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FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT: FARGO-MOORHEAD METROPOLITAN AREA FLOOD RISK MANAGEMENT, JULY 2011

COMMUNICATION

FROM

THE ASSISTANT SECRETARY OF THE ARMY, CIVIL WORKS, THE DEPARTMENT OF DEFENSE

TRANSMITTING

THE CORPS FINAL FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT

PART 7 OF 7

AUGUST 2, 2012.—Referred to the Committee on Transportation and Infrastructure and ordered to be printed

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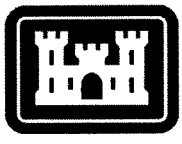
Final Feasibility Report and Environmental Impact Statement

Fargo-Moorhead Metropolitan Area Flood Risk Management

Volume 7
Appendices T-U

July 2011



US Army Corps of Engineers ®

Prepared by:
U.S. Army Corps of Engineers
St. Paul District
180 Fifth Street East, Suite 700
St. Paul, Minnesota 55101-1678

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USACE-MVP-0000087960

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June 20, 2011

Ref: 8EPR-N

Mr. Aaron Snyder
St. Paul District
U.S. Army Corps of Engineers
180 E. 5th St., Suite 700
St. Paul, Minnesota 55101-1678

Re: Fargo-Moorhead Metro Area, Flood Risk Management, SDFR/DSEIS # 20110138

Dear Mr. Snyder:

The U.S. Environmental Protection Agency, Regions 8 and 5 (EPA) have reviewed the U.S. Army Corps of Engineers' (Corps) Supplemental Draft Feasibility Report and Environmental Impact Statement (SDFR/DSEIS) for the Fargo-Moorhead Metropolitan Area Flood Risk Management project. EPA offers these comments in accordance with the Agency's responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C) and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

The SDFR/DSEIS analyzes a new locally preferred plan (LPP) – a 20,000 cfs diversion channel in North Dakota with upstream flood staging and storage. Previously, in the DEIS, the LPP was a North Dakota diversion channel with a capacity of 35,000 cfs (ND 35K). The new LLP generally follows the ND35K alignment except for a few modifications. The ND 35K alternative increased flooding downstream into Canada and was therefore deemed to no longer be a feasible alternative. The Minnesota alternative (MN 35K) is the same as in the DEIS and is referred to as the Federally Comparable Plan (FCP).

The following bullets summarize EPA's concerns about the revised project and our recommendations to improve the environmental analysis and mitigation measures. EPA's specific comments on the SDFR/DSEIS start on page 3 of this letter.

EPA Concerns and Recommendations:

- The information provided in the Clean Water Act (CWA) § 404(b)(1) analysis may not fully support the conclusion that the LPP alternative (the tentatively selected preferred alternative) is the least environmentally damaging practicable alternative (LEDPA). This alternative impacts more wetlands and riparian areas than the MN 35K alternative. We recommend adding more information to the analysis regarding the practicability of the alternatives after consideration of costs, existing technology, and logistics in light of the overall project purpose [40 C.F.R. § 230.10].

- We recommend incorporating local and regional planning efforts to control development in the Fargo-Moorhead metropolitan region's flood-prone areas and reduce flooding impacts. These efforts will be the main factor in sustaining the level of flood protection that will be provided by the proposed flood diversion channel. We understand that these measures will be implemented by others, but we think these local and regional planning efforts are an important consideration in the Corps' decision process.

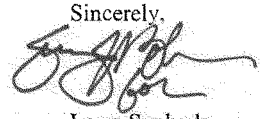
Rating:

EPA's comments are based on the SDFR/DSEIS and appendices that we received in May 2011. The document is much improved from the FR/DEIS. The addition of the mitigation plans and the more in depth wetlands analysis have significantly improved the EIS. We were particularly pleased to see alternatives developed for some of the mitigation plans.

Pursuant to EPA policy and guidance, EPA rates the environmental impact of an action and the adequacy of the NEPA analysis. Because the Corps has "tentatively" identified a preferred alternative, EPA is rating each alternative presented in the SDFR/DSEIS. Based on our review of the SDFR/DSEIS and the CWA § 404 (b)(1) analysis, we are rating each alternative and the overall SDFR/DSEIS as "EC-2" (Environmental Concerns-Insufficient Information). The "EC" rating is based on impacts to wetlands, riparian areas and areas upstream of the diversion. The "2" rating is based on the need for clarification or disclosure of information in the Final EIS. A description of EPA's EIS rating system is also enclosed.

Thank you for considering our input. If you have any questions regarding our comments, please call me at (303) 312-6004 or you may contact Dana Allen of my staff at (303) 312-6870. You may also contact Ken Westlake in Region 5 at (312) 886-2910.

Sincerely,



Larry Svoboda
Director, NEPA Program
Office of Ecosystems Protection and Remediation

EPA's Comments on the
Fargo-Moorhead Supplemental Draft Feasibility Report and
Environmental Impact Statement (SDFR/DSEIS)
June 20, 2011

Background

The majority of the Fargo-Moorhead metropolitan area is located in the floodplain of the Red River of the North and several tributaries. The Red River has exceeded the National Weather Service flood stage of 18 feet in 47 of the past 108 years, and every year from 1993 through 2010. Although emergency flood control measures have been successful, future average annual flood damages in the Fargo-Moorhead area are estimated at $195.9 million without an extensive flood control project.

The purpose of the proposed project is to reduce flood risk and flood damages in the Fargo-Moorhead Metropolitan area. The project will also restore or improve riparian habitat, increase wetland habitat and provide recreational opportunities. The SDFR/DSEIS fully analyzes four alternatives: No Action – continue emergency measures, two North Dakota diversion channels one with flood storage and staging and a 35K channel without storage and staging, and a Minnesota diversion channel. The Locally Preferred Plan alternative, the North Dakota 20K diversion channel with flood storage and staging, has been identified by the Corps as the tentatively preferred alternative in the SDFR/DSEIS.

ND 20K, Upstream Storage & Staging	ND 35K	MN 35K
Locally Preferred Plan (LPP) DSEIS	LPP in DEIS	Federally Comparable Plan (FCP)
North Dakota, west of Fargo	North Dakota, west of Fargo	Minnesota, east of Moorhead
36 miles long diversion channel	36 miles long diversion channel	25 miles diversion channel
19 hwy bridges, 4 railroad bridges	18 hwy bridges, 4 railroad bridges	20 hwy bridges, 4 RR bridges
5 control structures at: Red, Wild Rice, Sheyenne, Maple, Rush and Lower Rush Rivers + Wolverton Creek Culvert	5 control structures at: Red, Wild Rice, Sheyenne, Maple, Rush and Lower Rush Rivers + Wolverton Creek Culvert	Red River control structure + Wolverton Creek
Storage Area 4,360 acres	--	--
Staging Area in Floodplain	--	--

Wetlands

Clean Water Act § 404(b)(1) Analysis

1. The SDFR/DSEIS includes a preliminary Clean Water Act (CWA) § 404(b)(1) Guidelines (Guidelines) Evaluation in Attachment 1. The CWA § 404 (b)(1) analysis is used to determine the Least Environmentally Damaging Practical Alternative (LEDPA) under the Guidelines. The Guidelines state "no discharge shall be allowed if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem (waters of the U.S.) so

long as the alternative does not have other significant adverse consequences" 40 C.F.R. § 230.10(a).

While we acknowledge the Corps' guidance on the interpretation of the (Guidelines, we still have concerns regarding the use of a modified purpose and need for the CWA § 404(b)(1) analysis. We recommend that the same purpose and need be used for the both the SFR/DSEIS and the CWA § 404(b)(1) analysis.

The regulations at 40 CFR 230.10 do allow for the selection of an alternative with more aquatic resource impacts, if the alternative with lesser aquatic resource impacts is determined to be "impracticable". The term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes [40 CFR § 230.3(q)].

We recommend adding a paragraph(s) discussing each of the three criteria for practicability to the CWA § 404 (b)(1) analysis for each alternative. We would anticipate the cost and existing technology discussions would be short summaries of the information in the SDFR/DSEIS such as Table 11 -- Final Comparison of Alternative Plan Costs. The technologies for the SDFR/DSEIS are well-established flood protection measures. We recommend that that the revisions concentrate on the logistical constraints of the LPP and FCP alternatives.

2. We note an inconsistency in the 2:1 mitigation ratio for forested areas between different plans. The proposed mitigation activities in the draft report on "Fish and Wildlife Coordination Act" (Attachment 2 of SDFR/DSEIS) on page 27, # 10 lists a 1:1 replacement ratio while the "Discussion of Habitat Loss, Mitigation Needs and Adaptive Management" (Attachment 6) on page 30, 1st paragraph recommends a 2:1 replacement ratio. We recommend the 2:1 ratio.

3. We note some inconsistencies in the discussion of wetlands mitigation and channel design. The design plans in Appendix K – Civil Engineering show a traditional trapezoidal channel with a hardened pilot channel. The cross-section on plan CS313, shows a 32-foot wide and 2-foot deep rip rap lining of the pilot channel. This pilot channel design appears to conflict with the discussion in the mitigation plan and on page 346, Section 5.5.2.3, which discusses the creation of wetlands within the diversion channel, stating: "Features that will be used to facilitate the creation of wetlands will include meandering the low flow channel; constructed rock riffles applications to create ponding; and other features developed during the design of the project. Vegetative species would be planted that are appropriate to temporarily flooded wetlands. A low flow channel is a channel that is typically in the center of a larger channel which is sized to handle small flows from drains, ditches or ground water the low flow channel will be approximately 10 feet wide; 3 foot deep channel located in the middle of the larger diversion channel and could meander back and forth within the 250-400 foot wide diversion channel bottom"

   We recommend that the mitigation features be formally incorporated into the design. The hardened pilot channel appears to be incompatible with the proposed wetlands mitigation features and meandering channel bottom. An initial meandering low flow channel should be included in the design including the appropriate riffles and ponding areas.

4. On page 53, the SDFR/DSEIS states that "[t]here would also be opportunities to incorporate wetland creation into the bottom of other portions of the channel. These features could be added at little to no cost". This "passive mitigation" is also discussed on page 361, in answer to recommendation 2 from the Fish and Wildlife Coordination Act Report. The Corps anticipates that the diversion channel will eventually develop sufficient wetlands to offset wetland losses for the project (except for forested wetlands). The wording describes the process as "self mitigation." We recommend including seeding and planting of appropriate wetland species in the design plans and costs. This will restore wetland values much more quickly, reduce the potential for invasive wetland species and potentially enhance the design and stability of the meandering low flow channel.

5. On page 346, Section 5.5.2.3, the Corps description appears to anticipate the entire length of the diversion channel will contain a low flow channel with flow to sustain wetland mitigation. Other parts of the SDFR/DSEIS seem to anticipate flow only below the diversion of the Rush and Lower Rush Rivers. Please clarify if there will be enough water to sustain the wetlands mitigation throughout the diversion channel and where the water sources will enter the channel.

Sustainability of Flood Control Measures

Over the last one hundred years, a series of flood control projects have been constructed to reduce flood risk for the Fargo-Moorhead area. In the long term, none of these flood protection measures have maintained the desired level of flood protection. The flooding this year throughout the Midwest also serves as a reminder of the importance of local and regional planning in sustaining flood control measures. New flood control projects often have the effect of increasing development in flood prone areas. We anticipate that more flood prone areas in metropolitan Fargo-Moorhead will be developed as a result of the project changing the regulatory floodplain and zoning and building requirements.

6. Even with the new flood diversion channel the Fargo-Moorhead area will continue to experience some flooding due the topography of the Red River Basin. As shown on the maps delineating the areas of existing flooding and flooding with the LPP there are still substantial areas of Fargo that will be flooded during the 1% (100-year) and 0.2% (500-year) chance events (pages 310 and 311). We therefore recommend that the local and regional flood-risk reduction efforts be fully integrated into the flood diversion channel project. These efforts include the control of development in flood-prone areas; the use of construction requirements to avoid damage to properties, etc., as described in Appendix P; and other activities. We understand that the Corps will not be implementing and funding these activities; however, the long-term success of the Corps' flood control project will be dependent on successful implementation of these plans, ordinances and practices.

Environmental Justice

7. The legend and alternative labels for the environmental justice (EJ) mapping on pages 319-330 should be corrected. The labels do not identify mapping for the DSEIS LPP and the cross hatching for "induced flooding" looks like it may be for the existing flooding data layer for some areas. It may be useful to show the both the existing floodplain and the induced flooding on these maps.

United States Department of the Interior

OFFICE OF THE SECRETARY
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Denver Federal Center, Building 67, Room 118
Post Office Box 25007 (D-108)
Denver, Colorado 80225-0007

June 17, 2011

9043.1
ER 11/421

Colonel Michael J. Price
District Engineer
U.S. Army Corps of Engineers
St. Paul District
180 Fifth Street East, Suite 700
St. Paul, Minnesota 55101-1678
Attention: Aaron M. Snyder

Dear Colonel Price:

The Department of the Interior (Department) has reviewed Supplemental Draft Feasibility Report and Environmental Impact Statement, **Fargo-Moorhead Metropolitan Area Flood Risk Management**, Cass County, North Dakota and Clay County, Minnesota, and offers the following comments:

FISH AND WILDLIFE RESOURCES

The United States Fish and Wildlife Service (USFWS) is authorized under the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) to provide recommendations to the Corps of Engineers on federally funded water development projects. Based on information available at this time and the Impact Analysis outlined in its Draft Fish and Wildlife Coordination Act Report (April 2011), the USFWS recommends that, should the Corps of Engineers and the Local Project Sponsors proceed with the Fargo-Moorhead Metropolitan Flood Risk Reduction Project, the Federally Comparable Plan (FCP or MN 35K Alternative) Diversion Channel Alternative be the selected Alternative.

Adverse ecological impacts will occur with either of the Diversion Channel Alternatives. For the following reason, however, the FCP Alternative would result in less severe ecological impacts than the Locally Preferred Plan (LPP) Diversion Channel Alternative:

1. The LPP Alternative is anticipated to adversely impact approximately 189 more acres of wetland then the FCP Alternative;

2. The LPP Alternative, as proposed, would result in 36 more acres of adverse impacts to aquatic habitat then the FCP Alternative;
3. The LPP Alternative would adversely impact 5 rivers in addition to the main stem of the Red River;
4. Apart from the work that would occur within the Red River and the adjacent riparian habitat, the land uses that would be primarily affected by the FCP Alternative have limited wildlife habitat value.

For a complete list of fish and wildlife recommendations, please refer to the USFWS Draft Fish and Wildlife Coordination Act (FWCA) Report (Attachment 2) within the US Army Corps of Engineers Draft Feasibility Report and Environmental Impact Statement, Fargo – Moorhead Metropolitan Area Flood Risk Management.

We appreciate the opportunity to review the document and provide comments. If you have questions concerning USFWS' comments, please contact Tony Sullins, Field Supervisor of the Twin Cities Ecological Services Field Office, at phone 612-725-3548 extension 2201.

Sincerely,

Robert F. Stewart

Robert F. Stewart
Regional Environmental Officer

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

Jack Dalrymple
Governor of North Dakota

North Dakota State Historical Board

Chester E. Nelson, Jr.
Bismarck - President

Gereld Gerntholz
Valley City - Vice President

Richard Kloubec
Fargo - Secretary

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Grand Forks

Calvin Grinnell
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Jamestown

Sara Otte Coleman
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Kelly Schmidt
State Treasurer

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Director
Parks and Recreation Department

Francis Ziegler
Director
Department of Transportation

Merlan E. Paaverud, Jr.
Director

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May 9, 2011

Aaron M. Snyder, Chief
Project Management and Development
Department of the Army
St. Paul District, Corps of Engineers
180 Fifth Street East Suite 700
St. Paul, MN 55101-1678

NDSHPO REF.: 09-1166a COE Fargo-Moorhead Metropolitan Area Flood Risk Management; Fargo-Moorhead Supplemental Draft Feasibility Report and Environmental Impact Statement (EIS), Draft Programmatic Agreement (PA)

Dear Mr. Snyder:

We have received and reviewed correspondence and documentation for: **09-1166a COE Fargo-Moorhead Metropolitan Area Flood Risk Management**, "Fargo-Moorhead Supplemental Draft Feasibility Report and Draft Environmental Impact Statement (EIS), and Draft Programmatic Agreement (PA)."

We note that cultural resource overviews are discussed in Sections 4.2.2 (pp. 175-180) and 5.2.2 (pp. 280-282), and that identification efforts for the Fargo-Moorhead Flood Risk Management project await completion of the Class III Cultural Resources Inventory (pedestrian survey) and associated report documentation, whereas follow-up evaluation efforts and the mitigation of adverse effects for compliance with Section 106 of the National Historic Preservation Act are treated in the draft PA (Attachment 3), while overall or cumulative effects are briefly mentioned in 5.4.1.12 (pp. 339-340).

Thank you for the opportunity to review the project, and we look forward to the review of (outstanding) project documentation, and to further consultation on it. If you have questions please contact either Fern Swenson at (701) 328-3575 or fswenson@nd.gov or Paul Picha at ppicha@nd.gov or (701) 328-3574.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
And Director, State Historical Society of North Dakota

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218.308.2629

June 16, 2011

Aaron Snyder
USACE Project Manager
190 East 5th Street
Suite 401
St. Paul, MN 55101

RE: Minnesota Department of Natural Resources (DNR) Comments
Fargo Moorhead Draft Feasibility Report and Supplemental Draft Environmental Impact Statement (SDEIS)

Dear Mr. Snyder,

The State of Minnesota remains committed to flood protection in the Red River valley and appreciate the opportunity to review the SDEIS, however; it's apparent that significant additional work is needed to demonstrate that the selected alternative is:

- ecologically sustainable,
- the least impact solution ,
- one in which adverse effects can and will be mitigated , and
- consistent with other standards, ordinances, and resource plans of local and regional governments.

This information will be necessary for both the state environmental review and permitting process.

This letter is multipurpose in that it addresses environmental effects and feasibility considerations and provides insight on the types of issues that the DNR must address as part of state environmental review and permitting. Addressing these concerns early-on will facilitate efficient future state environmental review and permitting.

Portions of past DNR correspondence remain relevant as many concerns remain unaddressed. In the interested of brevity, DNR comments on the SDEIS will reference past comments when appropriate. Referenced comments should be considered part of DNR's SDEIS comments.

Attachments:

1. DNR DEIS comments - August 6th, 2010
2. DNR SDEIS Scoping Comments – January 24, 2011

DNR comment topics remain consistent with past correspondence (attached) and also include additional topics. For each topic general, and in some cases, specific comments (which reference specific areas in the DEIS) are provided. The DNR offers the following comments:

Prior Reports and Existing Projects

Specific Comments:

Section 1.5.1- Reports should include the 1996 Federal Tier 1/State Generic EIS titled, "Environmental Impact Study of Flood Control Impoundments in Northwestern Minnesota". This document is relevant to the proposal as it addressed the potential cumulative effects of proposed surface water impoundments in the Red River of the North watershed that have flood damage reduction as a project purpose and require individual permits under the federal Clean Water Act (CWA).

This joint EIS was challenged in MN district court, and in 1997, the Minnesota Legislature authorized funding for a "Mediation" process to resolve disputed issues and permitting gridlock. The conclusion/product of the mediation process was the development of the 1998 Mediation Agreement which provides a framework for development of flood damage reduction projects using a comprehensive watershed planning approach to project development.

DNR has long been supportive of projects that are the product of the 1998 Red River Basin Flood Damage Reduction Work Group mediation agreement process. Projects that meet the mediation agreement goals for flood damage reduction and natural resource benefits typically have a level of consensus that helps balance economic, environmental and social concerns while providing a more streamlined and less controversial permit review and approval process. The most controversial types of projects include large on-channel storage structures. These projects have the greatest potential for environmental impacts, and mitigation for these types of projects is sometimes impossible. Likewise, permits for on-channel structures would not be approved by the DNR if an off-channel alternative provides similar flood control benefits.

Compatibility with Existing Plans

Specific Comments:

DNR's SDEIS scoping comments specifically requested that the SDEIS describe the compatibility of the various project alternatives with the decision making process outlined in the Flood Damage Reduction Mediation Agreement and the associated TSAC technical papers. This information is not included in SDEIS.

> *Action needed*
> *The Final EIS must fully describe any potential conflicts with land use plans, policies or controls [See regulations for implementing NEPA contained in CFR Parts 1502.16 (c) &1506.2 (d)]. Explicit incorporated of such a section into the EIS would provide this needed information.*

Scope of Alternatives

General Comments:

All action alternatives that are being carried forward in the SDEIS include construction of the high hazard dam on the Red River that would need a dam safety permit from the MDNR. The alternatives analysis for flood protection within the Fargo-Moorhead metropolitan area is a very important aspect of such a project for environmental review and permitting. Minnesota Statutes related to environmental policy address how alternatives must be considered for actions significantly effecting the environment. Specifically

Minnesota Statutes, 116D.04 Subpart 6 states, "No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state, so long as there is a feasible and prudent alternative...".

Appendix O – Plan Formulation of the SDEIS provides the details on alternative screening and analysis. Some of the assumptions and components of this alternative analysis need to be re-evaluated to ensure that alternatives where not screened out that could meet the project purpose with less significant environmental effect. The following comments on the alternatives are specific areas that should be re-evaluated to ensure the least environmental damaging alternative has been identified and is being pursued.

Specific Comments:

Magnitude/scale of flood risk protection

As stated on page O-6 of Appendix O (Plan Formulation) the primary planning objective is to reduce flood risk damage in the Fargo-Moorhead Metropolitan Area. It appears the effectiveness of each alternative considered was assessed against the non-federal project sponsor's goal of reducing the 0.2% chance event to a stage of 36 feet. The application of this goal in alternative screening was inconsistent as earlier screening used the Fargo stage of 36 feet as an acceptable level of flood risk reduction, but then the acceptable level was changed to a stage of 40 feet. Achieving this goal is not the planning objective, but it appears achieving this high level of flood protection may have incidentally affected screening and assessment of project alternatives. For example on Page O-39 of Appendix O section 7.4.4. – Validation of Earlier Screening Steps includes the following statement, "...confirmed that diversion channel concept was the only concept that could achieve the planning objective to provide a high level of flood risk reduction". Achieving a high level of flood risk reduction was not identified as one of the planning objectives.

Action needed

An additional alternative should be evaluated that considers a lower, but still acceptable level of flood risk reduction that focuses on the 1% chance event. By doing this evaluation some other alternatives may be more feasible and cost effective while still meeting the project objective of reducing flood risk damage in the Fargo-Moorhead Metropolitan Area.

Control structures

Page O-64 of Appendix O Section 8.4.3.2 screened out diversion without control structures due to marginal feasibility.

Action needed

Are there incremental measures such as small levees, non-structural measures, and/or flood storage that could be combined with diversions without control structures that would increase feasibility? These incremental measures should be evaluated, especially under an alternative with a lower magnitude of flood protection. Are there other available technologies or designs for control structures that could be considered besides construction of a high hazard dam on the Red River? If so the feasibility of these designs should be evaluated.

Future Development
It appears that the cost benefit analysis used as part of alternative screening included future development of areas that are currently within flood prone areas that would be protected by the proposed project. The document supports this benefit on page O-56 of Appendix O by stating, "...the Fargo-Moorhead metropolitan area is expected to grow at a rate of 266 acres per year, regardless of whether flood risk management is constructed." Presumably the assumption is that this development, or at least a portion of it, would occur within the flood prone areas.

Action needed
An additional incremental measure should be evaluated that considers restriction of development within flood prone areas. This would require an additional cost benefit analysis without future development within flood prone areas. Current regulations require new structures to be elevated above the 100 year flood elevation, which is an additional cost to individual developments as opposed to public cost of developing the proposed project.

Hydrology

Action needed
The evaluation of the project effects should use consistent hydrology for the environmental and floodplain management project aspects. The 2003 hydrological discharge and stage profile should be replaced with either the statistical analysis of the Period of Record for the Fargo gage or the analysis assuming a wet-dry period is acceptable. If the wet-dry period analysis is used it should be submitted to FEMA for review and acceptance.

Floodplain Hydraulics

The local project sponsor in conjunction with the USACE must ensure flood control measures such as a levee, dike or floodwall constructed in a community designated floodway shall not increase the 1% chance flood stage, unless authorized through the CLOMR (Conditional Letter of Map Revision) process. Within the proposed project limits, the existing detailed floodway profile must be compared to the revised project floodway profile within all communities in MN with designated floodplain maps. Where the USACE can demonstrate that no structures are impacted by any rise in floodwaters resulting from the proposed project, a cumulative net increase in floodway stage up to 0.5 feet may be acceptable when submitting the necessary CLOMR to FEMA for approval. Where structures will be impacted by any amount of subsequent stage increase, the USACE and/or the local sponsor must either mitigate all costs to bring the structure into conformance or no stage increase shall be permitted. In all cases, said stage increase must not exceed 0.5 feet unless there are floodway easements and concurrence of the local community. DNR Public Water and Dam Safety permits will require all projects to be consistent with local landuse controls, including floodplain ordinance regulations along with water and land management plans.

Project mitigation described in the SDEIS is not consistent with local landuse controls. Because of the 1% flood stage increases a CLOMR must be obtained. To obtain a CLOMR structures in the proposed project limits with any increase in the 1% flood stage must be mitigated. Without mitigation of all existing structures in the project limits the project does not meet Floodplain Executive Order 11988. Neither the mitigation costs nor the future costs for development without the CLOMR are included in the economic analyses.

Action needed

Project consistency and compatibility with all applicable land use controls must be described in the Final EIS. All mitigation costs and costs for development without the CLOMR should be included in the economic analysis.

Geomorphology

Action needed
DNR's SDEIS geomorphology comments contained herein focus on the LPP. With exception to providing additional sediment data, DNR comments in the DEIS regarding other alternatives remain relative and are attached.

General Comments:

Overall the SDEIS continues to drastically discount the potential for impacts caused by changes in geomorphic processes and DNR's direct observations of major sedimentation along the Red following large events contradict many of the conclusions in the SDEIS.

Specific Comments:

Upstream Geomorphology
The SDEIS takes the stance that because the sediment is fine and stays in suspension for long periods of time that there are no issues with deposition. The SDEIS indicates, "Based on sediment transport observations from the 2010 flood, even if all sediment settled during such a flood during operations, the average level of elevation increase across the inundated are would be less than .02 inches". A uniform distribution of sediment deposition over the entire flood pool would not be expected. Due to variability in flow velocities both within the reservoir and relative to natural floodplain conditions; there is likely to be a large amount of localized deposition of fine materials in the dam's impoundment area (up to about 40 acre ft per year of deposited sediment according to the main report).

Observation made at the LB Johnson boat landing and other locations along the Red after high water events show that the rate of deposition of very fine materials is often very high in localized areas (two feet or more of fine sediment can be deposited along and over the access and surrounding localized flood plain in a single year). The dam and reservoir would be expected to accelerate these conditions and increase river bank height which is often associated with increased bank erosion. Changes in plant communities and subsequent functional declines can also be expected (see wetland comments).

Action needed
The Final EIS must acknowledge that localized deposition will occur and be significant in areas. The impacts, maintenance, and costs associated with this deposition must also be included in the analysis.

Downstream Geomorphology
DNR agrees that the Red is currently very stable in its form and, depending on the operation plan; a diversion by itself may not have substantial effects on downstream geomorphology. However, with the addition of a dam and prolonged discharge of high flows there are additional concerns. There would be some potential for channel enlargement due to the increased duration and frequency of bankfull and higher events from the prolonged discharge of water from the dam reservoir. Since channels forming flows are a function of the product of sediment transport rate

and flow frequency, changes to either could have adverse consequences for riparian vegetation, channel stability, sediment, and habitat.

Bank Stability
The SDEIS indicates that, "the duration of bankfull conditions could be longer under the LPP, increasing the potential for soil saturation and possibly reducing soil strength in bankline areas" and "the durations under consideration here would not be expected to substantially change soil strength conditions". The duration of bankfull conditions WILL be longer under the LPP and the SDEIS provides no support for the conclusion that soil strength conditions would not be substantially changed.

DNR has observed substantial bank slumping in the Comstock to Oxbow areas of the Red River. These slumps can clearly be seen on aerial photos and appear to have accelerated after the 2009 flood. Similar slumping can be expected this year along that area due to the duration of high water this spring. Both areas mentioned above (and possibly others) will see even longer durations of above bankfull conditions under the LPP and exacerbation of bank failures can be expected.

The adaptive management remedies for this condition are limited to either changing operating procedures of the dam (which would tend to defeat its purpose), or the development of a fully wooded riparian corridor. However, prolonged inundation of the existing wooded corridor may actually worsen conditions and limit the development of a woody corridor where none exists.

Action needed
The Final EIS must provide support for the conclusion that soil strength conditions would not be substantially changed *under the LPP. Otherwise, mitigation must be provided. If additional support can be provided, the adaptive management plan should describe how stability issues will be dealt with if discovered.*

Direct Habitat Loss ("footprint impacts")

General Comments:

The DNR has been and will continue to work with the Corps' in identifying potential mitigation projects to be included in the Final EIS, that, when completed, will replace lost habitat function and value. The DNR supports mitigation projects where the effectiveness can be readily assessed (also see DNR Mitigation Comments below).

Fish Passage and Biological Connectivity

DNR comments and concerns expressed in response to previous project designs remain unchanged and relevant (see attached). Below are additional concerns and comments that pertain to the LPP as described in the SDEIS.

General Comments:

Implementation of the LPP will result in zero fish passage through the Red River control structure while it is in operation (≥9,600 cfs). When flows are between 9,600 and 20,000 cfs, fish passage would be limited to two fish bypass channels located on the east side of the Red River control structure. Between the time the RR control structure is implemented and the time the staged water gets high enough to make the fish

bypass channel useable, there will be no fish passage. Likewise, when water levels are receding, there will be no fish passage between the time the fish bypass channel stops flowing and the gates are fully retracted.

Action needed
While completion of fish passage projects elsewhere downstream (i.e. Drayton) will help to offset some impacts; DNR strongly believes that additional minimization measures must be provided to facilitate fish passage across a larger range of flows through the Red River control structure (i.e. additional fish passage channels) and included in the ROD. Post-operation monitoring – overtime- will indicate whether additional mitigation is necessary and assurances must be provided upfront.

Implementation of the LPP will result in no fish passage from the upstream end of the diversion channel into the Red River. Fish that are on a spawning migration and swim the 36 miles to the upper end of the diversion channel will either drop their eggs in the bypass channel where they are not likely to survive; reabsorb the eggs due to lack of suitable spawning habitat; or, and this is unlikely to happen, travel 36 miles back downstream into the Red River, and continue migrating approximately 57 miles upstream in the Red River to the control structure, and then navigate through the bypass channels to access suitable habitat upstream.

Action needed
The design should be modified to incorporate additional measures to allow fish passage out of the diversion channel.

Specific Comments:

Page 150: The DEIS dismisses the aquatic habitat value of smaller tributary streams, including Wolverton Creek, without justification.

Page 151: The current revised lake sturgeon stocking rates are 8,000 fingerlings and 200,000 fry.

Pages 137 &161& 163: Christine and Hickson dam modifications are now under construction, not in the planning phase as stated in the SDEIS.

Wolverton Creek Connectivity
Page 271: The DEIS identifies fish passage in Wolverton Creek as being impassable during periods of operation, yet provides no measures to avoid or mitigate this impact.

Action needed
The Final EIS must identify additional measures to avoid, minimize or mitigate connectivity impacts to Wolverton Creek.

Wetland Impacts

General Comments:

Wetland Mitigation
The SDEIS provides significant additional information describing existing wetlands (i.e. delineation, functional assessment, habitat unit conversions), however; it still lacks crucial

information necessary to determine the appropriateness of wetland mitigation. While it may be true that replacement acreage far exceeds that of the acreage impacted (as indicated in Section 5.5.2.3), the SDEIS still does not describe how the mitigation will or will not replace the functions and values lost at the impact sites (i.e., whether it's appropriate). This information also relates to the planning objective of restoring or improving degraded riverine and riparian (including wetlands) habitat.

Action needed
As requested during the DEIS, the Final EIS must specifically discuss how the proposed wetland mitigation will replace the functions and values lost at the impact sites. A functional analysis and subsequent comparison of impact and replacement sites is needed to accomplish this. The EIS must also discuss the potential for created channel-bottom wetlands to be influenced by aggressive non-native invasive plant species (e.g. reed canary grass) over time and associated functional decline. This potential outcome must be discussed in context of Corps mitigation policy (i.e. required replacement ratios). A description of whether perpetual easements or other protections will be placed on the replacement site(s) should also be provided.

Page 234 of the SDEIS indicates that the 4,450 acre storage area will provide wetland functions after project construction.

Action needed
The Final EIS should expand on this and indicate whether this site is needed in addition to the created channel bottom wetlands proposed for mitigation. If it is needed and planned, the suitability of the site in providing created or restored wetlands should be discussed in the analysis. Specifically, since topography, drainage (e.g. drainage tile and ditches), and soils provide the guidance for restorations, each should be considered and described in the Final EIS.

Indirect Impacts
Page 233 indicates that wetland could be lost indirectly through changes in drainage associated with construction, however; the SDEIS provides no analysis of wetland impacts that would be induced by operation of the various alternatives. It is likely those wetlands both within the staging area (LPP) and downstream (all alternatives) may also see indirect impacts that will result in changes in plant community which will carry over to the decline of habitat function.

Effects on vegetation are a function of the timing of operation, the depth to which water' is held in the pool, the length of time water is held, and the frequency of operation. The downstream effects of removing water from the flow include the prevention of the flow (including sediments and nutrients) of water into wetlands, the alteration of stream channel morphology, and the lowering of ground water tables. The upstream effects are associated with sediment and nutrient deposition (see upstream geomorphology comments); and changes in depth and duration of inundation.

Action needed
The Final EIS must provide an analysis of the potential impacts that operation of the alternatives will have on wetlands. Mitigation must demonstrate replacement of all lost functions and values and be provided for all impacts.

Debris and Ice

Section 3.10.4 of the SDEIS indicates that, "The LPP and ND35K plan both include aqueduct structures …that could be affected by ice or debris during a flood event… include features to deal with ice and debris within the diversion channel and the natural river channels, but there will remain a risk that these structures could be partially blocked by ice or debris which could raise water surfaces upstream of the structures." Appendix S indicates that a debris and ice study will be provided in the Final EIS. While it's good that this information will be provide in the Final EIS, waiting until the Final EIS to provide this information provides less opportunity/time for public comment and incorporation of changes into the Record of Decision (ROD).

> *Action needed*
> *The Final EIS should include a comprehensive study of potential ice and debris impacts on the alternatives. Specifically, for each alternative; the EIS should provide a thorough analysis of debris and ice as it relates to operation, stage increases, maintenance, geomorphic processes and habitat. Based on comment responses in Appendix S, it's our understanding that this study be provided in the Final EIS.*

Safety

During both the DEIS and the SDEIS Scoping, DNR requested that an analysis of catastrophic failure risk and loss of life estimates in the event of catastrophic failure be provided. Originally this information was necessary and requested to determine whether the control structure on the Red River met Minnesota's definition of a Class I Dam (which require preparation of a state EIS). Enough data was provided at the time to determine that the structure meets the definition of a Class I Dam, however; the above mentioned information is also necessary for future state permitting. Approvals or denials of dam safety permits are based on the potential hazards to the health, safety, and welfare of the public and the environment including probable future development of the area downstream or upstream. Permit decisions are also based on whether there are other alternatives that will meet the project purpose without the risk of dam failure.

Appendix S indicates that this information will be provided in the Final EIS. As already mentioned, waiting until the Final EIS to provide information provides less opportunity/time for public comment and incorporation of changes into the ROD.

Invasive Species

General Comments:

DNR agrees that the proposed project would not speed the spread of zebra mussels through the Red River (Appendix S response to DNR comments). However, the Final EIS should acknowledge that there may be some colonization of zebra mussels on the bypass structure which may require periodic cleaning to ensure the gates remain operational. This is common on other projects (e.g. locks and dams on the Mississippi River) and these maintenance cost should be captured and included in the cost analysis.

Mitigation and Adaptive Management

DNR's August 2010 DEIS comments remain relevant (see attached).

General Comments:

For impacts the Corps is concluding will be less than significant - but still possible - Corps is relying on future monitoring and adaptive management/mitigation. DNR generally agrees with this approach provided that the following items are included in an Adaptive Management Plan (AMP):

1. *Criteria and indicators that reflect the desired condition;*
2. *Identification of thresholds at which implementation actions will occur;*
3. *Typical implementation actions and associated costs; and*
4. *Assurance (financial or agreements) that future mitigation/management actions will take place*

To date no assurance that future mitigation action will occur has been provided for potential impacts that will be verified through post operation monitoring. Significant additional work is also needed to ensure that the aforementioned items are included in an AMP. This lack of assurance and information will provide serious challenges as it relates to state permitting.

Action needed
A mutually agreed upon mitigation and adaptive management plan containing the specific criteria, indicators, thresholds, response actions, costs, and assurances should be required as part of the ROD. DNR permits will include similar mitigation provisions.

State Environmental Review and Permitting

General Comments:

Minnesota statutes 103G.245, sub. 7 states, "(a) A public waters work permit may be issued only if the project will involve a minimum encroachment, change, or damage to the environment, particularly the ecology of the waterway. (b) If a major change in the resource is justified, public waters work permits must include provisions to compensate for the detrimental aspects of the change."

DNR's January 2011 scoping comments requested that the SDEIS provide adequate information to inform the State permitting process. At that time, the information requested was that which is required in a "Preliminary Report" under MN Rule 6115.0410 Sub. 3. Since that time, Minnesota's Governor has issued Executive Order 11-04 requiring state agencies to set a goal of issuing all necessary project permits within 30 days of EIS approval. In addition, effective March 4, 2011, Minnesota Statutes, Section 116D.04, Subdivision 3a was amended to require that all state approvals needed for a project undergoing an EIS must be issued within 30 days of the completion of the EIS. Due to other statutory noticing requirements, the only way to comply with this law is to have all permitting questions and issues resolved as part of the EIS process. This means that in addition to a preliminary report, a final design report (together with plans and specifications) must be submitted concurrently with the State environmental review process. Appendix S indicates that the intended plan is to initiate the State environmental review process when the Final EIS is released to the public.

Action needed
DNR recommends that the permit-level analysis be compiled and provided concurrently with the state EI process. If it is the Corps' goal to produce a federal EIS which can be used as a state EIS, the permit-level analysis must be included in the federal EIS. If the proposer wishes to proceed with a state EIS before permit-level analysis can be provided, the proponent must contact DNR's Public Waters Work Program to discuss options under which the proponent can consent to exceed new goals for issuing permits.

Conclusion

The DNR remains committed to flood protection efforts in the Red River Valley; however, the DNR is concerned that, if a plan that impounds water on the main channel of the Red River is selected, there will be significant impacts and the required mitigation and monitoring would be extensive. This is very important as it relates to DNR permits, as the DNR cannot issue a permit for an on-channel structure if a feasible alternative with less potential for environmental impact is available that can provide acceptable flood control benefits. DNR approvals or denials of dam safety permits must also be based on the potential hazards to the health, safety, and welfare of the public and the environment including probable future development of the area downstream or upstream.

As outlined in our comments (both the DEIS and the SDEIS); additional efforts are needed to demonstrate that projects are ecologically sustainable, the least impact solution, adverse effects can and will be mitigated, and the chosen project is consistent with other standards, ordinances, and resource plans of local and regional governments. This information will be necessary for both the state environmental review and permitting process. In order to proceed efficiently, we recommend that all comments and recommendations be addressed in the federal EIS.

Thank you for considering our input.

Sincerely,

Michael R. Carroll
Assistant Commissioner
Mike.carroll@state.mn.us

cc: DNR Commissioner's Office
Kent Lokkesmoe, Director – Director of Capital Investment
Steve Hirsch, Director – Division of Ecological and Water Resources Director
Red River Watershed Management Board
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-----Original Message-----
From: Kestner, Nathan (DNR) [mailto:nathan.kestner@state.mn.us]
Sent: Thursday, June 23, 2011 3:45 PM
To: Snyder, Aaron M MVP; Williams, Terryl L MVP
Cc: Carroll, Mike R (DNR); Edelman, Donna (DNR); Sobiech, Jonathan J MVP
Subject: Fargo Moorhead SDEIS DNR Comment Letter (UNCLASSIFIED) - Addendum Request

Aaron-

We just realize that DNR comments on the SDEIS provided on June 20th, 2011 contained a typographical error.

Page 10 of the comment letter, last paragraph, first sentence currently reads, "DNR recommends that the permit-level analysis be compiled and provided concurrently with the state EI process." This sentence should instead read, ""DNR recommends that the permit-level analysis be compiled and provided concurrently with the state EIS process."

Please accept this correction and we apologize for any confusion. Thank you.

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August 6, 2010

Aaron Snyder
USACE Project Manager
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RE: Minnesota Department of Natural Resources (DNR) Comments
Fargo Moorhead Draft Feasibility Report and Environmental Impact Statement (DEIS)

Dear Mr. Snyder,

For approximately the past 14 months, the Minnesota Department of Natural Resources (DNR) has been an active participant in the U.S. Army Corp of Engineers' (ACOE) efforts to develop a Scoping Document and Feasibility Study for flood risk management in the Fargo-Moorhead Metropolitan Area. This letter serves several purposes because the Feasibility Study is being conducted concurrently with Federal EIS preparation, and also due to the fact that the DNR has determined a Minnesota State EIS must be prepared for the tentatively preferred option. With this in mind, this letter addresses environmental effects and feasibility considerations, and can provide insight for the types of issues that the DNR would address as part of State environmental review and permitting. It is again important to place in context that our involvement to date does not constitute an endorsement for any one alternative, but rather provides design assistance and options for mitigation. Through multiple design concept changes, efforts have been made, that if implemented will help to reduce very certain impacts; however, significant resource concerns remain and must be addressed. Addressing these concerns early on will facilitate future State environmental review and permitting.

Past DNR correspondence remains relevant as many concerns remain unaddressed. Likewise, the following attachments are part of our DEIS comments and should be included in the record as such:

Attachments:

1. DNR comments - January 14, 2010
2. DNR comments - March 16, 2010
3. DNR informal scoping comments 2009

DNR comment topics remain consistent with past correspondence (attached) and include new topics. For each topic both general and, in some cases, specific comments (which reference specific areas in the DEIS) are provided. The DNR has the following comments:

Scope of Alternatives

General Comments:
The State of Minnesota has long been supportive of flood protection projects that utilize a comprehensive watershed approach to flood damage reduction. Such an approach integrates both flood damage reduction benefits and natural resource enhancements. This basin-wide approach is described in the 1998 Mediation Agreement and is supported by local sponsors that include the Red River Watershed Management Board, as well as the watershed districts in the Valley.

Flood storage, as a stand-alone plan, may not be a viable option able to meet both the sponsor's flood damage reduction goals and the ACOE feasibility planning objectives. Previous DNR scoping comments state that opportunities exist to increase and improve ecosystem and wetland restoration, wildlife habitat, and to provide recreational opportunities through the use of multipurpose water retention areas. Previous DNR scoping comments also indicated that water retention should be included in the mix of alternatives. The DEIS has not thoroughly included an evaluation of a comprehensive array of multi-faceted alternatives, such as upstream storage, flood barrier, floodway, and diversion combination alternatives. A comprehensive solution that includes storage options would provide needed mitigation for hydraulic impacts to downstream areas, be consistent with the comprehensive basin-wide approach, meet the feasibility study planning objectives, and have greater support.

Specific Comments:
Section 3.5.6 indicates that, "Following the development of the diversion alternatives, additional consideration was given to flood storage, wetland and grassland restoration... It was determined that these measures would not provide any additional justified increment. This is due to the fact that the diversion alternatives provided a very high level of flood risk reduction, and they captured a large portion of the benefits that could be captured by a project." This analysis assumes the diversion alternatives as proposed are acceptable stand alone projects.

Recommendation:

> *The EIS should include an alternative that is composed of a comprehensive array of multi-faceted alternatives, such as upstream storage, flood barrier, floodway, and diversion combination alternatives. Effects on the Study planning objectives (e.g. provide additional wetland habitat) and constraints (e.g. avoid downstream stage increases and loss of floodplain) must be part of the discussion in the EIS for all of the alternatives. Evaluation of the storage option with smaller diversion channels must be explored.*

Hydrology

General Comments:
Section 3.9.1 in the DEIS indicates that, "In an effort to account for the uncertainty in climate variability, a non-traditional hydrologic analysis was used to ensure that the selected plan would perform in the future." Part of this non-traditional approach involves use of a truncated period of record. It is not clear why this shortened record is used. The Expert Opinion Elicitation (EOE) Panel concluded that a long-term gauge record

should be broken into a wet period and a dry period. The justification for this action is also not well documented in the DEIS.

Past land use changes, specifically accelerated drainage, may have also influenced the hydrology and flow record of the Study area, yet this does not appear to be taken into consideration when deciding to split the long-term record. If land use changes were partially responsible (and not likely to be reversed), then discarding the first 40 years of the record may be more justifiable.

Recommendation:

The Final EIS must justify the decision to split a long-term gage record into a wet and dry period. This should include an analysis of available climate records to show that such a climate cycle has occurred during the last 100 years. Without suitable justification and/or explanation of the non-homogeneous gage record, the full period of record should be used.

The use of the non-traditional hydrology has significant affect on the economic analysis among other potentially significant effects. A comparison of the benefits for the old and new hydrology at the 10, 50, 100, 500-year events must be provided. The non-traditional hydrology must be used consistently for the entire analysis in estimating potential impacts (e.g. fisheries), mitigation, and be applied for regulatory purposes (FEMA flood map revision). For example, this would require the communities of Fargo-Moorhead to use the 1% (100-year) elevation of 905.14 (gage elevation of 42.4) for the base flood elevation for floodplain zoning purposes. Without such consistency, the DNR cannot support the use of a non-traditional hydrologic analysis.

Downstream Hydraulic Effects

General Comments:
The DNR understands that for any properties deemed to have incurred a taking, compensation and mitigation is required. Furthermore, we understand the ACOE position that their regulations do not authorize the funding of compensation or mitigation for downstream hydraulic impacts unless the takings threshold is met.

The Council on Environmental Quality (CEQ) guidance titled "NEPA's Forty Most Asked Questions" indicates that, "All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs of these agencies." Sections 1502.16(h), 1505.2(c). This will serve to [46 FR 18032] alert agencies or officials who can implement these extra measures, and will encourage them to do so."

The alternatives proposed will result in significant downstream stage increases, yet there is no mitigation proposed in the DEIS. A July 210 report *Preliminary Downstream Impact Analysis* was received on August 3, 2010, six days before the end of the public comment period; we will evaluate those issues when the report is final. Initial review of the preliminary report verifies our concern about downstream stage increases as all flood frequencies. The DNR position remains (*see DNR 1-14-10 comments*) that any increases in downstream stage or discharge are unacceptable without mitigation and

losses of floodplain storage must be effectively replaced. For each alternative, costs associated with downstream mitigation must be included in the project cost. Regardless of USACE authority, the DNR views mitigation as the responsibility of USACE and the local sponsors to mitigate any increase in water levels and flood flows downstream. To date, no such commitments are in place. This will be a significant issue as it relates to permits and funding from our agency and will influence our input concerning flood map revision by FEMA.

Recommendation:

The final EIS should include a description of the takings analysis and be explicit as to why the project does or does not result in a taking. Inclusion of the taking analysis as an appendix would be useful. The EIS must include mitigation and its estimated cost for addressing the downstream stage and flow increases regardless of ACOE authority to fund such mitigation actions.

The DEIS has not identified how the ACOE has complied with Executive Order 11988 on floodplains. In addition, the DEIS has not discussed the compliance with FEMA standards relating to the stage increase. These deficiencies must be addressed in the EIS.

Specific Comments:
The DEIS clearly indicates that all alternatives as proposed will result in potentially significant downstream impacts. Specifically:

Section 3.7.3.4.2 indicates that, "All of the diversion channel alternatives will change the timing and flows of water, significantly reducing the quantity of water flowing through the communities of Fargo and Moorhead. As a result of the modifications to the timing of the flows, downstream impacts are anticipated."

Also, Sections 5.2.1.4.1 and 5.2.1.4.1 state that for both the MN35K and the ND35K plan "Increases in the level and duration of downstream flooding would have no appreciable effects on natural resources, but may result in significant adverse effects on social resources."

Lastly, Section 5.4.1.3 indicates that, "all diversion channel alternatives include anticipated impacts for the 10, 2 and 1-percent chance events." In addition, "would extend approximately 45 miles downstream."

Recommendation:

The EIS must document how it was determined that increases in downstream flooding "...will have no appreciable effects on natural resources". It is very likely that additional downstream stage increases will result in increased erosion, nutrient loading and other impacts.

It is unclear how plans that will result in downstream stage increases are consistent with the identified planning constraints (e.g. avoid increasing peak stages). This must be explained the EIS.

The DEIS only provides preliminary data. The full extent of downstream stage increase must be included in the final EIS.

Downstream impacts must be quantified downstream to a point where there is no increase in discharge or stage.

Geomorphic Processes and Aquatic Habitat

General Comments:
The DEIS drastically discounts the potential for impacts caused by changes in geomorphic processes.

Geomorphic effects of flood control projects have historically far exceeded anticipated effects. For example, the ACOE channelization of the Wild Rice River resulted in 12 feet of headward incision, 8 feet of downstream aggradation, and had a devastating impact to over 40 miles of river....these effects were not anticipated, and currently there are no plans in place to fix the problem. The EIS suggests that these effects will be small due to the relatively high contribution of suspended sediment load compared to sand and other bedload. This is also predicated on the assumption that sediments are uniformly distributed through the water column.

While the DEIS alludes to monitoring, no sediment data have been provided on which to base the above assumptions or the discounting of geomorphic effects. The very high total sediment load of the Red River and its tributaries contradict this assessment. DNR has observed major sedimentation along the Red following large events. The proposed project will significantly change the distribution of flow and sediment. Any alteration of the existing hydrologic and sediment regimes has the potential to result in sedimentation or incision. Either of these effects can adversely affect habitat quality. The structures will draw surface water that typically has relatively low sediment concentrations. This will send relatively high concentrations of sediment down the natural channel with less power to carry it.

The DEIS indicates that further evaluation will take place to verify potential impacts, including pre- and post-construction monitoring. The DNR believes that a robust monitoring program is needed, and we will continue to work with agencies and local sponsors in the development of such a program.

The DEIS also indicates that monitoring will be done in close coordination between agencies, and that coordination should include discussion as to whether future action would be needed if impacts were identified. Unless data is provided upon which comprehensive analysis and conclusions can be deducted; we have no reason to concur with the ACOE assumption that impacts are not likely and feel strongly that mitigation is necessary and warranted. The types of mitigation warranted, along with associated costs, should be included into the project cost. Increasing the amount of mitigation already proposed for footprint impacts associated with the Red River control structure would be meaningful and help to offset likely geomorphic impacts.

Recommendation:

There is no substantiation for the assumption of a uniform distribution of sediment particle sizes through the water column. A particle size analysis of total

sediment load of the Red River would provide the necessary basis for such a conclusion and should be included in the final EIS. Without this information, mitigation must be included for geomorphic impacts to the Red River.

The EIS should also discuss whether impacts associated with reduced flow from the confluences of the Rush and Lower Rush Rivers to a diversion outlet are anticipated. Flows will be further reduced along this reach creating opportunity for sedimentation that will, in turn impact aquatic habitat.

The EIS should include a determination whether additional debris and ice in the project area will impact channel stability in the portion of the Red River which will be diverted. Potential geomorphic impacts to Wolverton Creek and necessary mitigation must be included in the EIS.

Direct Habitat Loss

General Comments:
The DEIS acknowledges that mitigation will be provided for the Red River Structure footprint impacts of approximately .5 miles (10 acres). The DNR has been and will continue to work with the ACOE in identifying potential mitigation projects to be included in the Final EIS, that, when completed, will replace lost habitat function and value. The DNR supports mitigation projects where the effectiveness can be readily assessed (also see DNR Mitigation Comments below).

Wetland Impacts

General Comments:
According to the DEIS, the Minnesota diversion alignment would directly impact approximately17 acres of wetlands and could indirectly impact up to 85 acres of wetlands, while the North Dakota diversion alignment would directly impact approximately 33 acres of wetlands and could indirectly impact up to 193 acres of wetlands.

The DEIS goes on to state, "Either alternative would include appropriate measures to minimize or mitigate potential losses to wetland areas." In addition, impact "will be offset by the creation of wetlands within the diversion channel bottom." And finally, "The area available on the bottom of the diversion channel for all alternatives far exceeds the amount of wetland acres that would be impacted."

The DEIS lacks crucial information necessary to determine the appropriateness of wetland mitigation. While it may be true that replacement acreage far exceeds that of the acreage impacted, the DEIS does not describe how the mitigation will or will not replace the functions and values lost at the impact sites. This information is critical in determining whether the proposed mitigation will actually replace the loss of habitat and ecological function (i.e., whether it's appropriate). This information also relates to the planning objective of restoring or improving degraded riverine and riparian (including wetlands) habitat.

Recommendation:

The EIS must specifically discuss how the proposed wetland mitigation will replace the functions and values lost at the impact sites. The EIS must also discuss the potential for created channel-bottom wetlands to be influenced by aggressive non-native invasive plant species over time and subsequent impacts on function and value. This potential outcome must be discussed in context or in determining the appropriate replacement ratio.

Fish Passage and Biological Connectivity

General Comments:
The fish bypasses and other structures are necessary and helpful in minimizing potential impacts to fishes; however, they do not replace the function of the natural channel for flows higher than the 5-year event. While passage during the open gate condition is reasonably satisfied, the proposed fishways have not been detailed to the degree that effectiveness can be assessed.

The DEIS states minimum effects of the project on fish passage by giving percentages of blockage based on the entire record of daily values. There are several problems with this assumption:

A. Fish migration is seasonal and for many species, spawning migration cues are associated with the spring flood. As a result, percentages would have greater relevance when put in the context of these migration periods.
B. Currently, fish passage is least impeded during floods greater than the two-year event as barrier structures are inundated and long migrations can only occur during these high flow events. The proposed project has the greatest affects during high flows when the river is most passable. Greater context would be provided by considering percentages of flows above the two-year event when the structure would block passage.
C. Fish populations in rivers are often sustained by unusual events. Large floods often are associated with large year classes of some species. These unusual events may be responsible for sustaining populations.
D. Spawning migrations are very sensitive to timing…fish cannot simply wait around for passage. A combination of day-length, water temperature, and hydrology all need to be appropriate. Blockage during the spawning run can result in egg absorption, stress-related disease and other mortality factors.
E. Using USACE analysis of gauge data from 1942 to present, 13 of 68 years or 19% of years would have had fish migration limited (using the bypass channel) for one week or more during April, 4% of the years would have had fish migration limited for two weeks or more.

Fish are likely to be drawn into the diversion channel during operation. Since the duration of operation is short, there is potential for stranding and mortality of large numbers of migrating fishes. The impacts of this mortality could be substantial especially for long-lived and rare fishes like lake sturgeon. The ND diversion channel would have a fish bypass to get fish over the 20' head difference rather than the rock ramp proposed for a MN diversion. This will further increase the chances of stranding in the diversion channel and limit fish passage. Additional mitigation measures should be

considered such as operations that allow gradual reduction of water in the diversion channel.

It is the MN DNR Fisheries' experience that fish movement is substantially impeded within and through long, channelized river segments and ditches, such as those presented in all of the alternatives. This is likely due to homogeneous low value habitat conditions present in many ditches. This concern has been brought up repeatedly in discussions but is not addressed in the draft EIS, rather, it has been assumed that fishes will use the diversion channel in the same manner they would use natural channels.

The assumption throughout the DEIS is that fish passage on either the Red or its tributaries will not be significantly affected due to features built into the project that are intended to minimize impacts. No evidence, either empirical or from literature, is provided to support this position.

Recommendation:

The analysis provided by the EIS must rely on hydrologic data (updated data), empirical evidence, and peer-reviewed literature to draw conclusion pertaining to potential fish passage impacts. The EIS should attempt to address: to what extent the proposed passage facilitation measures will alleviate fish passage impacts; what species will utilize the proposed design based minimization efforts, and; what extent multiple restriction structures will compound passage impacts. The EIS must also place fish passage percentages in context of migration periods of various species in the Red River system rather than the entire record.

The EIS should utilize empirical evidence, peer reviewed literature and include a literature-cited section.

Specific Comments:

It is the DNR's understanding that a tieback levee associated with a Red River control structure will also cross Wolverton Creek.

Recommendation:

Impacts to fish passage at Wolverton Creek must be included in the EIS.

Section 5.2.1.8.1.4 indicates that a notched weir will be included. This is helpful in minimizing impacts associated with the stranding of fish; however, it is unclear if the notch effects are represented in the hydrographs (i.e. how fast will flows shut off in the diversion once the 20% event flows have passed).

Recommendation:

This EIS must indicate whether the notch effects are represented in the hydrographs.

Section 5.2.1.8.1.5.1, which discusses the Red River control structure effects on connectivity concludes that, "all diversion channel alternatives would largely avoid and minimize significant adverse impacts to fish migration...and have a small adverse effect

on biotic connectivity." In addition, "although connectivity would be slightly affected, it appears unlikely this effect would result in a detectable response in terms of a measurable population change by fish. Thus, any of the diversion channel alternatives would have a less-than-significant impact to fish population levels in the Red River basin as a result of slightly reduced connectivity." For reasons stated above, the DNR does not concur with these conclusions and believes mitigation is necessary (also see Mitigation General Comments section).

Debris and Ice

General Comments:
Widening the gates to 50' will reduce chance of debris blocking the structure resulting in a reduction in maintenance need (debris removal). It is likely that the Red River through the study area will have a reduced capacity to transport debris and ice. This may in turn result in changes in the flow dynamics and geomorphic processes. The effect of debris and ice on safety, flow, channel stability and habitat will extend beyond times of operation.

Recommendation:

> *The EIS must acknowledge that woody debris is an important component of many river systems providing fish habitat and channel stability. The final EIS should expand on the discussion of debris and ice as it relates to operation, maintenance, geomorphic processes and habitat.*

State Environmental Review and Permitting

General Comments:
On July 19, 2010, it was determined that the tentatively preferred alternative requires preparation of a Minnesota State Environmental Impact Statement. The relationship between Federal and Minnesota state environmental review is addressed under Minnesota Rules 4410.3900, that requires, if a Federal draft or final EIS has been prepared for a project, the RGU must use the Federal EIS as the Minnesota State draft EIS provided it addresses the scoped issues and the State EIS content standards.

Minnesota has not initiated the State scoping process and many of the issues discussed to date will likely require additional analysis. Elimination or mitigation of downstream stage increases will also be required to secure the necessary DNR Division of Waters permit(s).

Specific Comments:
Section 3.12.4 titled "Permits" should include the need for a state EIS.

Safety

General Comments:
The Preliminary Section 404(b)(1) Evaluation indicates that, "During high flows when the control structures are under operation, recreational use (boaters, jet skis, canoes, kayaks, etc.) will not be allowed to pass through the structure due to safety concerns."

Recommendation:

Section 5.2.3.1.5 titled, "Public Health and Safety" should include a description of safety and operational measures proposed to ensure the safety of recreational users on the Red River and its tributaries.

As indicated in our January 2010 letter, diversion structures provide a barrier to flow during operation and have a risk of sudden and catastrophic failure presenting safety concerns for downstream habitants and recreational enthusiasts.

Recommendation:

The EIS should include an analysis of control structure catastrophic failure risk and provide loss of life estimates in the event of catastrophic failure.

According to Minnesota Rules, the proposed control structure on the Red River meets the definition of a high hazard dam. As such, preparation of Minnesota State EIS is mandatory. A Dam Safety Permit from the DNR Division of Waters will also be required.

Recommendation:

It is imperative that the federal and state EIS provide the safety information mentioned above as well as adequate information to inform the state permitting process. At a minimum, this information must include that described as required in a "Preliminary Report" under Division of Waters Rules 6115.0410 Sub. 3.

Mitigation

General Comments:
Based on case studies, peer reviewed literature, Minnesota Rules and professional experience; the DNR believes that the project has the potential to result in significant impacts to fish passage and biological connectivity, geomorphic impacts, and downstream stage increases. Unless data can be provided, upon which analysis and conclusion can be deducted that clearly show that impacts will be less than significant, our position remains that mitigation is required and cost estimates need to be included.

The DEIS appears to only offer or consider mitigation for impacts that the ACOE projects to be significant. The Council on Environmental Quality (CEQ) guidance titled "NEPA's Forty Most Asked Questions" indicates that, "mitigation must be considered for impacts that, by themselves would not be considered "significant". Once the proposal itself is considered as a whole to have significant effects, all of its specific effects on the environment (whether or not "significant") must be considered, and mitigation measures must be developed where it is feasible to do so. Sections 1502.14(f), 1502.16(h), 1508.14."

Recommendation:

The EIS must explicitly state why it is not feasible to provide mitigation for what the Corp's feels are less than significant impacts (i.e. fish passage, Red River and tributary geomorphology, and downstream stage increases).

The EIS must demonstrate that proposed mitigation measures ensure no loss of habitat function or values. Replacement of habitat, as a mitigation method, can replace lost functions and values. The success of habitat restoration or creation in replacing function and value can be estimated with the Habitat Evaluation Procedure (HEP), Habitat Equivalency Analysis (HEA) or other methods.

Specific Comments:
5.5.1.5 Stream Re-meandering
As previously indicated (March 16, 2010, DNR letter), the DNR believes that money targeted at pre-existing comprehensive ecosystem restoration initiatives will help ensure the most value for mitigation efforts. The DNR is aware of several restoration projects (e.g. Lower Wild Rice River, Buffalo River through Hawley) that if completed would restore stream or river habitat by recreating meanders and riparian habitat lost through channelization. The functions and values gained by these projects could be as mitigation for project-induced impacts.

5.5.1.6 Riparian Buffer Strips
The DNR questions the value of using riparian buffer strips along the Wild Rice River as mitigation for impacts likely to occur on the same stretch of river. The establishment of a riparian buffer in this area may be better suited as mitigation for riparian forest (wetland or upland) impacts elsewhere.

5.5.1.7 Fish Passage
DNR believes that improving fish passage as a systemic mitigation approach will improve connectivity in the Red River system as a whole. We also strongly believe this is required to offset project-induced impacts to fish passage and biological connectivity that will remain after minimization efforts.

We agree that completion of fish passage projects will open up previously unreachable habitats (of varying quality) for use. This will result in an overall increase in function and value for those habitats. However, the use of this approach as mitigation for measurable footprint impacts is questionable due to the difficulty in assessing effectiveness. While it "is possible fish passage could have broader and more meaningful benefits than site specific mitigation", the DNR does not support this approach as mitigation for habitat impacts. We support mitigation projects that are measurable and can be effectively assessed (i.e. can quantify functions and values gained and demonstrate that they replace function and value loss at impact locations).

If the ACOE proceeds with a systemic approach to mitigation for impacts other than those associated with the loss of connectivity, it will be necessary to increase the scope of planned pre- and post-construction monitoring to include the new "reachable" habitats.

Adaptive Management

General Comments:
In order for adaptive management to be successful, there must be identified indicators and criteria that reflect the desired conditions (e.g. what level of deviation from the existing condition is acceptable?); monitoring of the indicators and criteria for deviation; and implementation of management actions when the desired conditions are violated (or when conditions are deteriorating and preventive measures are available). At present, other than the commitment that pre- and post-construction monitoring will take place,

there are no identified criteria or indicators that reflect the desired condition or assurance (financial or agreements) that future management action will take place.

Specific Comments:
Section 5.5.3 provides no assurance of Federal funding if problems are found during post project monitoring (e.g. "could take action...could work with Corps to secure potential funding...could include seeking congressional action"). T he Council on Environmental Quality (CEQ) guidance titled "NEPA's Forty Most Asked Questions" states that, "to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed. Thus, the EIS and the Record of Decision should indicate the likelihood that such measures will be adopted or enforced by the responsible agencies. Sections 1502.16(h), 1505.2."

Recommendation:

The EIS must discuss the likelihood of securing future funding and the probability of mitigation measures being implemented in the future. A commitment on behalf of the sponsors in the form of financial assurance and agreement to undertake future mitigation is necessary. Examples of how adaptive management has been used successfully on other ACOE projects would also provide greater assurance.

Invasive Species

General Comments:
The DEIS does not discuss the potential for invasive species transport during construction or how the operation of the project may potentially be affected. A zebra mussel veliger was recently discovered in the Red River. It is unknown whether zebra mussels will become established in the Red River. Regardless, maintenance associated with removal from infrastructure (to ensure smooth operation) can be costly and should be included in the analysis provided by the EIS.

Rare Species

General Comments:
Every state recently completed a "state wildlife action plan (SWAP)" which identifies conservation needs for species of concern, including threatened and endangered wildlife and other important wildlife species. Minnesota's SWAP titled, "Tomorrow's Habitat for the Wild and Rare" describes conservation concerns for species of greatest conservation need (SGCN) and their *key habitats* within various landscape settings.

Recommendation:

In the interests of providing a quantitative comprehensive analysis, the EIS, must describe whether key habitats and SGCN are present in the project area (Section 4) and whether they will be affected by the project (Section 5).

Specific Comments:
There appears to be inconsistency between the Minnesota Rare Species Guide, data provided in the DEIS main document, and Appendix F.

Section 4.2.1.9 and Table 25 implies that lake sturgeon no longer exist in the Red River basin. Although this was the assumption in the not so distant past, we now know that through our repopulation efforts and recapture records, including netting and angler accounts, lake sturgeon are now present in both lakes and streams in the basin, including the Red River.

Recommendation:

The EIS must rely on up to date accurate information. An updated table similar to that used in Appendix F should be included in Section 4.2.1.14.4 of the EIS. After Section 4 is updated, Section 5.2.1.10 must provide impact determinations for all state and federally listed species (this section only indicates that the Fish and Wildlife Service does not have records of federally listed species in the project area).

If rare species surveys are planned or have been completed, this information must be included in the EIS.

The EIS should document the known presence of lake sturgeon in the Red River basin.

Planning Objective and Constraints

General Comments:
The Feasibility Report planning objectives and constraints provide a template and parameters that, if adhered to, would likely result in a project that (as taken from the Feasibility Study):

- Reduces flood risk and flood damages in the Fargo-Moorhead metropolitan area.
- Restores or improve degraded riverine and riparian habitat in and along the Red River of the North, Wild Rice River (North Dakota), Sheyenne River (North Dakota), and Buffalo
  River (Minnesota) in conjunction with other flood risk management features.
- Provides additional wetland habitat in conjunction with other flood risk management features, and
- Provides recreational opportunities in conjunction with other flood risk management features.
- Avoids increasing peak Red River flood stages, either upstream or downstream
- Minimizes loss of floodplain in accordance with Executive Order 11988, Floodplain Management

Such a project would better fit within the "basin-wide approach" as described in the 1998 Mediation Agreement. However, the tentatively preferred alternative drastically deviates from the Feasibility Study Planning Objectives and Constraints.

Conclusion

The DNR remains committed to flood protection efforts in the Red River Valley; however, the DNR is concerned that, if the locally preferred plan (ND 35) is selected, there will be significant impact to up to 58 miles of the Red River. In addition, fish passage and

biological connectivity will be degraded, and unacceptable stage increases extending more than 50 miles downstream would influence several communities. The final EIS must demonstrate how the ACOE and project sponsors will eliminate these significant environmental effects.

This project is estimated in excess of $1.4 billion dollars and will be with us for a very long time. Accordingly, the Corps' and local sponsors must ensure on the front end, the best design possible that protects the Fargo-Moorhead Area, downstream communities, and addresses the array of environmental concerns; is the design selected.

Thank you for considering our input.

Sincerely,

Michael R. Carroll
NW Regional Director
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Cc: Commissioner's Office
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January 14, 2010

Col. Jon Christenson
US Army Corps of Engineers
Sibley Square at Mears Park
190 5th Street East, Suite 401
St. Paul, MN 55101-1638

RE: Fargo Moorhead Flood Reduction – MNDNR Comments

Dear Col. Christenson,

For approximately the last eight months the MN Department of Natural Resources has participated in the Corps' efforts to develop a Scoping Document and Feasibility Study for a flood mitigation project encompassing the Fargo-Moorhead metropolitan areas. In that time our agency has provided significant resource management expertise in an effort to develop options that maintain as much natural form and function of the impacted resources as is possible given the Corps' funding and project development constraints. As a result, our agency feels it is necessary to ensure that we place in context that our involvement to date has been to provide design assistance and not an endorsement of any one alternative or that all anticipated impacts have been mitigated through this process. In fact, it is anticipated that any preferred alternative will undergo significant additional review, design improvement and still require mitigation.

It is important to note that the State of MN is committed to flood protection in the Red River Valley. Significant financial resources have been expended to protect and mitigate flood damages to almost every Minnesota community along the river from Browns Valley in the south to St. Vincent in the north. Mitigation efforts also extend to agricultural areas through collaboration with local sponsors that include the Red River Watershed Management Board and the numerous watershed districts in the Valley. Water storage and natural resource enhancement is a significant component of this collaborative effort. Any project for the Fargo- Moorhead metropolitan area should remain consistent with these existing local efforts. It would be unacceptable to promote a project that negates efforts to store water or a project that increases flood levels and risk to a downstream community.

Following are concerns that the Department view as the primary issues that will need to be better addressed through improved design or mitigation.

DNR Comments:

Many agree that changes or regulation of flow in a river system have great potential to initiate a succession of changes and impacts. Some of these impacts are direct and measurable, while many occur over time and too slowly to be observed directly. Due to the ecological connectivity in rivers, impacts can be far reaching, result in loss of functions and values, and require mitigation. The environmental review document(s) and subsequent project design must give full consideration and analysis of the potential impacts associated with the following topics of concern:

Lost habitat:
The proposal to build the structure off channel and reroute the river through it while filling the existing channel will eliminate existing aquatic habitat. Changes in slope and geomorphologic issues may result. Maintaining the same channel length in a new armored channel will not directly replace this habitat. Also, re-routing of tributaries (Rush and Lower Rush) will involve abandonment of existing stream habitat requiring mitigation.

Accumulation of sediment in a riverbed can have a substantial impact on fish. Fish are highly susceptible to the changes in their aquatic environment and are uniquely connected to their environment. In response to accumulation of sediment, fish may begin to change their migratory patterns to avoid areas once used for habitat such as wintering grounds, nursery areas, or spawning areas.

Effective mitigation depends on replacement of lost functions of the impacted habitat. The integrity of mitigation projects is required to ensure effectiveness. In addition, it is imperative that mitigation project costs are included in the cost/benefit analysis and environmental review.

Downstream hydraulic effects: Any increase in downstream stage or discharge is unacceptable without efforts to mitigate these increases. This will be a significant issue as it relates to permits from our agency and will influence our agency's input concerning flood map revisions by FEMA. This concern is greatest where the impacts extend to downstream communities with detailed flood studies. These increases are primarily due to the loss of floodplain storage as a result of the operation of the diversion channel. This loss of floodplain storage needs to be effectively replaced through upstream storage options.

Debris and ice: Having larger and fewer openings in a diversion structure will decrease the potential for trees, ice, and other debris to create restrictions in flow, however; even full span bridges on the Red River have major debris and ice problems. Restrictions can create a host of problems with fish passage, safety, and other issues that would not be

restricted to just operational flow. It is preferable to pass rather than remove natural debris, as it serves an important role in the ecology of a river system. A thorough analysis of future operation and maintenance activities and associated potential impacts is needed.

Recreational analysis: A thorough analysis of the recreational uses of the Red River and its tributaries and how the various project proposal will impact those uses is needed. Project induced recreational opportunities should also be explored and pursued whenever possible.

Channel stability effects: The current Red River diversion structure will send surface waters into the diversion while water from the bottom of the water column will be sent down the natural channel. Although suspended load dominates the Red Rivers sediment load, the distribution of suspended materials is typically highest near the bed. As a result, a disproportionate sediment supply would potentially be routed down the natural channel with reduced stream power to carry it through resulting in sediment aggregation.

Minnesota currently has massive erosion and sedimentation problems resulting from flood control projects where sediment transport and channel stability were either ignored or misunderstood. The sediment load is variable across the tributaries of which a ND diversion alternative would cross. It is imperative that the potential for channel stability impacts associated with each alternative and associated project components (e.g. diversion structure, bypass structures and tributary crossings and bypasses) be fully analyzed.

Safety Issues: During operation, diversion structures provide a barrier to flow. Flood barriers have a risk of sudden and catastrophic failure presenting safety concerns for downstream habitants and recreational enthusiasts. Minnesota Rules, chapter 4410.4400, subpart 18 requires preparation of a State Environmental Impact Statement (EIS) for construction of a Class I dam. Whether or not a diversion structure alternative qualifies as a Class I dam is determined by a breech analysis. The DNR understands that the COE is conducting this analysis and will provide the results upon completion for our review. Shortly after review, we will provide a need determination regarding whether or not preparation of a EIS under Minnesota Rules, chapter 4410 is required. If required, the DNR (as the Responsible Government Unit) will consult with the COE to reduce duplication between Minnesota Statutes and the National Environmental Policy Act.

Floodplain Impacts: The flora and fauna within a floodplain depend on periodic inundation to maintain its existing ecology. The potential for impacts to floodplain wetlands and species using those habitats increases as flows are diverted more frequently. Over time, ecological changes may ensue. Having baseline data and then monitoring and measuring changes over time will provide a means to measure potential impacts and subsequent mitigation requirements. Our concern for potential impacts

greatly increases when passing flows less than a 5-year event, such as those associated with some of the ND tributary crossings. A thorough analysis of existing floodplain resources and estimates of potential impacts is needed.

Fish passage: Since the current Red River has unimpeded passage from Hickson to Drayton, and since the river currently has total passage at flows above the 2 year event, any lost reduction in passage is an environmental loss. Dealing with twelve feet of head loss at this site is no small task. It is our understanding that the current diversion structure design will allow for fish passage for up to a 5-year event, at which time fish ladders will become operational and potentially provide passage (for an unknown percentage the fish population) for up to 50 year events. Ideally, fish passage would be provided for all flood events, however; a loss in resilience would still be likely, as fish passage would be restricted.

An analysis of how accommodating fish passage at various flood events will potentially affect fish passage, resilience, project design, and the cost-to-benefit ratio is needed. The chosen alternative can then be based on the design which both minimizes the potential impacts and is still practicable. Diversion channels have the potential to cause fish stranding and increased predation. It is not likely that quality fish habitat can be provided in a diversion channel and fish usage of any diversion channel should be excluded when possible by design.

Land use and changes have and occurred progressively over time resulting in more rapid conveyance of water. Climate changes are occurring and basins response in not fully understood. Flood frequency estimation records encompass much of this period of change. Likewise, the records upon which flood frequency estimations are based upon may underestimate future flood potential.

Future flood frequency estimates based on a greater "look back" period may produce flood frequency estimates that are misleading. Using a shorter look back period, and actually accounting for anticipated future changes in land use and climate will result in the estimation of events that are not as rare as they would appear to be using the entire historic record. Fish passage design accommodations based on these adjusted estimates would further minimize potential impacts.

Conclusion

The DNR believes that the project alternatives under consideration have the potential to impact up to 58 miles of the Red River system. It is imperative that the Corps of Engineers continue to meet with DNR staff regularly to develop project designs that avoid and minimize identified potential impacts to the extent possible, however; even after these efforts, a loss in ecological function is still likely. These unavoidable losses will require mitigation. Mitigation projects must replace all project induced lost functions and values.

Finding balance between important economic, environmental and social consideration has and continues to be challenging in developing flood reduction projects. The DNR is committed to continued collaboration with the Corps of Engineers and other stakeholders in developing meaningful well-balanced flood reduction projects. The DNR would like to meet with the Corps of Engineers in the near future to discuss specific mitigation projects that when completed, provide the greatest value. Please contact Regional Environmental Review Ecologist Nathan Kestner at 218-308-2672 to set up a meeting with DNR staff to discuss these projects.

Thank you for considering our input.

Sincerely,

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cc: Aaron Snyder, COE
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March 16, 2010

Col. Jon Christenson
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RE: Fargo-Moorhead Flood Reduction – MN DNR Project Mitigation Comments

Dear Col. Christenson,

The Minnesota Department of Natural Resources (DNR) remains committed to flood protection efforts in the Red River Valley. Through multiple design concept changes, efforts have been made to reduce potential fish passage impacts associated with a Fargo Diversion; however, we do not share the conclusion that remaining impacts will be insignificant or that project design elements alone can bring impacts to a level not warranting mitigation. Any such conclusion prior to a thorough impact analysis is premature. Furthermore, efforts to mitigate direct and indirect impacts to habitat must replace lost functions. Focusing mitigation efforts on areas identified as impaired and in need of restoration will likely provide the most value. Following are some considerations regarding connectivity and habitat impacts:

Fish Passage Considerations in the Red River of the North System

For a Minnesota Diversion, the current proposed measures to help alleviate fish passage problems above the 5-year discharge include both a fish passageway around the restriction structure and fish passage provided over the spillway for the Diversion channel. It is not known; however:

- What extent the current proposed passage facilitation measures will alleviate fish passage impacts. It is widely know that fish bypass channels are not 100% effective.
- What species will utilize the proposed design-based minimization efforts (documentation on lake sturgeon using fish bypasses is limited).
- What extent multiple restriction structures and tributary crossings will compound passage impacts (e.g. a ND diversion alternative).

The following is information about connectivity impacts, values of the River system as a fishery, and a description of past efforts and ongoing initiatives to increase connectivity and enhance those values:

- Impacts remaining after minimization efforts cannot be mitigated onsite; therefore, off-site mitigation is necessary.

- Currently, Christine and Hickson dams are fish passage barriers up to approximately the 2-year recurrence discharge. The Fargo structure on mainstem Red River would be a fish passage barrier to some extent at the 5-year recurrence discharge and greater. Therefore, the unimpeded fish passage upstream from Fargo-Moorhead that currently exists for all flows above the 2-year discharge would become impaired to some degree above the 5-year discharge. For a Minnesota Diversion, the two proposed measures to permit fish passage above the 5 year discharge include both a by-pass fishway around the structure on the Red River and a rock arch rapids to provide a passable slope over the flood diversion channel weir. These fishways are considered essential with the existing project design. However, it is accepted among resource managers that fish by-pass channels are not 100% effective and it is not known to what extent the fish by-pass channel on the Red River structure will alleviate fish passage impacts.

- Corps of Engineers data indicates that Drayton Dam washes out and becomes passable to most fish species, including lake sturgeon, at approximately the 80% event. However, during critical times when many fishes are migrating to spawning habitats, passage has historically been limited to approximately 13% of the time in March, 50% in April, 35% in May, and 20% in June. Removal or modification of existing barriers increases overall net passage and connectivity and removal of downstream barriers will increase passage potential at existing and future upstream barriers.

- Connectivity of rivers and their associated tributaries is necessary to maintain ecological diversity and function.

- During floods, fishes use the inundated floodplain for a variety of reasons including, refuge from higher velocities, making use of additional food sources, and migrating upstream and downstream in the slower waters found in the floodplain. Diverting floodwaters to the diversion channel decreases existing higher quality floodplain habitat, diverts migrating fish into lower quality diversion channel habitat, and poses an impediment to the movement of fishes.

- Most of the 57 species known to inhabit the mainstem of Red River migrate throughout the system to one extent or another. Channel catfish and lake sturgeon are two species of particular concern. With channel catfish being present in high numbers, the presence of fish exceeding 40 inches, fishing effort exceeding 110,000 hours/year and harvest exceeding 43,000 lbs/ year, the Red River of the North arguably supports the best recreational channel catfish fishery in North America. The ability of channel catfish to migrate throughout the Red River basin is critical. Channel catfish have been shown to move long distances, both upstream and downstream, within and between the Red River and its tributaries as catfish seasonally migrate between summer, overwintering and spawning habitats (Hegrenes, 1992; Wendel, 1999; McDonald 1990).

The lake sturgeon is a member of the sturgeon family of fishes that are imperiled throughout the world. Overharvest and construction of dams are frequently cited as the causative factors of population declines. Construction of dams is widely believed to be one of the major factors that have led to the near extirpation of the lake sturgeon from the Red River Basin.

Efforts by state, federal and tribal agencies to re-establish lake sturgeon (a State designated species of special concern) in the Red River basin have been ongoing since the mid-1990's. As part of this effort, juvenile lake sturgeon were tagged in 1997 and 1998 and released in Detroit Lake, Otter Tail Lake, and the Otter Tail River to begin the restoration and to gather information on lake sturgeon movement through the basin. Subsequent recapture information showed that juvenile lake sturgeon migrated long distances within a year, including some that migrated hundreds of miles down and miles up tributary streams, even though the stocked sturgeon were not sexually mature. Male lake sturgeon reach sexual maturity in approximately 10-15 years, and females reach maturity in 20-25 years. The first large-scale reintroduction of lake sturgeon fry and fingerlings (first year fish) occurred in 1999, which means there are likely mature male sturgeon in Red River that are beginning to make upstream migrations associated with spawning behavior. Female lake sturgeon spawn once every six to ten years. The fact that lake sturgeon exhibit long-distance seasonal migrations, take a relatively long time to reach sexual maturity and spawn infrequently, emphasizes the need to provide uninhibited connectivity throughout the Red River and its tributaries in order to re-establish and sustain lake sturgeon in the Red River Basin. The long-range goal for lake sturgeon restoration in the Red River basin is to establish a self-sustaining population over the next 20 to 30 years (MN DNR, 2002).

In addition to catfish and sturgeon, Red River species such as walleye, sauger, goldeye, an others, also exhibit long-distance, season migration patterns. Spawning migrations by many species are initiated by an increase in discharge, most often associated with annual spring high discharges. This is the same relative time period when the Fargo structure would have the highest probability of being operated.

- Significant energy has been put into restoring connectivity along the Red River and its tributaries with past project such as Riverside, Fargo North, Midtown, Fargo South, and Kidder on the Red River; and Point, Crookston, Heiberg, and at least 25 other fish passage projects on Red River Tributaries.

Given the facts described above, the DNR believes that any additional impedance to seasonal fish migration patterns may result in significant impacts to catfish, lake sturgeon and other species populations over time. It is imperative that any unavoidable impacts be mitigated. It may be possible to offset some project-induced impacts by improving fish and system connectivity.

Efforts are currently underway to alleviate or provide passage through these dams:

- Drayton Dam (Section 18, T 159 N, R 50 W)
- Christine (Section 18, T 136 N, R 48 W) and Hickson Dams (Section 19, T 137 N, R 48 W)

Ensuring that these projects are completed will go a long way to connecting the system and providing mitigation for passage impacts associated with a Fargo Diversion.

Direct and Indirect Habitat Mitigation Considerations
The DNR agrees that money targeted at pre-existing comprehensive ecosystem restoration initiatives will help ensure the most value for mitigation efforts. One such initiative that the DNR feel would go a long way in mitigating impacts associated with a Fargo diversion project is completion of an ecosystem restoration and flood damage reduction project on the lower Wild Rice River. Implementation of this project would restore wetland and aquatic habitat, restore form and function to the floodplain, and restore connectivity to segmented floodplain forest.

The MNDNR will continue to provide resource management expertise in an effort to develop options that maintain as much natural form and function of the impacted resources as is possible.

Thank you for considering our input.

Sincerely,

Michael R. Carroll
Regional Director
mike.carroll@state.mn.us

Cc: Aaron Snyder, COE
Elliot Stefanik, COE
Craig Evans, COE
Kent Lokkesmoe, Director Division of Waters

Sources:

Hegrenes, S.G. 1992. Age, growth and reproduction of channel catfish in the Red River of the North. Master's thesis. University of North Dakota, Grand Forks, ND.

McDonald, D. 1990. The channel catfish sport harvest of the lower Red River. Master's thesis. University of Manitoba, Winnipeg.

MN DNR. 2002. Restoration of extirpated lake sturgeon (Acipenser fulvescens) in the Red River of the North watershed. Minnesota Department of Natural Resources, Division of Fisheries, Bemidji, MN.

Wendel, J.L. 1999. Habitat use and movements of channel catfish in the Red River of the North. Master's thesis. University of North Dakota, Grand Forks, ND.

Fargo/Moorhead Feasibility Study Scoping Comments
Bob Bezek [Bob.Bezek@dnr.state.mn.us]

Jon,

In response to the initial meeting you had in Fargo and your request for some input based on that meeting, comments were solicited from Department staff. While I did get some input back it was very general in nature. I think it would have been helpful to have a formal request to respond to. That being said, following is a summation of the comments we received.

1. Continue to consult Natural Heritage data.

2. It is anticipated that a channel diversion through agriculture land will not have significant impacts to wildlife resources for production or movement. Depending on the type of vegetation and management practices employed some benefits may be realized in a diversion channel.

3. Levees and floodwalls along the river may effect the movement of some species of wildlife such as geese, but would not be significant in either a negative or positive way.

4. The employment of water retention should be included in the mix of alternatives. Opportunities exist to increase and improve ecosystem and wetland restoration, wildlife habitat and provide recreational opportunities through the use of multipurpose water retention areas.

5. Attached for consideration is Technical Paper 12 (Wetland Hydrology & Biodiversity in the Red River Basin, Minnesota) developed by the Red River Flood Damage Reduction Work Group.

6. The potential for impacts to the Buffalo Aquifer need to be addressed in the consideration of alternatives.

7. Many regional flood mitigation efforts are either under way or planned by groups such as the Red River Water Management Board and the Red River Basin Commission. Every effort should be made to identify all possible partners to leverage money and benefits where ever possible.

8. It is recommended that structural flood control measures not be utilized to promote development in currently undeveloped areas prone to flooding.

Again, these are just some initial comments. Once you compile the comments you have received from others it might help to route those to our staff as well. Thanks for the opportunity to provide input Jon.

Best Regards, Bob Bezek

Robert J. Bezek
NW Regional Hydrologist
MN DNR Waters - Bemidji
(o) 218-308-2621
(c) 218-760-7096

From: Nathan Kestner
To: craig.o.evans@usace.army.mil
CC: Bezek, Bob; Buesseler, Peter; Doneen, Randall; Groshens, Tom
Date: 8/27/2009 1:05 PM
Subject: Fargo-Moorhead Metro Feasibility, Draft Scoping Document - DNR Comments
Attachments: Wetland Hydrology and Bio.pdf; Wetland Restoration to.pdf; Nathan Kestner.vcf

Craig,

It appears that all previous DNR comments and concerns have been included in either the Scope of Alternatives or Scope of Issues To Be Addressed in the EIS sections of the Draft Scoping Document.

Based on staff comments, it was suggested that additional emphasis be placed on wetland restoration as a flood storage alternative:

Wetland Restoration
The employment of water retention through wetland restoration has been included in the Scoping Document in both the scope of alternatives and in the scope of issues to be addressed section.

Wetland restorations have multi-purpose benefits (water quality, fish ☐wildlife habitat) that are not always captured in cost-benefit analysis. The restoration of wetland ecosystems can result in a change in one or more functions which include; water quality improvement, floodwater retention, fish and wildlife habitat, aesthetic and biological activity. The value (or estimate of the importance or worth) of one or more of these changes in function should be included in the cost benefit and impact analysis. Additionally, there will likely be many other agencies (MDNR, NDDNR, USFWS, MPCA, Watershed Districts) willing to partner on projects that would help distribute the cost this consideration should also be included in any cost benefit analysis.

Attached for consideration are two papers that provide recommendations and/or acknowledge that further study of wetland restorations for flood benefits is needed. These papers may be of value in preparing the EIS.

☐ Technical Paper 12 (Wetland Hydrology ☐Biodiversity in the Red River Basin, Minnesota) developed by the Red River Flood Damage Reduction Work Group).

☐ Agribusiness ☐Applied Economics Report No. 432a (The Feasibility of Wetland Restoration to Reduce Flooding in the Red River Valley: A Case Study of the Maple River Watershed, North Dakota).

It is our anticipation that the alternative of wetland restoration will be given thorough consideration and comprehensive review in the EIS. The DNR will be submitting more formal comments for the final document. Please call me with any questions.

Thank you

Nathan Kestner
Environmental Assessment Biologist
MN DNR Division of Ecological Resources
2115 Birchmont Beach Rd NE, Bemidji, MN 56601
218-308-2672, 218-755-4066 (fax)

From: Nathan Kestner
To: Sobiech, Jonathan J MVP
CC: Bezek, Bob; Buesseler, Peter; Carlson, Thomas; Drewes, Henry; Groshe...
Date: 10/2/2009 3:18 PM
Subject: Re: Diversion Channel Alternatives
Attachments: Nathan Kestner.vcf

Jon-

The DNR appreciates the opportunity to provide comments on the diversion channel alternatives being considered as part of the Phase 2 Feasibility study for the Fargo-Moorhead Metro Flood Risk Management Project. DNR staff did not review North Dakota diversion alternatives, however; we have given the Minnesota alternatives a preliminary review and offer the following comments:

Wildlife:
As far as Wildlife is concerned, there doesn't appear to be any issues or concerns with either alignment as both alternatives are located on tillable land. The DNR encourages a management scheme of the channel which provides wildlife habitat value.

Fisheries:
1. The DNR recommends setting inlet diversion crest elevations at the 10 year event level, allowing flows associated with less frequent events to continue to flow down Red River of the North.
2.Ensure all structures , including culverts and diversions, are designed to allow fish passage.
3.Design all structures and channels to ensure vertical and lateral stream channel stability, and maintain functionality.
4.Design the low-flow pilot channel within the diversion channel as a Rosgen E channel type to mimic natural stream morphology and functionality.
5.Establish project monitoring plan to identify stream, ditch and diversion channel adjustments over time, and design and implement maintenance activities as necessary.

Vegetation:
Other than what has already been stated (regarding a management scheme which provides habitat value), the DNR does not have further specific comments pertaining to the selection of vegetation species within the diversions. We will provide further input in the future if a diversion alternative is further pursued.

Thank you for the opportunity to provide these comments. The MnDNR looks forward to working with the Corps of Engineers in a collaborative manner. As the project moves forward the DNR will have more substantive and formalized comments. Please feel free to give me a call at 218-308-2672 with any questions.

Thank you.

Nathan Kestner
Environmental Assessment Biologist
MN DNR Division of Ecological Resources
2115 Birchmont Beach Rd NE, Bemidji, MN 56601
218-308-2672, 218-755-4066 (fax)

□□□"Sobiech, Jonathan J MVP" □Jonathan.J.Sobiech@usace.army.mil□9/30/2009 4:20 PM □□□
Hello,
I am writing to follow up with the diversion channel alternatives I sent out. I am looking for comments by the end of this week Oct 2nd if possible. I would also like to set up a meeting/workshop to discuss the comments and the impacts these alternatives will create. I was hoping to have a meeting the week of October 12th, but realize that is too soon and instead am shooting for the week of October 26th. Your input on this alternative is extremely important for this process, I look forward to hearing from all of you.
Thanks for your hard work on this project I really appreciate it.
Jon

Jonathan Sobiech
Forester
US Army Corps of Engineers
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Office phone 651-290-5428
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fax 651-290-5258

Minnesota Department of Natural Resources

REGIONAL OPERATIONS
2115 Birchmont Beach Road NE
Bemidji MN 56601
218.308.2629

January 24, 2011

Aaron Snyder
USACE Project Manager
190 East 5th Street
Suite 401
St. Paul, MN 55101

RE: Fargo Moorhead Flood Reduction – MNDNR federal Supplemental Draft EIS Scoping Comments

Dear Mr. Snyder,

The State of Minnesota remains committed to flood protection in the Red River valley and supports projects that are the product of the 1998 Red River Basin Flood Damage Reduction Work Group mediation agreement process. In August of 2010, the Minnesota Department of Natural Resources (MNDNR) submitted comments on the federal Draft Environmental Impact Statement (DEIS) which identified specific issues that should be included in the scope of a Final EIS. Those comments remain relevant to the now planned Supplemental Draft EIS (SDEIS). The purpose of this letter is to provide both a summary of previous recommendations and provide recommendations for additional analysis which pertain specifically to the most recent plans for on-channel storage.

Summary of Past Recommendations

Scope of Alternatives – The DEIS and Feasibility Study looked at individual alternatives to assess the economic feasibility of flood protection. The SDEIS should include an alternative that is composed of a comprehensive array of multi-faceted alternatives, such as upstream off-channel storage, watershed/wetland restoration, flood barrier, floodway, by out/relocation, and diversion combination alternatives. A combination of non-structural and structural approaches should be evaluated to minimize upstream and downstream hydrological effects that would occur from a single large structural alternative such as a diversion channel.

Hydrology - The SDEIS must justify the decision to split a long-term gage record into a wet and dry period. This should include an analysis of available climate records to show that such a climate cycle has occurred during the last 100 years. The use of the non-traditional hydrology has significant affect on the economic analysis among other potentially significant effects. A comparison of the benefits for the old and new hydrology at the 10, 50, 100, 500-year events should be provided in the SDEIS. The non-

traditional hydrology must be used consistently for the entire analysis in estimating potential impacts (e.g. fisheries), mitigation, and be applied for regulatory purposes (FEMA flood map revision).

Downstream Hydraulic Effects - The SDEIS should include a description of the takings analysis and be explicit as to what constitutes a taking. Inclusion of the taking analysis as an appendix would be useful. The SDEIS should include mitigation measures and estimated cost for addressing upstream and downstream stage and flow increases regardless of Corps' authority to fund such mitigation actions.

The SDEIS should identify how the Corps' has complied with Executive Order 11988 on floodplains. In addition, the SDEIS should discuss compliance with FEMA standards relating to the stage increases.

The DEIS only provided preliminary hydraulic effects data. The full extent of upstream and/or downstream stage increases should be included in the SDEIS.

Geomorphic Processes and Aquatic Habitat - The DEIS did not provide substantiation for assumptions of uniform distribution of sediment particle sizes throughout the water column. It's our understanding that additional work related to sediment distribution is underway. The SDEIS should include a particle size analysis of total sediment load of the Red River and its tributaries.

Fish Passage and Biological Connectivity - The analysis provided by the SDEIS must rely on hydrologic data (updated data), empirical evidence, and peer-reviewed literature to draw conclusion pertaining to potential fish passage impacts. For all alternatives, the SDEIS should address: to what extent the proposed passage facilitation measures will alleviate fish passage impacts; what species will utilize the proposed design based minimization efforts, and; what extent multiple restriction structures will compound passage impacts. The EIS must also place fish passage percentages in context of migration periods of various species in the Red River system rather than the entire record. Impacts to fish passage at Wolverton creek was not analyzed in the DEIS and must be included in the SDEIS.

Wetland Impacts - The SDEIS must specifically discuss how the proposed wetland mitigation will replace the functions and values lost at direct and indirect impact sites. The SDEIS should also discuss the potential for created channel-bottom wetlands to be influenced by aggressive non-native invasive plant species over time and subsequent impacts on function and value. This potential outcome must be discussed in context or in determining the appropriate replacement ratio.

Debris and Ice - The SDEIS should acknowledge that woody debris is an important component of many river systems providing fish habitat and channel stability. For each alternative, the SDEIS should provide a thorough analysis of debris and ice as it relates to operation, maintenance, geomorphic processes and habitat.

Safety – The SDEIS should include a description of safety and operational measures proposed to ensure the safety of recreational users on the Red River and its tributaries. The SDEIS should also include an analysis of catastrophic failure risk and provide loss of life estimates in the event of catastrophic failure.

The SDEIS provide the safety information mentioned above as well as adequate information to inform the state permitting process. At a minimum, this information must include that described as required in a "Preliminary Report" under Division of Waters Rules 6115.0410 Sub. 3.

Mitigation and Adaptive Management - The SDEIS must demonstrate that proposed mitigation measures ensure no loss of habitat function or values. Likewise, the SDEIS must discuss methods proposed for quantifying mitigation, future monitoring, and verification of mitigation effectiveness.

The SDEIS should include indicators and criteria that reflect the desired conditions (e.g. what level of deviation from the existing condition is acceptable?); monitoring of the indicators and criteria for deviation; and implementation of management actions when the desired conditions are violated (or when conditions are deteriorating and preventive measures are available). The SDEIS must discuss the likelihood of securing future funding and the probability of mitigation measures being implemented in the future. A commitment on behalf of the sponsors in the form of financial assurance and agreement to undertake future mitigation is necessary.

Invasive Species - The SDEIS should discuss the potential for invasive species transport during construction or how the operation of the project may potentially be affected. A zebra mussel veliger was recently discovered in the Red River. It is unknown whether zebra mussels will become established in the Red River. Regardless, maintenance associated with removal from infrastructure (to ensure smooth operation) can be costly and should be included in the analysis provided by the SDEIS.

Recommendations for Additional Analysis

Subsequent to the issuance of the DEIS an on-channel impoundment alternative has been added the range of alternatives which includes significant design changes. These changes will require re-evaluation of all aforementioned topics as well as the following additional topics:

Compatibility with Existing Plans – The DNR supports projects that are the product of the 1998 Red River Basin Flood Damage Reduction Work Group mediation agreement process. Projects that meet the mediation agreement goals for flood damage reduction and natural resource benefits typically have a level of consensus that helps balance economic, environmental and social concerns while providing a more streamlined and less controversial permit review and approval process. The SDEIS should describe the compatibility of the various project alternatives with the decision making process outlined in the Flood Damage Reduction Mediation Agreement and the associated TSAC technical papers.

Effects on Vegetation – Inundation and sedimentation associated with on-channel storage may negatively affect plants and plant communities. The SDEIS should analyze the direct effects that inundation and sedimentation will have on both wetland and upland vegetation.

Stream Stability – Within impoundments accumulation of sediment within the channel and on the floodplain, and losses of native riparian vegetation can reduce stream stability. Inundation in itself may also reduce bank stability. An analysis of these potential affects should be included in the SDEIS.

The DNR remains committed to flood protection efforts in the Red River Valley; however, the DNR is concerned that, if a plan that impounds water on the main channel of the Red River is selected, there will be significant impacts and mitigation would be challenging. This is very important as it relates to DNR permits, as the DNR cannot issue a permit for an on-channel structure if a feasible alternative with less potential for environmental impact is available that can provide similar flood control benefits.
The project component of a high hazard dam on the Red River triggers mandatory EIS preparation under the Minnesota Environmental Policy Act (MEPA). The Minnesota State EIS process has not begun and the ability of the federal EIS to satisfy the state requirements has not been determined. Regardless of what is included in the federal EIS, a state EIS scoping process must occur to determine the scope of the state EIS.

Thank you for considering our input. We look forward to continuing to work with you and your staff.

Sincerely,

Michael R. Carroll
NW Regional Director
mike.carroll@state.mn.us

Minnesota Pollution Control Agency
520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300
800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

June 16, 2011

Mr. Aaron Snyder
Chief, Project Management and Development Branch
U.S. Army Corps of Engineers
180 East 5th Street, Suite 700
St. Paul, MN 55101-1678

Re: Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement

Dear Mr. Snyder:

Thank you for the opportunity to review and comment on the Supplemental Draft Feasibility Report and Environmental Impact Statement (Supplemental EIS) for the Fargo-Moorhead Metropolitan Area Flood Risk Management project (Project) located in Fargo, North Dakota and Moorhead, Minnesota. The Project consists of the construction of a diversion channel around the Fargo-Moorhead Metropolitan Area to reduce flood risk. Minnesota Pollution Control Agency (MPCA) staff has reviewed the Supplemental EIS and have no comments at this time.

Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this Supplemental EIS, please contact me at 651-757-2508.

Sincerely,

Karen Kromar

Karen Kromar
Planner Principal
Environmental Review and Feedlot Section
Regional Division

KK:mbo

cc: Craig Affeldt, MPCA, St. Paul
Will Haapala, MPCA, Detroit Lakes

NORTH DAKOTA FOREST SERVICE

"To care for, protect and improve forest and natural resources to enhance the quality of life for present and future generations."

June 10, 2011

Aaron M. Snyder, Chief
Project Management and Development Branch
St. Paul District, Corps of Engineers
180 East 5th Street, Suite 700
St. Paul, MN 55101-1678

Re: Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Mr. Synder,

The North Dakota Forest Service (NDFS) has reviewed the information pertaining to forest and tree resources in the Supplemental Draft Feasibility Report and Environmental Impact Statement – Fargo Moorhead Metropolitan Area Flood Risk Management. The NDFS submits the following comments to the U.S. Army Corps of Engineers:

Loss of Forestland – *The North Dakota Statewide Assessment of Forest Resources and Forest Resource Strategy* published by the NDFS in May, 2010, identifies conversion to non-forest as a significant threat to upland forests, riparian forests and rural tree plantings. The NDFS feels that the 2:1 mitigation ratio is adequate to restore riparian/upland forests removed due to construction activities.

Floodplain Forest Performance Standards – The NDFS recommends the following considerations for Performance Standard 1 – Although American elm and green ash are native species to the study area, their continued use should be re-evaluated due to the impacts of Dutch elm disease (*Ophiostoma ulmi*) and the expected arrival of the emerald ash borer (*Agrilus planipennis*). Dutch elm disease has severely altered the abundance of elm within these forest systems. Emerald ash borer is expected to result in similar negative consequences for the ash component of these forests. Mitigation efforts should attempt to focus on establishing other non-host, native trees species. In addition, silver maple is not considered a native species in North Dakota. Its recommendation for use in mitigation areas should be reviewed. Quaking aspen (*Populus tremuloides*) is a native, fast-growing, root-suckering species that should be considered as a more appropriate substitute for silver maple.

Seasonal Effect of Flooding on Trees – Flooding resulting from retention of flood water could have significant negative effects on forest and tree resources. The timing (seasonal) and duration

State Forester Mollberg Forestry Center 307 First Street East Bottineau, ND 58318-1100
Tel: (701) 228-5422 • Fax: (701) 228-5448 • E-mail: forest@nd.gov • www.nd.gov/forest

of flooding are the most important criteria in determining the effects on the health and vitality of inundated trees. Flooding during the growing season usually is more harmful to woody plants than flooding during the dormant season. Specifically, trees are most susceptible to flooding in late spring just after the first flush of growth. The longer trees are exposed to flooding, the greater the potential for injury. Most trees can withstand only 1-4 months with water being continuously over the soil surface. Short periods of flooding during the growing season can be tolerated by most trees. However, if flooding is recurrent and keeps the soil saturated or prevents recovery from previous flooding, injuries will accumulate and serious damage may occur. The NDFS suggests the U.S. Army Corps of Engineers consider these two criteria (timing of inundation and duration) when assessing if additional mitigation areas should be sought.

Further information on the effects of flooding on trees can be found at:
Bratkovich, Stephen et al. 1993. Flooding and It's Effects on Trees. 1993. Forest Resources Management and Forest Health Protection, USDA Forest Service, Northeastern Area State and Private Forestry, St. Paul, MN.

Thank you for your consideration and the opportunity to comment on the Fargo-Moorhead Area Flood Risk Management.

Sincerely,

Larry A. Kotchman
North Dakota State Forester

North Dakota Department of Transportation

Francis G. Ziegler, P.E.
Director

Jack Dalrymple
Governor

May 20, 2011

Aaron M. Snyder, Chief
Project Management and Development Branch
Department of the Army Corps of Engineers
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

SUPPLEMENTAL DRAFT FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT FOR FARGO MOORHEAD METROPOLITAN AREA FLOOD RISK MANAGEMENT TO CONSTRUCT A 36-MILE LONG DIVERSION CHANNEL LOCATED IN NORTH DAKOTA THAT WOULD DIRECT FLOOD WATERS, CASS COUNTY, FARGO, NORTH DAKOTA

We have reviewed your April 28, 2011, letter.

The project referenced above will have no adverse effect on the North Dakota Department of Transportation (NDDOT) highways; however, use of right of way and design of channel and structures within the right of way should be coordinated with NDDOT Office of Project Development.

Additionally, if any work needs to be done on highway right-of-way, appropriate permits and risk management documents will need to be obtained from the Department of Transportation District Engineer, Robert Walton at 701-239-8903.

RONALD J. HENKE, P.E., DIRECTOR – OFFICE OF PROJECT DEVELOPMENT

57/rjh/js
c: Robert Walton, Fargo District Engineer

1101 1st Ave. N., Fargo, ND 58102
P.O. Box 2064, Fargo, ND 58107-2064
Phone: 701-298-2200 • 1-800-367-9668 • Fax: 701-298-2210

4023 State St., Bismarck, ND 58503
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June 17, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

We are writing to you with our concerns about the proposed Red River Diversion project as described in the Supplemental Draft Feasibility Report of the Environmental Impact Statement published in April 2011.

North Dakota Farm Bureau is a statewide organization focused on issues that concern production agriculture in our state. Our membership exceeds 27,000 farmers and non-farmers. We are a member of the American Farm Bureau Federation. That organization has affiliates in every state in the country and has a membership of over six million. It is safe to say that water issues are some of the top concerns for nearly every Farm Bureau in the country.

Flooding in the Red River Basin is of critical importance to agriculture in North Dakota. Excessive precipitation over the past 20 years has had devastating consequences to farmers in the Devils Lake portion of the basin, as well as the Red River Valley. Agriculture provides one of only two sources of new wealth in the state, the other being the mining of coal and extraction of oil and natural gas. Protecting our industry is critical to the continued economic development of our region. Urban areas like Fargo and Moorhead have shown significant growth in service related industries along with development of the health care industry and post secondary education facilities. But it is unquestionable that agriculture is the economic engine that drives the economies of eastern North Dakota and Western Minnesota. Any project proposal that does not consider the effects on the agricultural environment is seriously flawed.

The report supplies a limited analysis of effects on agriculture in the Farmland/Food Supply section of 5.2.3.2.7. It lists 10 to 15 farming operations affected by channel construction, but does not list operations affected by the staging pool. The report totals additional acres affected by the pool at 20,000. Maps of total area affected appear to be in excess of 54,000 acres. There seems to be a disconnect between the effects of sheet water normally expected in spring flooding, and the depths anticipated behind the storage dam. The difference is evident when the report suggests different remedies for water depths

over three feet, one to three feet, and those under one foot. If mitigation is required for those significant depths, shouldn't they be considered as severely impacted by the study and differentiated from existing conditions?

There is no economic impact to the region calculated for loss of production of those acres. It appears that the estimate is for operation of the staging area in one year out of five. If spring planting is delayed in that area for an average of four weeks because of soil saturation, there would be a corresponding economic loss to the region in those years. Farmers' inputs would be reduced because of anticipated reduction in yields, and production would be reduced as well. Summer use would be less likely, but in those years the loss of production would be large. This will have a significant impact on the local rural communities as well as the larger cities. Ag related business will receive the largest negative impact.

There is little analysis of the impact on the rural communities affected by the project. It appears the communities of Oxbow, Hickson and Bakke will have to be removed. As stated earlier, the number of farmsteads that will be affected in the pool area has not been specified. Small communities, school districts and businesses in this area will be severely affected. Property taxes are a significant component in the cost structure for agriculture in the Red River Valley. If tax base destroyed by the project must be absorbed by farmland in the school districts affected, farmers will be disproportionately affected. There is no attempt to quantify or analyze this in the report.

Little mention was made in the report on how farmers would be compensated for farmsteads being purchased or relocated. At one of the information meetings, a real estate expert with the USACE suggested farm structures would be purchased at their depreciated value. This would have serious consequences since the farmsteads would have to be rebuilt at new prices.

Agriculture has gone through enormous transitions over the last 30 years. The 1980s and 1990s saw unprecedented consolidation of farms. This resulted in the loss of population in rural areas and significant stress on rural communities and school districts. The communities affected by the storage area in this project have adapted to the changes in demographics, but would be returned to the stresses of three decades ago by this proposal. Analyses of cultural and social effects of the staging area design in the SDEIS are virtually non-existent.

Finally, even though the study was designed to reduce flood risk for the cities of Fargo and Moorhead, the look at alternatives virtually ignores the region-wide impact of excess precipitation, and possible solutions that would protect the economic integrity of the entire area. The most significant opportunity is to consider a basin wide strategy to reduce flows in addition to localized flood control for Fargo and Moorhead.

The study reviewed a plan put forward by Minnesota Representative Collin Peterson to identify upstream retention areas. The study review estimated 400,000 to 600,000 acre feet of storage upstream would reduce river levels in Fargo-Moorhead at 1.6 feet. The

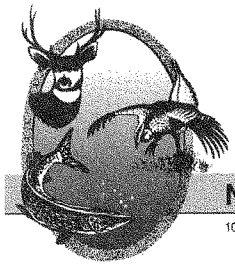
Diversion Proposal would reduce the level by a targeted 12 feet. Clearly, upstream storage is not feasible for reducing river levels to a necessary level. The USACE has stated that the control structure and staging pool covering 54,000 acres of farmland would have no impact on river levels, but mitigate downstream impacts. There does not appear to be any analysis of using upstream retention to mitigate downstream impacts instead of the staging pool. This would seem to be an obvious point for study, given the fact that the area inside the diversion would already receive absolute protection. Managing upstream flows would be balanced with downstream effects. The entire watershed would benefit from such an approach. Agricultural production would be enhanced, helping the economy of the entire area. We do not understand this oversight.

We appreciate that North Dakota Farm Bureau has been able to interact with USACE during this process. The information and understanding we have gained has made it possible to better understand the issues involved with this project, and how it will affect the agricultural and regional environment of the eastern part of the state. We feel at this point the study is incomplete, and the questions we have raised in these comments need further analysis before the report could be considered comprehensive.

Thanks again for the opportunity to participate with these comments.

Sincerely,

Craig Hertsgaard, Chairman
NDFB Red River Basin Task Force



"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

June 10, 2011

Aaron Snyder
Chief, Project Management and Development Branch
180 East 5th Street
Suite 700
St. Paul, MN 55101-1678

Re: Fargo/Moorhead Metropolitan Area Flood Risk Draft Environmental Impact Statement

Dear Mr. Snyder:

The North Dakota Game and Fish Department (Department) has received a copy of the Draft Feasibility Report and Environmental Impact Statement (DEIS) for Fargo/Moorhead Metropolitan Area Flood Risk Management. The scope of the DEIS is to evaluate flood risk management measures that could be implemented as a Federal project in the Fargo-Moorhead Metropolitan Area. Department personnel have worked closely with the Corps of Engineers and the local sponsors to assure adequate flood protection is implemented in the Fargo/Moorhead area while minimizing impacts to fish and wildlife resources.

Although the COE and the local sponsors have worked diligently to assure an environmentally friendly project is implemented, we realize the project will have impacts. The COE has worked to avoid and minimize impacts through almost all aspects of the proposed project, however, Section 5.5 'Mitigation and Adaptive Management' of the DEIS will play a major role in replacing lost or impacted ecological functions. The Department stresses the importance to continue close coordination to develop the most appropriate actions possible to offset unavoidable impacts.

There are numerous impacts that can be readily addressed, however there are also numerous unknowns regarding fish passage and geomorphic impacts that are going to be very difficult to quantify. The Department has voiced concern numerous times regarding the need to assure funding is available to allow for future modification of the project or additional mitigation to offset those unidentified impacts. Although this has been discussed in the Adaptive Management Section, additional actions need to be taken to address this issue. The COE and the project sponsors are pursuing this project which will have negative environmental impacts. There needs to be a solid commitment prior to the construction of the project that all impacts will be adequately mitigated.

The current total cost for mitigation for the LPP is approximately $58 million, or 3.2% of a $1.8 billion project. Given this is a small percentage of the overall project, the local sponsors should make a solid commitment to assure funding is available for unidentified impacts or project modifications.

The Department prefers mitigation for riparian forest impacts includes options such as acquisition of mitigation lands. The Department's philosophy is if public dollars are being utilized for the project then the mitigation should be available for public use. The Department would consider entering into a MOU to manage these properties if they are of adequate size and habitat quality.

The Department is concerned with a conclusion in Section 5.2.1.7.5.6 stating "For the LPP and ND35K, fish passage at the upstream control weir does not seem feasible." The Department suggests the COE and local sponsors consider all options to maintain river connectivity and recommends additional correspondence with the various agencies regarding this issue.

Within Section 6.0 of the EIS, the document states the Resource Agency Team includes the North Dakota Game, Fish and Parks (NDGFP). Please correct it to read the North Dakota Game & Fish Department (NDGFD) in this Section and any additional Sections of the document.

Sincerely,

Paul Schadewald
Chief
Conservation & Communication Division

blk

State of
North Dakota
Office of the Governor

Jack Dalrymple
Governor

June 14, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
Chief, Project Management and Development Branch
180 East Fifth Street, Suite 700
St. Paul, MN 55101-1678

RE: Comments on the Supplemental Draft Feasibility Report and Environmental Impact Statement (EIS) for Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear U.S. Army Corps of Engineers, St. Paul District:

This letter is in response to the comment period regarding the proposed construction of flood protection measures for the Fargo-Moorhead Metropolitan area. Since the Fargo-Moorhead Metropolitan Area Flood Risk Management Study was authorized, the State of North Dakota has attended Metro Working Group meetings, meetings with local sponsors and meetings with concerned stakeholders that are directly and indirectly affected by the proposed project.

A project of this size not only affects those that have requested assistance in determining a solution to permanent flood protection but also stakeholders that may be impacted by the plan selected. Therefore the State recommends that the U.S. Army Corps of Engineers continue to obtain and consider input by those stakeholders and water management districts, both upstream and downstream, that may be impacted by the project.

The State of North Dakota will continue coordination efforts as the studies and project components are made available and that the voices of concerned citizens are heard. The state of North Dakota is committed to providing funding to cover one half of the non-federal, non-Minnesota share of the project's costs. It is important to note that the state serves a support role in this effort. Local governing entities, their constituents and the U.S. Army Corps of Engineers will determine the project's scope and footprint.

Thank you for your consideration and for the opportunity to comment on the Supplemental Draft Feasibility Report and EIS for the Fargo-Moorhead Metropolitan Area Flood Risk Management Study.

Sincerely,

Jack Dalrymple

Jack Dalrymple
Governor

37:68:56

600 E. Boulevard Ave. • Bismarck, ND 58505-0601 • Phone: 701.328.2200 • Fax: 701.328.2205 • www.governor.nd.gov

North Dakota State Water Commission
900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: http://swc.nd.gov

June 16, 2011

Mr. Aaron Snyder
Chief, Project Management and Development Branch
U.S. Army Corps of Engineers - St. Paul District
180 East 5th Street, Suite 700
St. Paul, MN 55101-1678

Dear U.S. Army Corps of Engineers - St. Paul District:

Thank you for the opportunity to review the Supplemental Draft Feasibility Report and Environmental Impact Statement for the Fargo-Moorhead Metropolitan Area Flood Risk Management Study.

As we have mentioned before, flooding in the greater F-M area has been a habitual problem that needs resolution. We are optimistic that through this study, and ultimately through construction and implementation of the Locally Preferred Plan (LPP), the F-M metro area will have the permanent flood protection that has been needed for so many decades. Therefore, we applaud your efforts to move this study forward in a timely manner.

The following include State Water Commission staff comments related to specific sections of the report:

Section 1.5.3.16
Some of the dams mentioned were constructed through the NRCS (SCS). This includes the three dams located on tributaries of the lower portion of the Maple River, and the three dams on the Elm River.

Section 2.7, Planning Constraints
One of the planning constraints mentioned is to "minimize loss of floodplain in accordance with Executive Order 11988, Floodplain Management." By the very nature of the various diversion alternatives, large areas will be removed from the floodplain. That planning constraint should be reworded, or additional clarification provided.

Section 3.14.4
A Sovereign Lands Permit is required through North Dakota's Office of the State Engineer, not through the North Dakota State Water Commission. Please note that a construction permit would also be required from the Office of the State Engineer.

JACK DALRYMPLE, GOVERNOR
CHAIRMAN
TODD SANDO, P.E.
SECRETARY AND STATE ENGINEER

Executive Summary (Page 19, Recommendations)
In this section of the report it is mentioned that the St. Paul District Engineer recommends the North Dakota East 20,000 cfs diversion channel with upstream staging and storage. It should very clearly say that this is the LPP. Then, throughout the document, there are several sections where the capacity of the other alternatives is provided in their respective discussions, but not always for the LPP. This makes it less clear to the reader that the LPP is now a 20,000 cfs diversion alternative (with upstream storage and staging).

Regarding general comments on the Draft Feasibility Report and EIS, we offer the following:

- We are concerned for landowners along the route of the proposed diversion channel and the upstream area included in the staging/storage area for the LPP. This is a major disruption to those individuals. Some will be forced to move, some will have farmsteads and farmland fragmented by the alignment, and others, at the very least, will be negatively impacted in one way or another. Therefore, it is important that they receive fair compensation, based on value without the potential project having any impact. It is also important to include compensation for all buildings on a farmstead, not just the house. In addition to impacts to farmsteads and rural areas, the small communities and school districts that will be impacted by the project also need to be justly compensated.

- The Water Commission agrees that an adaptive management approach and post monitoring is a good idea for such a large project where it is difficult to determine the effectiveness of the mitigation efforts. It is suggested that the Corps of Engineers pursue other programs that may be able to assist in any changes to the mitigation that may be determined to be needed in the future.

- We understand that there may be some additional consideration of minor relocations of the alignment of the diversion in the design phase of the project. We encourage further analysis of a possible alignment that could offer protection for Hickson, Oxbow, and the Bakke Subdivision, as well as further review with the western alignment near Horace and West Fargo.

- We support the development of additional upstream storage, regardless of whether the proposed F-M project is in place or not. The upstream storage will also benefit flood prone areas along tributaries.

Generally speaking, the State Water Commission is supportive of the LPP alternative. And, we are committed to assisting the Corps of Engineers in any way we can to find a viable solution to the serious flooding problems that have plagued the F-M area for decades. In support of this pledge and of the project, the State of North Dakota, through the State Water Commission, has already obligated a substantial financial contribution for our local share, and we will continue to do so as needed in the future.

In closing, we sincerely appreciate the professionalism and extra effort Corps staff have shown in advancing this critically important project, and for the many opportunities you have provided for stakeholders to participate in the study process.

If you have any questions or would like clarification on any of the above comments, please contact Randy Gjestvang at our Red River office at 701-282-2318, or email him at rgjestvang@nd.gov.

Thank you for your consideration of our comments.

Sincerely,

Todd Sando

Todd Sando, P.E.
Chief Engineer-Secretary

TS:rg:lk:pmf/1955

Cass County
Joint Water
Resource
District

Thomas Fischer
Chairman
Fargo, North Dakota

Mark Brodshaug
Manager
Fargo, North Dakota

Rodger Olson
Manager
Leonard, North Dakota

Michael Buringrud
Manager
Gardner, North Dakota

Raymond Wolfer
Manager
Argusville, North Dakota

Carol Harbeke Lewis
Secretary-Treasurer

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@co.cass.nd.us
casscountygov.com

May 27, 2011

Aaron Snyder
Chief, Project Management and Development Branch
U.S. Army Corps of Engineers
St. Paul District
180 East 5th Street, Suite 700
St. Paul, MN 55101-1678

Dear Aaron:

RE: Fargo-Moorhead Metropolitan Area Flood Risk Management
Supplemental Draft Feasibility Report and EIS

The Cass County Joint Water Resource District supports the above referenced project, which is an integral part of permanent flood control for the Fargo-Moorhead metropolitan area. However, the Water Resource District is concerned about impacts to the people they serve and urges the Corps of Engineers to consider participation in the cost of mitigation in those areas.

Thank you.

Sincerely,

CASS COUNTY JOINT WATER RESOURCE DISTRICT

Thomas L. Fischer
Chairman

CASS COUNTY
GOVERNMENT

June 6, 2011

Board of County Commissioners

Scott Wagner
Fargo, North Dakota

Vern Bennett
Fargo, North Dakota

Ken Pawluk
Fargo, North Dakota

Darrell W. Vanyo
West Fargo, North Dakota

Robyn Sorum
Horace, North Dakota

U.S. Army Corps of Engineers
Attn: Aaron M. Snyder
180 East 5th Street
Suite 700
St Paul, MN 55101-1678

Subject: Environmental Impact Statement Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Mr. Snyder:

This letter is written on behalf of the Cass County, North Dakota Board of County Commissioners to convey our strongest possible support for the proposed project. As a result of the exhaustive study efforts completed in recent years, it is our conclusion that a diversion is the only practical solution to address this region's extreme flood risk. Time is of the essence in moving this critical project forward. Each year that passes without a project in place exposes the region to an unacceptably high risk of catastrophic loss.

We believe the process followed by the Corps has been methodical and has provided every opportunity for public comment and involvement. The Cass County Commission urges the U.S. Army Corps of Engineers to continue moving the project forward in the most expeditious manner possible.

Sincerely,

Darrell Vanyo, Chairman
Cass County Commission

hmw

cc: Cass County Commissioners
Keith Berndt, Cass County Administrator
Metro Flood Study Work Group

Heather Worden
Commission Assistant

Box 2806
211 Ninth Street South
Fargo, North Dakota 58108

701-241-5609
Fax 701-241-5728
www.casscountynd.gov

RECEIVED
MAY 20 2011
BY:

COUNTY OF RICHLAND

STATE OF NORTH DAKOTA

418 Second Avenue North
Wahpeton, North Dakota 58075

COPY

May 18, 2011

Governor Jack Dalrymple
600 E Boulevard Ave, Dept 101
Bismarck ND 58505-0001

RE: Proposed Fargo-Moorhead Flood Diversion Project

Dear Governor Dalrymple,

The Richland County Board of Commissioners has been involved in discussions and meetings pertaining to the proposed Fargo-Moorhead Flood Diversion Project. At the April 18, 2011 Commission Meeting, the Board passed the enclosed Resolution.

Please feel free to contact our office if you wish to visit with the Board regarding this matter.

Sincerely,

Tim Campbell
Richland County Commission Chairman

cc: Senator John Hoeven
Senator Kent Conrad
Congressman Rick Berg
US Army Corps of Engineers
Cass County Board of Commissioners
Clay County Board of Commissioners
Wilkin County Board of Commissioners
City of Fargo
City of Moorhead

COUNTY OF RICHLAND

STATE OF NORTH DAKOTA

418 Second Avenue North
Wahpeton, North Dakota 58075

RICHLAND COUNTY, NORTH DAKOTA
RESOLUTION

Introduced by Commissioner Perry Miller, who moved its adoption: April 18, 2011

BE IT RESOLVED BY THE COUNTY COMMISSION OF RICHLAND COUNTY, to wit:

WHEREAS, No Environmental Impact Study for Richland County has been prepared by the State Water Commission or the Army Corp of Engineers; and

WHEREAS, We support Basin Wide Solutions for the high water issues in the Red River Valley.

THEREFORE, Richland County cannot support the FM diversion/dam as proposed.

Commissioner Sid Berg, seconded the motion for adoption.

ATTEST: Harris Bailey
Harris Bailey
Auditor/Administrator

CHAIRPERSON
Tim Campbell
Board of Richland County Commissioners

Roll Call Vote		
	Ayes	5
	Nays	0
	Absent	0

RICHLAND COUNTY TOWNSHIP OFFICERS ASSOCIATION

OFFICE OF THE SECRETARY

WAHPETON, NORTH DAKOTA 58075

June 17, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact State, Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

We are writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

On April 28, 2011, the Richland County Township Officers passed the following resolution:

> "We oppose any Red River diversion project that would place a dam on the river and backing water into Richland County. We would also like to thank the Richland County Commission and Water Resource Board for their position to oppose the diversion project."

Sincerely,

Jason Dennis Goltz
Secretary
Richland County Township Officers Assn.
701.642.7793

COUNTY OF RICHLAND

STATE OF NORTH DAKOTA

418 Second Avenue North
Wahpeton, North Dakota 58075

RICHLAND COUNTY, NORTH DAKOTA
RESOLUTION

BE IT RESOLVED BY THE COUNTY COMMISSION OF RICHLAND COUNTY, to wit:

WHEREAS, Citizens of Richland County have appeared before the Richland County Commission and have expressed concern over the proposed Cass County North Dakota Red River Diversion Plan as submitted by the United States Army Corps of Engineers; and

WHEREAS, Based on such concerns, Richland County Commission Members have attended numerous hearings and itself has held hearings with its citizens so that the Commission can evaluate the proposed Red River Diversion and its effects on Richland County; and

WHEREAS, After due consideration of the verbal input of its citizens, letters and e-mails received, the Richland County Commission does unanimously conclude that the Red River Diversion Plan as submitted by the United States Army Corps of Engineers be vigorously opposed for the following reasons:

I. That based on the surveys conducted by the Corps of Engineers and the project sponsors, the Corps has failed to spell out and quantify the adverse impacts upon Richland County such as:

   A. Loss of tax base of residential and farmland values as a result of the diversion/retention. That the loss of tax revenues will have to be made up by increasing taxes of all non-affected property owners in Richland County.
   B. That the Northern Tier of Richland County has been a strong growth area for the County, which growth will be severely affected by land flooding as a result of the diversion.

C. That the Corps of Engineers has failed to take into account the loss of tax revenues to school districts and other public entities which will be affected by the proposed diversion project.

D. That the overland flooding and retaining of flood waters resulting from the diversion project will severely affect crop production in the northern tier of the County causing economic losses to its rural citizens and those businesses that rely on such agricultural producers.

E. That Richland County has already experienced adverse effects in so far as residential real estate in the northern tier of Richland County has already suffered in value and difficulties in financing since the proposed diversion plan has been revealed.

F. That the full economic impact to Richland County and the effects that such will have on citizens, businesses, roads, electric utilities, personal property and public safety have not been factored into the project.

G. That the plan sponsors have no legal standing to take property within Richland County or require its citizens to forfeit their property without recompense.

II. That the Richland County Commission concludes that the Red River Diversion Project will be of absolutely no benefit to Richland County or its citizens and thus can only have negative impacts on the County. The plan fails to address water issues in the entire Red River Basin including upstream and downstream interests.

NOW THEREFORE BE IT RESOLVED that for the above reasons and others, the Richland County Commission be and is totally opposed to the current and most recent United States Army Corps of Engineers Red River Diversion Plan;

BE IT FURTHER RESOLVED that copies of this Resolution be submitted to the United States Army Corps of Engineers, the Governor of the State of North Dakota, and all Representatives and Senators of this State.

Dated at Wahpeton, ND this13th day of June, 2011.

ATTEST: Harris Bailey
Harris Bailey
Auditor/Administrator

Tim Campbell CHAIRPERSON
Tim Campbell
Board of Richland County Commissioners

June 6, 2011

VIA CERTIFIED MAIL RRR & E-MAIL
(Aaron.M.Snyder@usace.army.mil)

US Army Corps of Engineers
St. Paul District
Attn: Aaron M. Snyder
180 E. 5th St., Suite 700
St. Paul, MN 55101-1678

Dear Mr. Snyder:

The US Army Corps of Engineers (USACE) made available to the public the Supplemental Draft Fargo/Moorhead Metro Feasibility Report and Environmental Impact Statement dated April, 2011. Enclosed is a resolution from the City of Christine in regard to the proposed Fargo/Moorhead flood diversion project.

The City Council has met with the residents of the City and received input from the community members. The City Council and city residents are opposed to the currently proposed Locally Preferred Plan that includes the City of Christine within a staging and storage area.

The City of Christine's residents have already felt the negative impact of the proposed Fargo/Moorhead diversion project as City property values have decreased. These property values will have a negative impact on the City by decreasing future tax revenues.

The City Council and its residents feel that flood mitigation for the entire Red River Valley basin is what is needed rather than solely focusing on one problem area of the basin. A flow reduction approach for upstream retention on valley rivers and tributaries would be a more effective way to solve flooding problems for a greater number of people and communities. The regional hub of Fargo/Moorhead would benefit as well as protecting the properties, school districts and livelihoods of those living outside of the metro area by reducing basin flooding. This would be a common sense compromise for the water issues of the entire basin.

The City of Christine is not opposed to the Cities of Fargo and Moorhead protecting themselves from flooding, but does not want to be irreparably damaged in the process. We feel it is necessary for the USACE to further study the upstream and downstream impacts. We have seen the project impact maps change frequently as the project continues to be studied. We request the USACE to pursue all potential flooding solutions for the entire basin and not merely for Fargo/Moorhead and the areas into which they wish to expand.

Sincerely,

James A. DesRoches
Mayor
City of Christine
PO Box 1241
Christine, ND 58015-1241

Our Centennial '83
1883 — 1983

CITY OF CHRISTINE
Flood Diversion Resolution 2011-01

City Council member Randy Monson introduced the following resolution and moved its adoption:

WHEREAS, The United States Army Corps of Engineers, (USACE) has proposed constructing diversion channels around the Cities of Fargo, ND and Moorhead, MN, which includes an upstream water staging and storage area.

WHEREAS, The locally preferred plan (LPP) diversion channel includes an upstream water staging and storage area.

WHEREAS, The City of Christine is included within the staging and storage area of the LPP.

WHEREAS, The proposed flood diversion channel will significantly increase the flood elevations in the staging and storage area of the project by damming up water thereby adversely affecting the health, welfare and safety of the City of Christine, its residents and the residents of northern Richland County.

WHEREAS, Increased water elevations as envisioned by the USACE would further adversely impact the local economy by removing prime acreage of farmland from operation impacting affected landowner's and tenants livelihoods.

WHEREAS, Tax revenues would be decreased for the Cities, Townships, School Districts and Richland County and stop the growth of that region of the County.

WHEREAS, The diversion project would also negatively affect the region's roads, public and private utilities, personal property and public safety to those included in the staging and storage area of the flood diversion project.

WHEREAS, The proposed Fargo/Moorhead Locally Preferred Plan diversion channel, which includes a staging and storage area, is not acceptable to the City of Christine due to all of the adverse impacts that would result from its implementation.

NOW THEREFORE, The City of Christine does hereby go on record opposing the Fargo/Moorhead diversion as it is presently proposed. The City of Christine requests the USACE to further study the upstream and downstream impacts and develop a solution that would benefit the entire Red River Basin, its population and communities.

The Resolution was seconded by Council member Curtis Schlauch and upon vote being taken, the following voted in favor thereof: Randy Monson, Curtis Schlauch, and Rick Baukol
and the following voted against the same: none.
Whereupon said Resolution was declared passed and adopted.

Adopted this 6th day of June, 2011.

CITY OF CHRISTINE

James A. DesRoches, Mayor

ATTEST:

Cathy Affield, City Auditor

Resolution No. 06-2011

A Resolution of the City Council of the City of Comstock, Minnesota Establishing Their Opposition to the Proposed Fargo, ND/Moorhead, MN Upstream Diversion.

WHEREAS, The United States Army Corps of Engineers (USACE) has proposed constructing floodwater diversion channels, tieback levees, and floodwater retention for the cities of Fargo, ND and Moorhead, MN; and

WHEREAS, the proposed diversion. Levees, and retention will cause floodwater to be held in southern Cass County ND, southern Clay County MN, northern Richland County ND, and northern Wilkin County,MN; and

WHEREAS, the USACE's own 1% and .2% existing floodplain maps show the City of Comstock not retaining water; and

WHEREAS, the proposed diversion, levees, and retention will cause floodwaters of one foot to more than three feet deep to cover the City of Comstock; and

WHEREAS, it is only the proposed diversion, levees, and retention that will cause the estimated level of water to enter the City of Comstock,

Now therefore, to preserve the interest of the City of Comstock and its people, the Comstock City Council does hereby go on record as opposing the Fargo, ND/Moorhead, MN upstream diversion project as it is now proposed.

PASSED AND ADOPTED by the City Council of the City of Comstock, Minnesota at a regular session thereof held on the 16 day of June, 2011.

Thomas P. Askegaard, Mayor
Thomas Askegaard, Mayor

ATTEST:

Pamela Guest, City Clerk

June 15, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

The City of Davenport is writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We have many concerns about the impact of the project on our city, with special interest in five areas:

-Diversion effects on flooding tributaries
-Relocation of displaced residents
-Loss of tax base and students in Kindred School District (Davenport is part of)
-Cultural losses from dismantling communities
-Lack of participation in the planning process

Diversion effects on flooding tributaries

"The study has been primarily focused on the Red River event with coincidental flow events on the tributaries and no models have been developed to assess the exact impact, however it can be said with certainty that there would be impacts." 3.7.3.2

The City of Davenport is located near the Sheyenne River immediately upstream from the proposed spillway along Cass County 17. The project appears to be designed so that in case precipitation or inflows cause the water held behind the dam to exceed planned levels, they would move west into the area occupied by overflows of the Sheyenne River. While local residents have measures to deal with overland flooding in this area, additional water from the spillway would inundated transportation routes and homes and farms in this area. In addition, since normal overflows occupy this area already, they may be displaced and be backed up into areas immediately surrounding our city. Since the study states that "no models have been developed to assess the exact impact," we ask that these models be completed with input from the City of Davenport before the study is considered complete.

Relocation of displaced residents

The report states "Several hundred or thousands of residents would need to be relocated. Hundreds of homes and farm structures would be removed, and farm operations relocated." 5.2.3.1.7

The vast majority of these residences would be considered likely or very likely to frequent businesses or services in the Davenport area. A loss of these patrons would have a significant impact on the economy and property values in Davenport. The study contains no estimate of economic impact on surrounding communities. Davenport is located about 25 miles from Fargo. People establish their homes in the greater Davenport area for two important reasons. The first is the ability to maintain a "small town atmosphere" near a larger metropolitan area that provides necessary services. The second is relatively the short distance to commute employment. Since economics dictate the distance most families can afford to commute to work, the communities of Oxbow, Hickson and Bakke offer a unique opportunity take advantage of both of the above factors. Displaced residents will be forced choose between their choice of environment for raising their families and economic pressures to be close to work. The location of the diversion and spillway will make it nearly impossible to duplicate the living environment they have chosen. The choice for most will be to move within the city limits of Fargo or Moorhead. The community of Davenport will suffer economic loss as a result of the diversion. The study does not quantify this or establish alternatives.

Loss of tax base and students in Kindred School District

The report states "The Kindred School District, which Davenport is part of, would be impacted by 'short term' loss of tax base and students." The assumption for this statement is that residents displaced by the project would eventually relocate in the district, or others would locate in the district at an accelerated rate to compensate for the immediate loss plus anticipated growth. The factors stated in the previous paragraph address the issues affecting current impact area residents. Those who would locate in the Kindred District in the future will require a higher economic status in order to live in the district. The increasing cost of transportation will limit who can live beyond the diversion and commute to the cities of Fargo and Moorhead.

The immediate impact to the City of Davenport, will be an increase in property taxes to replace the tax base lost by dismantling the neighboring communities and farms. The competitive cost of housing will discourage people from establishing new homes in Davenport, and lower the values of existing ones.

The loss of students in the school will also have a significant impact on the community. With the loss of students, the district receives less payment from the state in per pupil payments. Less students require less teachers. The school is the largest employer in the Kindred School District. The diversion will directly affect jobs.

The report recognizes the impact on the school district, but does not quantify the effect of the loss of services to the remaining community.

Cultural losses from dismantling communities

The SDEIS shows no analysis of cultural resources in staging area. The Davenport Region is an old community relative to cities in the Red River Valley. The first settlements in this area date to the 1870's. The earliest settlers were predominantly Norwegians, Germans, and Swedish. Over the past one hundred and thirty years, the different groups melded into a unique culture that contrast strong ethnic traditions with modern ties of school, sports, religion and relaxation. The most recent entrant into the established local community were people who moved from predominantly rural areas to work in the Fargo-Moorhead metropolitan area and maintain a small town environment. They chose the Hickson, Oxbow, Bakke area among traditional farm homes. They now compromise almost a quarter of the school population. They have established strong ties with traditional community residents of Kindred, Davenport, Leonard and Walcott. Many of the recent entrants into the community live next to siblings and their families, and have become the neighborhoods of choice for extended families and their children's families.

Promoters of the diversion compare dismantling the communities to flood buyouts in larger communities. Nothing could be further from the truth. Homeowners that are relocated in large cities can choose other homes in the same neighborhoods and school districts. Their lives can go on with relatively small disruption. Razing entire communities, especially those tied in with a larger rural community could have devastating results to the health and well being of the individuals involved, and have a lasting negative impact on those who remain in the larger rural community.

The study ignores the most stark and negative impacts of the proposed project.

The local community was not allowed to participate in the planning process

The Corps report states: "The sponsors have worked closely with the other local entities to develop a consensus on the path forward..." 6.3 At no time was the City of Davenport asked to participate in the planning process. As part of the school district, the practical boundaries of the community are the edges of the district The City of Davenport is a central city in the affected community, and should have been involved in the design and planning process of the project, and not only in the information dissemination portion at its conclusion. No mention of this omission is made in the SDEIS.

Thank you for considering our comments. We hope you will extend your study to include our areas of concern.

City Council of the City of Davenport

Larry Pallucks

Matthew Pallucks

CITY OF Fargo

MOORHEAD MINNESOTA

June 13, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: CEMVP-PM-B
180 5th Street East, Suite 700
St. Paul, MN 55101-1678

To Whom It May Concern:

On behalf of the cities of Fargo and Moorhead, the Local Sponsors of the proposed flood control project, the following comments are submitted in support of the conclusions of the Preliminary Clean Water Act Section 404(b)(1) determination set forth in Attachment 1 to the Supplement Draft Feasibility Report and Environmental Impact Statement ("SDEIS"), dated April 11, 2011. Because of the overlap in subjects, these comments should also be considered as comments on the SDEIS generally, although Fargo and Moorhead may submit further comments by the June 20, 2011 deadline for commenting on the SDEIS.

At the outset, I would like to express the Cities sincere appreciation for the extraordinary efforts by the Corps, cooperating state and federal agencies, and local government entities and individuals in developing the design for this critical public works project. As veterans of many decades of flood fights, we look forward to the day when the residents of the Fargo-Moorhead metropolitan area can look to the signs of spring each year with the hope of a new season, without being accompanied by the fear that this could be the year that the floodwaters win.

These comments will focus on three areas of the project which were the subject of many of the comments at the June 1, 2011 public hearing on the 404(b)(1) determination and in which the Cities have played an important role:

- The purpose and scope of the feasibility study and project design since inception;
- The development, analysis, screening, and selection of project alternatives; and

- The Local Sponsors' and Corps' public involvement and communications strategy and practices.

Project Purpose

First, it is impossible to treat the flooding of the Red River in isolation. Floodwaters play no favorites, and a home, business, or other property will be damaged just as much by water overflowing a ditch, creek, storm sewer, or tributary as by water overtopping the main channel of the Red River. In our years of combating flooding, City staff has learned that the entire area is an interconnected system and a comprehensive approach is essential. Because of its location and the volume of water it carries, the main channel of the Red is certainly our initial focus, but we have always devoted considerable planning and effort to flood risks posed by the Buffalo, Wild Rice, Sheyenne, Maple, Upper and Lower Rush Rivers and their associated feeder streams and drainage ditches throughout the metropolitan area. For this reason, the Local Sponsors and the Corps have focused on a comprehensive approach to managing the risk of flooding in the metropolitan area.

The comment at the June 1, 2011 hearing that consideration of flood protection from the tributaries to the Red River was somehow a "secondary purpose" of the project therefore completely misses the point. The purpose of the Feasibility Study – to "identify measures to reduce flood risk in the entire Fargo-Moorhead Metropolitan Area" (SDEIS at 1) – was never about treating the Red River in isolation. The feasibility study process was commenced over three years ago, on April 8, 2008. As stated in the Corps September 14, 2009 Scoping Document at the commencement of the NEPA process, "the purpose of the proposed action is to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan area." Scoping Document at 7. The geographic scope was further explained as follows:

> The geographic scope of analysis for the environmental impacts of the proposed action and alternatives consists of the Fargo-Moorhead Metropolitan region, located within the area from approximately 12 miles west to 5 miles east of the Red River and from 20 miles north to 20 miles south of Interstate Highway 94. This includes the Red River and the downstream portions of the Buffalo River, Wild Rice River (ND), Sheyenne River, Maple River, Rush River and other contributing streams that enter the Red River in the study area (Figure 1). Scoping Document at 12.

Protection from tributary flooding has always been an integral part of the project purpose.

Evaluation of Alternatives

Another comment at the June 1, 2011 hearing suggested that the Locally Preferred Plan is not the Least Environmentally Damaging Practicable Alternative ("LEDPA") under CWA Section 404(b)(1), and other alternatives, particularly combination plans, had not been properly compared. The comment further then suggested that since other potential flood protection measures were screened out as not being adequate to provide protection on a stand alone basis, these options were not fully considered as possible combinations once diversion alignments were selected.

The record and supporting analytical process for consideration of alternatives, however, clearly demonstrate otherwise. Upstream retention and storage were not pursued as *stand alone* alternatives in the initial Draft Environmental Impact Statement ("DEIS"), dated May 2010, but those options *were expressly retained* as alternatives for further consideration *in combination* with diversion channels and other flood protection features. These included:

Non-Structural Measures
Flood Storage
Wetland and Grassland Restoration
Bridge Replacement or Modification
Cut-Off Channels
Levees

See DEIS at 40; SDEIS at 39.

Initially, the Corps believed that downstream impacts from a diversion channel would attenuate relatively quickly based on the Corps' experience in other watersheds. However, modeling completed in October or November 2010 showed that diversion channels in the Red River watershed's unique topography would result in a rise in the river hundreds of miles downstream of Fargo-Moorhead, placing thousands of properties and structures at risk. The stand-alone North Dakota and Minnesota diversion alignments were therefore determined to be impracticable. Given the sheer volume of analysis performed and data collected, it would have been impossible to disaggregate and restate the reasons why each of the hundreds of combinations of possible alternatives were not pursued. The preliminary 404(b)(1) analysis therefore incorporated by reference the DEIS, SDEIS and their appendices to provide more detailed backup support for the conclusion that the ND 35K alignment "would have widespread impacts to infrastructure downstream." If more details are of interest, they can be found in the referenced documents, which describe the extent of the modeled impacts and make clear that comparable downstream impacts would result from other configurations.

Specifically, Appendix O of the SDEIS contains a detailed summary of the various options that were considered. Once the Corps concluded that a diversion channel alone would create unacceptable problems downstream, and additional measures were necessary to mitigate those impacts, the Corps examined *384* different combinations of measures that were carried forward from the initial December 2009 Alternatives

Screening Document. SDEIS Appendix O at 62. This process is summarized at pages 59 to 97 of Appendix O to the SDEIS, and included multiple combinations in conjunction with diversion alignments. There is no question that the MN 35K and North Dakota alignments receive more extensive discussion in the text of the main body SDEIS than the array of other alternatives considered, and rightly so. The MN 35K has long been identified as, and remains, the NED plan. It is important that this alternative be discussed in detail. Further, the various North Dakota diversion alignments have long had strong local support, and were originally viewed as being sufficient as stand alone options, which justified extensive discussion. Finally, although downstream modeling showed that diversions by themselves would cause unacceptably high impacts, diversion channels remain an essential foundation to any reasonable flood control system. Consequently, it is appropriate for the SDEIS to focus on a detailed comparison of various diversion options on which variations including the preferred alternative were built.

Topography ultimately drove the result of the SDEIS alternatives analysis. As explained at page 75 of Appendix O, if one attempts to site floodwater retention or storage further away from the Fargo-Moorhead boundaries, substantially more surface acres would be required to achieve the same level of flood protection. Moving the storage zone (or start of the diversion channel) south of the proposed areas would not simply shift the affected area from Oxbow/Hickson to Christine/Wolverton, but would also consume much more agricultural land, since the further upstream storage occurs, the more storage area that would be necessary. This topographical principle required the Corps to screen out most retention/storage and other options except those located in close proximity to the proposed diversion point. The Corps also looked at multiple local storage/retention options and other flood management measures around the diversion point and found no better configuration.

Neither Fargo, Moorhead nor any of the other Local Sponsors wish to displace any North Dakota or Minnesota residents. Over the course of the several Metro Flood Study Work Group meetings from November 2010 through release of the SDEIS, the Work Group examined every option they could conceive or was presented to them, and concluded that the Locally Preferred Plan presented the best option. The preferred alternative achieves the project goals, and is the LEDPA.

Public Involvement and Communication

There were other comments that the selection of upstream retention as a component of the design was done without sufficient public notice and involvement. As the record establishes quite clearly, this is simply not true. The feasibility study commenced in 2008. Water retention and storage were specifically identified in the Scoping Document as alternatives to be considered during the NEPA process. Scoping Document at 8, 16-17. Upstream retention was also identified as an area of interest by many commenters' to the Scoping Document. See Appendix A at 2-15, 19.

Once the difficulty of mitigating downstream impacts became clear in the later part of 2010, the Corps and the Metro Flood Study Work Group immediately revisited upstream

retention and other options in a series of public meetings. These are summarized in Appendix Q in the SDEIS:

Nov. 18, 2010 – Metro Flood Study Work Group Meeting -- presentation slides are at page 912 of Appendix Q

In this meeting the Corps and Work Group specifically state that they are examining upstream retention and storage, in light of the inability to eliminate downstream impacts. This message was repeated at every subsequent meeting.

Dec. 9, 2010 - Metro Flood Study Work Group Meeting -- presentation slides begin at page 918 of Appendix Q, discussion of upstream retention occurs on pages 920 to 922;

Upstream retention is expressly identified on the agenda for this meeting.

Jan. 13 - Metro Flood Study Work Group Meeting -- presentation slides begin at page 925 of Appendix Q, discussion of upstream retention occurs on pages 931 and 933;

The Kindred County School District, located in the area to be affected by upstream retention, made a presentation at this meeting.

Jan. 19 - Presentation for the Red River Basin Conference -- presentation slides are available at: http://www.internationalwaterinstitute.org/feasibility/110119_RRBC_presentation.pdf; discussion of upstream retention occurs on slide pages 10 to 14;

Feb. 24 – Metro Flood Study Work Group Meeting -- presentation slides begin at page 934 of Appendix Q, discussion of upstream retention occurs on pages 935 to 936;

Mar. 30 – Metro Flood Study Work Group Meeting -- presentation slides begin at page 937 of Appendix Q, discussion of upstream retention occurs on pages 940 to 952, 957 to 958, and 968 to 970;

Mar. 30 - Public Meeting -- presentation slides are at page 973 of Appendix Q; discussion of upstream retention occurs on pages 977 to 989;

Mar. 31 - Public Meeting -- presentation slides are at page 1016 of Appendix Q; discussion of upstream retention occurs on pages 1020 to 1032;

April 1 – Metro Flood Study Work Group Meeting -- presentation slides are at page 1054 of Appendix Q; discussion of upstream retention occurs on pages 1055 to 1066;

May 23 - Public Meeting – presentation slides are available at http://www.internationalwaterinstitute.org/feasibility/May2011_Public_Meetings_Presentation.pdf; discussion of upstream retention occurs on slide pages 5 to 25;

May 24 - Public Meeting – presentation slides are available at http://www.internationalwaterinstitute.org/feasibility/May2011_Public_Meetings_Presentation.pdf; discussion of upstream retention occurs on slide pages 5 to 25;

May 25 - Public Meeting -- presentation slides are available at http://www.internationalwaterinstitute.org/feasibility/May2011_Public_Meetings_Presentation.pdf; discussion of upstream retention occurs on slide pages 5 to 25;

May 26 - Public Meeting -- presentation slides are available at http://www.internationalwaterinstitute.org/feasibility/May2011_Public_Meetings_Presentation.pdf; discussion of upstream retention occurs on slide pages 5 to 25; and

June 1 - Public Hearing.

These meetings were all publicly noticed and the referenced documents were publicly released and available on the internet shortly after each meeting.

Moreover, the feasibility study and EIS process have also been closely followed by the local media. Attached to this letter are samples of articles and opinion pieces published in The Forum, just since November 2010, discussing the flood control study project. Many discuss the potential that upstream retention might be necessary in order to mitigate downstream effects as early as November 19, 2010, including quotes from Oxbow's elected officials. The project also received extensive coverage in other local print media and on television.

It is also important to note that the formal notices and meetings described in the SDEIS were one of the ways of communicating with and receiving input with the public. There were numerous meetings with individual citizens and public bodies, including representatives of Oxbow, Hickson and surrounding areas that will be most heavily impacted by the upstream retention feature. In addition to the formal meetings described in the SDEIS, Fargo staff had dozens of meetings with local individuals and groups about the project. To the best of my knowledge, anyone that requested an opportunity to meet and discuss this project was accommodated.

Most importantly, on December 27, 2010, the Corps published in the Federal Register a notice of intent to prepare the SDEIS, requesting comments on the scope of the study. 75 Fed. Reg. 81249. Among other commenter's, the City of Oxbow noted that they had been advised that "they can easily anticipate an increased impact of 3-7 feet." The City requested that the Corps evaluate a more southern alignment of the diversion channel that would protect the Oxbow/Hickson area and enclosed a January 19, 2011 Resolution opposing the diversion, with the signature of 68 Oxbow residents. Upstream communities and individuals therefore have been acutely aware for over 180 days that upstream retention was being considered, and have had many opportunities to evaluate the proposals and provide additional input, both before and after publication of the SDEIS.

Overall, the Local Sponsors and the Corps have worked extremely hard to make the EIS and project design processes as open and accessible as possible. The project is complex, and someone can always ask for more time to study more of the details. But, the SDEIS is the culmination of a three year intensive process to satisfy an urgent flood protection need. Each year that implementation is delayed exposes the Fargo-Moorhead area to annual flood flight costs that have recently cost millions of dollars each flood year, and exposes the region to potentially catastrophic costs and damages if we should ever lose a flood fight. And, we all know that despite our Herculean efforts, winning is never guaranteed. Given the risks the region faces, the significant additional work to be done, and the intensive public outreach conducted to date, there is no basis to conclude that public outreach efforts were inadequate or that issuance of the Record of Decision should be delayed for any reason.

Sincerely,

Mark Voxland, Mayor
City of Moorhead

Dennis R. Walaker, Mayor
City of Fargo

CITY OF KINDRED
PO BOX 158
KINDRED ND 58051
Phone (701) 428-3115; Fax (701) 428-9100
Email: Cityofkindred@msn.com

June 16, 2011

US Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 5th St. E., Ste 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

The City of Kindred is writing in opposition to the Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We have many concerns about the impact of the project on our city, with special interest in six areas:

- Diversion effects on flooding tributaries
- Relocation of displaced residents
- Loss of tax base and students in the Kindred School District
- Cultural losses from dismantling communities
- Lack of inclusion in the planning process
- Loss of business revenue

Diversion effects on flooding tributaries
"The study has been primarily focused on the Red River event with coincidental flow events on the tributaries and no models have been developed to assess the exact impact, however, it can be said with certainty that there would be impacts." 3.7.3.2

The City of Kindred is located near the Sheyenne River immediately upstream from the proposed spillway along Cass County 17. The project appears to be designed so that in case precipitation or inflows cause the water held behind the dam to exceed planned levels, they would move west into the area occupied by overflows of the Sheyenne River. While local residents have measures to deal with overland flooding in this area, additional water from the spillway would inundate transportation routes, homes, and farms in this area. In addition, since normal overflows occupy this area already, they may be displaced and be backed up into areas immediately surrounding our city. If the main source of the economic hub (Fargo) is protected, how can the City of Kindred afford the costs of annual flooding without a Federal Disaster Declaration? How will the diversion affect our infrastructure? How will damages incurred due to back water from the

tributaries be paid for? How is the City of Kindred going to support itself living on the outside of the dike? How will it alleviate the flooding that already occurs? Since the study states that "no models have been developed to assess the exact impact," we ask that these models be completed with input from the City of Kindred before the study is considered complete.

Relocation of displaced residents

The report states "Several hundred or thousands of residents would need to be relocated. Hundreds of homes and farm structures would be removed, and farm operations relocated." 5.2.3.1.7

The vast majority of these residences would be considered likely or very likely to frequent businesses or services in the Kindred area. A loss of these patrons would have a significant impact on the economy and property values in Kindred. The study contains no estimate of economic impact on surrounding communities. Kindred is located about 25 miles from Fargo. People establish their homes in the greater Kindred area for two important reasons. The first is the ability to maintain a "small town atmosphere" near a larger metropolitan area that provides necessary services. The second is the relatively short distance to commute to employment. Since economics dictate the distance most families can afford to commute to work, the communities of Oxbow, Hickson, and Bakke offer a unique opportunity to take advantage of both of the above factors. Displaced residents will be forced to choose between their choice of environment for raising their families and economic pressures to be close to work. The location of the diversion and spillway will make it nearly impossible to duplicate the living environment they have chosen. The choice for most will be to move within the city limits of Fargo or Moorhead. The community of Kindred will suffer economic loss as a result of the diversion. How is the City of Kindred to provide for residents when the infrastructure is stuck and we can't grow because we will be landlocked? How does the project make the City of Kindred a more desirable place to live? We ask that the study quantify this and establish alternatives.

Loss of tax base and students in the Kindred School District

The report states "The Kindred School District would be impacted by 'short term' loss of tax base and students." The assumption for this statement is that residents displaced by the project would eventually relocate in the district, or others would locate in the district at an accelerated rate to compensate for the immediate loss plus anticipated growth. The factors stated in the previous paragraph address the issues affecting current impact to area residents. Those who would locate in the Kindred District in the future will require a higher economic status in order to live in the district. The increasing cost of transportation will limit who can live beyond the diversion and commute to the cities of Fargo and Moorhead.

The Kindred School District is currently building a new school. The immediate impact to the City of Kindred will be an increase in property taxes to replace the tax base lost by dismantling the neighboring communities and farms. The competitive cost of housing will discourage people from establishing new homes in Kindred and lower the values of existing ones.

The loss of students in the school will also have a significant impact on the community. With the loss of students, the district receives less payment from the state in per pupil payments. Fewer students require fewer teachers. The school is the largest employer in the City of Kindred. The diversion will directly affect jobs. How many Kindred residents will lose their job?

The Kindred School District would be impacted by long term loss of tax base and students. How does the diversion keep existing residents in Kindred when property taxes may go up as a result of this project?

Cultural losses from dismantling communities

The SDEIS shows no analysis of cultural resources in the staging area. The Kindred region is an old community relative to cities in the Red River Valley. The first settlements in this area date to 1869. The earliest settlers were predominantly Norwegians, Germans, and French. Over the past one hundred and forty years, the different groups melded into a unique culture that contrast strong ethnic traditions with modern ties of school, sports, religion, and relaxation. The most recent entrant into the established local community were people who moved to the area from predominantly rural areas to work in the Fargo-Moorhead metropolitan area and maintain a small town environment. They chose the Hickson, Oxbow, Bakke areas among traditional farm homes. They now compromise almost a quarter of the school population. They have established strong ties with traditional community residents of Kindred, Davenport, Leonard, and Walcott. Many of the recent entrants into the community live next to siblings and their families, and have become the neighborhoods of choice for extended families and their children's families.

Promoters of the diversion compare dismantling the communities to flood buyouts in larger communities. Nothing could be further from the truth. Homeowners that are relocated in large cities can choose other homes in the same neighborhoods and school districts. Their lives can go on with relatively small disruption. Razing entire communities, especially those tied in with a larger rural community, could have devastating results to the health and well being of the individuals involved, and have lasting negative impact on those who remain in the larger rural community.

Have you considered the impact of moving cemeteries and churches? This is family heritage, tradition, and sacred beliefs being uprooted.

The study ignores the starkest and most negative impacts of the proposed project.

The local community was not included in the planning process

The Corps reports state: "The sponsors have worked closely with the other local entities to develop a consensus on the path forward..." 6.3

At no time was the City of Kindred asked to participate in the planning process. As the home of the school, the practical boundaries of the community are the edges of the district. The City of Kindred is the central city in the affected community and should have been involved in the design and planning process of the project, and not only in the information dissemination portion

at its conclusion. Why was the City of Kindred not included in the planning process? No mention of this omission is made in the SDEIS.

Loss of business revenue

Businesses will also see a reduction in sales. Competition is keen between small town grocery stores, banks, hardware stores, and restaurants, and those in nearby large metropolitan areas. The loss of the patron base can end the life of business in a short period of time. A loss of these patrons would have a significant impact on the economy and property values in Kindred. The study contains no estimate of economic impact on surrounding communities.

The report recognizes the impact on the school district, but does not quantify the effect on businesses in the City of Kindred, or the loss of services to the remaining community.

The project takes upstream land so that downstream land can be developed. This project directly contradicts with Kindred Plan 2020 which was developed to help Kindred continue to grow. We saw in increase in our population from 2000-2010. Many small towns did not experience growth. This plan will not allow the City of Kindred to continue to grow. We won't gain businesses, we will lose businesses.

The Corps acknowledges that there will be impacts outside the 33,390-acre staging area, but these issues have not been addressed or costs established. During normal flooding years, the city businesses all experience a decrease in sales due to the closure of roads. By changing the CFS for downstream communities, how will the extra water affect upstream communities like Kindred?

The City of Kindred is a rural agricultural community. There is a trickle-down effect when the local farmers lose their operation. Not only does it affect our local agricultural businesses in town, but it affects the gas station, the mechanic, the grocery store, bar, bank, etc. Every business in Kindred would be affected by loss of the agricultural community.

Thank you for reviewing and responding to our comments. We ask that you extend your study to include our areas of concern.

City of Kindred

Wayne Lunder

Mayor Wayne Lunder

RESOLUTION OPPOSING THE RED RIVER DIVERSION

WHEREAS, the United States Army Corps of Engineers (USACE) has proposed diverting floodwaters from the Red River around the cities of Fargo and Moorhead,

AND WHEREAS, the USACE has proposed constructing a dam as part of the diversion project that would flood large areas neighboring the City of Kindred, causing the loss of almost 400 homes and farms,

AND WHEREAS, flooding those neighboring areas would reduce the economic trade area for the City of Kindred, and cause the loss of a significant portion of property tax revenues for the Kindred School District, as well as a significant loss of student population, which could result in increased property taxes for residents of the City of Kindred, and an impediment to future growth,

AND WHEREAS, neither the USACE or the members of the METRO FLOOD GROUP have either recognized the potential economic damage, or engaged in any discussions for mitigating the economic or social damages that would occur as a result of their proposal,

NOW THEREFORE BE IT RESOLVED that the City of Kindred opposes the Red River Diversion project as currently proposed.

Wayne Lunder
Mayor Wayne Lunder

Jeff Wanner
President, Jeff Wanner

Vice President, Rich Schock

Deborah Grossnickle
Member, Deb Grossnickle

Member, Verne Wolf

6/15/11
Date

PLAN 2020

KINDRED

North Dakota

Mort Mazaheri Associates

April 1999

KINDRED CITY OFFICIALS

CITY COUNCIL

Robert Clarke, Mayor

Alisha Ankers
Scott Ilvedson
Sue Kersting
Tom Summers

PLANNING COMMISSION

Ryan Smith, Chair

Bruce Hendrickson
James Holmly
Rodell Lee
Brian Ordahl

STAFF

Naomi Wadena, Auditor
Kenneth Blilie, Public Works

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COMMUNITY PROFILE

THE SETTING

The first settlers of largely Norwegian descent arrived in the Kindred area in 1871. The original settlement was on the Sheyenne River south of the present city. Most of the land in the area was soon occupied by farmers who needed a center for trade and business. The first school was built in 1873. School District 32 was organized in 1875 and a second school was built in 1896.

In 1880 when the Minneapolis and Manitoba Railroad arrived, the first town site plat for Kindred was made and town lots were made available for sale. The passenger and freight railroad interconnected this new town site called "Kindred" after William A. Kindred, with other settlements in eastern North Dakota and beyond. Within one year, a post office was established and businesses began to take hold. By 1885 there was a town hall, Rustad Feed Mill, a general merchandise store, black smith shop and a jewelry store. Kindred State Bank opened for business in 1898 and merged with Norman State Bank in 1899. The fire of 1901 nearly destroyed many of the businesses in downtown and about half of the city. Fire fighting was limited to the agility of the property owners who carried water by pail and were no match for the raging blaze.

Soon after that, the local residents and their rural friends rebuilt the town better than before. In 1904 Farmers Elevator was built and in that year telephone came to the area. A high school went into operation in 1909. This new town was not incorporated until 1920. Cass County Electric Cooperative was set up

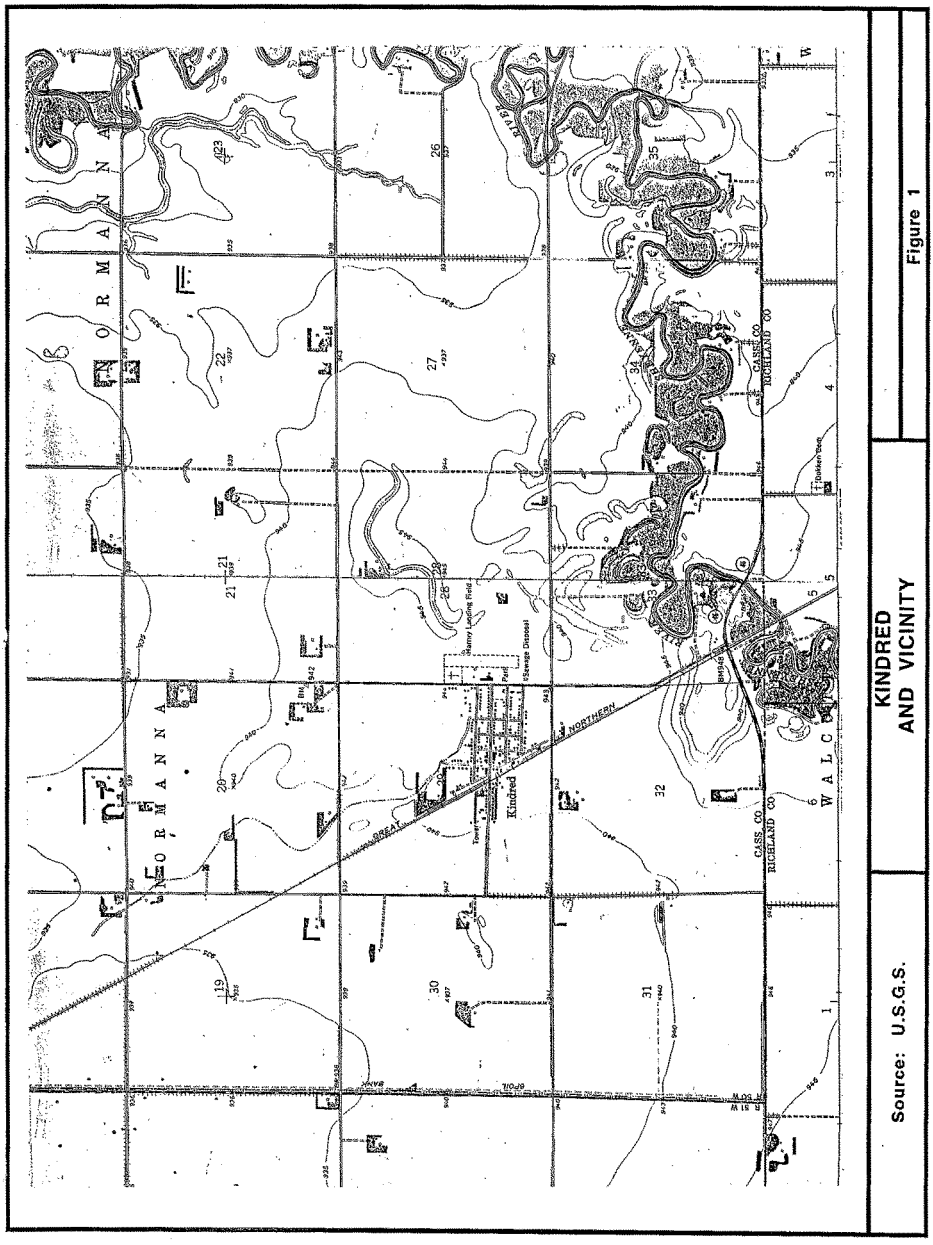
in 1937 and began serving rural Cass County immediately. The city attempted several times to build a public water and sewer system between 1938 and 1949. The system was finally completed in 1951. Kindred was a new and robust town on the prairie (See Figures 1 and 2).

Today Kindred located one mile north of North Dakota Highway 46 and Cass County south boundary, is a stable community, although gone are the days when a large rural population made up its strong service area. Kindred is becoming a suburban community for the Fargo Metropolitan area. The resident within 40 minute driving time have total access to the employment and services Fargo offers.

Kindred's location in the midst of the rich farm lands of Cass County is periodically threatened by the overflowing waters of the Sheyenne River. In 1997 the rising waters in the river together with the massive farm land drainage resulted in many leaky basements. The 1951 sewer system, due to the soil shifting, is placed at risk with a substantial clear water infiltration

POPULATION

Since its incorporation in 1920, Kindred has doubled its population. Although the growth of population has been generally upward, the rate of growth has lagged behind the growth in Cass County (See Table 1). Aside from 1970, when the city population declined, Kindred has shown a gain ranging from 2% to nearly 28% per decade since 1920. Prior to 1920, the city not having been incorporated, its population count was combined with Normanna Township.


KINDRED
AND VICINITY
Source: U.S.G.S.
Figure 1
NORMANNA
WALCOTT
Kindred
CASS CO
RICHLAND CO
NORTHERN

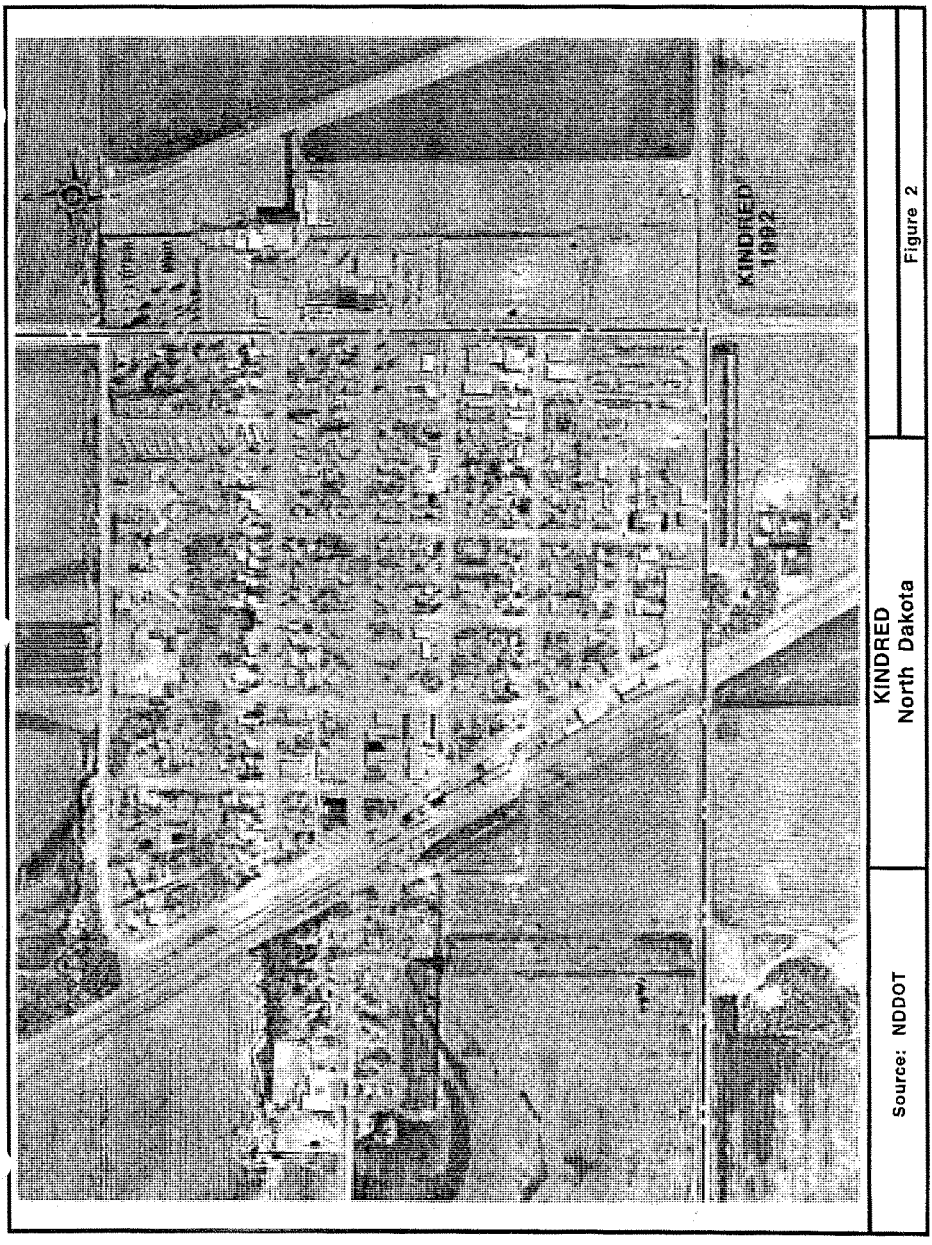

KINDRED
1992
KINDRED
North Dakota
Source: NDDOT
Figure 2

Table 1
Population Change
Kindred and Cass County, North Dakota

	Kindred	Change	Cass County	Change
1920	334		41,477	
1930	429	28.4%	48,735	17.5%
1940	450	4.9%	52,849	8.4%
1950	504	12.0%	58,877	11.4%
1960	580	15.1%	66,947	13.7%
1970	495	(14.7%)	73,653	10.0%
1980	568	14.7%	88,247	19.8%
1990	578	1.8%	102,874	16.6%
1998*	627	8.5%	119,951	16.6%

Source: U.S. Census of Population
*Projected

In comparison with other selected cities in eastern North Dakota, Kindred has not had a change in population since 1960. Depending on the location of these communities, those cities away from the major towns have experienced significant decline (See Table 2). On the other hand, communities close to the Fargo Metropolitan area have grown significantly. Kindred in this analysis, demonstrates the advantage of its location, despite a major change in rural population of its service area. A closer look at Kindred's population for 1980 and 1990 shows a general increase for all age groups under 65 years old, indicating that a relative decline in elderly population is signaling a trend in population changed evidenced by the projection offered in Table 1 for 1998 (See Table 3).

Table 2
Population Change
in Selected Cities of
Eastern North Dakota

	1960	1970	1980	1990	Change 1960-90
Kindred	580	495	568	578	-
Arthur	325	412	445	405	24.6%
Finley	808	809	718	544	(32.7%)
Harwood	-	-	326	577	-
Hope	390	364	406	289	(25.9%)
Mapleton	180	219	306	695	286.1%
Portland	606	534	627	583	(3.8%)
Wyndemere	644	516	550	477	(25.9%)

Source: U.S. Census of Population

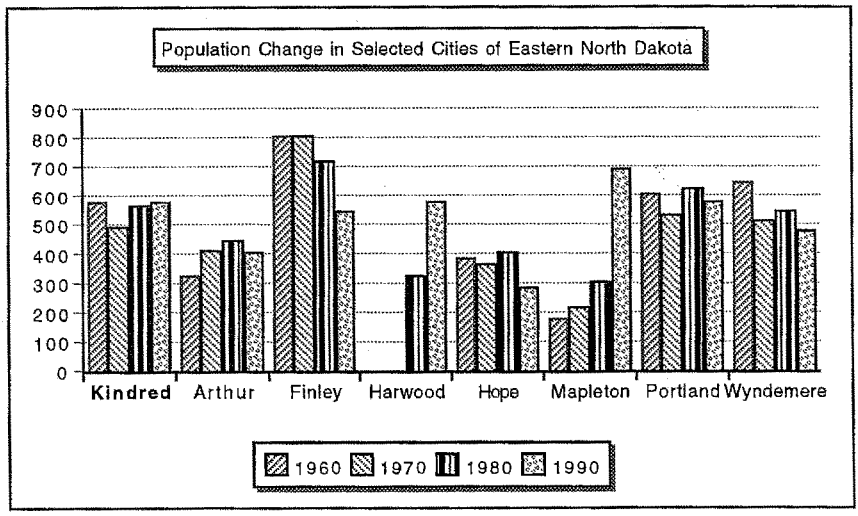
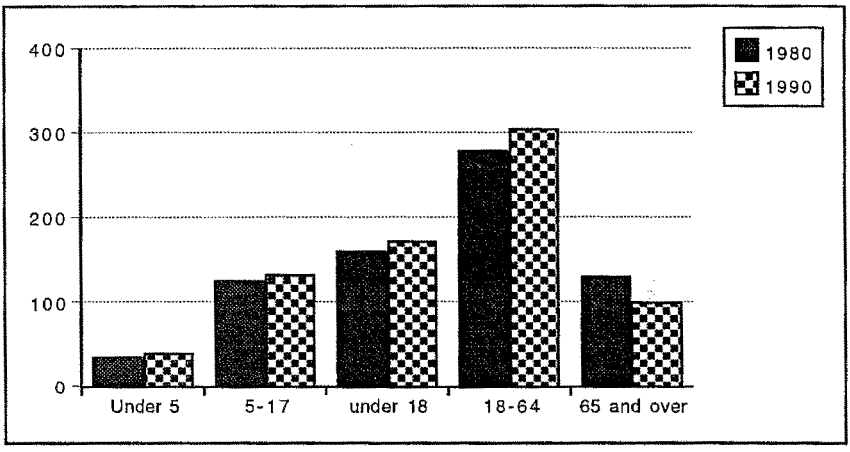


Table 3
1980-1990 General Population Characteristics for Kindred, North Dakota

	1980	1990	Change 1980-90
Under 5	35	40	14.3%
5-17	125	133	6.4%
under 18	160	173	8.1%
18-64	278	304	9.4%
65 and over	130	101	(22.3%)
Median Age, City	33.9	34.8	
Median Age, Cass Co.	27.0	30.0	
Median Age, ND	29.0	32.4	

Source: U.S. Census of Population



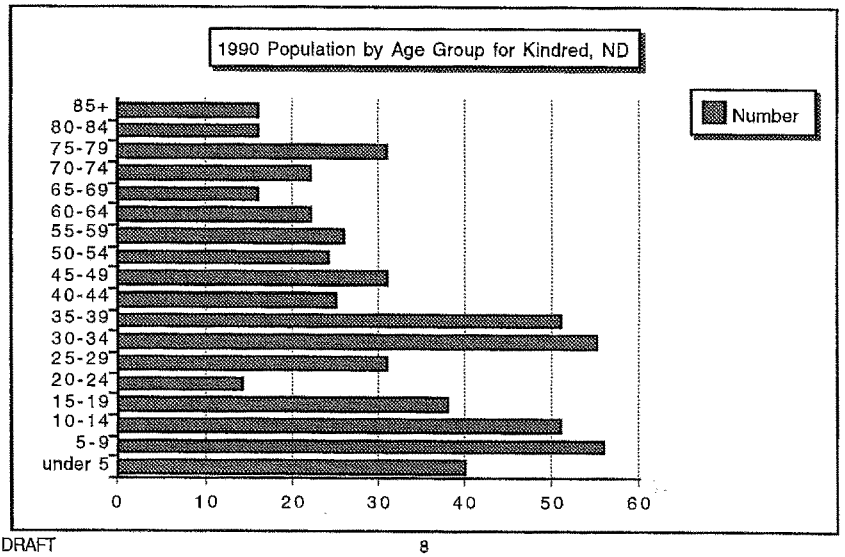
The dominant age groups in Kindred in 1990 were under 5, 5-9 and 10-14 years old making up 26% of the total city's population. Also, significantly the 30-34 and 35-39 year old consist of 18.7% of the population. Almost 60% of the 1990 population in Kindred in 1990 was under 40 years old. Only 18% of the population was 65 years old and over (See Table 4). These ratios indicate a change in population age groups and point out the suburbanization of Kindred

in recent years.

Table 4
1990 Population by Age Groups
Kindred, North Dakota

Age Group	Number	Percent
under 5	40	7.1%
5-9	56	9.9%
10-14	51	9.0%
15-19	38	6.7%
20-24	14	2.5%
25-29	31	5.5%
30-34	55	9.7%
35-39	51	9.0%
40-44	25	4.4%
45-49	31	5.5%
50-54	24	4.2%
55-59	26	4.6%
60-64	22	3.9%
65-69	16	2.8%
70-74	22	3.9%
75-79	31	5.5%
80-84	16	2.8%
85+	16	2.8%

Source:1990 Census of Population, C90STF1A

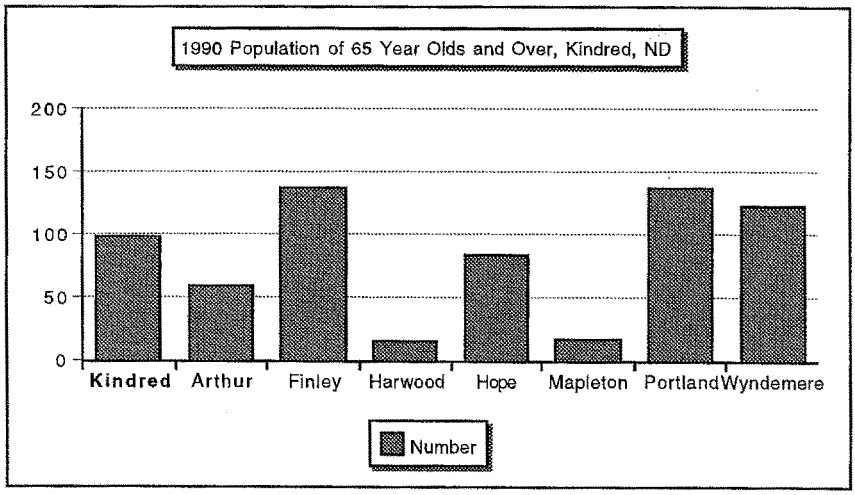


If we examine the 65 year old and over population in the selected cities, we find a correlation between aging population and distance from the Fargo Metropolitan area. Table 5 shows this contrast clearly, where the closer cities have fewer elderly than the cities farther away. But the mobility and self care limitations data are different. It is usually assumed that these two factors are closely related to aging, whereas proximity to services in larger towns becomes a major reason as is the case for the selected cities.

Table 5
1990 Population of 65 Years Old and Over, Kindred, ND

	Number	% of Population	Mobility Limitations	Self Care Limitation
Kindred	99	17.1%	17.2%	11.1%
Arthur	59	14.6%	42.4%	18.6%
Finley	137	25.2%	27.7%	2.2%
Harwood	16	2.8%	56.3%	31.3%
Hope	84	29.1%	26.2%	-
Mapleton	17	2.4%	17.6%	17.6%
Portland	138	23.7%	29.0%	8.0%
Wyndemere	124	26.0%	26.6%	0.8%

Source: 1990 Census of Population and Housing, CPH-5-36



DRAFT 9

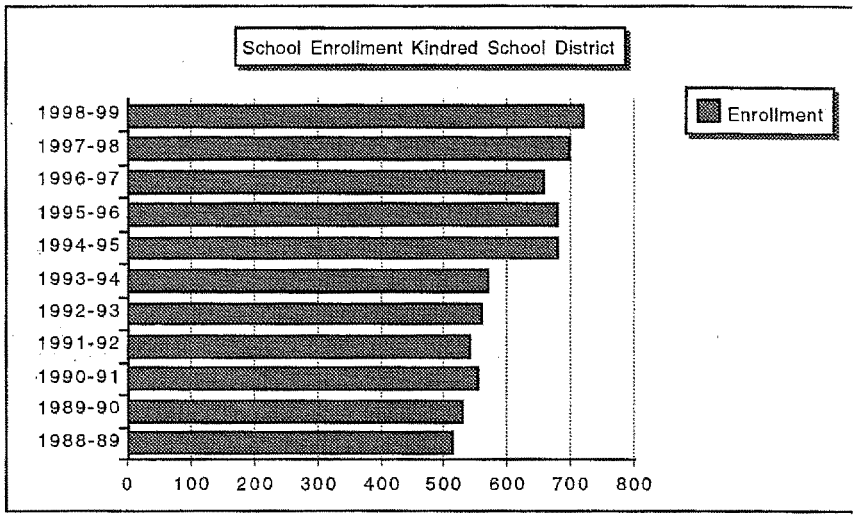
School Enrollment

School District enrollment from 512 in 1988-89 year increased to 714 in 1998-99, a growth of 40% in 11 years. Kindred's School District covers a large area and in 1998-99 school year, students residing in the city consisted of 21% of the total school district enrollment. Table 6, which provides the total enrollment, shows some fluctuation from year to year in the face of rapid growth during this period. The largest gain (19%) was experienced in 1994-95 school year. Then, in 1995-96, the gain was nominal and in 1996-97 the enrollment actually declined.

Table 6
School Enrollment
Kindred School District

Academic Year	Enrollment	Percent Change
1988-89	512	
1989-90	528	3.1%
1990-91	551	4.4%
1991-92	541	(1.8%)
1992-93	559	3.3%
1993-94	569	1.8%
1994-95	677	19.0%
1995-96	678	0.2%
1996-97	656	(3.2%)
1997-98	695	5.9%
1998-99	717	3.2%
Change 1988-99	205	40.0%

Source: Kindred School District
Board of Education, February 1999



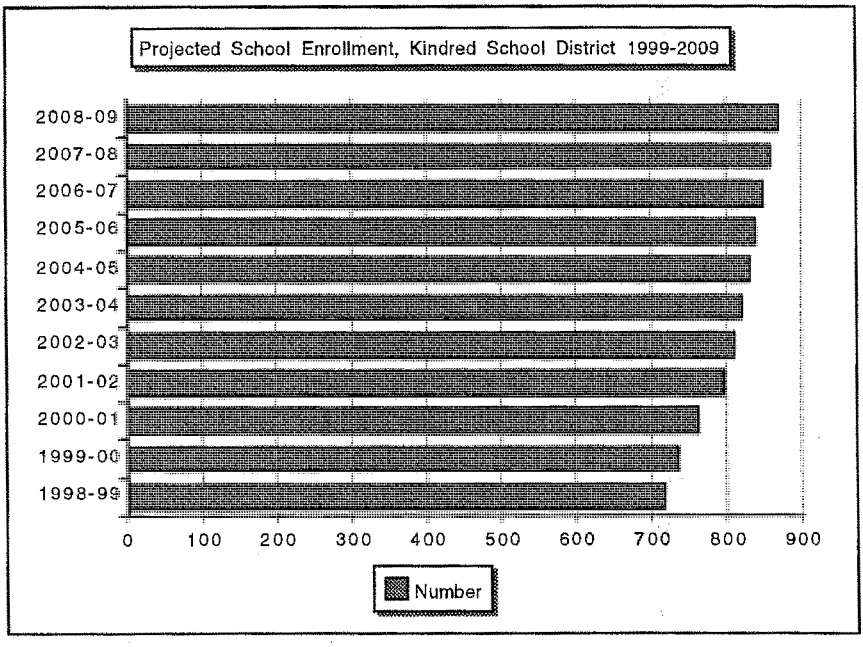
Because of the size of the school district and the fact that it includes Oxbow and Hickson and a number of rural residential subdivisions closer to Fargo, most of the growth in enrollment could be attributed to the north side of the district. At the same time, the growth is important to Kindred. First, the school facilities are right next to the city and second, a majority of the teaching and administrative staff is living in or near Kindred. In addition, the growth of the city population has been small but steady, pointing out potential population growth, depending on the direction that the city leadership chooses.

The school district's enrollment projections offer a healthy growth rate through 2001-02 school year. Thereafter, it shows a modest annual increase through 2008-09 school year (See Table 7).

Table 7
Projected School Enrollment,
Kindred School District
1999-2009

Academic Year	Number	Percent Change
1998-99	717	
1999-00	735	2.5%
2000-01	760	3.4%
2001-02	796	4.7%
2002-03	808	1.5%
2003-04	818	1.2%
2004-05	828	1.2%
2005-06	838	1.2%
2006-07	848	1.2%
2007-08	858	1.2%
2008-09	868	1.2%
Change 1998-2009	151	21.1%

Source: Kindred School District
Board of Education, February 1999



Future Potentials

The population of Kindred in the future is expected to grow. As experienced in the past, more working age households with school age children will reside in Kindred. The population of the city which had grown to mostly middle age to elderly will be gradually replaced by younger families. The level of growth of the city population depends upon how the growth received through additional and varied housing and larger business bases.

Kindred is anticipated to reach a population of 635 by the end of 1999. The growth continues at 1% per year, the city will have 135 more people within the next 20 years. If the population growth takes place at a faster pace such as 2% or 3% or more per year Kindred may have 1,000 or more people by the year 2020 (See Table 8). These projections are based on assumptions that the City of Kindred will encourage and facilitate different levels of housing and business developments and also, the Fargo Metropolitan area would continue to attract commuters from the suburban communities. Within the next 20 years, growth in Kindred will a function of city priorities for housing and public facilities including schools, parks and infrastructure.

Table 8
Potential Future Population
for Kindred, ND

	Annual Growth Rates			
	1%	2%	3%	5%
1990	578	578	578	578
1995	600	600	600	600
2000	635	635	635	790
2005	665	700	730	790
2010	700	770	840	990
2015	735	845	965	1,240
2020	770	930	1,110	1,550

Source: Mort Mazaheri & Associates

DRAFT 13

ECONOMY

Kindred as a suburban community today is tied into Fargo's economy much more than it has been in the past. The population mobility and vast range of employment and service opportunities in Fargo has shrunk Kindred's local service area which once was the engine which drove the town's economy.

Employment

Retail sales with 17% of the employment was the largest category, followed by educational services with about 14% and manufacturing with 13%. Other employment sectors are separated with a wide gap with the above three (See Table 9). Recognizing the size of Kindred, the employment data for the city compares well with Cass County, a much larger entity.

Table 9
1990 Employment by Industry
Kindred, ND

Industry	Number	Percent Kindred	Percent Cass County
Agriculture	15	5.7%	3.4%
Construction	14	5.4%	5.7%
Manufacturing	33	12.6%	7.7%
Durable Goods	20	7.7%	4.3%
Non-durable	13	5.0%	3.4%
Transportation	3	1.1%	5.0%
Communication/Public utilities	21	8.0%	2.6%
Wholesale Trade	19	7.3%	6.4%
Retail Trade	44	16.9%	20.0%
Finance, Ins. Real Estate	8	3.1%	8.0%
Business Repair/Service	18	6.9%	4.3%
Personal Services	6	2.3%	5.9%
Health Services	8	3.1%	11.7%
Educational Services	37	14.2%	9.9%
Professional Services	19	7.3%	7.1%
Public service	16	6.1%	2.9%

Source: 1990 Census of Population and Housing, C90STF3A

In comparison with Cass County employment sectors, manufacturing sector in Kindred is proportionately larger, as is educational services. On the other hand, health care, retail sales, finance, insurance and real estate sectors are also proportionately smaller. The purpose of this comparison is to illustrate the relative strength of employment sectors in Kindred.

In Kindred the participation in the labor force, when compared with other communities illustrates the suburban nature of the city (See Table 10). At 64% participation rate, Kindred, also, shows that its days of aging and retirement age population has given place to a younger area resident.

Table 10
1990 Labor Force Characteristics
in Kindred, North Dakota

	Population	Percent in Labor Force	Worked in 1989	Worked FT in 1989	Percent Unemployed
Kindred	578	63.8%	317	229	5.1%
Arthur	405	45.2%	186	133	1.3%
Finley	544	59.4%	357	227	3.0%
Harwood	577	86.5%	353	281	4.1%
Hope	289	52.4%	164	99	8.3%
Mapleton	695	76.3%	336	245	3.5%
Portland	385	60.4%	305	231	3.4%
Wyndemere	477	55.1%	235	154	3.2%

Source: 1990 Census of Population and Housing, CPH-5-36

Income

The largest income group in Kindred in 1990 was $10,000-$20,000, but significantly 86% of the households annually earned up to $50,000 (See Table 11). About 53% of the families earned between $30,000 and $50,000 per year. The median income for households, families and non-family households in

Kindred are higher than Cass County and North Dakota. The household median income was 10% higher than Cass County and 31% higher than North Dakota median household income.

Table 11
1990 Income of Households
and Families in Kindred, North Dakota

	Household		Family	
	No.	Percent	No.	Percent
under $10,000	30	12.9%	6	3.8%
$10,000-$19,999	47	20.2%	17	10.8%
$20,000-$29,999	39	16.7%	33	21.0%
$30,000-$39,000	44	18.9%	43	27.4%
$40,000-$49,999	40	17.2%	40	25.5%
$50,000-$74,999	27	11.6%	26	16.6%
$75,000 and over	6	2.6%	2	1.3%

Source: Census of Population and Housing, C90STF1A

Similarly, the median family income was 12% higher than Cass County and 30% higher than the median family income in North Dakota (See Table 12). The poverty ratios are also relevant and generally much lower than North Dakota. Only the 65 year old and over age group have a higher poverty ratio than Cass County, due to its overall older population. In Table 13 we see the median incomes in Kindred, with exception of Harwood, are higher than other selected cities, which speaks to the skill of the labor force employed locally or in other areas.

Table 12
Median Income
for Kindred, Cass County and
North Dakota

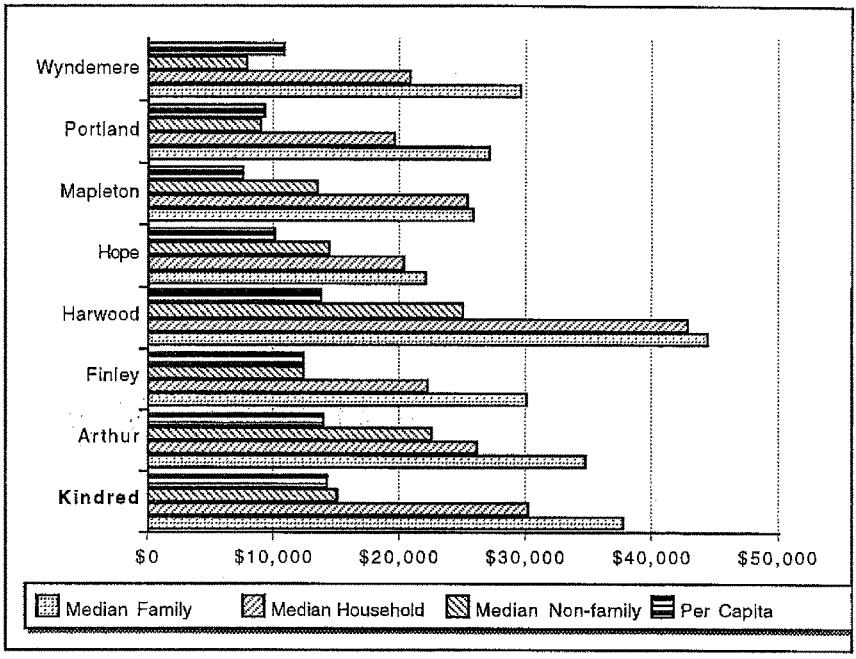
Income	Kindred	Cass Co.	North Dakota
Median family	$37,589	$34,221	$28,707
Median Household	$30,096	$26,806	$23,213
Median Non-family	$15,000	$15,332	$12,839
Per Capita	$14,160	$13,240	$11,051
% below poverty			
All ages	4.5%	11.8%	14.4%
65 and over	11.1%	9.7%	14.6%
Families	3.7%	7.3%	10.9%

Source: 1990 Census of Population and Housing, CPH-5-36

Table 13
1990 Median Family, Household,
Non-family and Per capita Income
for Selected Small Cities in Eastern ND

	Median Family	Median Household	Median Non-family	Per Capita	% Below Poverty
Kindred	$37,589	$30,096	$15,000	$14,160	4.5%
Arthur	$34,750	$26,042	$22,500	$13,917	5.1%
Finley	$30,000	$22,203	$12,411	$12,379	9.4%
Harwood	$44,375	$42,750	$25,000	$13,787	0.9%
Hope	$22,045	$20,294	$14,375	$9,998	10.7%
Mapleton	$25,750	$25,250	$13,500	$7,492	14.8%
Portland	$26,974	$19,464	$8,867	$9,181	11.0%
Wyndemere	$29,464	$20,750	$7,797	$10,816	14.5%

Source: 1990 Census of Population and Housing, CPH-5-36



Financial Resources

The total property value in Kindred in 1998 was about 13 million dollars, about 80% of which was residential property. Commercial property was approximately 18% and the agricultural land made up the remaining 2%. According to the North Dakota property tax formula, the total taxable property was $598,066 (See Table 14). The taxable value, between 1992 and 1998, increased by 41.7%. This increase of an average annual 6% is in part due to the seven single family units and 14 multi-family units and the general appreciation of property values (See Table 15). It is a solid growth rate and the city should make every effort to maintain and improve it. Another significant element in the financial profile of Kindred is declining mill levy since 1991.

Table 14
1998 Value of Land and Improvements in Kindred, ND

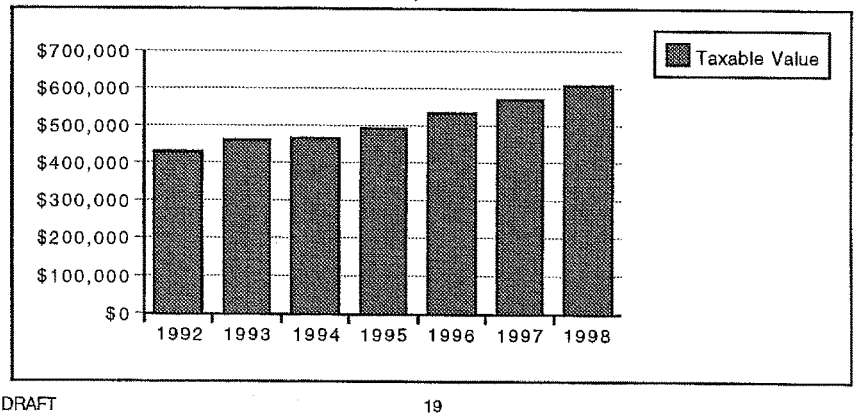
Property Category	Valuation
Agricultural Land	$262,200
Residential Property	$2,333,600
Commercial Property	$10,397,500
Total Full Value	$12,998,300
Total Assessed Value	$6,499,150
Total Taxable Value	$611,924

Source: Kindred City Auditor, Naomi Wadena

Table 15
Changes in Taxable Valuation of all Properties in Kindred, ND

	Taxable Value	Percent Change
1992	$431,737	
1993	$464,884	7.7%
1994	$470,811	1.3%
1995	$492,532	4.6%
1996	$539,049	9.4%
1997	$571,691	6.1%
1998	$611,924	7.0%
1992-98	$180,187	41.7%

Source: Kindred City Auditor's Office



The general fund mill levy which was 57.21 is now 41.60, showing 27.3% decrease, yet the general fund raised under this mill rate grew a modest 6.4% in the past eight years (See Table 16). While, the tax base in Kindred is modest, it has shown a noticeable strength and is anticipated to grow, depending on the growth directions chosen by the city.

Table 16
Mill Levy, Total City and
General City Taxes for Kindred, ND

	Mill Levy	Amount Raised	General Fund
1991	98.23	$41,085	$23,930
1992	95.22	$41,102	$23,934
1993	89.01	$41,380	$24,188
1994	89.10	$41,949	$24,755
1995	85.2	$41,964	$24,760
1996	80.18	$43,221	$25,023
1997	75.87	$43,374	$24,943
1998	79.5	$48,647	$25,456
Change 1991-98	(19.1%)	18.4%	6.4%

Source: Kindred City Auditor

HOUSING

Over 50% of the housing units in Kindred have been built since 1960. Almost 22% of the units were constructed during the 1970s. About 40% of the housing units, largely single family detached units are older than 50 years (See Table 17). Most of the multi-family housing units were build during the last 20 years. Of the total 267 housing units today, 182 units are owner occupied and 85 are rental units. The count of the housing units include 13 mobile homes. Most of the owner occupied housing units fall within the traditional three bedroom American Family home. About 53% of the overall housing units contain six

rooms or more. Less than 10% of the housing units, presumably mostly rental units, have less than four room (See Table 18).

Table 17
Age of Housing Units
in Kindred, ND

Age	Number	Percent
Before 1940	70	27.2%
1940-49	34	13.2%
1950-59	18	7.0%
1960-69	33	12.8%
1970-79	56	21.8%
1980-89	25	9.8%
1990-98	21	8.2%
Total	257	100.0%

Source: 1990 Census of Population and Housing, C90STF1A and Kindred City Auditor

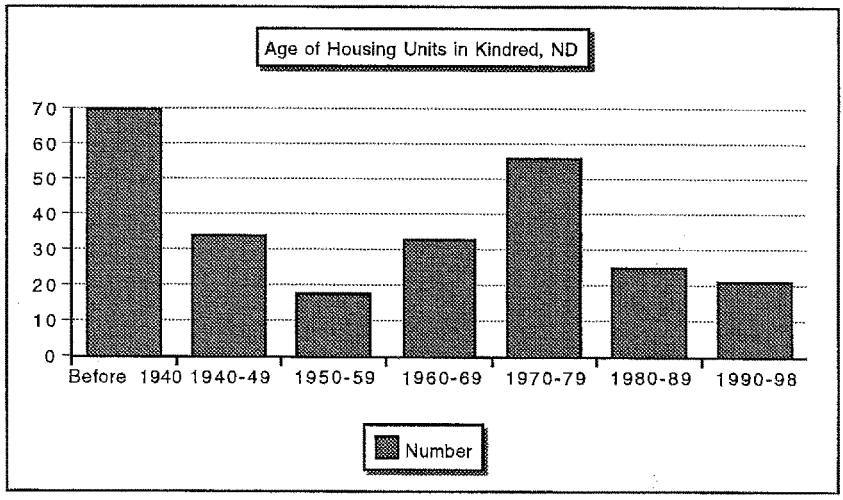
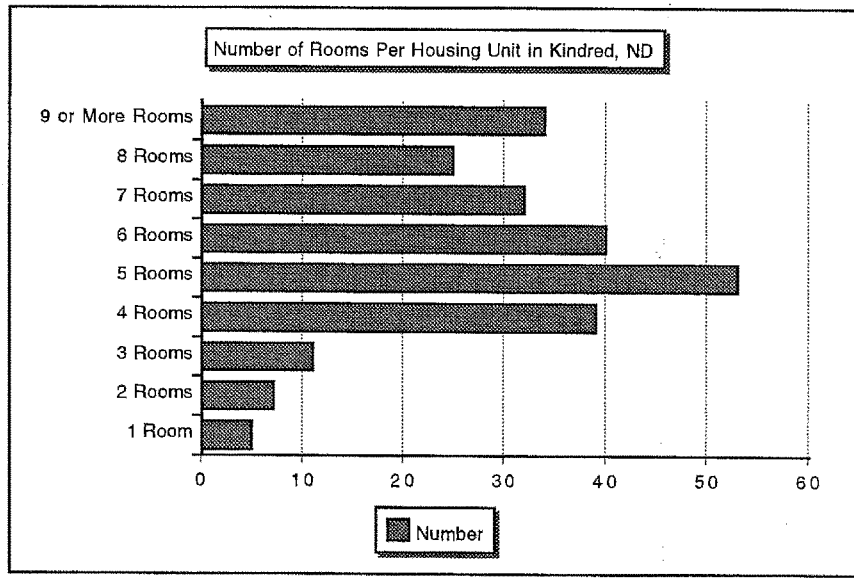


Table 18
Number of Rooms Per Housing Unit in Kindred, ND

Housing Units	Number	Percent
1 Room	5	2.0%
2 Rooms	7	2.8%
3 Rooms	11	4.5%
4 Rooms	39	15.9%
5 Rooms	53	21.5%
6 Rooms	40	16.3%
7 Rooms	32	13.0%
8 Rooms	25	10.2%
9 or More Rooms	34	13.8%

Source: 1990 Census of Population and Housing, C90STF1A



In the owner occupied housing units, there is a fair distribution of housing units by age of the householders (See Table 19). For rental units we find a

concentration of 25-34 year old on one hand and 75 and older households on the other. These distributions show a typical balance among householders and type of housing. In the future, this pattern is expected to change as new and younger households move into Kindred.

Table 19
Housing Occupancy Status by Age of Householders in Kindred, ND

Age of Householders	Owner Occupied		Renter Occupied	
Under 25	2	1.2%	3	5.6%
25-34	32	18.9%	14	25.9%
35-44	34	20.0%	5	9.3%
45-54	27	15.9%	2	3.7%
55-64	20	11.8%	6	11.1%
65-74	24	14.1%	7	13.0%
75 and Over	31	1.8%	17	31.5%

Source: 19990 Census of Housing and Population, C90STF1A

The median value of owner occupied housing in Kindred in 1990 was $44,300 compared with $70,000 for Fargo. Although there has been a noticeable change in house values since 1990, Kindred housing stock had about one third of its owner occupied units above $50,000 (See Table 20). This is supported by the average monthly owner cost in Table 21. Aside from Harwood, average monthly owner cost in Kindred is higher than other selected cities, indicating the interest of the commuter market.

Table 20
1990 Value of Owner Occupied Housing in Kindred, ND

	Number	Percent
Less than $20,000	11	8.0%
$20,000-$29,999	10	7.2%
$30,000-$39,999	29	21.0%
$40,000-$49,999	37	26.8%
$50,000-$59,999	26	18.8%
$60,000-$74,999	16	11.6%
$75,000-$99,999	7	5.1%
$100,000 and over	2	1.4%

Source: 1990 Census of Population and Housing, C90STF3A

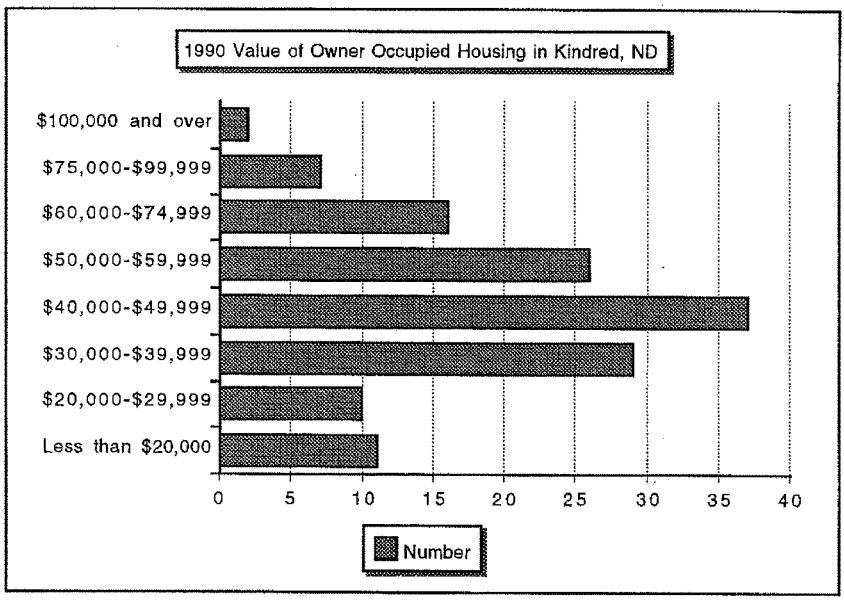


Table 21
Median Monthly Owner Occupied and Renter Occupied Housing Cost in Kindred, ND

	Owner Cost with Mortgage	Gross Rent
Kindred	$582	$265
Arthur	$370	$231
Finley	$464	$204
Harwood	$741	$475
Hope	$300	$198
Mapleton	$458	$350
Portland	$529	$235
Wyndemere	$436	$200

Source: 1990 Census of Population and Housing, CPH-5-36

LAND USE

Kindred has a compact land use pattern with much of the development within or immediately adjacent to the city limits. Presently, the school and airport facilities are located outside the city limits, east of Cass County 15. Two residential subdivisions are located about one mile south along North Dakota Highway 46. About 65% of the land within the one square mile city proper is presently used for farming with a few vacant lots within the core of Kindred. Single family residential uses consist of 32% of the developed area and street rights-of-way make up 20% of the developed land area (See Table 22). Much of the industrial land is within the railroad right-of-way.

Commercial area along Cass County 15 is limited to an implement dealership and a small gas-food operation. The downtown is largely compact main street intersection, extending one block in each direction, occupying the original townsite east of the railroad track.

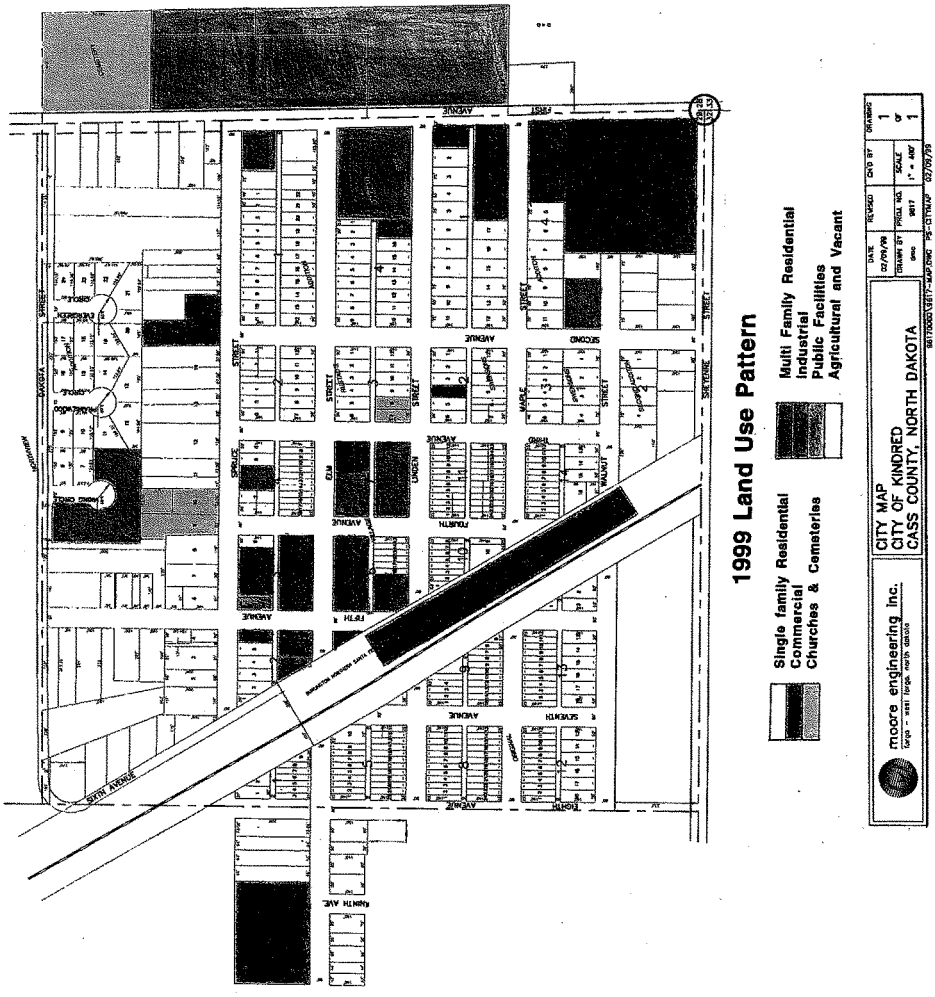
Table 22
1999 Land Use
Kindred, ND

	Acres	Percent of Development	Percent Total
Single Family Residential	71	32.0%	11.1%
Multi-family Residential	5	2.3%	0.8%
Commercial	13	5.8%	2.0%
Industrial	5	2.3%	0.8%
Churches and Cemeteries	7	3.2%	1.1%
Public & facilities (Parks, School, Airport)	40	18.0%	6.3%
Rights-of-Way	81	36.5%	12.7%
Railroad	36	16.2%	5.6%
Streets	45	20.3%	7.1%
Total Developed	222	100.0%	34.7%
Total Land Area	640		100.0%
Vacant and Agricultural	418		65.3%

Source: Mort Mazaheri & Kindred Public Works Superintendent, Ken Blilie

Residential areas show a variety of single family units with four small clusters of rental units. The present residential pattern consists of a generally well placed housing units with most of the older units near the business district and newer houses around them. At this time, the north side is all residential, compared to the west side, which accommodates agricultural storage related buildings and the facility yard for the Cass County Electric Cooperative (See Figure 3).

Since the city corporate limits run along Cass County 15, the school and airport facilities are east of the highway providing a permanent boundary to avoid development in that area. The other three sides of Kindred are suitable for development. The area to the north should be reserved for residential development. West of the city, the land is suitable for a range of land needs for residential and non-residential use. On the south side, a small acreage suitable for residential development exists.


1999 Land Use Pattern
Single family Residential
Commercial
Churches & Cemeteries
Multi Family Residential
Industrial
Public Facilities
Agricultural and Vacant
moore engineering inc.
CITY MAP
CITY OF KINDRED
CASS COUNTY, NORTH DAKOTA

PUBLIC FACILITIES AND SERVICES

Airport

Kindred has a general aviation airport, largely a landing strip, without lighting. The existing hanger and support structures are adjacent to the school building. A new study by Kadrmas, Lee and Jackson includes two new alignments for future runways and taxiway to expand the present facilities. The 12-30 alignment requires about 300 additional acres of land. The second alternative, 15-33 alignment requires 160 acres. This alignment is more compact for the use of land and potentially would not impact the school and also the future residential development north of the city. From the perspective of future development in and around the airport property, it is necessary that the general land use policies are adhered to consistently and compatible uses are permitted in the area. Since the farm land north of Dakota Street is the most accessible for long term residential development, any future expansion of the airport facilities should take this into account. In addition, the future airport expansion provides opportunities for compatible businesses and the available sites should be planned for those uses accordingly. In this effort care must be exercised to avoid creation of conflict with airport uses and other uses in the area.

Water System

Kindred's water system consist of storage and distribution structures. The city has been served by rural water since 1992 with a capacity of 60 gallons per minute. Prior to that the city drew its water from two wells until 1978, and a larger well, three miles north served, the city until 1992.

The distribution system consists of 6" PVC supported by 4" PVC feeders installed during 1979-80 and is in good condition (See Figure 4). Kindred's storage reservoirs consist of 50,000 gallon towers and a 140,000 gallon underground tank holding 3 day water needs of the city. The city fire rating is presently 8.

Waste Water System

The city waste water collection system consists of 16,000 feet of sewer line built in 1950 supported by one lift station (See Figure 4). Because of the aging system and extensive clear water infiltration, it may be necessary to replace 3,000 feet of the damaged lines and inserting liner for 13,000 feet. To illustrate the magnitude of the infiltration problem, in 1998 the volume of waste water going through the lift station was about two million gallons in January compared to 11 million gallons in May and 13 million gallons in June of 1998. If this is compared with average monthly consumption of 1.8 million gallons, the extent of infiltration becomes more apparent (100 gallons per person per day).The infiltration continues through the springs and again picks up in the fall before the water freeze up (See Table 20).

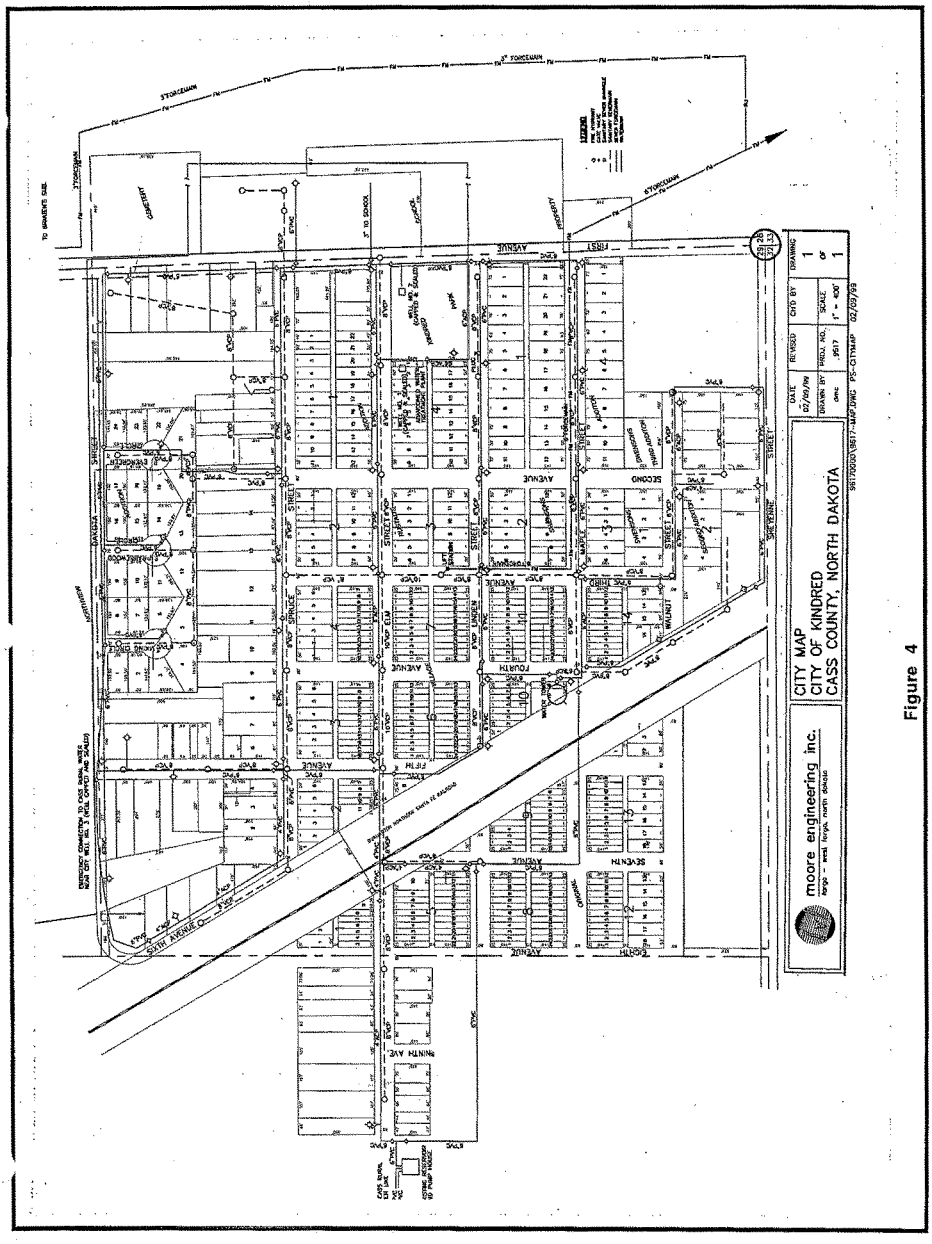
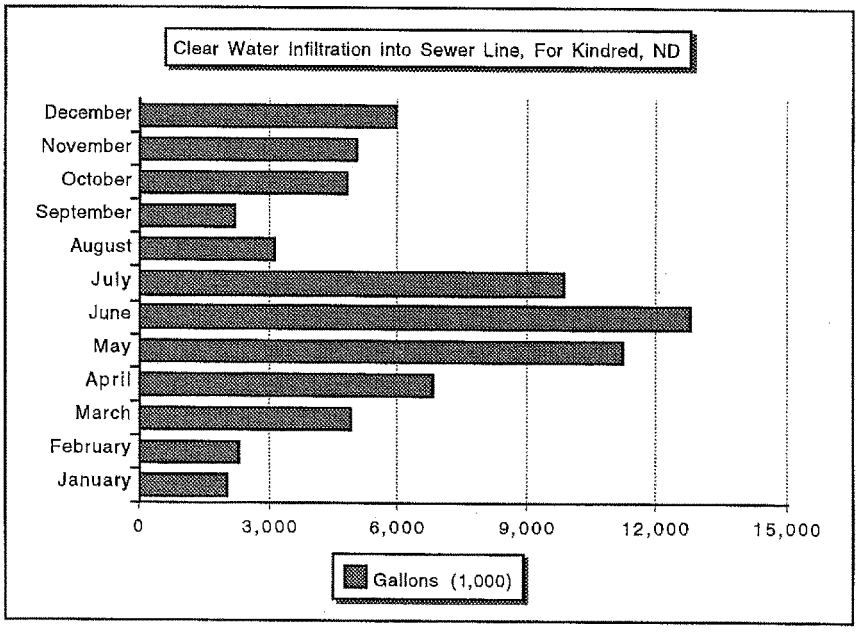

CITY MAP
CITY OF KINDRED
CASS COUNTY, NORTH DAKOTA
moore engineering inc.
Fargo - west fargo, north dakota
DATE
REVISED
DRAWN BY
PROJ. NO.
SCALE
DRAWING
02/09/09
1" = 400'
1
1
FIRST AVENUE
SECOND AVENUE
THIRD AVENUE
FOURTH AVENUE
SIXTH AVENUE
SEVENTH AVENUE
NINTH AVE.
MAIN AVENUE
WALNUT
SPRUCE
BROADWAY
LEGEND

Figure 4

Table 23
Clear Water Infiltration into Sewer Line, for Kindred, ND

1998	Gallons (1,000)	Percent of Water Consumption
January	2,010	74.9%
February	2,308	164.7%
March	4,881	335.4%
April	6,818	386.0%
May	11,189	596.3%
June	12,741	843.8%
July	9,831	401.2%
August	3,094	64.2%
September	2,190	53.9%
October	4,797	292.6%
November	5,051	354.2%
December	5,930	445.0%

Source: Kindred Public Works Superintendent, Ken Blilie



The high water table particularly during the spring of 1997, has prompted the city to take action to reduce water seepage into the structures, particularly houses with full basements. The drainage is a major issue in Kindred and needs to be addressed in a number of ways. Proximity to the Sheyenne River also impacts the city during the food stages. Of the 35 manholes about one third need to be rebuilt. In the future, new development must take this issue into consideration particularly for residential development

The waste water treatment consists of two cells, one with 5.5 surface acres is used for primary treatment and another with 1.5 surface acres is used for secondary treatment.

Streets and Alleys

The streets in Kindred were improved about 10 years ago and are in good condition. The city contracts for 5 miles of the paved streets for periodic crack filling and seal coating. Because of the location of the city, about 1.5 miles of the roads on the outer edges of the city are gravel. Cass County 15, forming the east edge of the city is an all weather road and connects the city to I-94 from the north. North Dakota Highway 46 located one mile south of the city connects Kindred to I-29 to the east. The total rights-of-way including alleys, in Kindred is about 45 acres, the second largest part of the developed land in the city.

Railroad

The ownership of the railroad has changed hands several times, as consolidation of the rail companies has taken place since 1900. Presently, the railroad is owned and operated by the Red River Valley and Western Railroad.

The rail traffic through Kindred has been light, about two trains per day. There is a large right-of-way (36 acres) associated with this line, much of which is presently vacant. Forming a boundary on the west edge of Kindred poses a small problem for city expansion to the west. While this area is suitable for residential and industrial development, it is necessary to keep the number of crossings to a minimum. Presently, the only development is along Elm Street. Other crossings are limited to Sheyenne Street and the section line road forming the south and north boundary lines of the city.

PHYSICAL DEVELOPMENT CHOICES AND POLICIES

ALTERNATIVES FOR FUTURE GROWTH

ALTERNATIVES FOR FUTURE GROWTH

The City of Kindred, because of its proximity to the Fargo Metropolitan Area is anticipated to face major challenges for growth in the coming years. Evidenced by a 40% growth in the public school enrollment, Kindred has attracted many new households in recent years. How much growth and what type of growth is the focus of this plan.

Recent community input offers a wide range of comments regarding the extent and type of growth for Kindred. Major concern is how the future growth and change would affect the quality of life in the coming years. Small town face to face contact, peace and serenity and cost of services have become key community issues. Some residents feel slow growth is beneficial to the long term interest of Kindred. In general, however, most residents recognize the potential of the city in the face of some possible adverse effects.

Alternative 1, Existing Trends

This alternative focuses on the general development trends without too much guidance from the city. The rationale for this scenario is that development is a market driven phenomena and not a public responsibility. It does not imply, necessarily, that "anything goes". The city has overall land use control through administration of zoning ordinances and capital improvement programs for maintaining and expanding of the water, sewer and street system. Market forces play a dominant role in this alternative, none the less.

Under this scenario, the pace of development is more controlled by the market

demand. It may speed up or slow down, based on the regional economic forces, the quality of growth and the visual and social images which the community may portray. In addition to the regional market factors, local influences such as cost of lots and services, attitude of the residents toward community environmental management influence the development changes. The major elements encouraging development, normally, are lower taxes, less expensive land, regional housing market and the quality of life

Alternative 2, Slow Growth

Under this scenario, there would be a conscious effort to keep the growth to a moderate level consistent with certain policies for capital expenditures for water, sewer and street system. In essence, it is possible to limit the growth of Kindred to certain areas and scale. While citing numerical examples to define the scale of growth, specific qualitative characteristics are more difficult to define. It is very possible to limit development to certain areas for a selective market. The control devices are water, sewer, drainage services and land use control through zoning and planning.

Should Kindred choose to exercise a slow growth alternative, it should define that by a number of housing units or persons per year. The negative side effect of this alternative is that the development may be slow to the point of diverting growth opportunities to other communities and unincorporated areas near the city, as evidenced by the housing development south of North Dakota Highway 46. Good zoning enforcement within the city and its extra territorial area would somewhat limit the development.

Alternative 3, Accelerated Growth

Accelerated growth means induced planned growth and not necessarily helter skelter development. There are several examples of communities which have followed such a path. If Kindred sees itself as a primary suburban residential development, certain steps need to be taken to avoid potential problems. This alternative relates to the present growth in school enrollment and attempts to broaden the housing stock and encourage a strong business development posture. One of the major requirements of meeting the objectives of this alternative is sound financial planning, aggressive business development program and above all openness to changes that may bring many challenges, some of which may conflict with social and cultural traditions in Kindred. Accelerated growth, like slow growth, requires proactive efforts by the city to develop special housing assistance programs to complement the existing state and federal housing programs.

Recommended Alternative

This alternative attempts to capture the best possible choices for Kindred within the next 20 years. It is based on the recognition that the long term growth of Kindred is inevitable first and second with appropriate safe guards the community's environmental desirability would be maintained. A public-citizen partnership is a necessity to continually evaluate the community issue in the face of growth and change.

A coordinated and phased in approach with regular assessments enables Kindred to prepare itself based on its financial and human resources. The 20 year planning period under this scenario is divided into four 5 year planning phases. Phase one (2000-2004) is a period of evaluating the present community financial resources and

potential outside sources for tooling up for a level of development within the next 2-5 years.

It is common knowledge that the sewer system in Kindred would require major revamping. Also, the high water table and the changing drainage patterns in the area has been a major concern to the city in recent years. In addition, the water storage and distribution system needs to be expanded within the next five years.

The population projections on Table 8 illustrate the potential number of persons for Kindred at five year intervals based on annual growth of 1%-5%. Even at 5% rate which is considered very healthy, the total compounded growth for a 20 year period is 1,500 persons, not a large number. The period of 2000-2004 is a basic time span in determining the desirable growth limit and commitment for improving the infrastructure for Kindred.

FRAMEWORK FOR PLANNING

The purpose of planning is to serve as a guide for decision making. Community based planning is to define the potential paths by a series of broad goals, more defined and focused objectives to be carried out by a set of policies as a community planning tool. Appropriate objectives and policies are essential to the future growth of Kindred. Standards for land use and transportation are included in each section in the background analysis of the 2020 Community Plan. The essence of the 2020 Community Plan for Kindred is to guide the future decisions for the use of physical and financial resources..

Kindred's future, no doubt, will be influenced by the growth of Fargo Metropolitan Area, and of course, to a large measure, by the action of the local governments including the City Council, the School District and Cass County.

Effective community planning requires cooperation and coordination in decision making for making Kindred a highly livable and sought after town. Although the City of Kindred, in a statutory sense, is defined by its corporate limits, its true boundary economically and socially covers a much larger area. In a broad sense, the true limits of Kindred are its service area. Kindred is becoming a suburban residential community to the Fargo Metropolitan area. The important consideration is formulating objectives and policies for a larger regional perspective. From the standpoint of public services, however, we focus on the present city limits and the one mile planning area, authorized by the North Dakota Laws. As a basic guide, several planning principles are discussed below, some of which define Kindred as a physical, social and economic entity both in very local and much larger regional setting: (a) compact development; (b) compatibility of uses; (c) coordination and cooperation; (d) fair and cost effective services; (e) orderly development; (f) partnership; and (g) public participation.

Compact Development

Compact development means efficient use of land. Sensible, well spaced and cost effective development has been a priority goal for Kindred. Compact development does not mean a crowded or congested town. It means a carefully thought out system of land use, transportation and public facilities developed together based on a plan that meets the future needs while addressing the current demands of the people. Historically, Kindred has adhered to this principle.

Compatibility of Uses

The quality of life in Kindred depends on the range of services and amenities and their physical relationships. Some activities fit together better in some areas than others. Since we need to accommodate a wide range of activities, sound planning enables us to predetermine the appropriate use of each location that complement each other rather than posing conflicts. In Kindred, as in other communities, zoning is a device used to keep the conflicts to a minimum by grouping complementary uses together. Other devices include site planning with appropriate landscaping, screening and buffering, or aggregating uses that are the most compatible and least conflicting. Here, the heart of the issue is careful consideration of each part of the development and its effect on the future. In reviewing land use applications such questions as scale and appropriateness for the area both for now and in the future deserve attention.

Cooperation and Coordination

The City of Kindred is responsible for a multitude of decisions regarding street, water, sewer, drainage, and city management services. On the other hand, other local governmental entities such as school district, township and the county, by virtue of their decisions, also influence the physical, social and economic environment of the city. Location of schools, parks and other community facilities influence the present and the future development. Similarly, state and federal agencies from the perspective of housing, transportation, education and Sheyenne River flood plain management influence the physical direction and extent of changes in the city. The private businesses all impact the city's future physical form in varying degrees.

Here, we find a complex bundle of forces that shape and reshape the city physically, economically and socially. Some of these forces because of their singular focus

operate independent of one another. As a general governmental unit, a body which by statutes is responsible for the overall welfare of Kindred, the city should provide the needed coordination to assure that other governmental or private sector decisions fit together in the interest of the citizens of Kindred.

Fair and Cost Effective Services

All communities borrow money to finance schools, parks, sewer, water, streets and public buildings. Distribution of the cost needs to be fair and prevent burdening of a group or area. The city relies on municipal revenues to pay for the current operations as well as the long term capital investments. Sharing of the facilities is important in any setting, yet it is also important to pay for the facilities that are used by all. Some developments do not pay their fair share for the use of city services. Kindred should identify those areas and help plan and develop programs to meet the needs.

Orderly Development

Orderly development means a well paced and directed growth compared to unanticipated and unguided development. A successful and orderly development is usually compatible with the extent of community services and resources such as capacity for water, sewer, street, police and fire protection. An important element in orderly development is planning and coordination. Nearly all communities compete for resources and services and usually those who do better planning and are ready to act decisively are more successful.

Partnership

The city is realistically a partner in all activities which provide good service to the people. This partnership finds its roots in the citizens of Kindred who rely on day-to-

day services based on their individual or collective needs. Partnership in city government decisions is essential to the prosperity of the private businesses. Certain incentives, some specifically authorized by the state laws and some under general governmental powers, help in focusing on particular areas of needs, such as housing, business retention, expansion and attraction.

Public Participation

Public participation is essential in the planning process. Public planning is public business and public decisions are greatly enhanced when the public is involved. Because planning is a tool of decision making, then the public should be a part of it. Public participation would help set the stage for partnership in community planning, housing, business and industrial development, enhancing educational, cultural and recreational facilities.

POLICY GUIDE

Business

Kindred is a small center that provides a variety of services for an area within and outside of it. The overall economic health of the city is important not only to its residents but also to a large area around it. Healthy business and commerce is the foundation for good jobs, income and public and private services.

Objectives

a. To support healthy, growing area businesses that provide service and employment opportunities.

b. To help expand the job base in all areas of business, particularly in those areas which offer steady employment.

c. To maintain an active city role in encouraging business development to

serve the people of Kindred.

d. To help make Kindred an attractive and vibrant business environment which draws new businesses and jobs.

e. To support and assist the existing businesses in their efforts to expand employment and market.

f. To promote agriculturally related manufacturing and processing operations

Policies

a. Continue to develop appropriate capacities and incentives to maintain and enhance a favorable business climate. Devices such as tax increment financing, particularly when a redevelopment project is involved, and property tax abatement are important. State economic development funds, and Community Development Block Grants are also other sources as used in Cass County in recent years.

b. Encourage stable and growing businesses that diversify Kindred's economy in compatible groupings to be located in different parts of the city.

c. Emphasize economic development programs which encourage the private sector to participate in expansion of the existing businesses as well as attracting new businesses.

d. Encourage the formation and development of new businesses by local entrepreneurs and investors.

e. Provide opportunities for business owners and investors to advise the city for improving the business climate in the city.

f. Provide the necessary public facilities and services (streets, water and sewer) that help businesses to function successfully.

g. Recognize the regional nature of economy and employment and encourage coordinated economic development efforts in the city and vicinity.

Downtown Development

Downtown is an important part of business and commerce in Kindred. It provides a broad range of services and activities in a relatively small area. The commercial core should be protected as a distinct part of Kindred.

Objectives

a. To help promote activities in the downtown area to maintain its identity as a center for all types of human activity.

b. To encourage development and expansion of retail professional services and consumer services in downtown.

c. To encourage preservation, restoration and use of older structures.

d. To encourage a diverse range of events and activities to maintain downtown as a distinct place to go to.

Policies

a. Encourage more private investment in downtown area.

b. Encourage activities and entertainment in downtown to support the businesses.

c. Encourage retail growth particularly specialty retail shops.

d. Promote seasonal activities and events to attract people and service users.

e. Provide for accessible and sufficient parking to accommodate businesses and residential uses.

f. Adopt a beautification program and make continual improvement to the downtown appearance to blend the past and present.

Fringe Area Development

Suburban cities like Kindred experience visible changes on the fringes. This is evidenced by the development along Cass County Highway 15. Streets and highway corridors, based on their functions and capacity, attract development some of which

may become incompatible over time and, therefore, pose limitation for other needed development. Unplanned and piecemeal development cause traffic circulation problems, access and convenience problems, additional maintenance costs and visual problems. Often, major roads are the gateways to the city and their development requires extensive planning.

Objectives

a. To encourage development of an orderly pattern of land use which provides the best use of spaces in Kindred.

b. To encourage physical development of the land to be based upon the standards set forth by the city for siting, access, setbacks, landscaping and compatibility with the adjoining uses.

c. To encourage upkeep of buildings for appearance in downtown.

Policies

a. Exercise extra territorial planning and zoning in fringe area development for consistency of the development pattern. Recognize that the city fringes are important parts of the community and their appearance and arrangements influence the public perception about Kindred and also attract or detract the future development.

b. Coordinate all efforts with the business community to consider the fringe areas as the new parts whose success or failure pose social and economic impacts on the city and its service area.

c. Extend residential areas to the south, west and north to continue the existing new residential pattern where the land is most suitable.

d. Encourage extension of streets and utilities to those areas that are mature for development and ready for receiving the full municipal services.

e. Avoid development of those lands that are subject to flooding from the

Sheyenne River or pose drainage problems.

Growth and Development Pattern

As the City of Kindred grows, the need for additional land to accommodate new residential, commercial, recreational, and public areas increases. To maximize the financial resources of the city a compact and balanced development pattern is an ideal goal to strive for. Kindred has the opportunity to capitalize on its location as a suburban town with a friendly atmosphere. The pattern of growth needs to reflect the human needs in a way which produces wholesome, integrated activities and services.

Objectives

a. To encourage development of a compact city, supported by good public services including transportation, utilities and public protection.

b. To help Kindred develop as a visually distinct suburban community in the heart of an agricultural region.

c. To encourage development first in those areas where the services are most economically available. Infilling should be a priority as an economic measure to assist in housing and business development.

d. To emphasize the city's quality of life as an ideal living environment for those who prefer a small town in a rural setting.

Policies

a. Continue to encourage the development of Kindred as a compact city to maximize the use of its financial resources.

b. Encourage balanced growth for housing, businesses, education, to emphasize quality of life in Kindred.

c. Support the private sector actions that give higher priority to redevelopment of available vacant and underutilized land in the city.

d. Extend the city services to locations where development in the future is

desirable and consistent with the city's goal for orderly, compact and cost effective development.

e. Utilize existing utility and service capacities before extending or constructing new facilities.

f. Encourage effective communication and coordination with school and park districts, county and township to enhance the quality of growth and development in the area.

Housing

Good housing is a basic need for all people. In recent years, the housing development in Kindred has not kept pace with the needs of many home buyers at a price they can afford. In absence of available housing new households, out of necessity, live in other areas.

Objectives

a. To encourage home ownership and home improvement to enhance the existing housing stock.

b. To encourage the private sector to maintain a choice of housing types and locations for persons of all income levels.

c. To encourage development of affordable housing for ownership and rent.

d. To help expand the supply of new housing for elderly households to free up more single family units.

e. To promote home ownership for young families who live in the surrounding areas.

Policies

a. Encourage development of a broad range of housing types and densities to offer choices in affordable price ranges.

b. Encourage improvement of existing housing stock to increase choices in housing availability.

c. Encourage programs which enable the elderly and fixed income households to remain in their homes rather than be displaced because of the high costs of municipal improvements, energy and property taxes.

d. Support programs for affordable housing to assist the first time home buyers and those who can only afford lower priced houses.

e. Provide incentives for home ownership such as tax abatement, reduced infrastructure cost.

f. Encourage planned development of housing projects to meet a wide range of housing needs based on age and financial considerations.

g. Encourage compact development to reduce the costs of street, sewer, water and other municipal services.

h. Encourage energy conserving design in the development of new houses.

i. Encourage adaptive use of existing buildings for housing.

j. Discourage over concentration of housing units for low-moderate income households.

k. Develop a partnership with the housing industry to utilize the state and federal housing programs to the benefit of the first time home buyers and low-moderate income households.

l. To enforce the building code and zoning regulations to assure upgrading of housing units and their physical appearance.

Land Use

Guiding the location of land uses and activities is an important part of community planning. A planned community in comparison with an unplanned community,

experiences fewer problems in appearance and cost of services Orderly development means careful placement of various uses in a community for the long term benefit of all people.

Objectives

a. To encourage development of attractive, well balanced and well linked land uses to meet the residential, commercial, public and semi public and recreational needs of Kindred.

b. To plan for extension of municipal services and utilities to meet the future development needs of the city.

c. To encourage development of land in a compact, orderly manner for the safety and convenience of the people and cost effective use of the city's financial resources..

Policies

a. Guide orderly and efficient use of land to avoid traffic and circulation problems and ensure safety, comfort and convenience of the public and at the same time creating a visually attractive environment.

b. Target areas to meet the demand for residential, commercial, industrial and public uses.

c. Avoid over zoning of land particularly where there is a supply of appropriately zoned properties.

d. Give priority to developing those properties where city utilities and services are available with sufficient capacity.

e. Encourage development in compact, efficient and functional forms to provide for convenient movement between residential, and service areas.

f. Evaluate requests for rezoning for their long term impact on the adjoining land uses and property values and the cost of municipal utilities and

services.

g. Encourage coordination of efforts among the school district, county, township and other governmental entities for selection of sites and improvement changes.

h. Plan for compact commercial areas to avoid extensive strip development or leapfrogging, which often adversely impacts the use and enjoyment of adjoining properties.

i. Require commercial development be located in areas readily served by city utilities and services and within or adjacent to existing commercial uses.

j. Relate major commercial development to existing and planned transportation facilities and services.

k. Encourage the clustering of related businesses.

l. Avoid developing those lands that are prone to flooding or have poor drainage.

Public Services and Facilities

Development of new land is a complex process and the key element to a successful project is location, timing and availability of public services. Also, as any part of the city ages the public services need replacement and maintenance. Public services including water, sewer and streets attract development.

Objectives

a. To establish a city service area to serve the existing and new development. The city service area is defined as an area within one mile of the city limits, also called the planning area.

b. To extend public services to the city core area which prove cost effective. The city core area is the presently developed land in the city and the

adjoining parcels.

c. To utilize the public services as a negotiating tool to enhance and improve the economic interest of the city.

d. To stage the development of public services in a fair and cost-effective manner.

Policies

a. Limit the extension of public services to areas designated as the city service area. Standards for the city core area should include: (i) availability and capacity of public services; (ii) location, use and cost of services; (iii) ability of the area to pay the fair share of services, consisting of such costs as extension of services and maintenance; and (iv) surcharges for those developments which appear too distant away and do not prove cost-effective for the city.

b. Avoid extension of public utilities to large areas of undeveloped land without a specific development plan to measure the overall impacts.

c. Evaluate and monitor the capacities in the public utilities to accommodate the anticipated future businesses and population.

d. Coordinate planning and development efforts with the school district, township, county and state agencies.

e. Utilize the Capital Improvement Program for systematic enhancement of the city utilities and services.

Transportation and Circulation

Good circulation is the life blood of a community. It provides accessibility and mobility for people and places. Kindred has good access to highway transportation system for connecting it to other cities in the state and beyond. For transporting goods and

services rail and truck are the main components.

Objectives

a. To provide safe, convenient and efficient transportation services to meet the needs of all people in the city.

b. To realize the full potential of existing street and highway facilities and services through an effective management, and continuing improvement.

c. To plan to utilize the existing transportation facilities and services efficiently.

d. To plan for a street and highway network which would guide the type of desired uses and growth pattern of the community. The advanced location of major streets facilitates the type and diversity of development without jeopardizing public safety or convenience.

e. To provide for sufficient parking needs in the city and assist the businesses to meet their growing needs.

Policies

a. Designate and preserve the needed travel corridors that can serve the city now and in the future.

b. Encourage timely maintenance programs to preserve the existing roads and streets and increase safety.

c. Provide safe and efficient street system to meet the needs of all people who live, work and seek services in Kindred.

d. Plan the extension and expansion of streets and highways according to the Capital Improvement Program to encourage compact, cost effective and energy-efficient development.

e. Plan to use the existing streets and roads in the most efficient manner instead of building new ones.

f. Reserve sufficient right-of-way to allow for future streets.

g. Provide street and roadway access control measures to preserve the travel capacity.

h. Preserve the rail corridor to minimize the conflict with street transportation or adjoining uses.

i. Provide for safe and convenient airport facilities and coordinate land use activities around the airport.

j. Discourage land uses in the vicinity of the schools that are incompatible with educational uses and activities.

STANDARDS

Land Use

Based on the population projections in Table 8 and the present land use densities in Table 22, Kindred's developable land needs within the next 20 years range from 50 acres to 330 acres depending on the level of population growth (See Table 24).

Table 24
Additional Developable Land Needs
Kindred, ND

	Annual Growth Rates			
	1%	2%	3%	5%
2005	15 Acs.	27 Acs.	40 Acs.	60 Acs.
2010	27	55	75	130
2015	40	80	100	220
2020	55	110	120	330

Source: Mort Mazaheri Associates

* Based on 1999 Land Use Ratios and Average Annual Growth Rates on Table 22.

If lower densities are chosen, larger tracts of developable land are needed. Similarly if a slower growth rate prevails, there is a need for less land. For single family detached units, due to the high cost of infrastructure, it will be assumed that average density will not exceed three lots per acre. Multi family units density at 3,500 square feet per unit should not exceed 12 units per acre. The basic standards for single family lots should not be less than 10,000 square feet with a minimum of 75 feet of width, although larger lots are permissible. The existing improved lots, however, are honored to continue as conforming lots. Unimproved lots should meet the new requirements. In no event smaller lots than 75 feet wide and 10,000 square feet should be permitted to be developed for single family development.

Table 25 illustrates the additional net acreage needed for residential development in Kindred between 2005 and 2020. These projections show wide ranges, (from 1% to 5% annual growth) based on the anticipated or induced community growth.

Table 25
Additional Land Needs for Single Family and Multi-Family Development in Kindred, ND

	Single Family	Multi-Family
2005	5-20 Acs.	1-3 Acs.
2010	9-40	2-4
2015	15-90	2-6
2020	26-100	3-9

Source: Mort Mazaheri Associates
* Based on 1999 Land Use Ratios and Average Annual Growth Rates from 1%-5%.

As a part of visual appeal, the City of Kindred should also require landscaping in residential areas, particularly around multi family housing units to create a more attractive physical environment. The minimum standards for single family lot (10,000 square feet with 75 feet of width) and multi family dwelling units (3,500 square feet per unit) should be included in the zoning ordinance for consistency and continuity of development.

For commercial and industrial spaces, depending on the market needs, the acreage has a wide range at five growth rates (1%-5% annually) shown in Table 26. The commercial areas should be developed in and around the present downtown with sufficient parking. Ribbon Development along Cass County 15 should be avoided for safety of the users and conflict with school facilities. Industrial uses could be clustered in two areas. One area is near the railroad tracks (if such a transportation access is needed), or near the present facility operated by Cass County Electric Cooperative on the west side. A second cluster should be examined in the vicinity of the proposed new airport land. In this case, care must be taken that such industries would not conflict with the operation of the airport in the future. Selection of sites for industrial

uses require care and sensitivity to impact on other uses to avoid conflicts which usually have monetary, visual and safety effects.

Table 26
Additional Land Needs for
Commercial Uses, Community Facilities
and Streets Rights-of-Way in Kindred, ND

	Commercial Industrial	Community Facilities	Street Rights-of-Way
2005	1.5-6 Acs.	0.5-3 Acs.	3-12
2010	2.5-13	1-6	5-25
2015	4-22	2-10	8-40
2020	5.5-33	2.5-15	11-65

Source: Mort Mazaheri and Associates
*Average annual growth is based on 1%-5%.

Public Facilities

Community facilities such as park, open spaces and buildings should be regarded as important elements contributing to the quality of life in Kindred. As the community grows certain facilities should be located more accessibly for people of all ages while other improvements need to be centralized to conform to the cost effectiveness of projects. The school facility ,is presently at capacity and needs expansion. Since this facility serves large areas to the north (reaching outskirt of Fargo), it is important that the additions be kept at or near the present site. In addition to being an excellent school system, the Kindred schools campus is also a major economic component for the city. As the district population grows, there would be a need for regular updating and expansion of the existing facilities. The school district projects a reasonable enrollment of 868 students by the year 2008-2009, or a growth of 150 students in 10 years. It is likely that between the years 2010 and 2020 another 200 students be added to the school age population. These changes require not only additionally classrooms and support spaces but also require additional land for spatial expansion.

The aggregate land space for a campus including primary, middle and secondary school, based on national averages, would be 40 acres. Additional land may be available in the vicinity of the present buildings to accommodate future needs.

Other major public facilities needs are: expansion of the airport, as it was discussed in the community profile section; and expansion of the parks and outdoor recreational services. Efforts are underway to accommodate expansion of the existing airport facilities with sufficient space for additional future expansion and also potentially for compatible future industrial uses. Park land development is needed for areas west and north of the existing development. Sufficient acreage for small neighborhood parks and community parks and play fields should depend on the number of housing units contemplated in Areas 2-6 shown on Figure 5.

Certain outdoor facilities may be incorporated in the school campus plan which requires close working between the Park Board and School District. Other park and recreational facilities, for ease and convenience should be appropriately located in the new residential areas. As new subdivisions are approved, the city with the Park Board should examine locations for purchase or even dedication for park purposes. The land need for park and open spaces in Kindred for the next 20 years would be 20-40 acres depending on population growth.

Streets and Roads

One of the largest users of land in any community is streets and alleys. Nearly 20% of the developed land in Kindred is presently used for this purpose. while wider streets are visually appealing, the cost of construction and maintenance becomes a major consideration. Street width for residential areas should not exceed 60'-70' for rights-

of-way. A 60' street right-of-way can provide for a 28-32 pavement and 14'-16' boulevards on each side. In small commercial and industrial areas, these standards are also applicable. Major thoroughfares such as Cass County 15 would require 80'-100' right-of-way with access points at street intersections only. The following standards for streets and roads are commonly used by many communities.

Primary and Secondary Arterials,	100-120 feet
Collector and Connector Streets,	80-100 feet
Local Streets	60-70 feet
Cul-de-Sacs	80-100 feet in diameter
Alleys	16-20 feet
Sidewalks	Four feet

STRATEGIES

For the purpose of priority setting and targeting, this plan is divided into four five-year periods. Each period focuses on careful examination of priorities, financial resources, specific needs of Kindred. Naturally, flexibility in implementation of the plan is important to accommodate emerging needs or unexpected situations.

2000-2005 Period

In this period, the City of Kindred begins a process of examining the alternative growth patterns, and community impacts. Determining the type, quality and extent of growth is important in this phase of the community planning process. During these years, priority should be given to making major improvement to water and sewer as a needed major feature for the future development of Kindred. It was pointed out that the city's sewer system requires extensive renovation and replacement. The extent of these improvements should address a design capacity for a population of 1,500 to avoid the same problems in the near future. New capacities for storage of water is needed to

upgrade the present storage system to accommodate the new residential development and potential commercial development opportunities.

Drainage which has been of major concern in recent years requires much attention. There needs to be a substantial emphasis on diverting the surface run-off away from the city. Discussion of installing tiles in major locations in lieu of storm water handling systems should be vigorously pursued. Interim or perhaps permanent policies or limiting below grade development to 1/2 story or slab at grade should be examined to avoid water seepage into the new structures.

In this period, the housing absorption capacity should be tested and defined as Kindred is expected to experience sizable growth within the next 20 years. Zoning and subdivision ordinances may have to be amended to guide the type of growth Kindred desires. Likewise, a capital improvement program, no matter how small, should be developed for defining the future city expenditures and source of financing by priority.

Within the next five years two new areas largely for residential development should be considered. The land between the railroad tracks and Cass County 15 directly south of the existing city limits (Sheyenne Street) and north of the Catholic Church is an extension of the present single family area. This land should be given priority for single family development to accommodate 16-20 lots (See Figure 5). The major step here is to extend 2nd Avenue Sough and also to install a half block residential street about 150'-170' from the Cass County 15 right-of-way. No direct access should be allowed to the lots fronting on Cass County 15.

Another developable area is west of the railroad tracks south of Elm Street and a part of the original town site plat. This area is presently vacant. Connections for water and sewer may be an issue as the present system serving the houses along Elm Street may not be sufficient to be extended to the south. These services, however, could be provided from points south of Elm and under the railroad tracks. This area has the potential to accommodate 35-40 single family housing units. Because of the cost of infrastructure, it is recommended that the development be phased in, if the property owner/developer expects city assistance for up front financing and special assessment thereafter. Phasing would protect the city interest and would reduce the risk, in the event the lots are not sold within a 2-3 year period (See Figure 5).

A summary of the tasks to be undertaken during the first phase of future planning (2000-2004) is as follows:

1. Clarification and improvement program for the city sewer system
2. Expansion of the water storage system
3. Plan for reducing the impact of high water table and drainage system.
4. Development of plat of subdivision for the area south of Sheyenne Street and west of Cass County 15 (Area 1).
5. Development of plat of subdivision for area west of the railroad tracks and south of Elm Street (Area 2). This area, due to its size, may have to be phases in as a final plat. If the original town site lots in this area are still of record, no additional platting may be necessary.
6. Preparation of a capital improvement program to determine the projects by priority and cost.

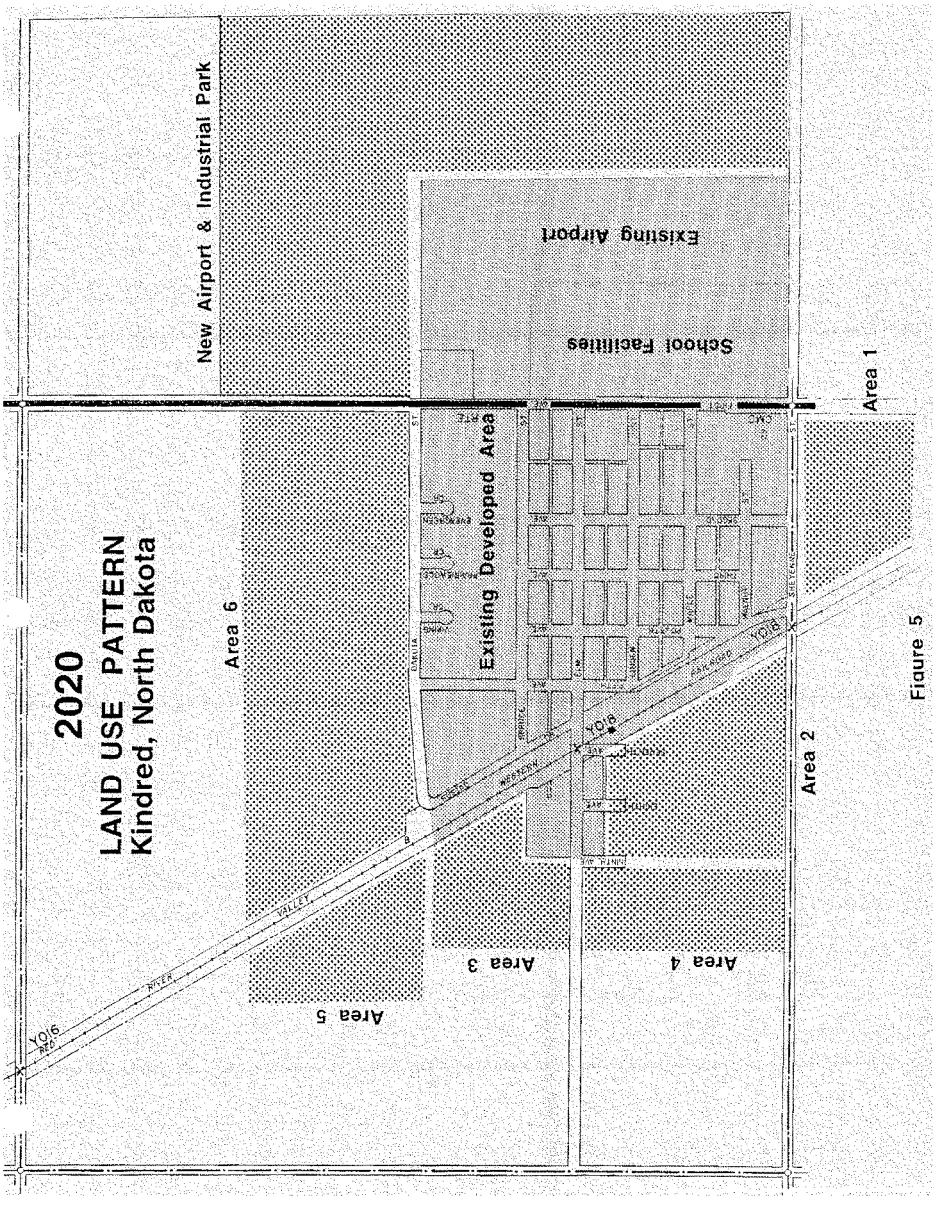

2020
LAND USE PATTERN
Kindred, North Dakota
New Airport & Industrial Park
Existing Airport
School Facilities
Existing Developed Area
Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
YOKE
RIVER
VALLEY
WESTERN
EASTERN

Figure 5

7. The city would enforce its zoning and subdivision ordinance to avoid development of incompatible uses outside the city, particularly within one mile extra territorial planning.
8. No development should be given sewer service, unless it is annexed to the city.
9. Begin a process of rehabilitation of existing homes to upgrade the existing housing stock. Lake Agassiz Regional Development Corporation has programs to accommodate the housing rehabilitation efforts.

2006-2010 Period

By the time this phase begins, the city should be in a position to determine the level of growth it can support. This period would be the start of a new direction for the development pattern for Kindred. All community services, for the most part, would be assumed to be updated. If the city determines that certain areas, south and west of the existing city limits is mature for development, the area should be annexed before any service is provided.

Between residential areas 1 and 2, there would be 50-60 new single family lots which should indicate the city residential land absorption (See Figure 5). These two areas when fully developed represent 140-200 persons which places the population of Kindred between 775-835. An evaluation would enable the city to determine whether that rate of growth is economically sustainable.

Extension of Area 2 to the south or west for additional residential development should be examined in this period. Sufficiency of infrastructure and soil conditions are determining factors for platting new residential subdivision. Area 3 on the west side of

the railroad track and north of Elm Street has potential for commercial and industrial development which should be evaluated early in this period again. Areas 4 and 5 are also potential sites for residential development within the next 10-15 years. These sites should be examined for cost effectiveness of extending water and sewer. The city should avoid piecemeal development of Areas 3, 4, and 5.

A summary of actions for this period include:

1. Determination of the growth rate for this five year period based on experience during 2000-2004 and evaluation of updated infrastructure and community services.
2. Downtown renovation for more compact development and improving the visual appearance. Older buildings should be regarded as an integral part of Kindred's heritage and should be preserved to the maximum possible extent.
3. Housing rehabilitation should continue throughout this period to maintain a high quality housing stock at affordable prices.
4. Early evaluation of need for additional multi-family units with good site planning to complement the surrounding uses should be done. Among choices are developing sites near downtown for access to services or individual sites in new residential subdivisions.
5. Determination of location of service, commercial or industrial uses near the proposed airport site or on the west side in proximity to existing industrial uses.

2011-2015

Within this time period, Kindred should be ready for a desired scale of development. Long term development preparation for addressing the key community issues such as water, sewer and storm water drainage which had been underway between the years 2000-2010 becomes a key determinant on meeting the needs of the subsequent ten years. The 2011-2015 years are thought of as a period of planned growth without many unexpected new and capital needs.

In these years, the residential growth should be directed to the northwest and north sides supported by detailed site planning to meet the city's need for a ten year period. By this time, the public facilities on the east side of Cass County 15 are expected to be prepared for a defined growth rate reflective of a growing community as it relates to the spill over effects of the Fargo Metropolitan area.

In respect with the pattern and density of residential development, the city needs to evaluate its growth during the two five year periods. Certain market demands are difficult to predict, but in most instances we assume that the residential densities and forms would not significantly differ from current practices. The ten year evaluation for assuring a continuous, orderly ad consistent development both in the built up parts and new areas is necessary.

It is obvious that if Kindred reaches a population of 1,000 in the first 10 years (2000-2010) and that growth has been consistent with the community planning and development policies articulated in the first part of the plan, the city would continue its support for the following 10 years. If, however, the variation in market forces or unexpected circumstances lead to unforeseen development issues, the city would

need a careful examination of the issues and underlying forces to change course as needed.

The location of commercial and industrial development would require careful consideration and should be consistent with the objectives and policies offered in this plan. It may be necessary to refine and formulate new objectives and specific policies to guide the city growth effectively in time of unanticipated development proposals. The city should remain flexible in accommodating new development for adding to the services and employment opportunities where possible.

2016-2020 Period

During these five years, Kindred should comprehensively address the community development pattern for the next twenty years (2020-2040). The forefront of these issues are community facilities and services. Water, sewer and drainage would continue to be in the heart of the community development issues. Deliberate decisions regarding the community needs within the next twenty years should be made in this period.

In this period, the City of Kindred should establish its readiness in defining the extent and diversities of development for residential, commercial and industrial uses. By the year 2020, Kindred would be a more ready suburban community to seek opportunities for the type of growth it deems consistent with the services, facilities and community goals. This opportunity, however, does not offer itself in one well packaged and tidy bundle. It will be in a form of numerous initiatives, actions, challenges and responses in relationship to the needs of the economic region in southeastern North Dakota.

For example, if Kindred attains a population of 1,500 within the 2000-2020 period without major controversies, it should find ways to continue its growth and change in the subsequent years. This is not to say that there will not be challenges and possibly nagging issues. The economic market, placing demands for housing, jobs and services is complex and should not be regarded as simple and static. It is rather dynamic and complex as it cuts across the regional needs and values.

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June 20, 2011

VIA EMAIL & CERTIFIED MAIL

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

Re: Supplemental Draft Feasibility Report and Environmental Impact Statement - Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Mr. Snyder:

On behalf of the City of Oxbow, North Dakota, we submit the following comments on the U.S. Army Corps of Engineers' ("Corps'") feasibility and National Environmental Protection Act ("NEPA") analysis for the above-mentioned Supplemental Draft Feasibility Report and Environmental Impact Statement ("SDFR&EIS"). The strong desire to build a North Dakota diversion project is prematurely forcing decision on a plan that is: 1) more expensive than all others considered; 2) lacking sufficient funding from local sponsors and thereby not feasible or practicable; 3) suffering from a lack of adequate analysis under both NEPA and Water Resources Defense Authorization Act ("WRDA") guidelines; 4) violative of Executive Orders ("EO") 11990 and 11988; 5) the most environmentally damaging by affecting far more wetland, farmland and floodplain acres than any of the other plans analyzed; and 6) ultimately planned at the expense of residents of the City of Oxbow and other communities.

I. Background

The City of Oxbow is a small town of just over 200 residents located south of Fargo. Residents enjoy their beautiful surroundings and cohesion as a small community. Oxbow has consistently been ranked high as one of the best places to live in the United States.

Oxbow is also home to a signature golf course, the Oxbow Country Club, designed by Robert Trent Jones, Jr. Located in the heart of Oxbow, it employs 70 people and draws its

members and golfers from throughout the region. It is the only golf course of its kind in a 400 mile radius and Oxbow residents pride themselves on having such a unique facility in their community.

While the City of Oxbow in good faith has continuously tried to find a way to support flood mitigation in the region, the City's efforts have not been reciprocated. Instead, City residents face frightening uncertainty, unable to plan for their futures given the inability to sell -- or even get appraisals for -- their properties in light of the pending project. The Oxbow Country Club has also recently had difficulty recruiting new members because of the proposed project. Worse, there is no certainty as to when -- or if -- the controversial project will ever be completed. Particularly in light of the increased project costs and likely inability or unwillingness of the local sponsors to cover their shares of the costs, this "limbo" period Oxbow residents are already living in could last for years. It is simply not fair to put one town's future on indefinite hold while the local sponsors figure out whether they can even afford the project they planned.

Originally the local sponsors and the Corps assured the public that the proposed diversion project would have no impact on upstream communities. However, in order to address the unexpected and significant impacts of the original locally preferred plan ("LPP") to downstream communities that rendered the LPP "not a practicable alternative" (Section 404(b)(1) Evaluation to the SDFR&EIS, at 3), the Corps changed course to include significant upstream water staging and storage areas that will put Oxbow underwater.

This was made known to Oxbow residents just days *after* a county sales tax vote taken to help fund the project costs. Most Oxbow residents voted for the sales tax, not realizing it was in effect a vote to spend their own dollars on a project that would eventually destroy their community. The Oxbow Country Club routinely collects the sales tax as an added expense to the business, knowing its intended use will eventually eliminate the business.

Any violation of the public trust aside, other aspects of the project financing are even more disconcerting and threatening to Oxbow's situation. All indications suggest that while the project cost estimates continue to rise, the local sponsors' ability or willingness to pay their dedicated share of the costs is uncertain at best. Even with the sales tax vote approved, Cass County projects that it will be at least $150 million short of their estimated project cost share.[1]

[1] *See* the City of Fargo's Revenue Forecast as of spring 2011 (attached as Exhibit A).

More recently Moorhead City Council members questioned whether the city should remain one of the project's official sponsors.[2]

On top of the uncertainty related to the current project cost estimates, the Oxbow mitigation costs included in the SDFR&EIS analysis are woefully inadequate -- roughly one fifth of what the true costs are expected to be. It is also not lost on Oxbow residents that mitigation costs are the sole responsibility of the local sponsors who increasingly appear unable to pay even before the real Oxbow buyout costs are added to the equation.

Despite the utter dearth of analysis on economic feasibility and facial recognition that the LPP is the most environmentally damaging project considered, the St. Paul District Engineer "determined that the tentatively selected plan presented in this report is in the overall public interest and is technically sound, environmentally acceptable, and economically feasible" and recommended the project for authorization. *See* SDFR&EIS at ES-19. As is discussed below, this determination is arbitrary and capricious and otherwise not in accordance with the law.

Adding salt to already open wounds, the Corps provided only a 45-day comment period to respond to thousands of pages of documentation on a complicated, nearly $2 billion project. When the City asked for an extension[3] so that it could simply find and hire appropriate economic and technical consultants to better evaluate why the mitigation costs for flooding their town were so low and why other alternatives that would save the City were so quickly dismissed by the Corps, the request was denied. Despite the basin-wide impacts of this project, the sky-high price tag and the proposed destruction of entire cities, the Corps was unwilling to give even a few days' extension so that Oxbow could be given a fair chance to comment.

The Corps' failure to provide Oxbow and the public a reasonable opportunity to comment is further exacerbated by the unnecessarily and inappropriately complicated manner in which the Corps communicated the nature of the model used to compare the engineering feasibility of the various alternatives considered to accomplish the project purpose and need. In fact, Corps

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[2] *See* Dave Olson, INFORUM, Moorhead questions diversion sponsorship (June 14, 2011), http://www.inforum.com/event/article/id/323354/(attached as Exhibit B).

[3] *See* Oxbow Extension Letter Request, dated May 19, 2011 (attached as Exhibit C). *See also* Letter from Terry Birckenstock to Kevin Johnson, denying the extension request (attached as Exhibit D).

technical staff previously told Oxbow engineers that it was nearly impossible for any third party entity to understand let alone attempt to provide input to the engineering assumptions used by the Corps and discouraged Oxbow from attempting to do so. These statements by Corps staff not only underscore the reason to grant – rather than deny – a comment period extension, but are directly counter to what is required under NEPA.

The very purpose of NEPA is to make the decisions and the impacts of those decisions accessible to the public and decisionmakers. *See e.g., Minnesota Public Interest Research Group v. Butz*, 541 F.2d 1292, 1300 (8th Cir. Minn. 1976) (explaining that NEPA requires an objective, comprehensive and understandable technical explanation to ensure that the analysis fulfills its primary function). NEPA documents must translate technical data into terms that render the analysis an effective disclosure of the environmental impacts of a proposed project; the more complicated the science underlying the analysis, the more challenging the task to convey the information clearly. *See e.g., Oregon Environmental Council v. Kunzman*, 817 F.2d 484, 493-495 (9th Cir. Or. 1987). Particularly with a project of this size and complexity, the Corps had an added burden to make the information and results of its decision-making clear and accessible to the public instead of making it so complicated so as to effectively preclude meaningful inquiry and comment. For this reason, along with many others explained below, the SDFR&EIS is wholly inadequate and will not survive judicial scrutiny.

II. Inadequate NEPA Analysis

A. NEPA Requires a Hard Look and a Reasoned Explanation for the Choices Made

Although the record for this project is long, NEPA requires more than a lengthy list of project impacts and more than the Corps has provided. It does not require a particular substantive outcome, but it does require that sufficient analysis be presented such that the agency's reasoning in selecting a particular project can be well understood. The Corps must "take a 'hard look' at the environmental consequences" of the diversion project, a major federal action. *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 533 (8th Cir. 2003) (citing *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87 (1983)). This standard requires the agency to prepare a detailed statement "from which a court can determine whether the agency has made a good faith effort to consider the values NEPA seeks to protect." *Minn. Pub. Interest Research Grp. v. Butz*, 541 F.2d 1292, 1299 (8th Cir. 1976), *cert denied*, 430 U.S. 922 (1977). NEPA analysis must not merely catalogue environmental facts, but must also explain fully its course of inquiry, analysis and reasoning. *Minn. Pub.*, 541 F.2d at 1299.

In addition, the degree of detail that NEPA requires "depends upon the nature and scope of the proposed action." *Sierra Club v. Kimbell,* 623 F.3d 549, 560 (8th Cir. 2010) (internal quotation marks and citation omitted). Given the significant scale, cost and impacts of the diversion project presented, this project will be held to the highest standards under NEPA. *See, e.g., Mid States*, 345 F.3d at 550 (taking into account the size and scope of the $1.4 billion rail construction project when evaluating the sufficiency of the analysis).

B. Inadequate Analysis of Alternatives

The Corps failed to adequately assess reasonable alternatives to the LPP and to explain the reasons for its decisions, rendering the NEPA analysis insufficient. Comparing the proposed project to a variety of distinct alternatives is at the heart of the NEPA-guided process. NEPA requires an agency to thoroughly discuss alternatives to the proposed action in its EIS and to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). The Corps is required to consider all "reasonable" alternatives (40 C.F.R. § 1502.14(a)) and the "existence of a viable but unexamined alternative, renders an environmental impact statement inadequate." *Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999) (internal quotation marks and citation omitted).

NEPA also requires an agency to present the EIS alternatives in comparative form, "sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. The agency must also "cogently explain" the reasons for its decision. *Motor Vehicle Mfrs. Ass'n of the U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 48 (1983). Here, the Corps has failed to adequately and accurately examine practicable alternatives to its recommended course of action and, as demonstrated more fully below, has not "cogently explained" its reasoning for selecting one course above all others.

1. Inadequate and Inaccurate Analysis of the Southern Alignment and Oxbow Buyout

The Corps did not take a "hard look" at the southern alignment alternative which, if selected, would save the City of Oxbow. Far from a hard look or rigorous exploration, the Corps concedes that it dismissed this reasonable alternative based on "a rough technical analysis with a primary focus of identifying any possible cost saving measures" (Appendix O, at 73) and devoted little more than a short paragraph in the SDFR&EIS to an alternative that would both meet the project purpose and protect the City of Oxbow from certain inundation. Its treatment of this practicable alternative is patently arbitrary.

First, it dismissed the southern alignment based on a rough cost comparison with the LPP and justified such "short-shrift" treatment by incorrectly insisting that the southern alignment is $35 million more expensive than the LPP. *See* Table 17, Fargo-Moorhead Metro Flood Risk Management Project, Feasibility Study, Phase 4. This cost comparison is flawed because it grossly undervalues the costs of mitigation associated with the LPP. The Corps assumed roughly a $12 million differential between the costs associated with mitigation for the upstream staging area required for the LPP, and the same for the southern alignment. *Id.* Yet, what the Corps failed to recognize is that this is but a fraction of what the Oxbow mitigation costs alone are expected to be.

Oxbow commissioned Rose Hoefs -- an appraiser well known to and utilized by the Corps -- to provide an assessment of costs required to buy out the residences of the City of Oxbow (exclusive of the golf course or other publicly or commercially held properties).[4] Although her analysis likely understates the value of a full buyout because it is based on residential tax values which are historically considerably lower than market values in North Dakota, she estimated that portion of the buyout alone to be roughly $42 million. The Hoefs estimate does not include costs for winding up the business of the City or the relocation costs for its residents. In addition to this, the Oxbow Country Club estimates the costs of reconstructing the golf course – one of the largest employers and most important assets of Oxbow – to range approximately between $12 and $24 million.[5] This estimate does not include the cost of designing the new course, the cost for the land, nor the cost of building a new clubhouse or maintenance building. Even if we assume the costs associated with golf course reconstruction fall squarely in the middle of this range – at $18 million – the combined analysis demonstrates that the Oxbow buyout would amount to a minimum of $60 million – or 5 times the Corps' assumption. While the Corps asserts that the southern alignment is $35 million *more* expensive, a far more accurate, and thus realistic, analysis of the relative buyout costs reveals that the southern alignment is actually far *less* expensive than the current LPP.

In addition to grossly underestimating the mitigation costs associated with the LPP, the Corps improperly dismissed the southern alignment on grounds that it would remove

[4] *See* Letter and Accompanying Attachments from Rose Hoefs to Jim Nyhoff and Kevin Johnson (June 14, 2011) (attached as Exhibit E).

[5] *See* Estimate Price Range for New Golf Course Construction Costs, and accompanying letter from Robert Trent Jones to Adam Gaber, dated April 12, 2011 (attached as Exhibit F).

approximately 6,000 more floodplain acres than the LPP and is thereby unacceptable under Executive Order 11988 which aims to protect floodplain function. Appendix O at 75. Yet, the Corps self-servingly neglects to mention the selection of the LPP would remove an additional 25,000 acres from the floodplain than a Minnesota alignment (SDFR&EIS at 88, citing a difference of 38.5 square miles). The Corps cannot pick and chose when the requirements of EO 11988 apply and when they do not. Furthermore, the Corps reaches this conclusion by using its own methodology to calculate floodplain impacts that departs from accepted FEMA data and protocol as intended under the Order.[6]

This kind of arbitrary decision making is the antithesis of what is required by NEPA. Because the Corps relied on erroneous information and more accurate information should have yielded a different result, the Corps' perfunctory consideration and ultimate dismissal of the southern alignment will not withstand judicial scrutiny. *Friends of the Boundary Waters Wilderness,* 164 F.3d at 1129.

2. Summary Dismissal of a Dispersed Flood Retention System

The Corps also failed to consider combining the North Dakota diversion alignment with non-structural alternatives. Earlier in the planning phases, distributed floodwater storage and wetland/grassland restoration were dismissed as stand-alone alternatives (SDFR&EIS at 39), but the Corps maintained that they should be "considered for integration with structural measures to maximize effectiveness of the alternatives." The Corps not only committed to seriously exploring non-structural options, but was obligated to do so under its own planning guidance. E.R. 1105-2-100 § 2-3(c)(Apr. 22, 2000).

The Corps, however, failed to continue to look at distributed floodwater storage and wetland/grassland restoration as possible combinations with the LPP. A perfect opportunity to do so arose when the Corps identified the LPP as being not practicable because of the logistical problems associated with dramatic downstream impacts. The Corps had already recognized that non-structural solutions generally have beneficial effects for downstream communities (Appendix P, at 11) and was well aware of promising research done by the Environment and

[6] EO 11988 and the National Flood Insurance Act of 1968 both place the responsibility to develop floodplain maps squarely with FEMA. *See* Further Advice on Executive Order 11988 Floodplain Management, Interagency Task Force on Floodplain Management (year), and 42 U.S.C. § 4101(e)-(j), respectively.

Energy Research Center on dispersed floodwater retention plans. Two researchers at EERC confirmed that there is likely sufficient upstream dispersed storage potential (between 159,000 and 267,000 acre-feet) to offset the need for both the staging and storage areas (necessitating 200,000 acre-feet of storage) included in the current LPP as solutions to the downstream impacts.[7] In other words, a North Dakota diversion channel in combination with distributed rather than concentrated storage, would provide the same level of flood risk reduction but avoid inundating whole communities, including the City of Oxbow. The Corps' failure to give this option a "hard look" comes at a significant cost to the City of Oxbow and its residents, and is patently arbitrary.

C. Arbitrary and Capricious Selection of Locally Preferred Plan

The Corps' selection of the LPP deviates from its own regulations and is difficult to rationalize given all of the associated adverse consequences. In addition, it is not financially feasible and violates other provisions of federal law.

1. The Corps impermissibly modified the project purpose to support its selection of the LPP over all others

The Corps elevated the LPP over other practicable alternatives, and in so doing, altered its definition of the project purpose. Selectively modifying the project purpose to elevate one alternative above all others is prohibited by NEPA

The stated purpose of the proposed action is to "reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." SDFR&EIS at 30. The Corps is obligated to consider reasonable alternatives that accomplish this stated purpose and need. 40 C.F.R. § 1502.14.

Perhaps in an attempt to "cogently explain" its rationale for selecting the LPP over the Federal Comparable Plan ("FCP") -- the Minnesota diversion alternative --, the Corps points to the fact that the LPP reduces flood stages in five specifically identified North Dakota tributaries to the Sheyenne River. *See e.g.*, SDFR&EIS at 92 (discussing "completeness"), at 101 (discussing EO 11988 impacts) Attachment 1 at 2 (discussing why the LPP was selected over the

[7] *See*, Kyle Glazewski and Bethany Kurz, "Potential Waffle Water Storage Sites Upstream of the Fargo-Moorhead Area," (June, 2011) (attached as Exhibit G).

FCP despite the FCP being more cost effective). *See also* letter from Beth S. Ginsberg to Aaron Snyder re: Corps' CWA Section 404(b)(1) analysis dated June 13, 2011 at 2. Nowhere, however, is reducing flood stages in these specific tributaries identified in the purpose and need section. Instead, the purpose and need statement is explicitly worded much more broadly to enable the Corps to reasonably compare the LPP against a reasonable range of alternatives that would accomplish its stated goal of "reduc[ing] flood risk, flood damages and flood protections costs related to the flooding in the Fargo-Moorhead Metropolitan Area." The Corps did not limit its options to those that *specifically* address flooding on the Sheyenne River and its tributaries.

In any event, the Corps' narrowing of its project purpose and need necessarily makes a North Dakota alignment the only plan capable of meeting this new project purpose because it crosses all of these tributaries where the others do not. The courts, however, have ruled that an agency cannot define the objectives of its own actions in terms so unreasonably narrow that only one alternative from among those in the agency's power would accomplish the goals of the agency's action, rendering the EIS a foreordained formality. *See, e.g., Nat'l Parks & Conservation Ass'n v. BLM*, 586 F.3d 735, 746 (9th Cir. 2009).

2. The LPP is not financially feasible and thereby not a practicable alternative

The Corps' selection of the LPP violates NEPA because the LPP is neither financially feasible nor practicable. The estimated project cost for the LPP is approaching $2 billion. Only $767 million of the total costs for the proposed project would be borne by the federal government, if Congress so acts.[8] The remaining costs must be borne by the non-federal ("local") sponsors as follows: 1) 10% of the total balance is to be paid by the City of Moorhead and State of Minnesota, 2) 50% of the remainder after the federal and Minnesota shares have been subtracted is purported to be covered by the State of North Dakota, 3) and 50% of the remaining balance is to be paid by Fargo and Cass County each. Despite its commitment to bear a significant portion of the costs for the North Dakota diversion alignment, Cass County is already reporting a shortfall of roughly $150 million and Moorhead's willingness to pay its share seems increasingly uncertain. *See supra at 2-3*. Given the current precarious fiscal condition of state and local governments, these budget shortfalls are only likely to increase, rendering the

[8] The federal share is capped at 65% of the estimated costs of the FCP, currently estimated at $1.18 billion. This equates to a little over $767 million for the total federal share or less than 50% of the current LPP costs (SDFR&EIS at 127-8).

ability of the non-federal sponsors to pay their share of the preferred alternative even more uncertain. Any increases in project costs, including those necessary to adequately compensate City of Oxbow residents, must come from the local sponsors, whose budgets are already overextended. Furthermore, any project cost overruns specific to the LPP are the local sponsor's responsibility exclusively, making their financial exposure related to this project potentially unlimited. As a result, the LPP is infeasible due to lack of adequate local financing.

Under NEPA, the Corps is required to consider alternatives that are feasible and thus "reasonable." *See, e.g., Mid States*, 345 F.3d at 546. As the Council on Environmental Quality ("CEQ") has explained: "Reasonable alternatives include those that are practical or feasible from the technical *and economic standpoint* and using common sense, rather than simply desirable from the standpoint of the applicant."[9] Thus, an alternative is not reasonable if it is not economically practicable. Here, the locally preferred alternative fits squarely into the category of alternatives that, "using common sense," are not feasible from an economic standpoint. Despite selecting an alternative that is significantly more expensive than the FCP, the local sponsors have not secured adequate funding to see the project through to completion. Meanwhile the project continues to expand in scope, blind to an already insufficient budget.

The requirements of NEPA and common sense both suggest that the ability to fully finance a project should be part of a feasibility analysis, particularly whereas here, the LPP is far more expensive and includes, as demonstrated below, many additional adverse environmental and floodplain consequences as compared to the FCP. Although the LPP may be "desirable from the standpoint of the applicant," an un-fundable project is not a reasonable NEPA alternative at all.

3. The Corps Selection of the LPP is in Violation of Executive Orders 11988 and 11990.

The LPP is also violative of Executive Orders ("EO")11988 and 11990. Although it selected a plan that affects far more wetland and floodplain acres, the Corps has not demonstrated how the LPP will be made consistent with Executive Orders ("EO") 11988 and 11990, which aim to protect floodplain and wetland functions, respectively.

[9] Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981) (emphases omitted).

The Corps selected a plan that affects 25,000 more acres of floodplain acres than the FCP but did not explain how it plans to minimize adverse effects to floodplain function. When building in the floodplain is determined to be the only practicable alternative, EO 11988 requires that the agency "design or modify its action in order to minimize potential harm to or within the floodplain consistent with regulations issued in accord with Section 2(d) of this Order." EO 11988, § 2(a)(2). The courts have interpreted this EO as requiring federal agencies to "take steps to minimize any flood hazard posed by the project." *See e.g., Daingerfield Island Protective Soc'y v. Babbitt*, 40 F.3d 442, 447 (D.C. Cir. 1994). The Corps' implementing regulations further require that prior to authorizing an activity in the floodplain, the Corps must "ensure, to the maximum extent practicable, that the impacts of potential flooding on human health, safety, and welfare are minimized, the risks of flood losses are minimized, and, whenever practicable the natural and beneficial values served by floodplains are restored and preserved." 3 C.F.R. § 320.4(*l*)(2); *see also* E.R. 1165-2-26 (Mar. 30, 1984).

Instead of demonstrating actions to minimize adverse effects to the floodplain, the Corps summarily and arbitrarily insists that "[a]ny floodplain impacts created by any of the possible alternatives will be minimized as much as possible." Appendix O at 95. An analysis consistent with EO 11988, however, would ensure that 1) the beneficial values of the floodplain will be preserved; 2) adverse floodplain impacts of the project will be minimized; and 3) that any adverse human health, safety and welfare impacts to the residents of Oxbow and other affected communities are reduced.

The Corps' selection of the LPP also runs counter to its requirement to avoid selecting an alternative that would indirectly support floodplain development. EO No. 11988. While the Corps is well aware of the potential unintended consequence that structural flood diversion projects might provide a false sense of security and actually encourage more floodplain development (Appendix P, at 3), by selecting the LPP, the Corps actually *helps* the local sponsors actually *plan* for it. In fact, recent alterations to the LPP place staging and storage areas further south to better accommodate future growth at the edges of the Fargo metropolitan area. Although the Corps acknowledges that: 1) "the communities of West Fargo, Horace, and Cass County have indicated a desire to develop into areas that are currently floodplain and subject to regular flooding;" 2) "have developed long term goals to develop in the floodplain areas that would be between the East and West diversion alignments" and 3) "would like to see these areas removed from the floodplain," the Corps maintains that the LPP is in compliance with EO 11988 anyway. SDFR&EIS at 101. How the Corps can insist that its encouragement of the local sponsors' intentions to develop into areas that are currently floodplain and subject to regular flooding is consistent with the mandate established by EO 11988 is mystery known only to the

Corps. Indeed, floodplain management under the EO is intended to *reduce* not *encourage* further development in the floodplain.

Selection of the LPP is also violative of EO 11990. EO 11990 prohibits federal agencies from undertaking or providing assistance to projects in wetlands unless the agency demonstrates "that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use." EO No. 11990, Protection of Wetlands, § 2(a) (May 24, 1977). The LPP directly impacts 1,161 acres of natural wetland or roughly a quarter of the total wetland acres in the whole project boundary. Rather than minimizing wetlands impacts, the LPP is the alternative that is expected to result in the greatest degree of wetlands impacts. Adding insult to injury, the Corps entirely fails to explain how its selection of the alternative noted for having the greatest degree of wetland impacts conceivably complies with EO 11990, insisting instead that it just does. Particularly given the scope of the project and its significant impact on wetlands, the Corps must include at least *some* analysis as to how it plans to comply with EO 11990 rather than disregarding it entirely. *See* Oxbow comments submitted re: Corps' 404(b)(1) analysis, attached hereto as Exhibit H.

D. The Corps Failed to Address Climate Change Effects

The SDFR&EIS is further deficient because it fails entirely to address the effects of climate change and global warming. The CEQ's Draft NEPA Guidance on Climate Change requires all federal agencies to address "the relationship of climate change effects to a proposed action or alternatives, including the relationship to proposal design, environmental impacts, mitigation and adaptation measures." *See* Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions at 8-11 (Feb. 18, 2010)("Guidance") at 1 (attached as Exhibit I). The Guidance further admonishes that "federal agencies must ensure the scientific and professional integrity of their assessment of the ways in which climate change is affecting or could affect environmental effects of the proposed action." *Id.* at 2; *see also* 40 C.F.R. § 1502.24. According to CEQ, "climate change can affect the integrity of a development or structure by exposing it to a greater risk of floods, storm surges, or higher temperatures." Guidance at 6. CEQ further acknowledges that "climate change can increase the vulnerability of a resource, or ecosystem. . . . , causing a proposed action to result in consequences that are more damaging than prior experience with environmental impacts analysis might indicate." *Id.*

This is especially true here, where the proposed project is designed to alleviate effects produced by flooding. Given that the Corps' proposed action is all about reducing the effects of mother nature, effects that have been exacerbated by the advent of climate change, it was incumbent on the Corps to address the likelihood that climate change may affect the assumptions

about the likelihood and likely intensity of future flooding, storm surges and the like, and the likely impact those events may have on the utility of the various alternatives considered in the DFR&EIS.

Global warming has been recognized by the courts as an issue of national importance. *See, e.g., Massachusetts v. EPA*, 549 U.S. 497, 521 (2007). Thus, by failing entirely to consider an important aspect of the problem, the Corps' NEPA analysis is arbitrary and capricious. *See, e.g., Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1216 (9th Cir. 2008) (finding NEPA document inadequate for failing to discuss the effect of carbon dioxide emissions on climate change). In that case, the Ninth Circuit cautioned that the fact that climate change is largely a global phenomenon does not release the agency from its duty of assessing the effects of its actions on global warming within the context of other actions that also affect global warming. *Id.* at 1217; *see also Mid States,* 345 F.3d at 549-50 (invalidating NEPA analysis that failed to address increased climate change effects produced by proposal to construct new rail line to coal mines of Wyoming's Powder River Basin).

E. Inadequate Analysis of the Cumulative Effects, Particularly for a Project of This Magnitude

The cumulative effects analysis is similarly woefully inadequate. Cumulative effects include the "incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7. Cumulative impacts can result from "individually minor but collectively significant actions taking place over a period of time." *Id.* The CEQ has issued recent draft guidance on how to conduct a proper cumulative effects analysis. *See* Guidance at 8-11. CEQ advises that the analysis of cumulative effects begins with consideration of the direct and indirect effects on the environment that are expected or likely to result from a proposal or its reasonable alternatives. Agencies must "consider the affected environment by looking for effects of past, present, and reasonably foreseeable future actions that are, in the judgment of the agency, relevant because their effects would increase or change in combination with the direct and indirect effects of the proposal or its alternatives." *Id.* at 10.

The purpose of the cumulative effects analysis is to document agency consideration of the context and intensity of the effects of a proposal, particularly whether the action is related to other actions with individually insignificant but cumulatively significant impacts. 40 C.F.R. § 1508.27(b)(7). Only after such documentation will "the dual purposes of NEPA . . . be satisfied." Draft CEQ Guidance at 10.

The Eighth Circuit held that in conducting cumulative effects analyses, agencies are required to present a "detailed statement" so that a court may determine whether the agency has made a good-faith effort to consider the values NEPA seeks to protect. *Minn. Pub.*, 541 F.2d at 1299. General statements that "merely catalog environmental facts" are legally inadequate in that "some quantified or detailed information" is required. *Sierra Club v. Bosworth*, 352 F. Supp. 2d 909, 926 (D. Minn. 2005) (internal quotation marks and citation omitted).

Given the breadth of this proposed diversion project, which encompasses 36 miles, crosses five rivers, requires construction of 19 highway bridges and four railroad bridges that cross the proposed diversion channel, and affects more than 8,000 acres, the truncated cumulative effects section of the SDFR&EIS will not survive judicial scrutiny. Indeed, the Corps has devoted only five pages of the SDFR&EIS to the cumulative effects analysis and devotes approximately one paragraph to each relevant effect at issue. *See* SDFR&EIS at 334-40 (cumulative effects analysis). For example, on page 337 of the SDFR&EIS, the Corps summarily acknowledges that "[a]ll of the diversion channel alternatives could further degrade aquatic habitat quality that has already been greatly reduced. Impacts would be greater for the LPP and ND35K, and lesser for the LCP." This type of conclusory statement fails the "hard look" standard, and lacks any useful or detailed information the reader could use to understand how the Corps reaches this meaningless conclusion. While the Corps summarily asserts that "all of the alternatives include mitigation to further reduce any remaining significant impacts," the reader is again left guessing as to how or why this is true.

Similarly, with respect to water quality, the Corps acknowledges, as it must, that the "diversion channel alternatives considered here could slightly affect water quality that has already been greatly reduced." SDFR&EIS at 336. Yet, the only detail it provides with respect to this effect is that "construction of any of the alternatives could result in minor reductions in water quality, although effects would be temporary." This acknowledgement is a far cry from the "hard look analysis" required under NEPA, especially since the cumulative effects section is entirely lacking any quantified or detailed information. *See, e.g., Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998) (holding that general, perfunctory statements about effects and risk do not constitute a "hard look" absent justification of why a more definitive analysis could not be provided); *see also Sierra Club v. U.S. Army Corps of Eng'rs*, 494 F. Supp. 2d 1090, 1096 (W.D. Mo. 2007) (invalidating Corps' NEPA analysis on cumulative effects grounds in connection with a flood control project for the Missouri River that failed to consider the cumulative impact of adding the proposed levee to the flood control structures already in place).

F. NEPA Summary

The Corps has not cogently explained its reasoning for selecting the LPP as the tentatively selected plan; it has not adequately analyzed other practical and reasonable solutions to the current LPP; it has not followed CEQ guidance with regard to analyzing the project in the context of climate change; it presents an inadequate assessment of the cumulative effects of the project; and it ultimately selects a plan that is wholly infeasible. Although NEPA does not require any particular substantive determination, it does require adequate and reasonable analysis according to CEQ guidance. The inadequacies demonstrated herein require that the Corps' NEPA analysis be re-evaluated in its entirety.

III. Failure to Demonstrate the LPP is a Feasible Project Under WRDA

In addition to violating NEPA, the Corps' Feasibility Study is altogether inadequate under the Water Resources Development Act ("WRDA"). Under WRDA and the Corps' Planning Guidance Notebook, E.R. 1105-2-100, the Corps was obligated to select the National Economic Development ("NED") plan, unless it can demonstrate the existence of "overriding" issues of local or regional concern favoring a LPP. Here, the NED plan was the MN 40k diversion channel, but the Corps determined that a ND35K diversion alignment was preferable. The "overriding" justification for that departure was premised on the need to provide flood control for various tributaries and rivers in North Dakota -- despite the fact that the project purpose and need, as articulated by the Corps, does not specifically include those rivers and tributaries. As indicated above, the Corps' shifting articulation of the project's purpose and need is not only illegal under NEPA, but cannot support its selection of the LPP under WRDA. *See supra* at section II. C.1.

According to Corps' guidance, the LPP, among other things, must satisfy the "completeness" criteria set forth under E.R. 1105-2-100. These regulations dictate the manner in which the Corps is authorized to carry out Civil Works water resources projects for flood damage reduction. *See* E.R. 1105-2-100(2-4)(c)(2) (defining the concept of "completeness" as the "extent to which the alternative plans provide and account for all necessary investments or other actions to ensure the realization of the planning objectives, including actions by other Federal and non-Federal entities." As demonstrated above, the LPP is anything but "complete" as it does not in any way account for all necessary investments or other actions to ensure its realization of the plan's objectives.

Indeed, the local governments that are responsible for approximately $500 million in funding required for this project are now balking at their financial obligations. *See* Dave Olson,

INFORUM, Moorhead questions diversion sponsorship (June 14, 2011) attached as Exhibit B. There is now great uncertainty as to whether the counties will be able or willing to raise the requisite funds necessary to fulfill their financial commitment. *Id.* This is not surprising given that the non-federal share of funding will exceed $1 billion of a total project cost that will likely exceed $1.8 billion (at 2011 price levels). *See* SDFR&EIS at 366. Accordingly, the LPP is neither practicable nor "complete" as it is wholly dependent on the ability and willingness of the local sponsors to fulfill their share of the huge financial commitment required, which is anything but certain at this point. *See* SDFR&EIS at 92 (emphasizing that the "completeness" criterion is "an indication of the degree to which the outputs of the plan are dependent upon the actions of others or on factors beyond the control of the planner.").

In addition, because the costs of mitigation are grossly under-represented as they pertain to the necessary Oxbow buyouts, the draft feasibility is similarly inadequate. *See* Section II.B.1. The Corps should substantially revise its initial feasibility analysis to take into account the true costs of mitigation as they relate to the Oxbow buyouts, and should re-evaluate the various alternatives in light of this new information. The Corps should also revise its "efficiency" criterion as "efficiency is a measure of the cost-effectiveness of an alternative." Because the costs involved in carrying out the LPP have been grossly understated, the efficiency criterion needs to be substantially revised to reflect the same.

IV. CONCLUSION

The Corps has done a wholly inadequate job of satisfying its mandate under NEPA and WRDA to select a proposed alternative to address its flood control objectives in the Fargo-Moorhead metropolitan area. The City of Oxbow strongly urges the Corps to go back to the drawing board to re-think its flood control plan, and to devise a new strategy that satisfies its objectives without running afoul of federal law and without destroying the City of Oxbow and its businesses and residents.

Very truly yours,

Beth S. Ginsberg

Enclosures

cc: James E. Nyhoff, Mayor of Oxbow, North Dakota

EXHIBIT A

City of Fargo Revenue Forecast

Aaron's Numbers from 4-6-11

Fargo's Numbers from 3-20-11 LPP	Study Costs From the City of Fargo	Fully Funded Amount Plus Contingency	Note: FY 12 is the period 10/1/11 to 9/30/12									
			FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Total Project
Federal												
E&D		$ 196,544	$ 19,000	$ 45,000	$ 40,000	$ 35,000	$ 35,000	$ 15,000	$ 3,000	$ 3,000	$ 1,544	$ 196,544
S&A		$ 96,080		$ 2,636	$ 7,030	$ 10,985	$ 12,479	$ 15,818	$ 15,818	$ 15,818	$ 15,495	$ 96,079
Construction		$ 1,093,318		$ 30,000	$ 80,000	$ 125,000	$ 142,000	$ 180,000	$ 180,000	$ 180,000	$ 176,318	$ 1,093,318
Non-Federal Cash		$ (627,321)	$ (7,000)	$ (20,000)	$ (25,000)	$ (67,000)	$ (80,000)	$ (100,000)	$ (100,000)	$ (115,000)	$ (113,321)	$ (627,321)
Federal LERRD		$ 64,118		$ 45,000	$ 10,000	$ 7,000	$ 2,118					$ 64,118
Recreation		$ 32,890						$ 7,000	$ 7,000	$ 7,000	$ 11,890	$ 32,890
Study Costs	$ 6,678											
Total Federal	$ 6,678	$ 855,629	$ 12,000	$ 102,636	$ 112,030	$ 110,985	$ 111,597	$ 117,818	$ 105,818	$ 90,818	$ 91,926	$ 855,628
Non-Federal												
E&D		$ 28,039	$ 5,000	$ 10,000	$ 7,000	$ 1,039						$ 28,039
S&A		$ 13,707		$ 3,229	$ 3,229	$ 3,229	$ 3,229	$ 792				$ 13,708
Relocation		$ 169,813		$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 9,813				$ 169,813
Lands		$ 276,629		$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 30,000	$ 30,000	$ 16,629		$ 276,629
Non-Federal Cash		$ 627,321	$ 7,000	$ 20,000	$ 25,000	$ 67,000	$ 80,000	$ 100,000	$ 100,000	$ 115,000	$ 113,321	$ 627,321
Study Costs - In Kind	$ 6,069											
Study costs - Cash to USACE	$ 2,208											
Red River Basin H & H Modeling	$ 1,125											
Total Non-federal	$ 9,403	$ 1,115,509	$ 12,000	$ 118,229	$ 128,229	$ 167,229	$ 174,268	$ 140,605	$ 130,000	$ 131,629	$ 113,321	$ 1,115,510
Total Project	$ 16,081	$ 1,971,138	$ 24,000	$ 220,865	$ 240,259	$ 278,214	$ 285,865	$ 258,423	$ 235,818	$ 222,447	$ 205,247	$ 1,971,138

All costs in thousands ($1,000)

	2011	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Total
Cass County (50% remainder)	$ 2,892	$ 2,700	$ 26,602	$ 28,852	$ 37,627	$ 39,210	$ 31,636	$ 29,250	$ 29,617	$ 25,497	$ 250,990
Minnesota (10%)	$ 388	$ 1,200	$ 11,823	$ 12,823	$ 16,723	$ 17,427	$ 14,061	$ 13,000	$ 13,163	$ 11,332	$ 111,551
North Dakota (50% non Fed MN)	$ 689	$ 5,400	$ 53,203	$ 57,703	$ 75,253	$ 78,421	$ 63,272	$ 58,500	$ 59,233	$ 50,994	$ 501,980
Fargo (50% remainder)		$ 2,700	$ 26,602	$ 28,852	$ 37,627	$ 39,210	$ 31,636	$ 29,250	$ 29,617	$ 25,497	$ 250,990
		$ 12,000	$ 118,229	$ 128,229	$ 167,229	$ 174,268	$ 140,605	$ 130,000	$ 131,629	$ 113,321	$ 1,115,510
Cass County Sales Tax ***	$ 4,583	$ 11,000	$ 11,000	$ 11,000	$ 11,000	$ 11,000	$ 11,000	$ 11,000	$ 11,000	$ 11,000	$ 99,000
County Tax at end of period	$ 1,692	$ 9,992	$ (5,610)	$ (23,461)	$ (50,088)	$ (78,298)	$ (98,934)	$ (117,184)	$ (135,801)	$ (150,298)	

*** Note that this is the period April 1, 2011 through September 30, 2011 to get us in sync with the federal fiscal year. Tax is based on an assumed $11 million per year with the first receipt in May.

Study Costs - In Kind	Total	Paid	Balance
Minnesota	$ 1,106	$ 831	$ 276
Fargo	$ 2,310	$ 2,310	$ (0)
NDSWC	$ 482	$ 300	$ 182
Cass County	$ 2,170	$ 418	$ 1,752
	$ 6,069	$ 3,859	$ 2,210

Study Costs - Cash to USACE			
Minnesota	$ 436	$ 436	$ -
Fargo	$ 886	$ 886	$ -
NDSWC			$ -
Cass County	$ 886	$ -	$ 886
	$ 2,208	$ 1,322	$ 886

Red River Basin H & H Modeling	Total	Paid	Balance
Minnesota	$ 113	$ -	$ 112.50
Fargo	$ 253	$ -	$ 253.13
NDSWC	$ 506	$ -	$ 506.25
Cass County	$ 253	$ -	$ 253.13
	$ 1,125	$ -	$ 1,125

Totals			
Minnesota	$ 1,654	$ 1,266	$ 388
Fargo	$ 3,450	$ 3,197	$ 253
NDSWC	$ 989	$ 300	$ 689
Cass County	$ 3,310	$ 418	$ 2,892
	$ 9,403	$ 5,181	$ 4,222

Note: The costs are the best representation for the study and diversion costs that the County has available to it as of 4-13-11. Some of the study costs that Fargo has submitted may be adjusted as additional studies are done and/or costs accumulated. The costs also do not include any flood mitigation projects within Cass County that the county may do with sales tax funds. It is anticipated that some projects will be done in order to reduce the effects of annual floods while the diversion is going through the approval and construction phase.

July 2011

USACE Tentatively Selected Plan (TSP) 20000 cfs SPEIS Contributions

04/13/2011 04:01 PM City of Fargo - Commission 1/1

EXHIBIT B

Fargo Forum Article

INFORUM
The Forum of Fargo-Moorhead

Published June 14, 2011, 12:00 AM

Moorhead questions diversion sponsorship

MOORHEAD – Moorhead City Council members balked Monday at a limited joint powers agreement involving a proposed Red River diversion. should remain one of the project's two official sponsors.

By: Dave Olson, INFORUM

MOORHEAD – Moorhead City Council members balked Monday at a limited joint powers agreement involving a proposed

They also questioned whether the city should remain one of the project's two official sponsors.

The council tabled action on a proposed Metro Flood Diversion Project Limited Joint Powers Agreement that would create the planning and design of a diversion on the North Dakota side of the Red River.

Council members raised questions about the proposed makeup of the authority and whether Moorhead's interests would b power given to the one representative the city could appoint to the board.

Under the proposal, the nine-member board would have three members appointed by Fargo and four appointed from Cass

One member would be appointed in accordance with a joint powers agreement between Clay County and the Buffalo-Red

Moorhead officials also questioned the budget that would be created by the agreement.

Under the plan, Moorhead would be responsible for 10 percent of the diversion authority's $16.5 million budget through Se million for planning and design of a diversion and $1.5 million for hiring a project manager and a lobbyist.

Several council members said it was too early in the planning process for a lobbyist to be worthwhile, and they questioned the proposed diversion's main local sponsor along with the city of Fargo.

The local sponsors of a diversion would be responsible for covering planning costs that will amount to tens of millions of dc

Moorhead officials maintain that Minnesota's share of the total cost should be no more than 10 percent, and they said the l step forward to cover that cost, not the city of Moorhead.

However, Moorhead City Attorney Brian Neugebauer told council members Monday that at this point the U.S. Army Corps Moorhead as being jointly responsible for covering planning costs.

Council member Nancy Otto suggested that perhaps Cass County should be the project's co-sponsor with Fargo.

Readers can reach Forum reporter Dave Olson at (701) 241-5555

Tags: news, flood, moorhead

EXHIBIT C

Oxbow Extension Request

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May 19, 2011

Mr. Aaron Snyder
Project Manager
U.S. Army Corps of Engineers
St. Paul District Office
180 E. 5th Street, Suite 700
St. Paul, MN 55101-1678

VIA EMAIL AND CERTIFIED MAIL

Re: Request for an Extension of the Comment Period for Fargo-Moorhead Supplemental Draft Feasibility Report and Environmental Impact Statement

Dear Mr. Snyder:

We represent the City of Oxbow, North Dakota and on behalf of the City hereby request an extension of the public comment period for the U.S. Army Corps of Engineers' (Corps) Supplemental Draft Feasibility and Environmental Impact Statement (SDEIS) for the proposed Fargo-Moorhead Metropolitan Area Flood Risk Management project. The City asks that the extension be the equivalent to the current 45 day period and result in comments due not earlier than August 4, 2011.

Because the City will be severely impacted by the proposed Locally Preferred Plan (LPP), which proposes to store flood water throughout a significant area of the City to the benefit of Fargo and Moorhead, the City needs more time to more thoroughly examine the voluminous documents posted for public comment and to engage experts that can help the City prepare meaningful comments.

The City has previously requested that the Corps fully examine:

1) an alignment further south of the City that would protect the City rather than demolish it; and

2) a detailed assessment of the mitigation, compensation, and relocation costs that will be needed for the City and its residents if the proposed LPP is implemented.

These two issues are absolutely critical to the City's residents and neither has been addressed in a substantive manner in the SDEIS. As a result, the City will need to develop its own information in order to meaningfully participate in the public comment process.

Even if the City had unlimited resources to spend on expert analysis, the 45-day period is simply too short to complete any meaningful assessment of the assumptions included in the SDEIS. For example, the City needs to respond to the lack of information regarding the valuation of their homes and properties. With this in mind, the City immediately engaged an appraiser but was told that there is not sufficient time to complete a detailed appraisal. More time is required to find an engineering consultant not already affiliated with the project and, then, for that consultant to sift through the thousands of pages of reports and appendices associated with the project, understand the complicated models used, and to prepare technical comments.

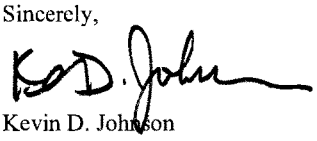
The City has been told by the Corps that the model is too complicated for others to recreate or understand and that there is no time for a more thorough assessment of a southern alignment until after the project has been authorized. In other words, the record is too complicated and time too short. This is precisely the City's concern and why it seeks an extension of the comment period.

The LPP is an enormously expensive and complicated project that attempts to respond to decades of flood mitigation planning in the region. It is critical to the region and its inhabitants that it is done right. Forty-five extra days must be granted to give one of the most severely impacted communities modest time to digest the information that has just been made available regarding their futures, and prepare an informed set of comments.

The City of Oxbow appreciates that the National Environmental Policy Act (NEPA) provides a forum through which its interests can be heard. Granting the City's request for a modest extension of time to prepare comments on a project so central to its future is entirely consistent with NEPA's statutory goals.

Please contact me if you have any questions regarding the City's request for an extension of time to file comments.

Sincerely,



Kevin D. Johnson

70697428.2

EXHIBIT D

Corps Response Denying Extension

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL MN 55101-1678

REPLY TO
ATTENTION OF

Regional Planning and Environment Division North

Mr. Kevin D. Johnson
Stoel Rives, LLP
33 South Sixth Street, Suite 4200
Minneapolis, Minnesota 55402

Dear Mr. Johnson:

I am responding to your May 19, 2011, letter requesting a 45-day extension of the comment period for the Supplemental Draft Feasibility Report and Environmental Impact Statement (SDEIS) for the Fargo-Moorhead Metropolitan Area Flood Risk Management Study. Based on the reasons given for a 45-day extension, we do not believe an extension is warranted.

Although the official review period for the SDEIS is 45 days, the details of the tentatively selected plan, including the extent of the upstream impacts, have been available for several months. The Corps began releasing the details of the tentatively selected plan, including the extent of upstream impacts, in December 2010. Several public meetings, including ones specifically for upstream impacts, were held prior to release of the SDEIS.[1] In addition, the city of Oxbow has had a representative on the Fargo-Moorhead Metro Technical Team for several months and information on the upstream staging plan has been presented at Fargo-Moorhead Metro Work Group meetings, which are open to the public. The city of Oxbow also submitted formal scoping comments in January 2011, which included one that an alignment to the south of Oxbow should be considered; the scoping comments were addressed and considered in the SDEIS. Furthermore, the SDEIS will have been available for public review for longer than the required 45 days: the official public review period began on May 6, 2011, when the notice of availability was published in the Federal Register, and ends on June 20, 2011, but it has been available on the project website since April 28 and was mailed out to agencies and libraries on April 29.

The May 19 letter cited a previous request to fully examine an alignment south of Oxbow. As noted above, the city included this request in its comments on the scope of the SDEIS in January 2011. The Corps studied the viability of an alignment south of Oxbow and subsequently dismissed it from consideration. As more thoroughly described in Section 3.7.4 of the SDEIS, moving the diversion alignment south would have several adverse consequences. South of Oxbow, the land rises more quickly, which reduces the available storage volume on each acre of land. Therefore, the depth of staging would need to be increased approximately 2.5

[1] The meetings specifically addressing upstream impacts were held at Bennett Elementary School on December 9, 2010 (Metro Work Group meeting open to the public), and at Kindred High School on March 30, 2011 (public meeting for upstream stakeholders).

feet, requiring higher control structures and tie-back levees. This alignment would impact communities farther upstream and raise additional technical challenges associated with the higher structures and levees. Moving the alignment south from its proposed location would also remove additional land from the floodplain, which would likely make it unacceptable from a Federal perspective under Executive Order 11988, which requires minimization of impacts to the floodplain. Given these considerations, an alignment to the south of Oxbow does not warrant further study.

The letter also cited a previous request for a detailed assessment of the mitigation, compensation and relocation costs for the city. The Corps concurs that a detailed appraisal will be needed to determine compensation for landowners prior to project implementation. However, the project is only in its feasibility stage at this point and has not yet been authorized by Congress. It is premature to perform a detailed appraisal of each property at this stage in the study. The SDEIS includes costs for mitigating for the city of Oxbow based on a gross appraisal. The gross appraisal is developed using average market values plus contingencies to ensure future property values are accounted for and provides sufficient information for decision-makers to evaluate the proposed project. A property by property assessment will be conducted after project authorization, if the project is authorized.

In closing, the issues raised in your letter do not warrant delaying the project by extending the comment period on the SDEIS. Extensive information was shared regarding the upstream impacts prior to release of the SDEIS, and the document adequately addressed the concerns you have raised. Furthermore, the Fargo-Moorhead Metro area has suffered from extensive flooding nearly every year as of late, and it is critical that this project be considered by Congress as soon as possible so a project can be implemented. Without a project, the communities of Fargo and Moorhead continue to be exposed to more than $195 million in average annual damages for each year the project is delayed.

Sincerely,

Terry J. Birkenstock
Deputy Chief
Regional Planning and
Environment Division North

EXHIBIT E

Rose Hoef Oxbow Buyout Project Cost Estimate

RM HOEFS & ASSOCIATES, INC.

PO Box 3102
1123 5th Avenue South, Unit B
Fargo, North Dakota 58108-3102
Phone - 701-298-3066
Fax - 701-298-0810

June 14, 2011

Jim Nyhof, Mayor
City of Oxbow
708 Riverbend Road
Oxbow, North Dakota 58047

Kevin D. Johnson, Attorney at Law
Stoel Rives, LLP
33 South 6th Street, Suite 4200
Minneapolis, Minnesota 55402

Dear Mssrs;

Pursuant to your request, please find attached a Project Procurement Estimate of the improved and vacant residential properties located in the City of Oxbow, Cass County, North Dakota. Please note that this estimate is not a mass appraisal, but rather a consultation service with the purpose of assisting the City of Oxbow, and its representatives, in preparation of an assessment of project costs associated with a prospective buyout of the entire community by the Corps of Engineers, as a part of a proposed diversion of the Red River of the North. Since federal funding is involved, *The Uniform Appraisal Standards of Federal Land Acquisition* served as a guide in the preparation of this Project Procurement Estimate.

The estimate considers only residential dwellings and privately owned vacant lots. Neither government (City or County /FEMA) owned vacant lots, nor Country Club owned buildings, site improvements or vacant lots were included in the analysis.

The procurement multipliers used in the analysis were derived from comparison of sale prices of closed residential sales in the City and County; pre-flood 2009, as compared to the assessed true and full value of these properties at the time of sale. This equation provided a range in multipliers from 1.02 to 1.65, with the strongest indicators falling between 1.30 and 1.40. The pre-flood sales were used as no detrimental factors (flood or

project influence) were present. The total procurement cost for residential lots and structures is estimated at $41,992,155 or 1.36 greater than the City's True and Full estimate of $30,901,900.

In addition to the preceding, a copy of the Oxbow City tax summary, and my qualifications are attached.

It has been a privilege to be of service. If you have any questions or comments, please inquire.

RM Hoefs & Associates, Inc.

Rose M. Hoefs
Certified General Real Estate Appraiser

North Dakota Certified General License #1063
Minnesota Certified General License #4002095

New World Systems
DATE 2/08/11
TIME 15:11:07

PAGE 42
ASS40
SUBMSIDE

A S S E S S M E N T R O L L P R O C E S S I N G

ASSESSING YEAR: 2011 PROPERTY ASSESSMENT REPORT JURISDICTION: OXBOW CITY

	ASSESSOR'S POSTINGS	TWN/CTY BOARD'S POSTINGS	CNTY BOARD'S POSTINGS	STATE BOARD'S POSTINGS	TAXABLE VALUE	ACRES
AG LAND					936,100	
COM LOT	936,100				430,460	
COM STRUCTURE	430,460				3,926,100	
RES LOT	3,926,100				26,975,800	
RES STRUCTURE	26,975,800				32,268,460	
TRUE & FULL	32,268,460				16,134,200	
TOTAL ASSESSED	16,134,200				1,458,977	
TAXABLE VALUE	1,458,977					
HMSTD CREDIT					1,458,977	
NET TAXABLE	1,458,977					

$30,901,900

QUALIFICATIONS OF ROSE M. HOEFS

AFFILIATION

The Appraisal Institute, Chicago, Ill., 1986; Associate Member
The International Right of Way Association
CCR; registered minority business *DUNS available on request

MEMBER OF

Greater Minnesota Chapter of the Appraisal Institute
Greater North Dakota Chapter of the Appraisal Institute
Fargo-Moorhead Board of Realtors

LICENSES AND DESIGNATIONS

North Dakota Certified General Appraiser, 1993; #1063
Minnesota Certified General Appraiser, 1993; #4002095
North Dakota Real Estate Broker, 1976; lapsed 2005
GRI (Graduate Realtors Institute) 1976; CRS (Certified Residential Specialist) 1977

EDUCATION – APPRAISAL INSTITUTE COURSES

Real Estate Principles
1988 University of Colorado, Boulder, Colorado

Basic Valuation Procedures
1989 University of Minnesota, Minneapolis, Minnesota

Capitalization Theory and Technique, Parts A and B
1990 University of Colorado, Boulder, Colorado

Report Writing and Valuation
1991 Houston Chapter, Appraisal Institute; Houston, Texas

Case Studies
1992 University of St. Thomas, Minneapolis, Minnesota

Advanced Sales Comparison and Cost Approaches
1999 University of St. Thomas, Minneapolis, Minnesota

Uniform Standards of Professional Appraisal Practice, Parts A, B & C
1988 University of Minnesota, Minneapolis, Minnesota
1994 University of Minnesota, Minneapolis, Minnesota
1999 Houston Chapter, Appraisal Institute; Houston, Texas
2005 North Dakota Chapter, Appraisal Institute; update
2006 North Dakota Chapter, Appraisal Institute; update
2008 North Dakota Chapter, Appraisal Institute; update
2010 North Dakota Chapter, Appraisal Institute; update

Condemnation Appraising / Basic Principles and Applications
1999 University of Colorado, Boulder, Colorado

Condemnation Appraising / Advanced Topics and Applications
1999 University of Colorado, Boulder, Colorado

Demonstration Report Writing
2000 Appraisal Institute, Chicago, Illinois

Advanced Applications
2000 University of St. Thomas, Minneapolis, Minnesota

Uniform Standards for Federal Land Acquisitions
2001 Sheridan, Wyoming
2007 St. Paul, Minnesota

QUALIFICATIONS OF ROSE M. HOEFS
(Cont.)

REAL ESTATE AND APPRAISAL EXPERIENCE

1974-1975	Rueben Liechty & Company; Jamestown, North Dakota; Real Estate Sales
1975-1981	Bagan Real Estate; Jamestown, North Dakota; Real Estate Sales
1983-1984	Bagan Real Estate; Jamestown, North Dakota; Broker – Owner
1984-1990	H.R. Arneson & Associates; Fargo, North Dakota; Fee Appraiser
1989-1990	Fargo Planning Commission; Fargo, North Dakota; Board Member
1990-1996	TW Sapa & Associates; Fargo, North Dakota; Fee Appraiser
1995-1998	Parsons Brinkerhoff; Herndon, Virginia; FEMA Inspector
1996-present	RM Hoefs & Associates, Inc.; Fargo, North Dakota; Fee Appraiser

Appraisal Experience includes over 3,000 self-contained, summary or restricted appraisals of vacant land, mixed residential properties and commercial, industrial and special purpose properties. Primary focus is litigation and eminent domain issues.

Purpose of the Appraisals includes purchase, sale, refinance, government acquisition, easements, contamination, insurance, litigation and damaged properties. Appraisal Area includes Eastern and Central North Dakota, Western Minnesota, North Eastern South Dakota.

Court Experience: Qualified expert witness; appraisal and reviewer; decision North Dakota Supreme Court/review/{*City of Grand Forks v. Hendon, No. 20050197*}.

PARTIAL LIST OF CLIENTS

Government

U.S. Department of the Army / Corps of Engineers – St. Paul, MN;
Homeland Security, North Dakota / Army Corps Engineers – Rock Island, Ill;
North Dakota Department of Transportation (NDDOT);
Minnesota Department of Transportation (MNDOT);
Federal Aviation Administration (FAA);
Wahpeton Airport Authority
Mayville Airport Authority
Grand Forks Airport Authority
Fargo Airport Authority
Bismarck Airport Authority
Federal Housing Administration (FHA);
General Services Administration (GSA)
Federal Deposit Insurance Corporation
Resolution Trust Corporation
City of Fargo, North Dakota
City of West Fargo, North Dakota
City of East Grand Forks, Minnesota
City of Grand Forks, North Dakota
City of Moorhead, Minnesota
City of Breckenridge, Minnesota
Cass County, North Dakota
Clay County, Minnesota

Engineering Firms

Houston Engineering, Inc.
Interstate Engineering, Inc.
Kadrmas, Lee and Jackson
Moore Engineering, Inc.
Ultieg Engineers, Inc
SRF Consulting, Inc.

QUALIFICATIONS OF ROSE M. HOEFS
(Cont.)

PARTIAL LIST OF CLIENTS

Financial Institutions
- Allied Mortgage
- American State Bank
- Community First Bank
- Dakota Bank and Trust
- Express Financial
- First Interstate Bank of Fargo, ND
- First Bank of North Dakota
- Gate City Federal Savings Bank
- Metropolitan Federal Savings Bank
- Midwest Savings Bank
- Moorhead State Bank
- Norwest Bank Systems
- State Bank of Hawley
- State Bank of Fargo
- Stutsman County State Bank
- Viking Bank
- US Appraisal

Entities
- Burlington Northern and Santa Fe Railroad
- American Society for Environmental Education
- Concordia College
- John Deere
- Consolidated Beef
- Cargill, Inc.
- Minnesota Mining and Manufacturing
- Roadway Express
- Ramada Inns
- Regency Inns
- Great Plains Supply
- Pepsi Cola
- Coca Cola
- General Motors
- AT&T
- Northwestern Bell
- Cass County Electric
- Super Valu Stores
- Surplus Tractor, Inc.
- Pamida, Inc.
- Steiger Tractor

RM HOEFS & ASSOCIATES, INC. (1996 – Present) Major Projects

AIRPORT NEW CONSTRUCTION OR EXPANSION
Kindred ND
Wahpeton ND
Lisbon ND
Gwinner ND
Grand Forks ND
Jamestown ND
Fargo ND
Mapleton, ND - *Contracted not complete

AIRPORT REVIEW
Kindred, ND
Lakota, ND
Gen Ulen, ND
Oaks, ND
Linton, ND
Washburn, ND
Bismarck, ND
Grand Forks, ND

STREETS, HIGHWAYS AND UTILITIES

- ***North Dakota Department of Transportation***

Reconstruction of Highway19 east and west, Devils Lake, ND;
Reconstruction of Highway 20, Devils Lake, ND;
Reconstruction of West Main Avenue, West Fargo, ND;
Reeonstruction Dakota Avenue, City limits to Red /Ottertail/Bois de Sioux River; Wahpeton, ND;
Reeonstruction 1-29 and 52nd Avenue Overpass; Fargo, North Dakota;
Reeonstruction of Main Ave & 25th Street Underpass/Shoofly, Fargo, ND;
Reconstruction of Main Ave & University Drive Underpass/Shoofly, Fargo, ND;
Reconstruction South University Drive, north of 52nd Avenue; Fargo, ND;
Reconstruction Highway, Max, ND;
Reeonstruction, Highway 281 South, Mill Hill to City limits, Jamestown ND;
Reconstruction, North Broadway, Minot, North Dakota, total takings;
Reeonstruction of 12th Avenue North and University Drive, Fargo, ND;
Construction/ reconstruction I-29 & Main Avenue Railroad Shoofly, Fargo, ND;
Construction of U. S. Highway 281 Bypass, (approximately 12 miles) Jamestown, ND;
Construction, I-94 sound wall; Fargo, ND.

- ***Cass County, North Dakota***

Reconstruction Cass County 17 from County Road 6 to Horace, ND;
Construction County Road 14, Horace, ND to I-29;

- ***Fargo, North Dakota***

Construction 64th Avenue South and 25th Street, Fargo, ND
Reconstruction of Main Avenue - 45th Street to 25th Street, Fargo, ND
Reconstruction of 13th Avenue South - 25th Street to I-29, Fargo, ND
Reconstruction of 42nd Street - 9th Avenue S to 32nd Avenue S, Fargo, ND
Reconstruction of 45th Street – 9th Avenue South to I-94;
Construction/reconstruction of 32nd Avenue S - 45th Street to 38th Street, Fargo, ND
Construction/reconstruction of 45th Street - I-94 to 52nd Avenue, Fargo, ND
Construction 17th Avenue Underpass / I-29, Fargo, ND;
Construction 42nd Avenue South Underpass / I-29, Fargo, ND;
Various utility projects.

WATER PROJECTS

- ***Total and Partial Takings / Government Participation (2000 – 2010)***

Breckenridge, MN, flood wall and levee construction
Grand Forks, ND; flood wall and levee construction
East Grand Forks, MN; flood wall and levee construction
Fargo, ND; levee construction
Fargo and Cass County, ND; south side flood project; preliminary projection
Valley City, ND; 5' Pool Raise, Baldhill Dam / Lake Ashtabula
Devils Lake Outlet; Property Owners versus State of North Dakota Water Commission
Becker County, Mn; Becker County Dam / South Branch of Wild Rice River
Perley, Minnesota ring dike
Hendrum, Minnesota, ring dike

- ***Voluntary Buyouts / Government Participation (2000 – 2010)***

Wild Rice Water District, MN
Cass County, ND
City of Fargo, ND
Breckenridge, MN
Clay County, MN

- ***Flood Damaged Properties (1997 - Present)***

Grand Forks, ND
East Grand Forks, MN
Fargo, ND
Moorhead, MN,
Cass County, ND
Clay County, MN

REFERENCES:

Garyelle Stewart; Solberg, Stewart, Tjon, Miller; North Dakota 701-237-3166
Mark Bittner; City Engineer, City of Fargo, North Dakota 701-241-1475
Howard Swanson; City Attorney; City of Grand Forks, North Dakota 701-772-3407

EXHIBIT F

Estimated Price Range for Oxbow Golf Course

BALLPARK ESTIMATE PRICE RANGE FOR NEW GOLF COURSE CONSTRUCTION COSTS

ITEM	LOW	HIGH	DESCRIPTION OF WORK
Mobilization	$ 1,000,000	$ 2,500,000	This includes transportation to the site, temporary facilities, and utilities.
Permits	$ 200,000	$ 300,000	
General Administration	$ 40,000	$ 70,000	
Bonds & Insurance			
Clearing & Grubbing	$ 300,000	$ 600,000	This is based on the number of acres of clearing, grubbing, at an estimated cost of $3,000/acre
Topsoil Management	$ 1,000,000	$ 1,200,000	This is based on using topsoil on site as material for fairways and tees
Earthwork	$ 1,000,000	$ 3,000,000	Based on the number of cy of cut/fill, haul distances, and topsoil management
Rough Grassing	$ 750,000	$ 1,000,000	
Bridge Structure	$ 250,000	$ 400,000	Crossing of US Hwy 81 by pedestrian facility
Drainage	$ 750,000	$ 1,000,000	Based on quantities of drainage, pipe sizes, depths of pipe, catch basins
Irrigation	$ 2,000,000	$ 3,000,000	Number of sprinkler heads, controllers, valves, etc.
Farm Irrigation	$ 350,000	$ 400,000	
Power & Communication	$ 1,000,000	$ 2,000,000	Electric, phone, and cable connections, transformers, and poles
Cart Paths	$ 750,000	$ 1,000,000	Quantity, thickness to be used (pavers, concrete, asphalt), classifications of construction
Tees, Greens, & Fairways	$ 2,000,000	$ 3,000,000	Quantity of tees, greens, and fairways, and type of turf to be grassed
Grassing	$ 1,000,000	$ 2,000,000	Quantity, method of grass (sod, seed, sprig)
Erosion Control, Permits, Misc	$ 250,000	$ 400,000	Quantity, classification, and type to be used
Landscaping	$ 800,000	$ 2,000,000	Based on quantities, species, etc. Quantity and size of deciduous trees & shrubs
Fencing	$ 500,000	$ 1,000,000	This is based on approximately 2% of costs. Golf Design, Structural Engineering, Inspection, Administration
ESTIMATED TOTAL	$ 12,940,000	$ 23,470,000	

Note: Golf design fees vary depending on the scope of work, but 10% of construction costs can be used for budgeting purposes. Engineering and golf clubhouse design fees vary by consultant and scope.

ROBERT
TRENT JONES
Golf Course Architects

April 12, 2011

Adam Gaber
General Manager
Oxbow Country Club
Fargo, North Dakota, U.S.A.

Dear Adam,

On behalf of our entire team at Robert Trent Jones II, LLC let me thank you for reaching out to us regarding your concerns at Oxbow Country Club. While our courses around the globe have been exposed to numerous natural disasters throughout the years, it is always unsettling to hear of any hardships within the Jones family of golf courses. We understand the struggles currently taking place near Fargo and we are here to assist you in any way we can. We have been through this process before, and are ready to offer our expertise to help all involved.

The loss of the existing Oxbow CC would bring great sadness to us as well as local homeowners, your membership and the North Dakota golf community. Perhaps the only thing that could fill that loss would be the creation of a new Oxbow CC. At your request, we have studied the possibility of creating a new golf course in Cass County, should Oxbow CC be eliminated as part of a river diversion project.

Enclosed you will find a spreadsheet that outlines some very preliminary figures for golf course construction. These figures have been assembled with a range for each category based upon current golf industry standards. The ranges presented are largely dependent upon the site, project goals, and timeline. As you know, golf course construction costs are only a piece of the puzzle and other costs to be considered include: land acquisition costs, master planning fees, golf design fees, engineering fees, golf clubhouse construction costs, golf clubhouse design fees, permits, development infrastructure, and more.

Perhaps the most important decision to be made is where to locate a new golf course. Site selection will have a huge impact on land acquisition costs, construction costs, membership potential, housing values and more. One of the ways that we feel we can be of great benefit to Oxbow CC, as well as the government agencies involved, is by analyzing any potential sites for a new course. We have assisted dozens of clients around the world in selecting a site for a new

ROBERT
TRENT JONES
Golf Course Architects

course and we would welcome the opportunity to work with your team in North Dakota to find the site that would work best for all involved.

Please keep us informed of the situation as you move through the process. We are always available to help throughout this entire process and we would be happy to visit with any interested parties should that be helpful.

We look forward to working with your team, as well as all involved, in order to ensure that a great Oxbow CC will live on forever.

Best regards.

Robert Trent Jones, Jr.

Robert Trent Jones Jr.

RTJ:jb

EXHIBIT G

Potential Waffle Storage

POTENTIAL WAFFLE® WATER STORAGE SITES UPSTREAM OF THE FARGO-MOORHEAD AREA

Kyle Glazewski and Bethany Kurz
Energy & Environmental Research Center (EERC)
15 N 23rd Street, Stop 9018
Grand Forks, ND 58202
June 2011

According to the U.S. Army Corps of Engineer's Supplemental Draft Fargo-Moorhead Metro Feasibility Report and Environmental Impact Statement (April 2011), approximately 200,000 acre-feet of staging and storage are required immediately upstream of the proposed Fargo-Moorhead diversion channel inlet to eliminate downstream impacts. Understandably, residents living in the proposed upstream staging and storage areas are highly concerned about the potential adverse impacts of the plan on their livelihoods, property values, and quality of living as a result of the increased flood risk.

Another potential method for upstream retention of water is the Energy & Environmental Research Center's (EERC's) Waffle concept. The Waffle concept entails temporary, distributed storage of water across the landscape, primarily located on agricultural lands. The Waffle concept, if implemented, would be initiated on a voluntary basis where landowners are paid to offer their land for temporary water storage during major spring flood events.

The EERC conducted a preliminary analysis of potential Waffle storage sites in the Red River Basin using 1-meter resolution topographic data that has recently been collected using light detection and ranging (lidar). This preliminary analysis provides a rough estimate of potential Waffle storage sites based only on topography and the existing road network. Two different scenarios were evaluated based on the amount of freeboard allowed between the stored water surface elevation and the lowest elevation of the roads surrounding a particular storage section. The preliminary analysis of potential Waffle storage sites indicated that there would be between 159,000 and 267,000 acre-feet of storage upstream of the Fargo-Moorhead metro area, excluding storage sites that hold less than 50 acre-feet.

While the preliminary numbers indicate the Waffle concept could hold significant amounts of water, the potential storage available upstream of Fargo-Moorhead needs to be more thoroughly evaluated. It is important to note that this analysis was not a feasibility study. The Waffle storage sites were not evaluated to determine if they would be suitable for holding water as a function of surrounding road type and/or the location of cultural features. In addition, significantly greater storage volumes may exist at a site if low points of elevation in roads were raised. The Fargo-Moorhead Metro Feasibility Report and Environmental Impact Statement indicated the 200,000 acre-feet of storage needs to be immediately upstream of the diversion inlet. Because the Waffle concept is distributed across the landscape, and the volume of storage required to mitigate the downstream impacts of the diversion will change based on the location and volume of storage, a more in-depth evaluation of Waffle storage potential and its downstream impacts is needed.

EXHIBIT H

CWA Section 404(b)(1) Analysis

STOEL RIVES LLP
ATTORNEYS AT LAW

600 University Street, Suite 3600
Seattle, Washington 98101
main 206.624.0900
fax 206.386.7500
www.stoel.com

BETH S. GINSBERG
Direct (206) 386-7581

June 13, 2011

VIA EMAIL & CERTIFIED MAIL

U.S. Army Corps of Engineers, St. Paul District
Attn: CEMVP-PM-B
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

Re: CWA section 404(b)(1) Evaluation- Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Mr. Snyder:

On behalf of the City of Oxbow, North Dakota, we submit the following comments on the U.S. Army Corps of Engineers' ("Corps'") Clean Water Act ("CWA") section 404(b)(1) analysis for the above-mentioned project. 33 U.S.C. §1344(b)(1). For a project that proposes to destroy *1161* acres of valuable wetlands in a flood-prone area, the 404(b)(1) analysis conducted by the Corps is woefully inadequate, violative not only of the CWA itself and its implementing regulations, but also of Executive Order 11990. As a result, it will not withstand judicial scrutiny.

Wetlands are considered "special aquatic sites" under the 404(b)(1) guidelines, subject to greater protection than other waters due to their significant contribution to the general overall environmental health and vitality of the region's ecosystem. 40 C.F.R. §§ 230.3 (q-1); 230.41. Wetlands perform a variety of critical functions, including creation of fish and wildlife habitat, enhancement of water quality, surface and groundwater recharge, and perhaps most importantly in this case, floodwater retention and storage. 40 C.F.R. §230.41(b).

The section 404(b)(1) guidelines require the Corps to evaluate the existence of practicable alternatives to any proposal to fill or otherwise destroy wetlands. The "practicable alternatives test" is designed to assess whether a project that depends on filling can be located elsewhere and prohibits the discharge of dredged or fill material if there is a practicable alternative that would have less adverse impact on the aquatic ecosystem. 40 C.F.R. §230.10(a). Under this test, the Corps must show that the locally preferred project ("LPP") is the "least environmentally damaging," taking into account reasonable alternatives as appropriate.

Here, the LPP is *not* the least environmentally damaging plan. To the contrary, it is by far the

most environmentally damaging plan that could have been selected. While Oxbow does not agree that only a diversion alternative can accomplish the project purpose and need—particularly in light of non-structural alternatives such as the basin wide retention project designed by the Energy & Environmental Research Center—among structural alternatives, a Minnesota diversion alternative should have been selected as the least environmentally damaging. Indeed, the Fish and Wildlife Service ("FWS") has previously determined that a Minnesota diversion alternative- which was the basis for the National Economic Development ("NED") and Federally Comparable Plan ("FCP") alternatives- will have far fewer wetland impacts, and is preferable from that standpoint. *See* letter dated July 26, 2010 from Robert F. Stewart, FWS Regional Environmental Officer, to Colonel Price, District Engineer.

A "practicable alternative" is one that is available and capable of being done after taking into consideration cost, existing technology and logistics in light of the overall project purpose. 40 C.F.R §230.10(a)(2).

When discussing why non-structural and other alternatives were not carried forward, the Corps asserts that a diversion alignment in North Dakota or Minnesota "significantly outperformed any other conceptual alternative with respect to the stated purpose and need in a cost effective manner using existing technology." The Corps then notes that while the Minnesota alignment was the most cost effective, "it did not reduce flood risk for the portion of the study area affected mainly by the Sheyenne River and its tributaries, the Maple, Rush and Lower Rush rivers" and later asserts that the LPP is the "least environmentally damaging practicable alternatives that would achieve the project purpose of reducing flood risk from both the Red River and the five North Dakota tributaries.

Given that a Minnesota alignment is widely thought to be more affordable and less environmentally damaging, the Corps appears to be asserting that the Minnesota options do not accomplish the project's goals. To the extent the Corps has functionally ruled out the existence of "practicable alternatives" by maintaining that a Minnesota alignment could not accomplish the project's goals as effectively as the LPP because it does not provide the same degree of flood control that the LPP does in the North Dakota tributaries, that argument is legally unavailing. Indeed, the Courts have ruled that an agency cannot define the objectives of its actions in terms so unreasonably narrow that only one alternative from among those in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality. *See e.g., Nat'l Parks & Conservation Assoc. v. BLM,* 586 F. 3d 735, 746 (9th Cir. 2009).

In any event, the Corps did not define its project purpose so narrowly. Instead, it stated that ("[t]he purpose of the proposed action is to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area."). SDFREIS at 30. It

further emphasized that each of the three alternatives considered--the ND35k, the FCP, and the LPP-- accomplishes the project purpose of reducing flooding in the metropolitan area covering Moorhead and Fargo. *See* ES-17 ("[i]mplementing any of the diversion channel alternatives would result in a substantial beneficial effect on the local economy by significantly reducing flood damages and flood risk, improving public safety and peace of mind. . . . All of the diversion channel alternatives would significantly reduce flood damage and flood risk, but neither of the plans would completely eliminate the flood risk." *Id.* Accordingly, the Corps cannot screen out these other alternatives under the CWA by insisting that only the LPP provides the degree of flood control it now self-servingly deems requisite to the project purpose and thus "practicable."

Nor can the Corps necessarily rely on the alternatives analysis conducted under NEPA to satisfy its CWA 404(b)(1) requirements. While overlapping- the two analyses are quite distinct- and require different emphasis. The CWA analysis is primarily concerned with ensuring selection of the alternative with the greatest degree of aquatic ecosystem protection- (and thus the least amount of wetlands impacts)- while the NEPA analysis is both broader and procedurally, rather than substantively oriented. *See e.g., Bering Strait Citizens for Responsible Resource Development v. U.S. Army Corps of Engineers,* 524 F.3d 938 (9th Cir. 2008).

Under the Corps' CWA implementing regulations, the Corps was required to concentrate on evaluating alternatives to the LPP that provide flood control protection for the Fargo-Moorhead metropolitan areas but that do so at a reduced cost to the aquatic ecosystem. Contrary to showing no practicable alternative existed, the Corps' own analysis demonstrates the opposite -- that a Minnesota alignment is a practicable alternative that is both more affordable and far less damaging to wetlands. *See* ES-18 and SDFREIS at 88 (conceding that the LPP will impact nearly 100 acres more than the FCP).

Nor are the Minnesota diversion alternatives the only practicable alternatives that should have been considered. Instead, the Corps should have considered a mix of alternatives- for example, a basin-wide retention option in combination with structural alternatives. For these reasons, despite Corps' assurances otherwise, there are "practicable alternatives" to the selection of the LPP, one of which should be selected as the preferred alternative as a matter of law.

Moreover, the Corps' own planning guidance requires the selection of the NED Plan unless there are "overriding" issues of local or regional concern favoring a locally preferred plan. ER 1105-2-100. While overriding regional concerns may give rise to different plan considerations under the Corps' planning guidance, they cannot alleviate the Corps' duty to select a plan with the least wetland impacts, or to minimize the impacts if the project must affect wetlands, under the CWA (as implemented by the regulations cited herein) or Executive Order 11990. No such

"overriding" issues as defined in Corps planning guidance or by local and regional sponsors can militate in favor of selection of an alternative that has the greatest amount of damaging environmental impacts and clearly violates federal law.

In addition to the existence of a "practicable alternative" to the LPP, the §404(b)(1) guidelines further prohibit wetlands destruction unless all appropriate and practicable steps have been taken to minimize potential adverse impacts. 40 C.F.R. § 230.10(d). The truncated analysis set forth in the Corps' §404(b)(1) analysis is a far cry from that which is required to ensure that all appropriate and practicable steps have been taken to minimize adverse impacts.

For example, the Corps provides only a conclusory description of the types of wetland fill it will procure, and its chemical constituency, while insisting that only minor, short term environmental effects will result from the project. This leaves the public guessing as to the accuracy of these optimistic assertions. While the Corps insists that: (1) fill will be "obtained from approved quarries" that "do not have a history of contamination"; (2) increases in turbidity and suspended sediments will have "relatively minor water column effects restricted to localized areas"; (3) fill will not result "in significant impacts on water color, odor, taste, or nutrient levels", and that (4) the Corps "will use best management practices" to mitigate for all these effects, it provides no meaningful details to back up these sweeping and self-serving assertions.

Ironically, the wetlands the Corps proposes to destroy are wetlands that perform effective flood control benefits. In fact, flooding in the Red River Basin is, in part, caused by the loss of these valuable wetlands. Wetland drainage has significantly increased both the timing and size of Red River floods.

While the Corps insists that it will fully mitigate for the significant losses associated with the destruction of 1161 acres of valuable wetland resources, it does not provide the public with necessary information regarding how, where, or what types of wetlands it will create in their stead or whether the wetlands created will be functionally equivalent to the ones lost. It provides no information on the type of monitoring or adaptive management regime it will employ to ensure that these wetland functions are fully restored, nor does it provide any information or reassurance that adequate funding will be available to mitigate for these significant wetland losses.

Not only does the Corps' analysis fail to satisfy the CWA and the 404(b)(1) guidelines, it also fails to satisfy Executive Order 11990 which requires the Corps to take a leadership role in the preservation and enhancement of wetlands when carrying out agency functions. More precisely, EO 11990 directs agencies to "avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative

to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use."

The EO 11990 does provide, however, that the head of the agency can take economic, environmental and other pertinent factors into account when making this determination. Ironically in this case however, the LPP is not only the most environmentally damaging plan, it is also by far the least affordable plan. By failing to adequately address the §404(b)(1) guidelines, and by failing to ensure that practicable alternatives to the loss of wetlands are selected, the Corps cannot establish that it has satisfied its EO 11990 obligations. Even if the Corps could successfully demonstrate that there was no practicable alternative, it would still not satisfy EO 11990 because of its clear failure to include all "practicable measures to minimize harm to wetlands.

Finally, "the Corps authorizes "its own discharges of dredged or fill material by applying all substantive legal requirements, including public notice, opportunity for public hearing, and application of the section 404(b)(1) guidelines." 33 C.F.R. § 336.1(a). While the "Corps does not process and issue permits for its own activities," *id.*, it "shall be subject to, and comply with, all . . . requirements . . . respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity." 33 U.S.C. § 1323(a)(2); *Environmental Defense v. U.S.A.C.E*, 515 F. Supp. 2d 69, 77 (D.D.C. 2007). Accordingly, the Corps would not tolerate this type of analysis from a private or any other public applicant, and should not condone this regulatory conduct on behalf of itself. This is especially the case, where, as here, the wetlands lost are wetlands essential to flood control efforts, performing naturally what the Corps seeks to engineer artificially.

In short, continued insistence on selection of the LPP as the proposed project will be deemed by the courts to be arbitrary, capricious, and contrary to the letter and spirit of the CWA and its implementing regulations. In addition, the project would violate the Executive Order 11990 by failing to minimize wetland impact, particularly when there were practicable alternatives to the proposed project. For all these reasons, the City of Oxbow urges the Corps to reverse course, and to re-do the analysis consistent with the CWA, the Corps' implementing regulations, and EO1190.

Very truly yours,

Beth S. Ginsberg

cc: James E. Nyhof, Mayor of Oxbow, North Dakota

EXHIBIT I

CEQ Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions

February 18, 2010

MEMORANDUM FOR HEADS OF FEDERAL DEPARTMENTS AND AGENCIES

FROM: NANCY H. SUTLEY, Chair, Council on Environmental Quality

SUBJECT: DRAFT NEPA GUIDANCE ON CONSIDERATION OF THE EFFECTS OF CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

I. INTRODUCTION

The Council on Environmental Quality (CEQ) provides this draft guidance memorandum for public consideration and comment on the ways in which Federal agencies can improve their consideration of the effects of greenhouse gas (GHG) emissions[1] and climate change in their evaluation of proposals for Federal actions under the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. This draft guidance is intended to help explain how agencies of the Federal government should analyze the environmental effects of GHG emissions and climate change when they describe the environmental effects of a proposed agency action in accordance with Section 102 of NEPA and the CEQ Regulations for Implementing the Procedural Provisions of NEPA, 40 C.F.R. parts 1500-1508. This draft guidance affirms the requirements of the statute and regulations and their applicability to GHGs and climate change impacts. CEQ proposes to advise Federal agencies that they should consider opportunities to reduce GHG emissions caused by proposed Federal actions and adapt their actions to climate change impacts throughout the NEPA process and to address these issues in their agency NEPA procedures.

The environmental analysis and documents produced in the NEPA process should provide the decision maker with relevant and timely information about the environmental effects of his or her decision and reasonable alternatives to mitigate those impacts. In this context, climate change issues arise in relation to the consideration of:

(1) The GHG emissions effects of a proposed action and alternative actions; and
(2) The relationship of climate change effects to a proposed action or alternatives, including the relationship to proposal design, environmental impacts, mitigation and adaptation measures.

NEPA demands informed, realistic governmental decision making. CEQ proposes to advise Federal agencies to consider, in scoping their NEPA analyses, whether analysis of the direct and indirect GHG emissions from their proposed actions may provide meaningful information to decision makers and the public. Specifically, if a proposed action would be reasonably anticipated to cause direct emissions of 25,000 metric tons or more of CO_2-equivalent GHG emissions on an annual basis, agencies should consider this an indicator that a quantitative and qualitative assessment may be meaningful to decision makers and the public. For long-term actions that have annual direct emissions of less than 25,000

[1] For purposes of this guidance, CEQ defines "GHGs" in accordance with Section 19(i) of Executive Order 13514 (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

metric tons of CO_2-equivalent, CEQ encourages Federal agencies to consider whether the action's long-term emissions should receive similar analysis. CEQ does not propose this as an indicator of a threshold of significant effects, but rather as an indicator of a minimum level of GHG emissions that may warrant some description in the appropriate NEPA analysis for agency actions involving direct emissions of GHGs.

CEQ does not propose to make this guidance applicable to Federal land and resource management actions, but seeks public comment on the appropriate means of assessing the GHG emissions and sequestration that are affected by Federal land and resource management decisions.

Because climate change is a global problem that results from global GHG emissions, there are more sources and actions emitting GHGs (in terms of both absolute numbers and types) than are typically encountered when evaluating the emissions of other pollutants. From a quantitative perspective, there are no dominating sources and fewer sources that would even be close to dominating total GHG emissions. The global climate change problem is much more the result of numerous and varied sources, each of which might seem to make a relatively small addition to global atmospheric GHG concentrations. CEQ proposes to recommend that environmental documents reflect this global context and be realistic in focusing on ensuring that useful information is provided to decision makers for those actions that the agency finds are a significant source of GHGs.

With regards to the effects of climate change on the design of a proposed action and alternatives, Federal agencies must ensure the scientific and professional integrity of their assessment of the ways in which climate change is affecting or could affect environmental effects of the proposed action. 40 CFR 1502.24. Under this proposed guidance, agencies should use the scoping process to set reasonable spatial and temporal boundaries for this assessment and focus on aspects of climate change that may lead to changes in the impacts, sustainability, vulnerability and design of the proposed action and alternative courses of action. At the same time, agencies should recognize the scientific limits of their ability to accurately predict climate change effects, especially of a short-term nature, and not devote effort to analyzing wholly speculative effects. Agencies can use the NEPA process to reduce vulnerability to climate change impacts, adapt to changes in our environment, and mitigate the impacts of Federal agency actions that are exacerbated by climate change.

Finally, CEQ seeks public comment on several issues not directly addressed by this draft guidance, including the assessment of climate change effects of land management activities, and means by which agencies can tailor the amount of the documentation prepared for NEPA analysis so that it is proportional to the importance of climate change to the decision-making process.

II. CONSIDERATION OF THE EFFECTS OF A PROPOSED AGENCY ACTION ON GHG EMISSIONS: WHEN TO EVALUATE GHG EMISSIONS

By statutes, Executive Orders, and agency policies, the Federal government is committed to the goals of energy conservation, reducing energy use, eliminating or reducing GHG emissions, and promoting the deployment of renewable energy technologies that are cleaner and more efficient. Where a proposal for Federal agency action implicates these goals, information on GHG emissions (qualitative or quantitative) that is useful and relevant to the decision should be used when deciding among alternatives.

Many projects and programs proposed by the Federal government have the potential to emit GHGs. Accordingly, where a proposed Federal action that is analyzed in an EA or EIS would be anticipated to emit GHGs to the atmosphere in quantities that the agency finds may be meaningful, it is appropriate for the agency to quantify and disclose its estimate of the expected annual direct and indirect GHG emissions in the environmental documentation for the proposed action. Where the proposed

activity is subject to GHG emissions accounting requirements, such as Clean Air Act reporting requirements that apply to stationary sources that directly emit 25,000 metric tons or more of CO_2-equivalent GHG on an annual basis,[2] the agency should include this information in the NEPA documentation for consideration by decision makers and the public. CEQ does not propose this reference point for use as a measure of indirect effects, the analysis of which must be must be bounded by limits of feasibility in evaluating upstream and downstream effects of Federal agency actions. In the agency's analysis of direct effects, it would be appropriate to: (1) quantify cumulative emissions over the life of the project; (2) discuss measures to reduce GHG emissions, including consideration of reasonable alternatives; and (3) qualitatively discuss the link between such GHG emissions and climate change. However, it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions, as such direct linkage is difficult to isolate and to understand. The estimated level of GHG emissions can serve as a reasonable proxy for assessing potential climate change impacts, and provide decision makers and the public with useful information for a reasoned choice among alternatives.

The reference point of 25,000 metric tons of direct CO_2-equivalent GHG emissions may provide agencies with a useful indicator – rather than an absolute standard of insignificant effects -- for agencies' action-specific evaluation of GHG emissions and disclosure of that analysis in their NEPA documents. CEQ does not propose this reference point as an indicator of a level of GHG emissions that may significantly affect the quality of the human environment, as that term is used by NEPA, but notes that it serves as a minimum standard for reporting emissions under the Clean Air Act. Evaluation of significance under NEPA is done by the action agency based on the categorization of actions in agency NEPA procedures and action-specific analysis of the context and intensity of the environmental impacts. 40 CFR 1501.4, 1508.27. Examples of proposals for Federal agency action that may warrant a discussion of the GHG impacts of various alternatives, as well as possible measures to mitigate climate change impacts, include: approval of a large solid waste landfill; approval of energy facilities such as a coal-fired power plant; or authorization of a methane venting coal mine. Other Federal policies, programs, or plans that cover multiple actions subject to NEPA – such as actions tiered from programmatic NEPA documents – may more appropriately address GHG emissions at the level of individual projects. In many cases, the GHG emissions of the proposed action may be so small as to be a negligible consideration. Agency NEPA procedures may identify actions for which GHG emissions and other environmental effects are neither individually or cumulatively significant. 40 CFR 1507.3.

Many agency NEPA analyses to date have found that GHG emissions from an individual agency action have small potential effects. Emissions from many proposed Federal actions would not typically be expected to produce an environmental effect that would trigger or otherwise require a detailed discussion in an EIS. Significant national policy decisions for which the action's GHG impacts are expected to be substantial have, on the other hand, required analysis of their GHG effects.

HOW TO EVALUATE GHG EMISSIONS

To describe the impact of an agency action on GHG emissions, once an agency has determined that this is appropriate, CEQ proposes that agencies should consider quantifying those emissions using the

[2] 25,000 metric tons may provide a useful, presumptive, threshold for discussion and disclosure of GHG emissions because it has been used and proposed in rule-makings under the Clean Air Act (e.g., EPA's Mandatory Reporting of Greenhouse Gases Final Rule, 74 FR 56260, October 30, 2009). This threshold is used in Clean Air Act rule-makings because it provides comprehensive coverage of emissions with a reasonable number of reporters, thereby creating an important data set useful in quantitative analyses of GHG policies, programs and regulations. See 74 FR 56272. This rationale is pertinent to the presentation of NEPA analysis as well.

following technical documents, to the extent that this information is useful and appropriate for the proposed action under NEPA:

- For quantification of emissions from large direct emitters: 40 CFR Parts 86, 87, 89, et al. Mandatory Reporting of Greenhouse Gases; Final Rule, U.S. Environmental Protection Agency (74 Fed. Reg. 56259-56308). Note that "applicability tools" are available (http://www.epa.gov/climatechange/emissions/GHG-calculator/) for determining whether projects or actions exceed the 25,000 metric ton of CO2-equivalent greenhouse gas emissions.
- For quantification of Scope 1 emissions at Federal facilities: Greenhouse gas emissions accounting and reporting guidance that will be issued under Executive Order 13514 Sections 5(a) and 9(b) (http://www.ofee.gov)
- For quantification of emissions and removals from terrestrial carbon sequestration and various other project types: Technical Guidelines, Voluntary Reporting of Greenhouse Gases, (1605(b) Program, U.S. Department of Energy (http://www.eia.doe.gov/oiaf/1605/))

Land management techniques, including changes in land use or land management strategies, lack any established Federal protocol for assessing their effect on atmospheric carbon release and sequestration at a landscape scale. Therefore, at this time, CEQ seeks public comment on this issue but has not identified any protocol that is useful and appropriate for NEPA analysis of a proposed land and resource management actions.

CEQ notes that agencies may also find useful information in the following sources:

- Renewable Energy Requirements Guidance for EPACT 2005 and EO 13423 (http://www.ofee.gov/eo/epact05_fedrenewenergyguid_final_on_web.pdf)
- EPA Climate Leaders GHG Inventory Protocols (http://www.epa.gov/climateleaders/resources/inventory-guidance.html)

For proposed actions that are not adequately addressed in the GHG emission reporting protocols listed above, agencies should use NEPA's provisions for inter-agency consultation with available expertise to identify and follow the best available procedures for evaluating comparable activities. Agencies should consider the emissions source categories, measurement methodologies and reporting criteria outlined in these documents, as applicable to the proposed action, and follow the relevant procedures for determining and reporting emissions. The NEPA process does not require submitting a formal report or participation in the reporting programs. Rather, under this proposed guidance, only the methodologies relevant to the emissions of the proposed project need to be considered and disclosed to decision makers and the public.

WHAT DEPARTMENTS AND AGENCIES SHOULD CONSIDER AS PART OF THEIR GHG EVALUATION

Federal agencies should structure their NEPA processes "to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 CFR 1502.1. Inherent in NEPA and the CEQ implementing regulations is a "'rule of reason,' which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decisionmaking process." *DOT v. Public Citizen,* 541 U.S. 752, 767 (2004). Where a proposed action is evaluated in either an EA or an EIS, the agency may look to reporting thresholds in the technical documents cited above as a point of reference for

determining the extent of direct GHG emissions analysis that is appropriate to the proposed agency decision. As proposed in draft guidance above, for Federal actions that require an EA or EIS the direct and indirect GHG emissions from the action should be considered in scoping and, to the extent that scoping indicates that GHG emissions warrant consideration by the decision maker, quantified and disclosed in the environmental document. 40 CFR 1508.25. In assessing direct emissions, an agency should look at the consequences of actions over which it has control or authority. *Public Citizen*, 541 U.S. at 768. When a proposed federal action meets an applicable threshold for quantification and reporting, as discussed above, CEQ proposes that the agency should also consider mitigation measures and reasonable alternatives to reduce action-related GHG emissions. Analysis of emissions sources should take account of all phases and elements of the proposed action over its expected life, subject to reasonable limits based on feasibility and practicality.

For proposed actions evaluated in an EIS, Federal agencies typically describe their consideration of the energy requirements of a proposed action and the conservation potential of its alternatives. 40 CFR 1502.16(e). Within this description of energy requirements and conservation opportunities, agencies should evaluate GHG emissions associated with energy use and mitigation opportunities and use this as a point of comparison between reasonable alternatives. For proposals normally evaluated in an EA, agencies may consider the GHG emissions as a factor in discussing alternative uses of available resources. 40 CFR 1508.9(b). CEQ proposes that this analysis should also consider applicable Federal, State or local goals for energy conservation and alternatives for reducing energy demand or GHG emissions associated with energy production.

Where an agency concludes that a discussion of cumulative effects of GHG emissions related to a proposed action is warranted to inform decision-making, CEQ recommends that the agency do so in a manner that meaningfully informs decision makers and the public regarding the potentially significant effects in the context of the proposal for agency action. This would most appropriately focus on an assessment of annual and cumulative emissions of the proposed action and the difference in emissions associated with alternative actions. Agencies may incorporate USGCRP studies and reports by reference in any discussion of GHG emissions and their effects. 40 CFR 1502.21.

Agencies apply the rule of reason to ensure that their discussion pertains to the issues that deserve study and deemphasizes issues that are less useful to the decision regarding the proposal, its alternatives, and mitigation options. 40 CFR 1500.4(f), (g), 1501.7, 1508.25. In addressing GHG emissions, consistent with this proposed guidance, CEQ expects agencies to ensure that such description is commensurate with the importance of the GHG emissions of the proposed action, avoiding useless bulk and boilerplate documentation, so that the NEPA document may concentrate attention on important issues. 40 CFR 1502.5, 1502.24.

An agency may decide that it would be useful to describe GHG emissions in aggregate, as part of a programmatic analysis of agency activities that can be incorporated by reference into subsequent NEPA analyses for individual agency actions. In addition, Federal programs that affect emissions or sinks and proposals regarding long range energy, transportation, and resource management programs lend themselves to a programmatic approach. For example, if GHG emissions or climate change and related effects in general are included in a broad (i.e., programmatic) EIS for a program, subsequent NEPA analyses for actions implementing that program at the project level should, if useful in the NEPA analysis for that decision, tier from the programmatic statement and summarize the relevant issues discussed in the programmatic statement. 40 CFR 1502.20, 1508.28. Such aggregated discussion may be useful under the consideration of agency compliance with requirements for Federal agencies to implement sustainable practices for energy efficiency, GHG emissions avoidance or reduction, petroleum products use reduction, and renewable energy, including bioenergy as well as other required sustainable practices. See, Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance (74

Fed. Reg. 52117-52127); Executive Order 13423 - Strengthening Federal Environmental, Energy, and Transportation Management (http://nepa.gov/nepa/regs/E.O._13423.pdf). In particular, NEPA analyses for individual actions may incorporate by reference agency Strategic Sustainability Plans and account for GHG effects in accordance with Federal GHG reporting and accounting procedures to the extent that they are applicable to actions that carry out agency obligations under subsections 2(a), (b), (c) and (f) of Executive Order 13514. Such reference to the programmatic accounting of Federal agency GHG emissions under EO 13514 should note where appropriate that the scope of this accounting (for Scope 1, 2 and 3 emissions) may be much broader than the emissions that would be reasonable for assessment within the scope of an individual agency action under NEPA.

To the extent that a federal agency evaluates proposed mitigation of GHG emissions, the quality of that mitigation – including its permanence, verifiability, enforceability, and additionality[3] – should also be carefully evaluated. Among the alternatives that may be considered for their ability to reduce or mitigate GHG emissions are enhanced energy efficiency, lower GHG-emitting technology, renewable energy, planning for carbon capture and sequestration, and capturing or beneficially using fugitive methane emissions. In some cases, such activities are part of the purpose and need for the proposed action and the analysis will provide an assessment, in a comparative manner, of the alternatives and their relative ability to advance those objectives.

III. CONSIDERATION OF CURRENT OR PROJECTED EFFECTS OF CLIMATE CHANGE ON PROPOSALS FOR AGENCY ACTION

CEQ proposes that agencies should determine which climate change impacts warrant consideration in their EAs and EISs because of their impact on the analysis of the environmental effects of a proposed agency action. Through scoping of an environmental document, agencies determine whether climate change considerations warrant emphasis or de-emphasis. 40 CFR 1500.4(g), 1501.7; See Scoping Guidance (CEQ 1981) (http://www.nepa.gov/nepa/regs/scope/scoping.htm) When scoping the impact of climate change on the proposal for agency action, the sensitivity, location, and timeframe of a proposed action will determine the degree to which consideration of these predictions or projections is warranted. As with analysis of any other present or future environment or resource condition, the observed and projected effects of climate change that warrant consideration are most appropriately described as part of the current and future state of the proposed action's "affected environment." 40 CFR 1502.15. Based on that description of climate change effects that warrant consideration, the agency may assess the extent that the effects of the proposal for agency action or its alternatives will add to, modify, or mitigate those effects. Such effects may include, but are not limited to, effects on the environment, on public health and safety, and on vulnerable populations who are more likely to be adversely affected by climate change. The final analysis documents an agency assessment of the effects of the actions considered, including alternatives, on the affected environment.

Climate change can affect the environment of a proposed action in a variety of ways. For instance, climate change can affect the integrity of a development or structure by exposing it to a greater risk of floods, storm surges, or higher temperatures. Climate change can increase the vulnerability of a resource, ecosystem, or human community, causing a proposed action to result in consequences that are more damaging than prior experience with environmental impacts analysis might indicate. For example, an industrial process may draw cumulatively significant amounts of water from a stream that is dwindling because of decreased snow pack in the mountains or add significant heat to a water body that is exposed

[3] Regulatory additionality requirements are designed to ensure that GHG reduction credit is limited to an entity with emission reductions that are above regulatory requirements. See http://www.eia.doe.gov/oiaf/1605/FAQ_GenInfoA.htm#Additionality;

to increasing atmospheric temperatures. Finally, climate change can magnify the damaging strength of certain effects of a proposed action.

Using NEPA's "rule of reason" governing the level of detail in any environmental effects analysis, agencies should ensure that they keep in proportion the extent to which they document their assessment of the effects of climate change. The focus of this analysis should be on the aspects of the environment that are affected by the proposed action and the significance of climate change for those aspects of the affected environment. Agencies should consider the specific effects of the proposed action (including the proposed action's effect on the vulnerability of affected ecosystems), the nexus of those effects with projected climate change effects on the same aspects of our environment, and the implications for the environment to adapt to the projected effects of climate change. The level of detail in the analysis and NEPA documentation of these effects will vary among affected resource values. For example, if a proposed project requires the use of significant quantities of water, changes in water availability associated with climate change may need to be discussed in greater detail than other consequences of climate change. In some cases, discussion of climate change effects in an EA or EIS may warrant a separate section, while in others such discussion may be integrated into the broader discussion of the affected environment.

When assessing the effects of climate change on a proposed action, an agency typically start with an identification of the reasonably foreseeable future condition of the affected environment for the "no action" alternative based on available climate change measurements, statistics, observations, and other evidence. See *Considering Cumulative Effects* (CEQ 1997) at www.nepa.gov. The reasonably foreseeable affected environment should serve as the basis for evaluating and comparing the incremental effects of alternatives. 40 CFR 1502.15. Agencies should be clear about the basis for projecting the changes from the existing environment to the reasonably foreseeable affected environment, including what would happen under this scenario and the probability or likelihood of this future condition. The obligation of an agency to discuss particular effects turns on "a reasonably close causal relationship between the environmental effect and the alleged cause." *Public Citizen*, 541 U.S. at 767. Where climate change effects are likely to be important but there is significant uncertainty about such effects, it may also be useful to consider the effects of any proposed action or its alternatives against a baseline of reasonably foreseeable future conditions that is drawn as distinctly as the science of climate change effects will support.

Climate change effects should be considered in the analysis of projects that are designed for long-term utility and located in areas that are considered vulnerable to specific effects of climate change (such as increasing sea level or ecological change) within the project's timeframe. For example, a proposal for long-term development of transportation infrastructure on a coastal barrier island will likely need to consider whether environmental effects or design parameters may be changed by the projected increase in the rate of sea level rise. See *Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study*, (http://www.globalchange.gov/publications/reports/scientific-assessments/saps/sap4-7), and *Abrupt Climate Change* ((http://www.globalchange.gov/publications/reports/scientific-assessments/saps/sap3-4 (discussing the likelihood of an abrupt change in sea level). Given the length of time involved in present sea level projections, such considerations typically would not be relevant to an action with only short-term considerations.

The process of adaptive planning requires constant learning to reduce uncertainties and improve adaptation outcomes. The CEQ NEPA regulations recognize the value of monitoring to assure that decisions are carried out as provided in a Record of Decision. 40 CFR 1505.3. In cases where adaptation to the effects of climate change is important, the significant aspects of these changes should be identified in the agency's final decision and adoption of a monitoring program should be considered. Monitoring

strategies should be modified as more information becomes available and best practices and other experiences are shared.

For sources of the best scientific information available on the reasonably foreseeable climate change impacts, Federal agencies may summarize and incorporate by reference the Synthesis and Assessment Products of the U.S. Global Change Research Program (USGCRP, http://www.globalchange.gov/publications/reports/scientific-assessments/saps), and other major peer-reviewed assessments from USGCRP . Particularly relevant is the report on climate change impacts on water resources, ecosystems, agriculture and forestry, health, coastlines and arctic regions in the United States. *Global Climate Change Impacts in the United States* (http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts). Research on climate change impacts is an emerging and rapidly evolving area of science. In accordance with NEPA's rule of reason and standards for obtaining information regarding reasonably foreseeable significant adverse effects on the human environment, action agencies need not undertake exorbitant research or analysis of projected climate change impacts in the project area or on the project itself, but may instead summarize and incorporate by reference the relevant scientific literature. See, e.g., 40 CFR 1502.21, 1502.22. Where agencies consider climate change modeling to be applicable to their NEPA analysis, agencies should consider the uncertainties associated with long-term projections from global and regional climate change models. There are limitations and variability in the capacity of climate models to reliably project potential changes at the regional, local, or project level, so agencies should disclose these limitations in explaining the extent to which they rely on particular studies or projections. 40 CFR 1502.21, 1502.22. The outputs of coarse-resolution global climate models, commonly used to project climate change scenarios at a continental or regional scale, require downscaling and bias removal (i.e., the adjustment of future projections for known systematic model errors) before they can be used in regional or local impact studies. See *Climate Models: An Assessment of Strengths and Limitations*. (http://www.globalchange.gov/publications/reports/scientific-assessments/saps/sap3-1).

Agencies should also consider the particular impacts of climate change on vulnerable communities where this may affect the design of the action or the selection among alternatives. Tribal and Alaska Native communities that maintain their close relationship with the cycles of nature have observed the changes that are already underway, including the melting of permafrost in Alaska, disappearance of important species of trees, shifting migration patterns of elk and fish, and the drying of lakes and rivers. These effects affect the survival for both their livelihood and their culture. Further, sovereign tribal governments with legal rights to reservations and trust resources are affected by ecological changes on the landscape in ways that many Americans are not.

IV. BACKGROUND

1. NEPA and Cumulative Effects in General

NEPA was enacted to, *inter alia*, "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." NEPA Section 2, 42 U.S.C. § 4321. NEPA is best known for its action-forcing requirement that "all agencies of the federal government shall . . . include in every recommendation or report on . . . major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on –

(i) the environmental impact of the proposed action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the proposed action,
(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."

NEPA Section 102(2) (C), 42 U.S.C. § 4332(2) (C). This information must be provided for review by agencies with jurisdiction or special expertise regarding the environmental effects described. The agency's "detailed statement," known as an EIS, must be provided to the public, in accordance with NEPA Section 102(2)(C) and the Freedom of Information Act, and be incorporated into the agency decision-making process.

The EIS requirement thus has two purposes. First, it is meant to promote transparency and to ensure public accountability of agency decisions with significant environmental effects. In this sense, it promotes political checks and balances broader public interests against the motivations for agency action. Second, it is meant to ensure that agencies take account of those effects before decisions are made and as part of the agency's own decision-making process. In this sense, it attempts to ensure that agencies consider environmental consequences as they decide how to proceed and take steps, when appropriate, to eliminate or mitigate adverse effects. The agency's "responsibility is not simply to sit back, like an umpire, and resolve adversary contentions . . . Rather, it must itself take the initiative of considering environmental values at every distinctive and comprehensive stage of the process beyond the staff's evaluation and recommendation." *Calvert Cliffs Coordinating Comm., Inc. v. US Atomic Energy Comm'n*, 449 F.2d 1109, 1119 (D.C. Cir. 1971).

Alternatives analysis is an essential element of the NEPA process, both under section 102(2) (C) and in the EA of "conflicts concerning alternative uses of available resources" under Section 102(2) (E). The requirement of consideration of alternatives is meant to ensure that the agency consider approaches whose adverse environmental effects will be insignificant or at least less significant than those of the proposal. "This requirement, like the 'detailed statement' requirement, seeks to ensure that each agency decision maker has before him and takes into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance. Only in that fashion is it likely that the most intelligent, optimally beneficial decision will ultimately be made." *Calvert Cliffs*, 449 F.2d at 1114.

NEPA analysis and documentation should be designed to both inform Federal agency decisions and provide for collaborative, coordinated decisions by making "advice and information useful in restoring, maintaining, and enhancing the quality of the environment" available to States, Tribes, counties, cities, institutions and individuals. Section 102(2) (G), 42 U.S.C. § 4332(2) (G). NEPA also requires Federal agencies to support international cooperation by recognizing "the global character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment." Section 102(2) (F), 42 U.S.C. § 4332(2) (F).

Federal actions may cause effects on the human environment that are not significant environment effects, in isolation, but that are significant in the aggregate or that will lead to significant effects. Since 1970, CEQ has construed the term "major Federal actions significantly affecting the quality of the human environment" as requiring the consideration of the "overall, cumulative impact of the action proposed (and of further actions contemplated)." 35 Fed. Reg. 7390, 7391 (1970). "Cumulative impact" is defined in CEQ's NEPA regulations as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions . . ." 40 C.F.R. § 1508.7. Cf. *Kleppe v. Sierra Club*, 427 U.S. 390, 413-414 (1976). CEQ interprets this regulation as referring only to the cumulative impact of the direct and indirect effects of the proposed action or its alternatives when added to the aggregate effects of past, present, and reasonably foreseeable future

actions. See, CEQ Guidance on the Consideration of Past Actions in Cumulative Effects Analysis (June 24, 2005) at 2, 3 (www.nepa.gov/nepa/regs/Guidance_on_CE.pdf).

As explained in prior CEQ guidance, and described in its handbook *Considering Cumulative Effects*, the analysis of cumulative effects begins with consideration of the direct and indirect effects on the environment that are expected or likely to result from a proposal for agency action or its reasonable alternatives. See *Considering Cumulative Effects* (CEQ 1997) at www.nepa.gov. Agencies then should consider the affected environment by looking for effects of past, present, and reasonably foreseeable future actions that are, in the judgment of the agency, relevant because their effects would increase or change in combination with the direct and indirect effects of the proposal for agency action or its alternatives. The relevant cumulative effects typically result from human activities with effects that accumulate within the temporal and geographic boundaries of the effects of the proposed action.

The purpose of cumulative effects analysis is to document agency consideration of the context and intensity of the effects of a proposal for agency action, particularly whether the action is related to other actions with individually insignificant but cumulatively significant impacts. 40 CFR 1508.27(b)(7). After such documentation, the dual purposes of NEPA will be satisfied. The public can scrutinize the relevant effects, and the agency, having been made alert to them, can decide how to proceed. The Supreme Court has emphasized that agencies may properly limit the scope of their cumulative effects analysis based on practical considerations. *Kleppe*, 427 U.S at 414 ("Even if environmental interrelationships could be shown conclusively to extend across basins and drainage areas, practical considerations of feasibility might well necessitate restricting the scope of comprehensive statements"). See also 40 CFR 1502.22 (regarding acquisition and disclosure of information that is "relevant to reasonably foreseeable significant adverse impacts" and "essential to a reasoned choice among alternatives").

2. Climate Change in General.

The science of climate change is rapidly developing, and is only briefly summarized in this guidance to illustrate the sources of scientific information that are presently available for consideration. CEQ's first Annual Report in 1970 discussed climate change, concluding that "man may be changing his weather." Environmental Quality: The First Annual Report at 93. At that time, human activities had increased the mean level of atmospheric carbon dioxide to 325 parts per million (ppm). Since 1970, the concentration of atmospheric carbon dioxide has increased at a rate of about 1.6 ppm per year (1979-2008) to the present level of approximately 385 ppm (2008 globally averaged value). *See* U.S. Department of Commerce, National Oceanic and Atmospheric Administration Earth Systems Research Laboratory (http://www.esrl.noaa.gov/gmd/ccgg/trends/). The atmospheric concentrations of other, more potent GHGs have also increased to levels that far exceed their levels in 1750, at the beginning of the industrial era. As of 2004, human activities annually produced more than 49 billion tons of GHG measured in carbon dioxide equivalency according to the Intergovernmental Panel on Climate Change (IPCC). IPCC Fourth Assessment Report: Synthesis Report at 38 (http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf). Nearly every aspect of energy choices and use affect the development of fossil fuel and other energy resources, either adding to or reducing the cumulative total of GHG emissions.

It is now well established that rising global GHG emissions are significantly affecting the Earth's climate. These conclusions are built upon a scientific record that has been created with substantial contributions from the United States' Global Change Research Program (formerly the Climate Change Science Program), which facilitates the creation and application of knowledge of the Earth's global environment through research, observations, decision support, and communication. (http://www.globalchange.gov/)

Based primarily on the scientific assessments of the USGCRP and NRC, EPA has issued a finding that the changes in our climate caused by GHG emissions endanger public health and welfare. (Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, December 15, 2009, 74 Fed. Reg. 66496). Ambient concentrations of GHGs do not cause direct adverse health effects (such as respiratory or toxic effects), but public health risks and impacts as a result of elevated atmospheric concentrations of GHGs occur via climate change. 74 Fed. Reg. at 66497-98. For example, EPA has estimated that climate change can exacerbate tropospheric ozone levels in some parts of the U.S. Broadly, EPA states that the effects of climate change observed to date and projected to occur in the future include, but are not limited to, more frequent and intense heat waves, more severe wildfires, degraded air quality, more heavy downpours and flooding, increased drought, greater sea-level rise, more intense storms, harm to water resources, harm to agriculture, and harm to wildlife and ecosystems. The Administrator has determined that these impacts are effects on public health and welfare within the meaning of the Clean Air Act. However, the Administrator does not currently believe that it is possible to quantify with great specificity (i.e. geographic), the various health effects from climate change but, because the risks from unusually hot days and nights and from heat waves are very serious, has proposed to find that on balance that these risks support a finding that public health is endangered even if it is also possible that modest temperature increases will have some beneficial health effects. The EPA findings cite IPCC reports that climate change impacts on human health in U.S. cities will be compounded by population growth and an aging population and GCRP reports that climate change has the potential to accentuate the disparities already evident in the American health care systems as many of the expected health effects are likely to fall disproportionately on the poor, the elderly, the disabled, and the uninsured.

V. CONCLUSION

With the purpose of informing decision-making, CEQ proposes that the NEPA process should incorporate consideration of both the impact of an agency action on the environment through the mechanism of GHG emissions and the impact of changing climate on that agency action. This is not intended as a "new" component of NEPA analysis, but rather as a potentially important factor to be considered within the existing NEPA framework. Where an agency determines that an assessment of climate issues is appropriate, the agency should identity alternative actions that are both adapted to anticipated climate change impacts and mitigate the GHG emissions that cause climate change. As noted above, NEPA analysis of climate change issues necessarily will evolve to reflect the scientific information available and the legal and policy context of decisions that the NEPA process is intended to inform. Therefore, once this guidance is issued in final form, CEQ intends to revise it as warranted to reflect developments in the law, policy, and science regarding climate change.

VI. SPECIFIC QUESTIONS FOR PUBLIC REVIEW

In addition to comments on this draft guidance document, CEQ also requests comment on land and resource management issues, including:

1. How should NEPA documents regarding long-range energy and resource management programs assess GHG emissions and climate change impacts?
2. What should be included in specific NEPA guidance for projects applicable to the federal land management agencies?
3. What should be included in specific NEPA guidance for land management planning applicable to the federal land management agencies?
4. Should CEQ recommend any particular protocols for assessing land management practices and their effect on carbon release and sequestration?

5. How should uncertainties associated with climate change projections and species and ecosystem responses be addressed in protocols for assessing land management practices?
6. How should NEPA analyses be tailored to address the beneficial effects on GHG emissions of Federal land and resource management actions?
7. Should CEQ provide guidance to agencies on determining whether GHG emissions are "significant" for NEPA purposes. At what level should GHG emissions be considered to have significant cumulative effects. In this context, commenters may wish to consider the Supreme Court decision in *Massachusetts v. EPA*, 549 U.S. 497, 524 (2007).

After consideration of public comment, CEQ intends to expeditiously issue this guidance in final form. In the meantime, CEQ does not intend this guidance to become effective until its issuance in final form.

# # #

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June 13, 2011

VIA EMAIL & CERTIFIED MAIL

U.S. Army Corps of Engineers, St. Paul District
Attn: CEMVP-PM-B
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

Re: CWA section 404(b)(1) Evaluation- Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Mr. Snyder:

On behalf of the City of Oxbow, North Dakota, we submit the following comments on the U.S. Army Corps of Engineers' ("Corps'") Clean Water Act ("CWA") section 404(b)(1) analysis for the above-mentioned project. 33 U.S.C. §1344(b)(1). For a project that proposes to destroy *1161* acres of valuable wetlands in a flood-prone area, the 404(b)(1) analysis conducted by the Corps is woefully inadequate, violative not only of the CWA itself and its implementing regulations, but also of Executive Order 11990. As a result, it will not withstand judicial scrutiny.

Wetlands are considered "special aquatic sites" under the 404(b)(1) guidelines, subject to greater protection than other waters due to their significant contribution to the general overall environmental health and vitality of the region's ecosystem. 40 C.F.R. §§ 230.3 (q-1); 230.41. Wetlands perform a variety of critical functions, including creation of fish and wildlife habitat, enhancement of water quality, surface and groundwater recharge, and perhaps most importantly in this case, floodwater retention and storage. 40 C.F.R. §230.41(b).

The section 404(b)(1) guidelines require the Corps to evaluate the existence of practicable alternatives to any proposal to fill or otherwise destroy wetlands. The "practicable alternatives test" is designed to assess whether a project that depends on filling can be located elsewhere and prohibits the discharge of dredged or fill material if there is a practicable alternative that would have less adverse impact on the aquatic ecosystem. 40 C.F.R. §230.10(a). Under this test, the Corps must show that the locally preferred project ("LPP") is the "least environmentally damaging," taking into account reasonable alternatives as appropriate.

Here, the LPP is *not* the least environmentally damaging plan. To the contrary, it is by far the

most environmentally damaging plan that could have been selected. While Oxbow does not agree that only a diversion alternative can accomplish the project purpose and need—particularly in light of non-structural alternatives such as the basin wide retention project designed by the Energy & Environmental Research Center—among structural alternatives, a Minnesota diversion alternative should have been selected as the least environmentally damaging. Indeed, the Fish and Wildlife Service ("FWS") has previously determined that a Minnesota diversion alternative- which was the basis for the National Economic Development ("NED") and Federally Comparable Plan ("FCP") alternatives- will have far fewer wetland impacts, and is preferable from that standpoint. *See* letter dated July 26, 2010 from Robert F. Stewart, FWS Regional Environmental Officer, to Colonel Price, District Engineer.

A "practicable alternative" is one that is available and capable of being done after taking into consideration cost, existing technology and logistics in light of the overall project purpose. 40 C.F.R §230.10(a)(2).

When discussing why non-structural and other alternatives were not carried forward, the Corps asserts that a diversion alignment in North Dakota or Minnesota "significantly outperformed any other conceptual alternative with respect to the stated purpose and need in a cost effective manner using existing technology." The Corps then notes that while the Minnesota alignment was the most cost effective, "it did not reduce flood risk for the portion of the study area affected mainly by the Sheyenne River and its tributaries, the Maple, Rush and Lower Rush rivers" and later asserts that the LPP is the "least environmentally damaging practicable alternatives that would achieve the project purpose of reducing flood risk from both the Red River and the five North Dakota tributaries.

Given that a Minnesota alignment is widely thought to be more affordable and less environmentally damaging, the Corps appears to be asserting that the Minnesota options do not accomplish the project's goals. To the extent the Corps has functionally ruled out the existence of "practicable alternatives" by maintaining that a Minnesota alignment could not accomplish the project's goals as effectively as the LPP because it does not provide the same degree of flood control that the LPP does in the North Dakota tributaries, that argument is legally unavailing. Indeed, the Courts have ruled that an agency cannot define the objectives of its actions in terms so unreasonably narrow that only one alternative from among those in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality. *See e.g., Nat'l Parks & Conservation Assoc. v. BLM,* 586 F. 3d 735, 746 (9th Cir. 2009).

In any event, the Corps did not define its project purpose so narrowly. Instead, it stated that ("[t]he purpose of the proposed action is to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area."). SDFREIS at 30. It

further emphasized that each of the three alternatives considered--the ND35k, the FCP, and the LPP-- accomplishes the project purpose of reducing flooding in the metropolitan area covering Moorhead and Fargo. *See* ES-17 ("[i]mplementing any of the diversion channel alternatives would result in a substantial beneficial effect on the local economy by significantly reducing flood damages and flood risk, improving public safety and peace of mind. . . . All of the diversion channel alternatives would significantly reduce flood damage and flood risk, but neither of the plans would completely eliminate the flood risk." *Id.* Accordingly, the Corps cannot screen out these other alternatives under the CWA by insisting that only the LPP provides the degree of flood control it now self-servingly deems requisite to the project purpose and thus "practicable."

Nor can the Corps necessarily rely on the alternatives analysis conducted under NEPA to satisfy its CWA 404(b)(1) requirements. While overlapping- the two analyses are quite distinct- and require different emphasis. The CWA analysis is primarily concerned with ensuring selection of the alternative with the greatest degree of aquatic ecosystem protection- (and thus the least amount of wetlands impacts)- while the NEPA analysis is both broader and procedurally, rather than substantively oriented. *See e.g., Bering Strait Citizens for Responsible Resource Development v. U.S. Army Corps of Engineers,* 524 F.3d 938 (9th Cir. 2008).

Under the Corps' CWA implementing regulations, the Corps was required to concentrate on evaluating alternatives to the LPP that provide flood control protection for the Fargo-Moorhead metropolitan areas but that do so at a reduced cost to the aquatic ecosystem. Contrary to showing no practicable alternative existed, the Corps' own analysis demonstrates the opposite -- that a Minnesota alignment is a practicable alternative that is both more affordable and far less damaging to wetlands. *See* ES-18 and SDFREIS at 88 (conceding that the LPP will impact nearly 100 acres more than the FCP).

Nor are the Minnesota diversion alternatives the only practicable alternatives that should have been considered. Instead, the Corps should have considered a mix of alternatives- for example, a basin-wide retention option in combination with structural alternatives. For these reasons, despite Corps' assurances otherwise, there are "practicable alternatives" to the selection of the LPP, one of which should be selected as the preferred alternative as a matter of law.

Moreover, the Corps' own planning guidance requires the selection of the NED Plan unless there are "overriding" issues of local or regional concern favoring a locally preferred plan. ER 1105-2-100. While overriding regional concerns may give rise to different plan considerations under the Corps' planning guidance, they cannot alleviate the Corps' duty to select a plan with the least wetland impacts, or to minimize the impacts if the project must affect wetlands, under the CWA (as implemented by the regulations cited herein) or Executive Order 11990. No such

"overriding" issues as defined in Corps planning guidance or by local and regional sponsors can militate in favor of selection of an alternative that has the greatest amount of damaging environmental impacts and clearly violates federal law.

In addition to the existence of a "practicable alternative" to the LPP, the §404(b)(1) guidelines further prohibit wetlands destruction unless all appropriate and practicable steps have been taken to minimize potential adverse impacts. 40 C.F.R. § 230.10(d). The truncated analysis set forth in the Corps' §404(b)(1) analysis is a far cry from that which is required to ensure that all appropriate and practicable steps have been taken to minimize adverse impacts.

For example, the Corps provides only a conclusory description of the types of wetland fill it will procure, and its chemical constituency, while insisting that only minor, short term environmental effects will result from the project. This leaves the public guessing as to the accuracy of these optimistic assertions. While the Corps insists that: (1) fill will be "obtained from approved quarries" that "do not have a history of contamination"; (2) increases in turbidity and suspended sediments will have "relatively minor water column effects restricted to localized areas"; (3) fill will not result "in significant impacts on water color, odor, taste, or nutrient levels", and that (4) the Corps "will use best management practices" to mitigate for all these effects, it provides no meaningful details to back up these sweeping and self-serving assertions.

Ironically, the wetlands the Corps proposes to destroy are wetlands that perform effective flood control benefits. In fact, flooding in the Red River Basin is, in part, caused by the loss of these valuable wetlands. Wetland drainage has significantly increased both the timing and size of Red River floods.

While the Corps insists that it will fully mitigate for the significant losses associated with the destruction of 1161 acres of valuable wetland resources, it does not provide the public with necessary information regarding how, where, or what types of wetlands it will create in their stead or whether the wetlands created will be functionally equivalent to the ones lost. It provides no information on the type of monitoring or adaptive management regime it will employ to ensure that these wetland functions are fully restored, nor does it provide any information or reassurance that adequate funding will be available to mitigate for these significant wetland losses.

Not only does the Corps' analysis fail to satisfy the CWA and the 404(b)(1) guidelines, it also fails to satisfy Executive Order 11990 which requires the Corps to take a leadership role in the preservation and enhancement of wetlands when carrying out agency functions. More precisely, EO 11990 directs agencies to "avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative

to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use."

The EO 11990 does provide, however, that the head of the agency can take economic, environmental and other pertinent factors into account when making this determination. Ironically in this case however, the LPP is not only the most environmentally damaging plan, it is also by far the least affordable plan. By failing to adequately address the §404(b)(1) guidelines, and by failing to ensure that practicable alternatives to the loss of wetlands are selected, the Corps cannot establish that it has satisfied its EO 11990 obligations. Even if the Corps could successfully demonstrate that there was no practicable alternative, it would still not satisfy EO 11990 because of its clear failure to include all "practicable measures to minimize harm to wetlands.

Finally, "the Corps authorizes "its own discharges of dredged or fill material by applying all substantive legal requirements, including public notice, opportunity for public hearing, and application of the section 404(b)(1) guidelines." 33 C.F.R. § 336.1(a). While the "Corps does not process and issue permits for its own activities," *id.*, it "shall be subject to, and comply with, all . . . requirements . . . respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity." 33 U.S.C. § 1323(a)(2); *Environmental Defense v. U.S.A.C.E*, 515 F. Supp. 2d 69, 77 (D.D.C. 2007). Accordingly, the Corps would not tolerate this type of analysis from a private or any other public applicant, and should not condone this regulatory conduct on behalf of itself. This is especially the case, where, as here, the wetlands lost are wetlands essential to flood control efforts, performing naturally what the Corps seeks to engineer artificially.

In short, continued insistence on selection of the LPP as the proposed project will be deemed by the courts to be arbitrary, capricious, and contrary to the letter and spirit of the CWA and its implementing regulations. In addition, the project would violate the Executive Order 11990 by failing to minimize wetland impact, particularly when there were practicable alternatives to the proposed project. For all these reasons, the City of Oxbow urges the Corps to reverse course, and to re-do the analysis consistent with the CWA, the Corps' implementing regulations, and EO1190.

Very truly yours,

Beth S. Ginsberg

cc: James E. Nyhof, Mayor of Oxbow, North Dakota

-----Original Message-----
From: Losing, Steven [mailto:Steven.Losing@kci1.com]
Sent: Tuesday, June 14, 2011 11:58 PM
To: Snyder, Aaron M MVP
Cc: dandel@far.midco.net; Paul Kochmann; Jim Nyhof
Subject: FW: Oxbow Park

Dear Aaron,

I had received an email pertaining to the "Nadia's Hope" Memorial Park from Jim Nyhof, mayor of Oxbow on Monday June 13, 2011. Per our telephone conversation of June 13th, 2011, I am forwarding on the letter pertaining to the Oxbow Park (a.k.a. Nadia's Hope Playground) from the current Recreation Grants Coordinator at the North Dakota Parks and Recreation Department. Attached is a link to the requirements needed for possible conversion due to the matching grant funding related to the park that I had mentioned.

The nature of the matching funding requires the Oxbow Park District to maintain the Oxbow Park "in perpuity" in the public domain or an approved replacement and maintenance through due process. Of course the previous actions of the LPP have not met the requirements and contrast heavily with the planning of the current LPP diversion project and its disregard for the aforementioned entity and its associated contracted structures.

Due to the current dereliction and omission by the EIS of the required course of action needed regarding the park and the proposed dire effects on taxable base and the existence of the Oxbow Park District as well as the park, its physical plant, and ongoing maintenance in perpuity; the three members of the Oxbow Park District as an independent public entity rendered a unanimous vote in a meeting on May 25th, 2011 to formally oppose the current LPP diversion project as it is structured during the public comment period.

I am pleased to hear that the Oxbow Park District's requests and concerns are gaining some consideration during the public comment period. As the father of Nadia, the namesake of the Memorial Park; and a member of the Oxbow Park District, I have a vested interest in maintaining not only the physical activities of our community, but the legacy of my daughter. As I shared on the call, I feel it would be very difficult to "replace" the essence of the park and what it means to us as a family and a community. The community park was funded due to the fact not only as a memorial, but that it gave children and families a place to have physical play in an underserved area, thus the approval of the associated matching grants in 2004/05.

Clearly, with the park only ½ of a city block from my current home in Oxbow, it is vitally important for the mental well being of my

family. We feel that the park should be retained ideally where it currently resides given our residency in the community if at all possible. We have never had any intention of ever leaving the Oxbow area, and would not be considering any voluntary move in the future. We do believe that the park, if need be, should be replaced close to our residency and maintained in perpuity through taxable levy, as it is currently. With no clear path or timeline for the proposed LPP buyouts or funding; and the proposed dissolution of the Oxbow Park District and it's levied mills, I see the requirements set forth by the federal grant as being challenging at best for the LPP to meet. As we discussed on the phone, my family and I would have no current plans as to where we would relocate physically if this project were to be federally funded and if our home were to be acquired. I would suggest, however, that if replacement of the park were to be imperative, a location inside the diversion project or associated diversion protected areas would be insensitive, incomprehensible, and unacceptable as our home will not reside within a reasonable distance of the proposed plan, nor within the city limits of Fargo.

It is my expectation that you and I will have further conversations based off of our telephone conversation concerning future planning as it relates to the Oxbow Park and the maintenance of the "Nadia's Hope" Playground.

Thank you for your consideration.

Sincerely,

Steve Losing

Steven Losing

752 RiverBend Rd, Oxbow, ND 58047

Oxbow Park District Member

(701) 371-8673

Jack Dalrymple, Governor
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
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E-mail parkrec@nd.gov
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May 27, 2011

Steven Losing
Oxbow Park District
Oxbow, ND 58047

Dear Mr. Losing,

It has come to my attention that a possible river diversion project may put the community of Oxbow at risk of flooding. Specifically, the Oxbow Park District has voiced concern that the river diversion project may permanently flood the Oxbow Community Memorial Park, also known as Nadia's Hope Playground. This park was funded through the Land and Water Conservation Fund (LWCF), a 50/50 matching grant program administered at the state level by the North Dakota Parks and Recreation Department (NDPRD) and funded at the federal level by the U.S. Department of Interior, National Park Service.

The Oxbow Park District received a LWCF grant of $40,000.00, which they matched with an additional $40,000.00 of local funding. The Oxbow Community Memorial Park, LWCF project #38-01235, was completed in 2005 and features the Nadia's Hope Playground Memorial, a picnic shelter, a warming house for the ice skating rink, and park lighting.

Recreation areas that receive federal assistance through the Land and Water Conservation Fund must remain dedicated to public outdoor recreation use and must be maintained in perpetuity. If this is not possible, a replacement park must be provided and designated as such through an official conversion process. If a conversion is required, NDPRD must be contacted prior to taking any action.

Please feel free to contact me at 701-328-5357 or jriepl@nd.gov if you have any questions or concerns.

Sincerely,

Jessica Riepl
Alternate State Liaison Officer/
Recreation Grants Coordinator
North Dakota Parks and Recreation Department

Play in our backyard!

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May 19, 2011

Mr. Aaron Snyder
Project Manager
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St. Paul District Office
180 E. 5th Street, Suite 700
St. Paul, MN 55101-1678

VIA EMAIL AND CERTIFIED MAIL

Re: Request for an Extension of the Comment Period for Fargo-Moorhead Supplemental Draft Feasibility Report and Environmental Impact Statement

Dear Mr. Snyder:

We represent the City of Oxbow, North Dakota and on behalf of the City hereby request an extension of the public comment period for the U.S. Army Corps of Engineers' (Corps) Supplemental Draft Feasibility and Environmental Impact Statement (SDEIS) for the proposed Fargo-Moorhead Metropolitan Area Flood Risk Management project. The City asks that the extension be the equivalent to the current 45 day period and result in comments due not earlier than August 4, 2011.

Because the City will be severely impacted by the proposed Locally Preferred Plan (LPP), which proposes to store flood water throughout a significant area of the City to the benefit of Fargo and Moorhead, the City needs more time to more thoroughly examine the voluminous documents posted for public comment and to engage experts that can help the City prepare meaningful comments.

The City has previously requested that the Corps fully examine:

1) an alignment further south of the City that would protect the City rather than demolish it; and

2) a detailed assessment of the mitigation, compensation, and relocation costs that will be needed for the City and its residents if the proposed LPP is implemented.

These two issues are absolutely critical to the City's residents and neither has been addressed in a substantive manner in the SDEIS. As a result, the City will need to develop its own information in order to meaningfully participate in the public comment process.

Even if the City had unlimited resources to spend on expert analysis, the 45-day period is simply too short to complete any meaningful assessment of the assumptions included in the SDEIS. For example, the City needs to respond to the lack of information regarding the valuation of their homes and properties. With this in mind, the City immediately engaged an appraiser but was told that there is not sufficient time to complete a detailed appraisal. More time is required to find an engineering consultant not already affiliated with the project and, then, for that consultant to sift through the thousands of pages of reports and appendices associated with the project, understand the complicated models used, and to prepare technical comments.

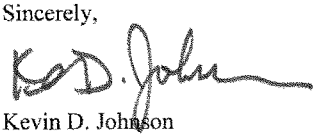
The City has been told by the Corps that the model is too complicated for others to recreate or understand and that there is no time for a more thorough assessment of a southern alignment until after the project has been authorized. In other words, the record is too complicated and time too short. This is precisely the City's concern and why it seeks an extension of the comment period.

The LPP is an enormously expensive and complicated project that attempts to respond to decades of flood mitigation planning in the region. It is critical to the region and its inhabitants that it is done right. Forty-five extra days must be granted to give one of the most severely impacted communities modest time to digest the information that has just been made available regarding their futures, and prepare an informed set of comments.

The City of Oxbow appreciates that the National Environmental Policy Act (NEPA) provides a forum through which its interests can be heard. Granting the City's request for a modest extension of time to prepare comments on a project so central to its future is entirely consistent with NEPA's statutory goals.

Please contact me if you have any questions regarding the City's request for an extension of time to file comments.

Sincerely,



Kevin D. Johnson

70697428.2

CITY OF PERLEY
PO BOX 437
PERLEY, MN 56574
PHONE 218-861-6170

May 24, 2011
To Whom Will Listen

My name is Ann Manley and I am the Mayor of a small town called Perley. We are located north of Moorhead on the Red River. We are a struggling community and one who has faced three major floods in the last three years. I am totally against the FM Diversion. I can not believe that a government entity like the Army Corps of Engineers can endorse or design a Billion dollar project that effects every community, farmstead, County, Township, School District, and another Country all the way up the Red River Valley. This is not humane or right. We are midwesteners and are known for being neighborly and friendly. This Diversion saves only Fargo and part of Moorhead. Just the threat of this eminent danger has caused our community to lose people.
Some have left and quit paying taxes. Why should they? They will lose everything they have worked for anyway.

The fact that we have to hire attornyes to fight this is irresponsible. We have enough problems in our communities to deal with without having to fight the very entities that are suppose to help and protect us. We can not grow, we will be levied in like a fortress. We may be protected but what about everyone else up and down the Valley.

We live in a small town because we want to know our neighbors and feel apart of a community. We want to look out our windows and see deer, moose, geese, and fox. We want to have flowers and gardens and have coffee with our neighbors. We want our children to go to a small school and learn the value of the land and how to have good work ethics. We want our children to know that the whole community cheers for them at a sporting event. That they don't have to tryout for a sport, because all kids are needed just to make a team. We want to have a church where all are welcome. That the kids take a roll in, even after they are confirmed.

This year was the worst flood our town of Perley has experienced since 1997.

We will suffer the effects of this flood for a year or more. We are patiently waiting to hear if FEMA will be helping us or not. I can not bare to think of another plan that the Corps will come up with, one that will turn on the downstream again. I am wearing down quickly. This is suppose to be my golden years. Retirement sounded so good to me and it would give me an opportunity to help my community with some my experience and wisdom. Truly I see no wisdom in this plan. I feel so bad for the upstream communities now, having to face what we did a year ago. This should not happen to any of us. One community is not more important than another.

Dear Lord help these people appointed or elected to see the effects that this Divirsion will have on so many people. I pray this because nothing we do seems to help. I think we need some higher intervention.

In 2009 we counted every resident in town. This was for the National Guard so they would know how many would have to be evacuated if our levee failed. We had 117 people. In 2010 we did the same . We had 99. In 2011 we had to do the same. This year we had 90. Every year it is less and yet the costs of flood fighting go up along with everything else. I can't believe that there isn't a plan somewhere that can help all of us. Fargo may have to build a levy around their town like us. Do we really need to get as big as Mpls. or St. Paul?

Ann Manley
Mayor of Perley

CITY OF WALCOTT

Lee Vining, Mayor
766 Sixth Avenue
Walcott, ND 58077

June 14, 2011

ATTN: Aaron M. Snyder
U. S. Army Corps of Engineers
St. Paul District
180th Fifth Street East
Suite 700
St. Paul, MN 55101-1678

RE: City of Walcott, North Dakota
Fargo/Moorhead Flood Diversion Project

Dear Mr. Snyder:

Please find enclosed herewith a copy of the Resolution adopted by the City Walcott, Richland County, North Dakota, setting forth the city's opposition to the proposed Fargo/Moorhead Flood Diversion Project and the reasons for its opposition.

As I understand it, you and the members of your St. Paul District staff are aware the residents of the smaller communities and rural areas south of Fargo/Moorhead support a basin wide solution to the flooding of the Red River and its tributaries.

In that the Cities of Fargo and Moorhead have been able to successfully protect themselves (with corps help) with emergency temporary measures against record floods these past few years without wreaking havoc upon their neighbors to the south, its hard to understand and even harder to believe that permanent solutions cannot be found that would not be so devastating to the residents and communities in northern Richland County.

Therefore the City of Walcott is requesting that the Corps of Engineers further study this matter as a total basin project and that it include the total impacts of the Sheyenne and Wild Rice Rivers flooding contemporaneously with the Red River of the North before proceeding further on this matter.

Sincerely,

Lee Vining
Mayor of the City of Walcott

Enclosure

RESOLUTION NO. 2011-1
RESOLUTION IN OPPOSITION TO FARGO-MOORHEAD METROPOLITAN AREA FLOOD RISK MANAGEMENT PROPOSED NORTH DAKOTA DIVERSION ALTERNATIVES

BE IT REVOLVED by the City Council of the City of Walcott, North Dakota as follows:

WHEREAS, no environmental impact study (EIS) has been prepared by the US Army Corps of Engineers for Richland County and in particular for the areas impacting the City of Walcott, its residents and its School District as a part of the proposed North Dakota Alternatives for the Fargo-Moorhead Metropolitan Area Flood Risk Management; and

WHEREAS, no environmental impact study (EIS) has been prepared by the US Army Corps of Engineers relating to the possible impacts of the proposed North Dakota Diversion Alternatives on the Wild Rice River and the Sheyenne River and their resulting impacts on the City of Walcott and its surrounding area; and

WHEREAS, several one percent chance flood events have occurred in the past two decades. The locally preferred plan for the North Dakota Diversion with staging, storage and upstream impacts, indicates increased stages upstream by more than eight feet and the impact study does so without adequately taking into account possible flooding of the Sheyenne River and Wild Rice River at the same time, with potentially disastrous effects on the City of Walcott and its surrounding area.

NOW, THEREFORE, the City of Walcott, Richland County, North Dakota hereby opposes the North Dakota Diversion Alternatives of the Fargo-Moorhead Metropolitan Area Flood Risk Management Proposals.

Dated this 2nd day of May, 2011.

CITY OF WALCOTT

By _____
Lee Vining, Mayor

ATTEST:

_____
Tracey Miller, City Auditor

-----Original Message-----
From: Mike Thorstad [mailto:Mike.Thorstad@westfargond.gov]
Sent: Tuesday, May 31, 2011 8:57 AM
To: Snyder, Aaron M MVP
Cc: tmahoney@cityoffargo.com; vanyod@casscountynd.gov; kevin.campbell@co.clay.mn.us; bwimmer@cityoffargo.com; wagners@casscountynd.gov; richard.mattern@ndsu.edu
Subject: Diversion Alignment

Aaron,

At last Thursday's meeting of the F-M Metro Flood Study Group at Fargo City Hall, a question regarding the alignment of the Red River Diversion was raised once again. Vice Chairman Mahoney stated the alignment of the diversion channel would be looked at during the design phase of the project. This is what I and others have understood would happen as well.

In response to Dr. Mahoney's comments, Brett of your staff stated that "a formal request for alignment changes must be submitted and any revisions would be subject to the review process".

Is a formal request required by the project sponsors to have the alignment reviewed?

As you are aware, the West Fargo City Commission strongly favors a western alignment of the diversion channel.

Thank you.

Mike Thorstad
West Fargo Commissioner

City of WEST FARGO
www.westfargo.org

Rich Mattern, Mayor

June 7, 2011

Mr. Aaron Synder
USACE Planner and Project Manager
180 East Fifth Street, Suite 700
St. Paul, MN 55101

RE: Location of North Dakota Diversion Project

Dear Mr. Snyder:

I am the President of the Board of City Commissioners for the City of West Fargo, and the Commission has unanimously voted in favor of the western alignment for the North Dakota diversion project. I am writing this letter to you to officially comment during the comment period for this project. Please consider this a comment both to the project as a whole, and to the wetlands issue regarding the 404 permit also.

It is our understanding that the Corps took into consideration the comprehensive plans of the cities of Fargo and Moorhead, and, in particular, their growth plans in the future to help determine an appropriate location for the placement of the two diversion project options -- one in Minnesota and one in North Dakota. It was, of course, appropriate for the Corps to do so. However, the Corps did not consider the comprehensive plan and growth plans for the City of West Fargo, although the placement has a dramatic effect on West Fargo. Obviously, we are not one of the two co-sponsors of the diversion project, and that probably was the reason you did not consider our growth plans. Although that is understandable as a matter of procedure, it is a substantial mistake to exclude that information from your analysis.

I previously sent you the relevant part of our comprehensive plan which deals with the property west of the Sheyenne Diversion Project, so I will not enclose them with this letter. I will attach the extraterritorial zoning map of the City of West Fargo which shows that much of our extraterritorial area, and future growth area, lie between the alignment of the Sheyenne Diversion Project and the western proposed route for the Fargo/Moorhead diversion project. In fact, there is one platted area in West Fargo already located west of the Sheyenne Diversion Project -- Hayden Heights Addition. City services, such as roads, water and sewer, are already in place and would be destroyed by the east alignment.

800 4th Avenue East • West Fargo, ND 58078 • 701.433.5315 • FAX 701.433.5318

We have been told the reason the Corps is rejecting the western boundary alignment is Executive Order 11988 and the regulations promulgated thereunder. In a nutshell, that order was trying to prevent the development of federal projects in the flood plain. However, both alignments of the Fargo/Moorhead diversion project on the west end of the project are in the flood plain. Thus, it is not a choice of one route out of the flood plain and another in the flood plain. The question is, just where in the flood plain should it be sited.

It is our belief the intent of the law is also to provide protection to critical infrastructure. There is an electrical power station located west of West Fargo which would be protected by the western alignment, but not by the eastern alignment. This could result in a catastrophic loss of power during a flood when power is essential to keeps pumps, lift stations, sump pumps and other equipment that are essential to control flooding and damages to property. Not only must the power station be protected, but also access to the power station must be ensured so that necessary repairs can be made during a major flood.

Another critical piece of infrastructure to the City of West Fargo and surrounding area is the Raymond interchange, also located between the eastern alignment and the western alignment. The loss of that interchange during a flood would cause serious transportation issues for West Fargo and the surrounding area. The Raymond interchange is currently a major point of connectivity within our transportation network for the area north and west of the existing West Fargo Diversion. Twelfth Avenue North connects with the Raymond interchange and provides a critical link for emergency and public works vehicles for properties that are already developed in that area, such as Hayden Heights and Willow Creek subdivisions, as well as numerous other single family and farmstead properties. To lose this vital transportation infrastructure during a large flood could result in the loss of life.

Another major concern West Fargo has with the Project in its present alignment is that when the West Fargo diversion project was constructed, the local entities paid for four bridge crossings across that channel south of Interstate 94. The total cost for those crossings was $1,519,000. Your current plan would eliminate three of those crossings. The elimination of those crossings presents a serious life safety issue for those living in West Fargo's extraterritorial jurisdiction. The project does not just eliminate those crossings during periods of floods, but for 365 days of the year. In addition

to life safety concerns, it will be very expensive for the West Fargo School district to run school routes with such limited access. It will also be a major inconvenience for residents and farmers moving equipment in that area. It is the position of the City of West Fargo, that the project should have crossing at all four of those intersections instead of one. At an estimated cost of $3,830,000 per crossing, if the Corps does not build those crossings, West Fargo would be forced to spend that $11,490,000 for those crossings. That cost does not even include the added cost to put sewer and water lines beneath the proposed diversion. At a minimum, West Fargo should be compensated for the destruction of three crossings paid for by West Fargo taxpayers. If those were buildings, the owners would be compensated for their destruction. There is no reason West Fargo should not be compensated for those losses. Obviously, a better choice would be for the project to be amended to include the $11,490,000 to replace the three lost crossings. However, it makes even more sense to use the western alignment. Using that alignment, the old crossings would remain, and West Fargo could get by with one crossing on the western alignment. In the decision making process, those bridge cost should be weighed as a factor to help determine whether the western alignment would be more cost effective. To just ignore those legitimate costs and say that is West Fargo's problem is not fair or defensible. West Fargo will grow into the area between the east and west alignment. The question is not if West Fargo will, but when it will.

It is also our understanding that one of the factors the Corps must consider is the loss of wetlands. It is our understanding the east alignment has a greater number of wetland acres to be disturbed than the western alignment.

Another factor the Corps has not given enough weight to is the safety factor of the west alignment. It is our understanding the farther west you go, the higher the natural ground level. Thus, using the western alignment, most, if not all, of the water being diverted around Fargo west of West Fargo would be below the natural ground level, a much safer situation than relying on above-ground dikes to contain that massive amount of water.

Finally, and of utmost concern to West Fargo, is to protect the integrity of the West Fargo diversion, which provides essential flood protection to the already existing 26,000 residents of West Fargo. The current project has served our City very well, and the City cannot afford to have that protection in any way jeopardized by the eastern alignment. One obvious concern is whether or not there would be a lessening of protection during construction of the eastern alignment.

The second concern relates to the extensive erosion that has occurred in the existing channel by existing floods and generally high water flows. Under the eastern alignment you would utilize and, obviously, expand the existing channel and levies protecting the south part of West Fargo. By adding the Red River and Wild Rice flows to that area, it is believed the erosion concerns could only worsen significantly. In regard to the eastern alignment, which parallels the channel and levies around the main part of West Fargo, we are concerned that because of soil instability in that area, the new construction and operation of the Fargo diversion could negatively impact the stability of the existing structures. It appears obvious to us that a much safer situation would be to use the western alignment, which would eliminate the above two concerns altogether. Additionally, if for some reason there was a failure on the western alignment of the Fargo diversion, it would be important to have the current diversion system and levies in place as a backup to keep West Fargo from flooding. By using the western alignment, for no more federal dollars, West Fargo would have a backup safety measure that could save not only the City of West Fargo, but also save countless federal taxpayer dollars.

Thank you for your consideration of this matter, and I would be more than welcome to meet with you to discuss this matter more fully.

Sincerely,

CITY OF WEST FARGO

Rich Mattern
President of the Board of City Commissioners of the City of West Fargo

Enclosure

Date: June 16, 2011

To U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT

ATT: AARON SNYDER

180 5 E. STE 700

ST. PAUL, MN 55101 - 1678

From: **Colfax Township**
C/O Leslie Rieger, Clk-Treas.
16325 61 St SE
Walcott, ND 58077-9567

Colfax Township, Richland County, North Dakota is opposed to the Fargo Diversion Plan.

Colfax Township maintains 90 miles of rural roads, paid for with taxes levied. Loss of land and sharply loweredland valuations would severly hamper the township's ability to provide the services required.

Board of Supervisors:
Lester Johnson
Bruce Hackey
Wayne Haverland

Lester Johnson, Chm.

PLEASANT TOWNSHIP BOARD

CASS COUNTY

HICKSON, ND

SupervisorBrett Odegaard introduced the following resolution and moved its adoption:

WHERAS, the United States Army Corps of Engineers, (USACE) has proposed constructing a flood water diversion channel around the city of Fargo, ND. The proposed diversion channel redeposits the floodwater back in the Red River in Northern Cass County of ND.

WHEREAS, Pleasant Township is situated directly south from point at which the proposed diversion is set to be constructed. The proposed flood diversion/dam will change the flow regime of the Red River during flood events and is estimated to cause an adverse impact of as much as 4 feet -12.9 feet of water to a majority of Pleasant Township. Increased flood crest of the magnitude envisioned by the USACE will adversely impact roads, bridges, utilities, farms, personal property, commerce, public safety, and personal well being to those upstream of the proposed diversion.

WHEREAS, a change in flow regime that results in adverse impacts to Pleasant Township and it's residents and or other situated upstream from the proposed diversion project is not acceptable.

THEREFORE, to preserve the interest of Pleasant Township and its people, the Pleasant Township board does hereby go on record of **opposing the FM diversion project.**

The motion for adoption of the forgoing resolution was duly seconded by Supervisor Steve Brakke and upon vote being taken thereon, unanimous voted in favor, and none voted against the same, whereupon said resolution was declared duly passed and adopted.

Adopted this 3rd day of May, 2011.

By _____, Steve Brakke, Chairman

By _____, Brett Odegaard, Supervisor

By _____, Dennis Biewer, Supervisor

By _____, Cindy Quibell, Treasurer

By _____, MaryJane Nipstad, Clerk

June 16, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

We are writing to you in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We believe the project as proposed will have many negative impacts on the landowners and residents of our township, and should be delayed for further study and revision.

Pleasant Township is located in the Southeast corner of Cass County, right in the "heart" of where the proposed FM Diversion/Dam would be used for the staging area of water. It is estimated that 5% of the township residents would have the possibility to remain in their homes in the township if this Diversion/Dam would be approved. Of that 5% - why would they want to stay if they are surrounded by water? Thus, Pleasant Township would be non existent with the proposed FM Diversion/Dam.

There are several major issues, which are highlighted below, regarding the design of this project that will cause harm to Pleasant Township.

- Impact on Tax Base
  - How is a township supposed to survive with a near extinction of residents with mandatory buyouts? Who pays the bills? Do the local sponsors, county, and state pay our bills going forward? Where is this money allocated in the project?
- Crop Losses /Lack of Crop Insurance Available
  - Corps state that crop production losses may occur on as much as 20,000 acres if the staging area is used. How can a value be put on this type of acreage destruction. Crops will be planted later into the season, yields will be much lower, etc. This is a loss of prime and unique farmland with rich soil and profitable growing conditions.
  - At this time, no effort has been put forth or given regarding the lack of crop insurance available for man-made, flooded out farm land. With 20,000 acres of farm land affected, or 60% of the total acres currently stated in the projected, would this not be a topic of priority to figure out and explain?
  - The SDEIS only lists the 5,800 to 6,900 acres to be taken for the diversion channel itself. This is one of the many places where the report leaves out the full staging area in its analysis. The

details of crop insurance, flowage easements, and possible additional of drain tile on land in the staging have not been spelled out and no costs for drain tile are in the plan.

- Loss of Property Valuation and Impact on Economic Development
  - The Corps have stated that this will not be a factor in determining values of homes, land, and farmsteads in the area. Unfortunately, this is not the case in this infancy stage of this project. In fact, the deterioration has already begun. Currently, residents are not able to market their homes for reasons such as sale or refinance due to the absurd project that is being proposed. What will the next 10 years bring if it is starting already. We have a difficult time believing that every appraiser, realtor, and buyer would overlook the fact that the property is located in the "heart" of the staging area.
- School District Loss of Revenue
  - This will result in the loss of approximately a quarter of the valuation and students in the Kindred School District. The loss of taxable valuation by the district will result in increased taxes for the rest of the residents of the district. As the school taxes increase, the valuation of our property will decrease. In addition, the people who live in the flooded areas patronized businesses, attended churches, and traveled to school functions in the local area. Army Corps representatives have stated it will be the responsibility of the local sponsors to mitigate those types of economic damages. The likely result will be that our residents will have to take legal action to recover any damages, and the outcome of that would be in question. The Corps has a responsibility to include these damages in the cost of the project.
- Roads
  - All roads except Hwy 29 and 75 would be allowed to flood during staging. The roads are necessary for the farmers to get to their fields. Who pays for the cost of repair of roads and bridges? Is it a local responsibility, so would it be Fargo and Moorhead or does the state and county have to pay as well? How much will this cost?
  - If the people have been removed from the staging area, who is left to pay taxes to maintain the roads for necessary access for farmers and for commuting through the depopulated area to Fargo-Moorhead? Farmland would still be taxed, but non farmers who have paid property taxes to maintain roads would be gone.
- Impact on Cemeteries – social and human costs
  - No information at this time has been released regarding how the cemeteries involved would be treated. The several cemeteries in the township need to be treated with the upmost respect too when it comes to such a personal matter of relocating a member of the family. The cost of this is not even mentioned in the current project.
- Lack of Public Involvement During The Process
  - At no time, was a member of Pleasant Township contacted during any phase of this project preparation. No contact was made from any Cass County officials, Corp of Engineer, or Metro Flood Committee members for input from Pleasant Township. Since the "heart" of the staging area completely destroys Pleasant Township, it is very disturbing that elected officials neglected to include anyone from the township when making these decisions.

- Furthermore, townships and counties to the west and south of us were never included in the communications. How can a project of this magnitude not include all entities affected?
- Maps show the effects miraculously ending at Highway 46 on the Wild Rice River and at the Christine on the Red River. If any representation would have been considered from officials in the townships, cities, and school districts it would have been apparent the feasibility study in process was in to much of an infancy stage to even push for an approval at the rate it is going currently.

- Compensation Models for Farmsteads
  - Obviously, no thought went into the sheer cost of what it would cost to relocate a farmstead. There are 8 farmsteads in the township that would have mandatory buyouts. The cost to rebuild homes, bins, shops, garages, and sheds with all the amenities they currently have (heated floors, drying fans in the bins, landscaping, electricity, etc) would be low to mid 7 figure costs per farmstead. No where in the project does an allocation of costs specifically for farmstead relocation show in the project analysis? This is of a much larger magnitude than all the residential buyouts accounted for in the staging area.
  - How are residents and farmsteads compensated when unexpected circumstances come up in the relocation process which was not figured into their buyout distribution? Are these individuals able to come back and get compensated for these additional costs that were unforeseen? This needs to be addressed since a project of this size will have unforeseen costs associated with it and relocating all these structures in the 33,390 acres will have unforeseen costs as well.

We are an elected governmental entity, and we must act in the best interest of our residents. We believe the negative impact on Pleasant Township has not been adequately addressed, especially since it is in the "heart" of the staging area. As a Federal Agency, the Army Corps of Engineers has a responsibility to Pleasant Township as well as the project sponsors. This project will have serious negative consequences for public safety, property valuation, rights of individuals and businesses, and community welfare. The Environmental Impact Assessment and mitigation for its effects is incomplete.

Thank you for the opportunity to comment on this project. We look forward in understanding how Pleasant Township will move forward as a government entity if this project is accepted.

MaryJane Nipstad

Clerk, Pleasant Township / Sent on behalf of Pleasant Township Officers

The response letter can be mailed directly to the address below:

PLEASANT TOWNSHIP
MaryJane Nipstad - Clerk
5245 172nd S
Hickson, ND 58047

June 15, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

We are writing to you in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have many concerns regarding the effects on the local residents, and farmers in Walcott Township.

Walcott Township is located along the south side of North Dakota Highway 46, between Interstate 29 and Richland County Road 3. We extend as far south as Richland County Road 2. The Wild Rice River crosses the east end of our township.

Adverse Impacts to Wild Rice

Maps provided by the United States Army Corps of Engineers shows a significant area around the Wild Rice River in Walcott township will have increased water depths as a result of the Diversion Project. The land adjacent to the Wild Rice contains many homes, farms, and other structures. Roads are clay based with gravel surfacing. Spring flooding often covers portions of these roads. Homes are generally safe from normal spring floods. Transportation is a critical issue as portions of many of the roads become inundated for short periods of time.

The SDEIS does not consider Walcott Township to be in the staging area despite indications there would be a rise of up to a foot in a large portion of the area around the Wild Rice. Those residents whose homes are currently just above the flood level in current conditions would certainly have to build dikes or abandon their homes. Transportation that is currently difficult during flood conditions, would become impossible. As a township board, we take very seriously the ability to have emergency access to as many residents as possible at all times. This project as proposed would place people's lives in jeopardy as a result of reduced access to homes.

The SDEIS does not consider the increased cost of road maintenance to the township. Repetitive flooding of clay based roads makes them soft and unstable for a large part of the year. Spring time is an especially busy time for farmers in the area, and the roads are frequently traveled by vehicles with heavy loads. The additional time submerged by the increased water levels will mean more road damage, and more cost for the township.

The SDEIS does not consider the negative impact on normal drainage along the Wild Rice. Numerous studies are underway by the Red River Basin Commission and other groups, to find options to reduce flooding along the river. If this project is completed as planned, the dam will become a permanent impediment to economic improvement from flood control in our township. No mention is made anywhere in the report about the negative impact on the economy to Walcott Township. It is both irresponsible and unethical to deny future opportunities to areas removed from Fargo and Moorhead.

Narrow scope of study and consideration

The SDEIS is seriously flawed because it does not consider a basin wide solution for a basin wide problem. The majority of the Red River Watershed is a lake bed. Every home, farm and business in the Red River Valley is at risk from flooding from the moment they are built. Those who build close to the river are especially at risk. The Diversion proposal singles out one area to protect at the expense of those are located upstream. Walcott Township is singled out for particular penalty because it is identified as having negative impacts, but its damages are not included as a cost of the project. Local sponsors have no legal responsibility to mitigate the damages. Township property owners only option may be legal action against the USACE or the project sponsors. Township property owners did not request this dilemma. The damage caused to the township should be included as an estimated cost to the project.

The USACE has a responsibility to widen its scope for solutions to the flooding problems of Fargo and Moorhead. It should take into account possible solutions that would reduce problems for everyone along the Red River Watershed. The study states it has considered upstream retention as an alternative to the Diversion project, and found it to be ineffective. The study did not consider upstream retention as an integral part of the project. The USACE has a preference for large projects with predictable outcomes. Upstream retention appears to have the ability to mitigate downstream impacts of the diversion channel. The USACE needs to re-evaluate its policy of preferences, and instead develop policies to meet the needs of the individual situations.

Negative Economic Impacts to Walcott Township

The increased water levels depicted by USACE maps would indicate reduced property values to portions of the township. Reduced tax collections plus increases to road maintenance costs on roads frequently flooded will reduce the safety and availability within the township. Walcott Township, along with most townships in North Dakota are at the maximum mill levy. We have no other source of revenue than property tax. If we receive less property tax revenue because of lower valuations, we will have to spend less on gravel and snow removal to all parts of the township. This is a critical issue for the safety of our residents.

The proposed project also reduces revenue to the Kindred School District. Most of Walcott Township is in that school district. Rural residents and communities rely on the

quality of education provided, and the taxing level of the school district for property values and growth.

As elected officials of Walcott Township, we have a responsibility to represent our residents. This project will have serious negative consequences for public safety, property valuation, rights of individuals, and community welfare. From all outward appearances, the Environmental Impact Assessment, and mitigation for its effects is incomplete.

We ask that those who are reviewing these comments, evaluate them with the same regard as our township board.

Sincerely,

Paul Huelsman, Supervisor

Keith Anderson, Supervisor

Craig Hertsgaard, Supervisor

Walcott Township
5470 Co Rd 1
Kindred, ND 58051

RICHLAND COUNTY
WATER RESOURCE DISTRICT

MANAGERS:
Don Moffet, Chr. (Barney)
Robert Rostad, Vice Chr. (Colfax)
Arv Burvee (Fairmount)
James Haugen (McLeod)
Gary Friskop (Wahpeton

SECRETARY /TREASURER:
Monica Zentgraf
(701)642-7773 (Phone)
(701)642-6332 (Fax)
mzentgraf@co.richland.nd.us (E-mail)

June 13, 2011

Aaron Snyder
Department of the Army
St. Paul District
United States Army Corps of Engineers
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1638

RE: Fargo-Moorhead Flood Diversion Project
Environmental Impact Study - Public Comment Period

Dear Mr. Snyder,

The Members of the Richland County Water Resource Board have attended several meetings for the Fargo-Moorhead Flood Diversion Project. After much deliberation and consideration, the Board requests the following:

Additional analysis of impacts to Richland County that will be affected by the proposed project, which include:

A. Analysis of impacts to the legal drains in the northern end of Richland County.
B. Analysis of impacts, which include stage increases, changes in flow, velocities, and drainage patterns on the Wild Rice, Sheyenne, and Red Rivers within Richland County.
C. Analysis of impacts on all other natural drainage systems in Richland County.

The Board requests this information for 100 and 500 year events and compared to current conditions. To assist you, we have enclosed a map depicting the legal drains in Richland County. Please contact Engineers Damon DeVillers or Mike Bassingthwaite, of Interstate Engineering, for information relative to the legal drains. They can be reached by calling 701-642-5521.

Thank you for your attention to this matter. We feel it is imperative our concerns be addressed prior to any decisions being made on the Fargo-Moorhead Flood Diversion Project.

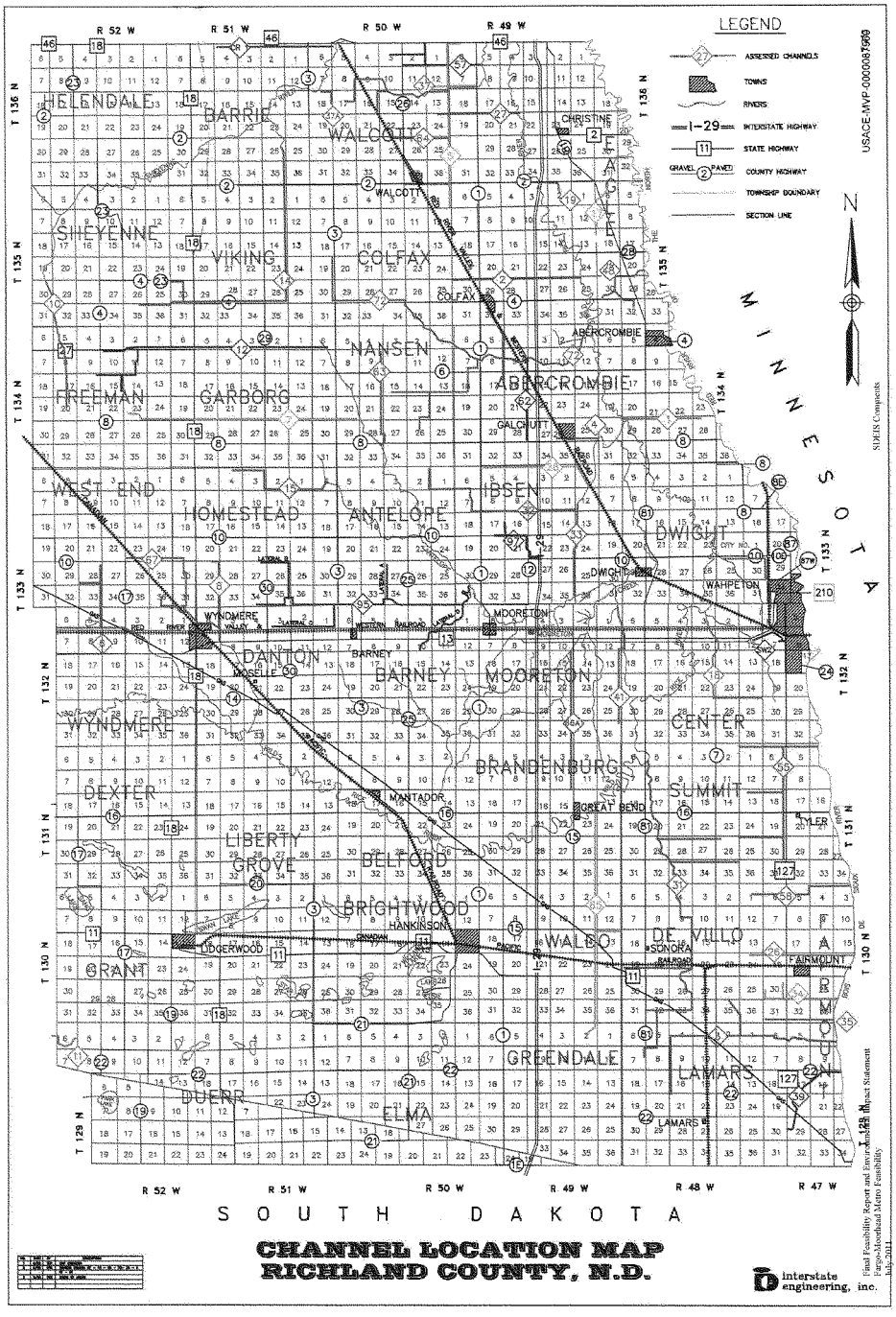
Sincerely,

Don Moffet

Don Moffet
Chairman of the Board

DM:mz

enclosure


LEGEND
ASSESSED CHANNELS
TOWNS
RIVERS
I-29 INTERSTATE HIGHWAY
11 STATE HIGHWAY
GRAVEL 2 PAVED COUNTY HIGHWAY
TOWNSHIP BOUNDARY
SECTION LINE
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N
MINNESOTA
SOUTH DAKOTA
HELENDALE
BARRIE
WALCOTT
CHRISTINE
SHEYENNE
VIKING
COLFAX
NANSEN
ABERCROMBIE
FREEMAN
GARBORG
GALCUTT
WEST END
HOMESTEAD
ANTELOPE
IBSEN
DWIGHT
WAHPETON
WYNDMERE
DANTON
MOSELLE
BARNEY
MOORETON
CENTER
DEXTER
BRANDENBURG
SUMMIT
MANTADOR
GREAT BEND
TYLER
LIBERTY
GROVE
BELFORD
BRIGHTWOOD
HANKINSON
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CHANNEL LOCATION MAP
RICHLAND COUNTY, N.D.
interstate engineering, inc.
Final Feasibility Report and Environmental Impact Statement
Fargo Moorhead Metro Feasibility
July 2011

RINKE NOONAN
attorneys at law

June 13, 2011

Direct Dial 320-656-3503
JKolb@RinkeNoonan.com

Colonel Michael J. Price, District Engineer
U.S. Army Corps of Engineers, St. Paul District
Attn: CEMVP-PM-B
180 – 5th Street East
Suite 700
Saint Paul, Minnesota 55101-1678

Re: MnDak Upstream Coalition; Comments to Clean Water Act Section 404(b)(1) Evaluation, Fargo-Moorhead Metropolitan Area Flood Risk Management
Our File No. 23316.001

Dear Colonel Price:

On behalf of the MnDak Upstream Coalition (MnDak), Rinke Noonan submits the following comments to the Corps' Clean Water Act Section 404(b)(1) evaluation of the Fargo-Moorhead Metropolitan Area Flood Risk Management Project. MnDak objects to the Corps' evaluation.

The Locally Preferred Plan (LPP) is an expansive and expensive plan that will directly impact at least 1,161 acres of wetland, will create a large, on-channel impoundment in all but the smallest storm flows on the Red River, will remove nearly 100 square miles from the floodplain and will cause the alteration and diversion of the natural channels of five additional rivers in North Dakota, resulting in significant degradation of the aquatic environment of a substantial reach of waters of the United States.

Specifically, MnDak objects to: (1) your proposed determination that the discharge of dredge and fill materials into waters of the United States associated with the LPP, described in the April 2011 Supplemental Draft Feasibility Report and Environmental Impact Statement, conforms with Section 404(b)(1) guidelines of the Clean Water Act, as amended; and (2) your proposed determination that the LPP is the Least Environmentally Damaging Practicable Alternative (LEPDA) that will achieve the overall project purpose of reducing flood risk from both the Red River and the five North Dakota Tributaries. The basis of the objections are as follows:

1. Neither the local project sponsors nor the Corps has conducted a meaningful evaluation of practicable alternatives required by Clean Water Act Section 404(b)(1) or its implementing regulations.
2. The articulation of "overall project purpose" is a material departure from the purpose identified in the Supplemental Draft Feasibility Report and Environmental Impact

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Statement. The new articulation of overall project purpose renders all comparable plans involving Minnesota diversions, including the National Economic Development (NED) Plan and Federal Comparable Plan (FCP), impracticable for achieving the overall project purpose.

Neither the local project sponsors nor the Corps has conducted a meaningful evaluation of practical alternatives required by Clean Water Act Section 404(b)(1) or its implementing regulations.

One must look past the volume of data contained in the Supplemental Draft Feasibility Report and Environmental Impact Statement and focus on the substance of the alternates analyzed in the documents. The analyses can only be understood in context of the multiple, iterative phases of alternative screenings that have occurred since 2008. These screenings were part of compliance with the National Environmental Policies Act (NEPA) and the Corps' Planning Guidance Notebook, ER 1105-2-100 (Planning Guidance), and not adequate under section 404(b)(1).

a. Planning History

From September 2008 to May 2009, the local sponsors and the Corps began scoping potentially feasible regional flood risk management actions (Feasibility Phase 1). Feasibility Phase 1 resulted in a general understanding of the effectiveness and cost of several flood risk management options. Based on the findings, the local sponsors elected to continue the study.

From May 2009 to March 2010, the local sponsors evaluated the feasibility of several alternative measures to address flood risk to the Fargo-Moorhead area (Feasibility Phase 2). Alternative measures included: continued emergency measures (No Action); non-structural measures; flood barriers, including floodwalls and levees; increased conveyance, including diversion channels; and flood storage. Initial screening of options in Feasibility Phase 2 resulted in the nomination of the No Action and Diversion Channel Alternatives for further evaluation. The local sponsors determined that no other alternative was feasible, standing alone, to achieve flood risk reduction objectives.

Consistent with the requirements of NEPA, the Corps' Planning Guidance and section 404(b)(1), the local sponsors developed several diversion alternatives. These diversion alternatives were distinguished by their location (Minnesota or North Dakota), their length (long or short) and their volume (ranging from 20,000 to 45,000 cubic feet per second). The local sponsors, with participation by the Corps, further refined plans by developing hydraulic and economic analyses to aid in determining the ability of various options to achieve flood risk reduction objectives.

It is important to note that all analysis occurring during Feasibility Phase 2 was based on channel diversions as stand-alone alternatives to achieve flood risk reduction objectives. Storage and other measures continued to be screened out of consideration as possible components of the alternatives.[1]

At the end of Feasibility Phase 2, based on improved hydraulic modeling, the local sponsors were convinced that a flood diversion channel would be the sole measure to achieve their flood risk reduction objections. (Appendix O, §6.5, pp. O-33-34). The revised modeling data validated the earlier screening of major conceptual alternatives but showed that additional analysis was needed to determine the NED Plan.

From March 2010 to September 2010, the local sponsors, with Corps participation, continued developing and evaluating hydraulic and economic factors of the various diversion alternatives in order to identify the NED Plan and the LPP[2] (Feasibility Phase 3). The Corps published the Draft Feasibility Study and Environmental Impact Statement for public review and comment in May 2010.

Improved hydraulic modeling during Feasibility Phase 3 began to disclose substantial downstream flooding associated with all diversion alternatives. Notwithstanding discovery that the LPP would no longer produce the locally desired flood risk reduction objectives, the local sponsors re-affirmed their LPP preference. (Appendix O, §7.4.2, p. O-38) Because what was then the LLP produced less benefit than the NED Plan, the NED Plan was dismissed in favor of a comparable Minnesota Diversion to be designated as the FCP in order to set the potential level of Federal financial participation in the LPP if approved.

At the end of Phase 3, there were two primary issues related to downstream impacts of the diversion plans. The first issue was the potential effect of induced economic damages on identification of the NED Plan. The second issue was the inability to determine the full extent of

[1] Following the development of the diversion alternatives, additional consideration was given to flood storage, wetland and grassland restoration, bridge replacement or modification, and the use of cut-off channels. It was determined that these measures would not provide any additional economically justified benefits. This is due to the fact that the diversion alternatives provided a very high level of flood risk reduction, and they captured a large portion of the benefits that could be captured by a project. (Appendix O, §6.4.4, p. O-32)

[2] U.S. Army Corps of Engineers' policy requires the Corps to recommend the NED Plan unless an exception from policy is obtained from the Assistant Secretary of the Army for Civil Works (ASA(CW)). On March 18, 2010, the Metro Flood Study Work Group (MFSWG) voted to recommend the North Dakota 35,000 cfs channel as its locally preferred alternative. In its motion, the work group noted that this plan provided "500-year flood protection to the FM metro area for the Red, Wild Rice, Sheyenne, Maple, Rush and Lower Rush Rivers" and "protection for the greatest amount of land and for the greatest number of citizens." The ASA(CW) approved the necessary exception from policy on April 28, 2010. The exception allowed St. Paul District to prepare the Draft Feasibility Report and Environmental Impact Statement tentatively recommending the ND35K plan as a LPP. (Appendix O, §7.2.2, p. O-35). At that time, the St. Paul District Engineer was prepared to declare the LPP was the LEDPA.

the impacts and identify the location where impacts dissipated to a negligible amount, which made it necessary to modify the LPP. The analysis of downstream impacts of the diversions was incomplete. However, it was determined that downstream impacts would not affect the selection of the NED Plan. This determination was based solely on an evaluation of comparable impacts of the various alternatives.[3]

Throughout Phases 1-3 of the study, the diversion alternatives were designed to have only downstream stage increases and it was expected that any downstream stage increases would be relatively small and dissipate relatively quickly. Prior to release of the Draft Report and Environmental Impact Statement in May 2010, the hydraulic models showed downstream impacts to Halstad, Minnesota. Following the release of the Draft Report, the models were extended downstream to Thompson, North Dakota (101 river miles downstream of the diversion outlet). The models showed impacts at Thompson of nearly 16 inches for a 1-percent chance event with the LPP diversion. Based on these results, it was determined that additional modeling was required to identify a point downstream with minimal to no impacts and that consideration would need to be given to other options such as upstream staging.

Essentially, a determination was made at the end of Screening Phase 3 that diversions alone were not feasible to meet flood risk reduction objectives without significant downstream flooding and environmental impact. The originally proposed LPP was determined by the Corps to not be a practicable alternative.[4] The LPP remained the tentatively selected plan in the May 2010 Draft Report and Environmental Impact Statement. However, due to the extent of the downstream impacts, it was necessary to consider modifications to the LPP, including options that would cause upstream impacts.

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[3] All of the Minnesota diversions would have similar performance up to their design capacity; for any given flood, each channel would divert the same amount of water up to its full capacity. All of the diversions would convey similar flows for more frequent events, and differences in downstream impact would primarily occur in the larger, less frequent events. Economic damages, due to downstream impacts, would not vary significantly with the size of channel, because the infrequent events would add relatively little to the annualized damages. Since downstream impacts would be relatively similar for all of the alternatives, downstream impacts would not affect the identification of the NED Plan, and it was not necessary to quantify the impacts from the smaller plans in order to identify the NED Plan. During Phase 3, downstream impacts were only modeled for the MN35K and ND35K plans. (Appendix O, §7.4.5, p. O-39-40).

[4] Upon further study of the North Dakota 35,000 cfs channel alternative (ND35K) using current modeling, the Corps determined that it would have widespread impacts to infrastructure downstream. Given the unacceptability of logistical problems with trying to mitigate for widespread downstream impacts, the ND35K is not a practicable alternative based on current modeling. (April 2011 Supplemental Draft Fargo-Moorhead Metro Feasibility Report, Attachment 1 (Section 404(b)(1) Evaluation), p. 3). The North Dakota alignment has greater downstream effects than the Minnesota alignments. (Appendix O, §7.5.3.4.2, p. O-55). North Dakota alternatives generally have more natural resource impacts than the Minnesota alternatives because they [ND alternatives] cross five tributary streams. (Appendix O, §7.5.3.4.4, p. O-55).

b. Failure to Analyze Alternatives

The goal of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To achieve this goal, the Clean Water Act generally prohibits the discharge of dredged or fill materials into waters of the United States unless authorized by a permit. *Id.* § 1311(a). Section 404 of the Clean Water Act authorizes the Secretary of the Army to issue permits for the discharge of dredged or fill material into waters of the United States when certain conditions are met. *Id.* § 1344. When it reviews a permit application, the Corps must follow binding guidelines established by the Corps and the EPA (the "Guidelines" or the "404(b) Guidelines"), which are codified at 40 C.F.R. Part 230. *See* 33 U.S.C. § 1344(b).

The Guidelines prohibit the permitting of projects in two instances relevant to this case. First, a permit may not be issued where there "is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." 40 C.F.R. § 230.10(a). To be "practicable," an alternative must be "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." *Id.* § 230.10(a)(2). Second, a permit may not be issued where it "will cause or contribute to significant degradation of the waters of the United States," which includes significantly adverse effects on the "life stages of aquatic life and other wildlife dependent on aquatic ecosystems" and "loss of fish and wildlife habitat." *Id.* § 230.10(c).

The Corps has promulgated a regulation which prohibits the issuance of a section 404 permit if "the district engineer determines that it would be contrary to the public interest." 33 C.F.R. § 320.4(a). This regulation requires the district engineer to weigh the benefits that reasonably may be expected to accrue from the proposal against its reasonably foreseeable detriments, considering all relevant factors. *Id.*

The purpose of the National Environmental Policy Act ("NEPA") is to "encourage productive and enjoyable harmony between man and his environment." 42 U.S.C. § 4321. To that end, NEPA requires federal agencies to prepare a detailed Environmental Impact Statement ("EIS") for "major Federal actions significantly affecting the quality of the human environment" to inform the agency's decision whether to go forward with the action. *Id.* § 4332(C). Regulations promulgated by the Council on Environmental Quality state that an agency must supplement this EIS when "[t]he agency makes substantial changes in the proposed action that are relevant to environmental concerns," or "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c).

The extent of the 404(b)(1) compliance evaluation, including the alternatives analysis, varies according to "the seriousness of the potential for adverse impacts on the aquatic ecosystems posed by specific dredged or fill material discharge activities." *Town of Norfolk v. United States Army Corps of Engineers,* 968 F.2d 1438, 1447 (1st Cir. 1992); 40 C.F.R. § 230.10. For actions subject to the NEPA, the analysis of alternatives will in most cases provide the information for the evaluation of practicable alternatives under section 230.10(a). *Id.* at 1163. But if the NEPA analysis does not consider the alternatives in sufficient detail to meet the requirements in section 230.10(a), the applicant may need to supplement the NEPA documents with additional information. *Id.*

"The Corps must do more than give vague explanations about the potential adverse effects of or potential political opposition to other alternatives. It must explain fully, based on analysis adequate to the task, why other alternatives are either impracticable or more damaging." *Alliance to Save the Mattaponi v. U.S. Army Corps of Engineers,* 606 F.Supp.2d 121, 130 (D. D.C. 2009). This obligation requires that the Corps take a hard look at viable alternatives to determine the relative impact of each on the aquatic ecosystem. Without proper consideration of real alternatives, the Corps cannot make a determination of the LEPDA under section 404(b)(1).

The 404(b)(1) analysis, 40 C.F.R. § 230.10(a), is the basis for the LEDPA determination – a permit will not be issued "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem." This requires the permit applicant to evaluate project alternatives that will result in less adverse impacts to the aquatic environment, thereby, providing the Corps with the information necessary to determine whether the proposed project is the LEDPA. 40 C.F.R. § 230.12(a)(3)(iv). Alternatives must be developed and analyzed to determine significant or identifiable differences in impact. 45 Fed. Reg. 85336, 85339-85340 (Dec. 24, 1980). The LEDPA requirement is an attempt to avoid environmental impacts instead of mitigating them; "if destruction of an area of water of the United States may be avoided, it should be avoided." 45 Fed. Reg. 85336, 85340 (Dec. 24, 1980). The Corps may only approve a project that is the LEDPA. 40 C.F.R. § 230.12(a)(3)(i). The LEDPA involves two separate determinations; it must be both practicable and the least environmentally damaging.

The "modifications" to the LPP were added between September 2010 and March 2011 (Feasibility Phase 4). The sole modification was the resurrection of a previously screened and discarded action – storage and retention. The result is the current LPP which is, in fact, a single alternative that has not been analyzed or evaluated under the section 404(b)(1) guidelines against distinguishable similar alternatives.

Unlike the process occurring during Feasibility Phase 2 where the local sponsors first determined the viability of a broad alternative and then set out to develop distinguishable

alternatives (i.e. short and long diversions, large and small-capacity diversions or Minnesota and North Dakota diversions), the local sponsors have fallen back to a viable broad alternative – diversion combined with storage. Rather than develop and analyze real alternative configurations of diversion and storage to demonstrate which is the LEPDA, the local sponsors have pushed forward a single option. Just as the prior LPP was carried forward into the prior Draft Feasibility Report and Environmental Impact Statement in May 2010 without adequate environmental analysis[5], the current LPP is being carried forward without adequate analysis of environmental impacts.

During Feasibility Phase 3, improved modeling demonstrated that storage alternatives would provide more benefits than initially thought. (Appendix O, §7.4.4, p. O-39). This increased benefit is recognized, for example, in the current LLP. The addition of 200 acre-feet of storage allowed the reduction of the diversion channel from 35,000 cfs to 20,000 cfs. But the same analysis was not conducted to determine the impact of storage on Minnesota diversion alignments. Similarly, no analysis was conducted to determine the impact distributed storage would have on flood risk reduction objectives or, more importantly, to the 404(b)(1) analysis, on the aquatic ecosystem as compared to the current LLP.

Rather, the local sponsors simply "screened" out alternative storage and diversion configuration without analysis. (Appendix O, §8.4.3, pp. O-62 *et seq.*). The screening is preposterous, especially given economic justifications representing less than 3% of total project costs and equivocal language such as "not likely to result" in certain benefits. Certainly, a reasonable set of alternatives for analysis would include at least two diversion alignment alternatives combined with consolidated storage (as proposed) and distributed storage (as has been extensively studied).

The Corps simply cannot make a determination that the 404(b)(1) guidelines have been followed or that the LPP is the LEDPA unless real alternatives are analyzed. The local sponsors have not met their burden to demonstrate that the LPP is the LEDPA.

The new articulation of "overall project purpose" renders all comparable plans involving Minnesota diversions, including the National Economic Development (NED) Plan and Federal Comparable Plan (FCP), impracticable for achieving the overall project purpose.

An alternative is only practicable if it is capable of being done taking into consideration the overall project purpose. "Overall project purpose" means the "basic project purpose plus

[5] In fact, subsequent to issuance of the prior Draft Feasibility Report and Environmental Impact Statement – a mere six days prior to the expiration of the comment period on August 9, 2010 – additional analysis of downstream impacts demonstrated that none of the diversion plans, including the LPP, NED Plan or FCP, were practical to achieve project purposes due to extensive downstream flooding and impacts to the aquatic ecosystem.

consideration of costs and technical and logistical feasibility." Overall project purpose does not include secondary project purposes, site-specific secondary requirements, project amenities, desired size requirements, or desired return on an investment.

Here, the April 2011, Supplemental Draft Feasibility Report and Environmental Impact Statement define the project purpose. "The purpose of the proposed action is to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." (§ 2.5). The project planning objectives included:

- Reduce flood risk and flood damages in the Fargo-Moorhead metropolitan area.
- Restore or improve degraded riverine and riparian habitat in and along the Red River of the North, Wild Rice River (North Dakota), Sheyenne River (North Dakota), and Buffalo River (Minnesota) in conjunction with other flood risk management features.
- Provide additional wetland habitat in conjunction with other flood risk management features.
- Provide recreational opportunities in conjunction with other flood risk management features.

(§ 2.6). Additionally, the supplemental draft reports articulated planning constraints:

- Avoid increasing peak Red River flood stages, either upstream or downstream.
- Comply with the Boundary Waters Treaty of 1909 and other pertinent international agreements.
- Avoid negatively impacting the Buffalo Aquifer in Minnesota.
- Minimize loss of floodplain in accordance with Executive Order 11988, Floodplain Management.

(§ 2.7). Nothing in these articulations describe a project purpose of intercepting and diverting the five North Dakota tributaries. In fact, both the NED Plan and FCP were found to provide better flood risk reduction to the Fargo-Moorhead metro area than the North Dakota diversions. However, articulation of "overall project purpose" contained in the 404(b)(1) review document focuses on the five tributaries. Under that articulation, neither the NED Plan nor the FCP are practicable alternatives. This would not only indicate a failure to follow section 404(b)(1) guidelines, but would also call into question compliance with NEPA alternative analysis and the Corps Planning Notebook.

Moreover, intercepting and managing flows from the five tributaries represents a secondary project purpose or requirement associated with the LPP. Such a purpose cannot drive the selection of the LEDPA under a section 404(b)(1) analysis.

An action by the Corps to adopt the determinations contained in Attachment 1 to the April 2011 Supplemental Draft Fargo-Moorhead Metro Feasibility Report would be arbitrary and capricious.

On behalf of our clients, we respectfully ask that the local sponsors supplement their section 404(b)(1) analysis to include, at a minimum, the following additional alternatives:

- A North Dakota diversion alignment with distributed storage as referenced in project screening documents.
- A Minnesota Diversion alignment with distributed storage as referenced in project screening documents.
- A Minnesota Diversion alignment with the currently proposed consolidated storage.

Sincerely,

John C. Kolb
JCK/cmt

cc: MnDak Upstream Coalition

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Shepherd of the Prairie Lutheran Parish
Serving the ELCA Congregations of Christine, Hickson, South Pleasant and Walcott

June 17, 2011

US Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

Dear Project Manager:

As pastor of the Shepherd of the Prairie Lutheran Parish, I am writing in opposition to the Locally Preferred Plan for the diversion with flood storage and upstream staging on the Red River of the North.

The parish I serve is comprised of the Christine, Hickson, South Pleasant and Walcott Lutheran Churches. When I asked the Corp of Engineers representatives at the public hearing of 03/30/11 in Kindred what would become of the Hickson Lutheran Church if the diversion were to be built according to the proposed plan, their response was that our church would be bought out, along with all the other structures in Hickson, Oxbow, and the Bakke Addition, and we would be free to relocate. Please understand that a church is not a building that can be bought or sold, but rather a community of people. In your plan of a community wide buyout coupled with the relocation of farm operations, we would lose not just buildings, but our people. Our members' hopes and dreams for their lives and future are tied to the community of faith that is and has been Hickson Lutheran church. That cannot be replicated by setting up a building in another place.

This Hickson Lutheran Church traces its beginnings in this region to 1872. Our history aligns with that of the Lower Wild Rice and Red River Cemetery and the North Pleasant Cemetery, both of which are close to the hearts of our members. In the event of the LPP becoming a reality, what would become of these cemeteries? Churches have always been central to the fabric of rural life. To this day, the Hickson Lutheran Church exists not just as a house of worship, but as a center that serves the greater community in a multitude of ways. We expect and intend to continue our calling as a congregation for many years to come in our present location.

A further concern beyond the potential disappearance of the Hickson Lutheran Church is the threat which that reality would pose to the rest of the parish, since Hickson contributes between 35 and 40 percent toward the parish budget. It seems that the cultural and communal losses that the LPP would inflict have not been sufficiently considered.

We are in agreement that Fargo Moorhead needs a more permanent solution for flood protection. Many of our community work in Fargo – Moorhead, and we look to Fargo-Moorhead for shopping, education, cultural and recreational activities, and to provide health care, and retirement facilities. Yet, the well-being of the metro area is to a great extent dependent on the vitality of the surrounding communities and the thriving agricultural based economy that drives this whole region. The rural cannot survive without

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Office Email: Shepluthpar@wtc-mail.net · Pastor's Email: Tadesyie@wtc-mail.net
Website: www.lutheransonline.com/shepluthpar

the urban, and likewise the urban cannot survive without the rural. It behooves us then, to find a solution that is beneficial to us all, as opposed to the present Locally Preferred Plan that would protect the areas inside the diversion, at the expense and at great loss to the areas upstream.

Please heed this plea, written on behalf of the more than 450 members of the Shepherd of the Prairie Lutheran Parish, to slow down and look at other options that would keep our communities both intact, and contributing to the overall health and vitality of southern Red River Valley.
Thank you for your consideration.

Sarah Larsen Tade

Sarah Larsen Tade, Pastor
Resident of Walcott for 7.5 years, parent of three children in the Kindred School District

CC:Bishop Bill Rindy, Eastern North Dakota Synod
Laura Oster-Aaland, Hickson Lutheran Church President
Keith Anderson, Shepherd of the Prairie Lutheran Parish Council President

Dakota Ag Cooperative
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701.428.3137 fax
Casselton • Claire City • Comstock • Harwood • Horace • Galchutt • Glyndon • Kindred • Mantador • Mooreton • West Fargo • Wyndmere

June 17, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

We are writing to you in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. Information in the Supplemental Draft Feasibility Report of the Environmental Impact Statement indicates that Dakota Ag Cooperative would suffer serious economic injury as a result of the proposed project.

Dakota Ag Cooperative is a farmer owned agricultural service business that operates seven grain handling and agronomic input facilities from Harwood, North Dakota to Claire City, South Dakota. Home delivery of heating and transportation fuels is also provided by the company. The primary locations affected by this project would be Harwood, West Fargo, Horace, Kindred, and Mooreton. Dakota Ag would be considered the primary market share holder in most of the affected area.

Two features of the project will have the most impact on our business. According to the SDEIS, the diversion channel itself will destroy approximately 6500 acres of farmland. The second major feature is the holding pool. The report considers 20,000 acres of land to be inundated in addition to what would otherwise be the case in a flooding year. Maps included in the study show a total of 54,000 acres to be impacted by the project. While the additional acres already have water on them to some degree, the additional depths caused by the retention structure will have a severe impact on the productivity of those acres. We believe the entire 54,000 acres will be impacted to a level that will reduce agricultural inputs and production in those years.

A third feature of the project may have additional impacts. The LPP Channel Profile chart on page 70 of the SDEIS indicates the existing ground level of the land outside the diversion channel will be at or below the level of the water in the channel for at least the first ten miles. This could have a significant impact on general drainage in this area, and subsequent agricultural production.

As a company, we estimate our sales of inputs and services are approximately $275 per acre to those farmers that are our customers. We would also expect to purchase a significant portion of the production from those farmers. Calculating typical margins on inputs and grain sales, total income to farm service businesses would be $80 per acre. It would be reasonable to expect a 25% reduction in inputs and yields in the years the diversion would operate. Losses to agribusinesses from the pool area alone would be over a

diversion would operate. Losses to agribusinesses from the pool area alone would be over a million dollars in years when the diversion operates. If the downstream portion of the diversion does not allow water to drain when it is in operation, you could easily add another 50,000 to 100,000 acres to the affected area. The production from 6500 acres lost to actual construction would be a permanent loss of margin of more than $500,000 per year. None of these costs are examined or quantified in the study, yet they are very real costs of the project that would accrue to our business.

Another issue for our business is access to the farms and fields that we service. Increased water levels outside the diversion, whether caused by the dam or the diversion itself, will have a negative impact on the township and county roads we use for reaching the fields. Most of the roads we use are unimproved dirt roads or gravel surfaces. Consistent inundation with water, softens the bases of these roads and makes travel with heavy trucks almost impossible. The SDEIS does not seem to consider the increased cost of maintaining these roads.

Finally, our business is part of the fabric of rural life. The communities where we operate are in constant competition with neighboring, larger cities. In order to find good employees to work in our business, we need to offer good schools, restaurants, and variety of life that makes it attractive to live and raise their families. Destroying the communities of Hickson, Oxbow and Bakke, not only limits areas where people can balance jobs and family, but makes it more difficult for small towns like Kindred, Christine, Comstock and Colfax to survive. The impact on the area around the diversion and retention dam are virtually ignored in the SDEIS.

We hope the Army Corps will take the time to revisit the study and address these issues before going forward with the project proposal.

Sincerely,

Dennis J Novacek
General Manager

Hickson Lutheran Church

A Congregation of the Evangelical Lutheran Church in America

June 9, 2011

US Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

Dear Project Manager:

I am writing on behalf of Hickson Lutheran Church to express opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

Hickson Lutheran Church is a thriving rural church of 170 members located in the city of Hickson, North Dakota. Church members reside in the communities of Hickson, Oxbow, Bakke Addition, Fargo, and rural Cass and Richland Counties. The church has roots in the community dating back to 1872. The church is located on high ground and has never experienced water concerns. In fact, in 2011 the Church building was considered by the county as a possible flood headquarters due to its location on high ground.

The proposed Locally Preferred Plan will destroy the existence of Hickson Lutheran Church and its many ministries to the local, state and international communities. Even considering the possibility of a buy out of the church property, it is likely that the church would cease to exist due to the inevitable relocation of its members. The loss of a spiritual home for the community would be immeasurable.

The demise of Hickson Lutheran Church would not only be a loss to the local community, but its partner churches of Christine, Walcott, and South Pleasant, as these congregations together form the Shepherd of the Prairie Lutheran Parish. The budget of this 500 member parish is dependent on the contributions of these four congregations. The loss of Hickson's contribution to the parish budget would make the viability of the parish and the vitality of the other three churches questionable.

As a community entity in close vicinity to Fargo, the members of Hickson Lutheran Church understand the importance of protecting that city. We also believe that flood protection for Fargo should not come at the expense of our city, our churches and our schools. We urge you to consider the immense human and cultural cost of this diversion on the neighboring communities. Please direct your response to me at the address listed below.

Sincerely,

Laura Oster-Aaland, President
Hickson Lutheran Church Council
5555 171st Ave. SE
Christine, ND 58015

Cc: Pastor Sarah Larsen Tade

16 First Avenue, Hickson, ND 58047

Phone: 701.588.4354 · Pastor's Phone: c-701.793.1676 h-701.469.2201
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RINKE NOONAN
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June 20, 2011

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Mr. Aaron Snyder
Planner and Project Manager
U.S. Army Corps of Engineers
Saint Paul District
180 E. Fifth Street
Suite 700
Saint Paul, Minnesota 55101-1687

Re: Comments of the MnDak Upstream Coalition to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement of April, 2011

By U.S. Mail, e-mail to aaron.m.snyder@usace.army.mil and digital submission at www.internationalwaterinstitute.or/feasibility

Dear Mr. Snyder:

On behalf of the MnDak Upstream Coalition ("MnDak"), Rinke Noonan submits the following comments to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement of April, 2011 ("SDEIS") prepared by St. Paul District, U.S. Army Corps of Engineers ("Corps"). These comments are furnished pursuant to the Corps' "Notice of Availability" of EIS *No. 20110138, Draft Supplement,* Fargo-Moorhead Metropolitan Area Flood Risk Management, published in the *Federal Register* Volume 76, Number 88, at page 26286 on May 6, 2011, as required by regulations of the President's Council on Environmental Quality ("CEQ") at 40 CFR 1503 et seq. and Corps regulations at 33 CFR 230.19 et seq.

Since the Corps has failed to provide critical technical information in the SDEIS and failed to adequately consider a reasonable range of alternatives to, and all environmental effects of, the Locally Preferred and Tentatively Selected Plan described in the SDEIS, among other inadequacies in the SDEIS, MnDak respectfully requests that the Corps further supplement its analysis and prepare a second Supplemental Draft EIS that addresses the issues raised in these comments.

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These comments address the inadequacies of the SDEIS under the National Environmental Policy Act ("NEPA"), including (i) an inconsistent articulation of the purpose and need for the Proposed Action; (ii) the inadequate consideration of storage alternatives to achieve a portion of the flood risk reduction objective; and (iii) an incomplete or absent analysis of the environmental and other impacts of the Tentatively Selected Plan. Additional comments focus on the failure of the Corps, during the re-scoping that occurred during the preparation of the SDEIS, to include participation of local government and citizens within the area to be impacted by the Tentatively Selected Plan.

Introduction:

It is futile to assume that Red River shall never again overflow its banks. Man is utterly powerless to prevent its occurring periodically, and whenever it occurs the disastrous consequences will be intensified in proportion to the increased number of inhabitants within the submerged district.

Sir Sandford Fleming, 1880

Sir Stanford Fleming's observation regarding Red River flooding remains as true today as it did over a century ago. It is fortunate that residents of the basin, their political leaders and a multitude of state and federal agencies are currently seized by the flooding issue. However, this seizure peaks in times of high water. Were this a drought time, complacency would have already set in and the cities of Fargo and Moorhead would again be blindly encroaching on the floodplain – saving for the future a multi-billion dollar project to place on the backs of unsuspecting rural communities and citizens throughout the basin.

Since the 1997 flood, governments at all levels have made changes in flood-related policies, funded new programs and changed existing ones, invested in research into many aspects of flooding, and supported the establishment of new institutions such as the Red River Basin Commission. Not only major floods such as that of 1997, but also smaller tributary floods have been the focus for attention. After 1997, the International Joint Commission (IJC) for the Red River basin studied methods to reduce or eliminate the impacts of future major floods. In 2000, the IJC released its report, *Living with the Red*. *Living with the Red* contained a series of policy and action recommendations directed at major flooding in the Red River basin.

In June 2001, the United States and Canada directed the IJC and the newly created International Red River Board to monitor progress by governments in implementing the recommendations contained in the publication *Living with the Red*, and to provide encouragement for continued cooperative, innovative, and integrated watershed management approaches. In January 2003 the IJC specifically requested the Board to provide a written report on progress. A report indicating substantial progress on many recommendations was prepared and made available to the public through the IJC website.

More recently, in 2006, the Red River experienced a significant flood with relatively little urban damage, although costs were incurred for measures such as closing ring dikes. In 2009 a flood that, at Fargo-Moorhead, exceeded those of 1997 and 1897 occurred. In the lower basin the 2009 flood was exceeded in the instrumental record only by that of 1997. The flood management measures implemented following the 1997 flood have led to a higher level of preparedness and improved mitigation measures. The basin has become more flood resilient, and this significantly reduced the effects of the 2009 flood on the people and communities of the Red River Valley.

The IJC made 28 recommendations to government and endorsed another 30 recommendations of its International Red River Basin Task Force without change. The expenditures since 1997 relating to the IJC recommendations have exceeded one billion dollars. No recommendations have been formally rejected although a few are unlikely to be implemented.

In the United States, policy changes by the Army Corps of Engineers were aimed at a more integrated basin-wide consideration of projects. That is, until the current Fargo-Moorhead plans were initiated. Activities by the Minnesota Red River Watershed Management Board and its North Dakota counterpart, the Red River Joint Water Resource District, continue to seek more integrated approaches.

The articulation of "Purpose and Need" within the SDEIS and associated documents has changed so drastically over the course of the feasibility analysis and EIS development that existing comparable alternatives are no longer feasible or practicable to achieve the overall project purpose:

At least three articulations of project purpose can be found in the SDEIS. First, the main document describes the project purpose as follows: "The purpose of the proposed action is to

reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." (SDEIS § 2.5)[1].

Second, in its Clean Water Act section 404(b)(1) evaluation, found at attachment 1 to the SDEIS, the Corps describes an overall project purpose as "reducing flood risk from both the Red River and the five North Dakota tributaries." (SDEIS, Attachment 1, p. 17). Finally, the analysis leading to identification of the Tentatively Selected Plan, in phase 4 of the feasibility study, did not focus on the project purpose described in the SDEIS. Rather, it focused on a feasibility objective of eliminating "adverse impacts on floods [sic] levels downstream of the diversion channel outlet." (Feasibility Study – Phase 4, Volume 1, General Report, p. 8)

Analyses based on a drastic departure from the project purpose articulated in the SDEIS have led to the elimination of multiple feasible and practicable project alternatives. The eliminated alternatives would otherwise satisfy the project purpose articulated in the SDEIS. Exacerbating this summary elimination of feasible alternatives is the lack of policy analysis under NEPA and a hard look at the environmental merits of the alternatives. The Tentatively Selected Plan does not meet the project planning objectives and violates the planning constraints.

The outcome is a Tentatively Selected Plan that protects downstream interests, already prone to flooding, at the expense of tens of thousands of acres of prime and unique farmland, several small communities, hundreds of farms and residences and an extensive network of rural infrastructure that is not presently prone to flooding. The shifting project purpose has allowed the Corps to ignore, without substantial analysis, the benefits of distributed storage alternatives

[1] The project planning objectives include:

- Reduce flood risk and flood damages in the Fargo-Moorhead metropolitan area.
- Restore or improve degraded riverine and riparian habitat in and along the Red River of the North, Wild Rice River (North Dakota), Sheyenne River (North Dakota), and Buffalo River (Minnesota) in conjunction with other flood risk management features.
- Provide additional wetland habitat in conjunction with other flood risk management features.
- Provide recreational opportunities in conjunction with other flood risk management features.

Planning constraints include:

- Avoid increasing peak Red River flood stages, either upstream or downstream.
- Comply with the Boundary Waters Treaty of 1909 and other pertinent international agreements.
- Avoid negatively impacting the Buffalo Aquifer in Minnesota.
- Minimize loss of floodplain in accordance with Executive Order 11988, Floodplain Management.

(SDEIS §§ 2.6, 2.7).

that would not only benefit flood risk reduction for Fargo-Moorhead, but would also prevent the damage described above.

Prior studies indicate that distributed upstream storage, as opposed to the consolidated storage proposed in the Tentatively Selected Plan, will significantly reduce flood risks across the Red River Basin, including Fargo-Moorhead. Implementation of the Corps' Tentatively Selected Plan, will result in construction of a massive project that will essentially eliminate future opportunities to implement flood risk reduction alternatives, such as distributed upstream storage. After spending over $1.7 billion on the hastily prepared Tentatively Selected Plan, it is highly unlikely the Corps, federal government or any local sponsor, would consider studies or funding for such other alternatives. Though the DEIS expressly acknowledges the basin-wide nature of the solution by stating a SDEIS objective "[t]o develop a *regional* system to reduce flood risk" (SDEIS §1.2), the Corps proceeds toward a narrow-visioned alternative that provides the fewest regional benefits at the greatest expense.

The Corps is now left with an untenable position under NEPA and its and the CEQ's regulations. If, in fact, feasibility considerations under the project purpose require that an alternative "eliminate adverse impacts on floods [sic] levels downstream of the diversion channel outlet," or if the overall project purpose is to "reduc[e] flood risk from both the Red River and the five North Dakota tributaries," then neither the NED plan nor the FCP are feasible, practicable alternatives. The Corps must start over in its planning process in order to identify a valid NED plan or FCP.

The SDEIS ignores prior investments in regional flood planning and current initiatives:

The Corps' existing policies and efforts in the Red River Basin reflect a preference for a basin-wide approach to flood management. For example, the Corps is a signatory to a December, 1998, agreement establishing the Red River Basin Flood Damage Reduction Work Group, a non-binding agreement among Minnesota stakeholders in the Red River Basin, whose members acknowledge certain goals and principles for flood damage reduction.

One principle of the Work Group is that "[water resource problems should not be passed along to others. A solution for a watershed should not create a problem upstream or downstream.]" Speaking to the concept of distributed storage as a regional contribution to a flood risk reduction solution, the principles include the concept that "[w]ater should be stored/managed as close to where it falls as is feasible and practical." The Corps, as an active participant in Red

River Basin planning and study efforts, has endorsed distributed storage as part of an overall solution.

In the US, policy changes by the COE are aimed at a more integrated basin-wide consideration of projects. Activity by the RRWMB and the ND RRJWRD also seeks more integrated approaches. (R.A. Haliday, R. Haliday & Associates, *How Are We Living With the Red? A report to the International Red River Board*, June 15, 2009 http://www.ijc.org/php/publications/pdf/ID1633.pdf at p. 4 (Accessed June 11, 2011)) Somewhere in its haste to make a recommendation to congress, the Corps has lost sight of an integrated, basin-wide approach. The Corps has shown little determination to consider the basin wide benefits in relation to this project. The sole focus of the Corps has been Fargo-Moorhead and no other interest.

The Corps failed to analyze reasonable upstream storage alternatives and to evaluate the Tentatively Selected Plan in light of existing flood management policies and initiatives:

Even if we assume the Corps was not distracted by the shifting articulation of Purpose and Need and competing and inconsistent planning objectives found throughout the SDEIS, the SDEIS fails to analyze a reasonable range of alternatives to the Tentatively Selected Plan. Under NEPA and CEQ regulations, this consideration must include (i) **appropriate initial screening** of such alternatives, (ii) **in-depth analysis of the environmental impacts** of alternatives that survive screening, and (iii) **comparison of these impacts** to anticipated impacts from the Tentatively Selected Plan. CEQ regulations also require the SDEIS to reconcile the Tentatively Selected Plan with existing local or regional flood management policies, as required by NEPA, CEQ regulations, and Corps NEPA regulations, including the Corps' planning notebook, Regulation ER 11 05-2-1 00.

The Corps' Alternatives Screening Document ("Screening Document"), December, 2009, prepared as a foundation for its NEPA analysis, considered and then eliminated five alternatives as stand-alone plans – plans that would be completely effective by themselves. Among these stand-alone alternatives were two forms of upstream flood storage: distributed storage in flood retention ponds and the "waffle," the use of the existing road network with additional water control structures. Both were eliminated because the Corps believed they would be less physically effective and less cost-effective than the various diversion channel plans, and thus did not meet the purpose and need of the study. (Attachment 4 to Appendix O, § 2.5).

Ultimately, in late 2010, a determination was made that diversions were not feasible or practicable stand-alone alternatives to meet flood risk reduction objectives. The Corps backtracked on its initial screening and determined its originally proposed Tentatively Selected Plan was not a practicable alternative.[2]

In its preparation of the SDEIS, the Corps conducted a subsequent screening of alternatives. Accepting that none of the originally scoped measures were adequate as stand-alone alternatives, the Corps looked at combinations of measures in its subsequent screening process – ultimately settling on a combination of diversion channel and consolidated storage[3] as the Tentatively Selected Plan. The subsequent screening, found in Section 8 of Appendix O to the SDEIS, summarily dismissed distributed storage and the "waffle" plan from evaluation. The SDEIS, in turn, failed to properly evaluate them, despite clear evidence of their effectiveness in reducing flood volumes and altering the timing of peak flows.[4] There was no serious analysis and, for this reason, MnDak believes the Corps' elimination of these alternatives is unreasonable, arbitrary and capricious and in violation of NEPA and CEQ requirements.

The Corps relies heavily for its elimination of upstream storage alternatives on the Fargo-Moorhead and Upstream Feasibility Study (FM Upstream). This study remains incomplete but has been refined and demonstrates greater flood reduction potential at lesser cost than previously anticipated. (R. Harnack, comments of Basin-wide Flow Reduction Strategy, June 2011). The Corps' analysis does not appear to have considered the most recent analysis of distributed storage options. Therefore, its alternatives analysis must be considered incomplete and inadequate under NEPA.

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[2] Upon further study of the North Dakota 35,000 cfs channel alternative (ND35K) using current modeling, the Corps determined that it would have widespread impacts to infrastructure downstream. Given the unacceptability of logistical problems with trying to mitigate for widespread downstream impacts, the ND35K is not a practicable alternative based on current modeling. (April 2011 Supplemental Draft Fargo-Moorhead Metro Feasibility Report, Attachment 1 (Section 404(b)(1) Evaluation), p. 3). The North Dakota alignment has greater downstream effects than the Minnesota alignments. (Appendix O, §7.5.3.4.2, p. O-55). North Dakota alternatives generally have more natural resource impacts than the Minnesota alternatives because they [ND alternatives] cross five tributary streams. (Appendix O, §7.5.3.4.4, p. O-55).

[3] We note that the Corps introduced a new concept called "staging" during the subsequent screening. For all practical purposes the terms "staging" and "storage" are synonymous. (Compare Appendix O, Attachment 4, §2.5.1 to Appendix O, §8.4.2.1.1)

[4] Improved modeling demonstrated that storage alternatives would provide more benefits than initially thought. (Appendix O, §7.4.4, p. O-39)

The Corps' own screening analysis of distributed storage options contradicts its decision to eliminate them from consideration. Appendix O, Section 8.4.3.5 discusses a multitude of beneficial environmental, flood reduction and economic virtues of distributed storage. But in a logic defying turn, the options are summarily eliminated. What is curious is that the supplemental screening recommends retention of storage options for possible inclusion in a Locally Preferred Plan (LPP). In fact, the Tentatively Selected Plan is the LPP and does contain a consolidated storage component. However, no comparison was ever made between the consolidated storage component contained on the Tentatively Selected Plan and distributed storage alternatives. (Appendix O, § 8.4.3.5)

Appendix O, Section 8.4.3.5, makes a series of what it calls "pivotal" conclusions in the evaluation of flood storage:

1. *There are opportunities to implement flood storage and wetland/grassland restoration basin-wide. These measures could have substantial cumulative benefits basin-wide; however they are relatively ineffective in reducing the significant problem of flooding in the Fargo-Moorhead Metro area.*

This conclusion is based on an analysis of storage as a stand-alone alternative. No one has ever indicated that upstream storage is the solution to all the problems in Fargo and Moorhead. However, to suggest that upstream storage is not effective is inconsistent with the current data. 200,000 to 400,000 acre feet of storage in the tributary watersheds that impact Fargo and Moorhead is not unrealistic. The benefit is three fold: One, the retention helps minimize or eliminate the downstream impacts of the diversion; second, the retention provides an additional degree of protection to the cities by reducing the peak flows; and third, the retention has significant benefit for the tributary watersheds by significantly reducing infrastructure damages for roads and bridges, agricultural damages, erosion & sedimentation, and benefits small communities in the area.

The consolidated storage component of the Tentatively Selected Plan does nothing to address the broader basin flood damages. The Corps has already concluded that neither a diversion nor storage can stand alone to achieve the project purpose. The diversion channel is necessary and can only be achieved in combination with storage. It is an analysis to the type and location of storage that is lacking.

2. *It would be difficult and time consuming to implement a 400,000 acre-foot storage system as a unique measure. The most cost effective and timely way to implement a storage system is in increments, creating small impoundments as opportunities arise.*

This conclusion states what is true of the entire effort to provide flood protection to Fargo and Moorhead – it is difficult and time consuming. These factors do not make implementation of storage impracticable or unworthy of analysis.

3. *A system of flood storage is likely unable to offset downstream impacts induced by diversion channels. However, it would be effective in changing the frequency of how often the diversion channel would operate, making it operate less often.*

The phrase "likely unable to offset downstream impacts" is speculative and unsupported by any analysis. Further, it confuses a planning objective with the project purpose and highlights the shifting focus of this project. It presumes that it is unacceptable to have downstream impacts but acceptable to have upstream impacts.

4. *Although flood storage and wetland/grassland restoration measures provide environmental quality benefits and additional wildlife habitat, they would not be justified as an increment to this project, nor would they have much ability to reduce flood damages in the project area.*

The conclusion flies in the face of the Corps' Tentatively Selected Plan. This is primarily because there is no engineering distinction between "staging" and "storage" – both store water on the landscape for a period of time. (Again, compare Appendix O, Attachment 4, §2.5.1 to Appendix O, §8.4.2.1.1) The Corps' conclusion is not support by the existing data. State, regional and local agencies with flood control responsibility in the Red River basin have determined, on the basis of both technical study and experience with existing facilities in the Red River basin, that upstream flood retention storage may be an effective means of flood flow reduction. The conclusion is unsupported by study data or rigorous analysis.

NEPA does not require statistical certainty for an alternative to be studied in an EIS, rather only that it be a reasonable alternative in light of the Project Purpose and Need. Under NEPA, as an otherwise implementable alternative with potentially lower environmental effects, distributed storage qualifies as such an alternative, not to be discarded on the basis of benefit and cost comparisons alone. The Corps' summary elimination of distributed storage alternatives is belied

by a considerable body of study data indicating their effectiveness, some of which is described below and none of which the SDEIS cites or discusses. The Corps' reference to cost is misplaced. The degree of economic benefits, as measured using federal or Corps methodology (e,g., measurement under National Economic Development (NED) criteria using the 1983 principles established by the Water Resources Council methodology, see SDEIS, § 3.8.2.1), while furnishing a basis for selection among *federally* implementable alternatives themselves, is not a NEPA criterion for comparison of federal and otherwise feasible non-federal alternatives.

Significantly, none of the reasons cited in the SDEIS for elimination of distributed storage include adverse or beneficial environmental effects. The SDEIS contains no discussion of the environmental effects of these alternatives, either singly or in comparison to the Tentatively Selected Plan. NEPA requires that each reasonable alternative be "rigorously" explored and its environmental effects identified and evaluated. (CEQ Regulations, 40 CFR Sections 1502.14(a)) The environmental effects of the respective alternatives must then be compared, as between the particular alternatives. (40 CPR Section 1502.16) Several recent studies and reports show that distributed storage would be at least equally effective as the consolidated storage component of the Tentatively Selected Plan, and would have substantially greater regional benefit and positive environmental effects. The Corps ignored these studies, both in its overall alternatives screening process and in the SDEIS discussion of alternatives.

Among these studies is Technical Paper No. 11, dated May, 2004, by the Technical and Scientific Advisory Committee of the Flood Damage Reduction Work Group ("Technical Paper 11") online at http://www.rrwmb.org/files/FDRW/TP11.pdf. Technical Paper 11 evaluates and recommends an array of alternatives, including upstream impoundments along with downstream urban measures, such as removal of channel and floodway obstructions, each contributing to flood prevention in its own way, in tandem with others. This paper is based on distributed storage.

Similarly, the Red River Basin Commission, a basin-wide planning organization in which the Corps participates, published a "Progress Report to the Minnesota Legislature." ("RRBC Progress Report") The RRBC Progress Report sets out a detailed flood damage reduction and project identification strategy calling for reduction in Red River and tributary flood flows by a target percentage (currently set at 20 percent), through a mix of basin-wide approaches, including retention dams, wetland creation and restoration, impoundment, etc. Among the findings in the RRBC Progress Report is an estimate that a million acre-feet of storage would be sufficient to provide basin-wide protection from a flood similar to that of 1997. Using current

costs of $1000 per acre-foot, a basin-wide project would cost over $800 million less than the Tentatively Selected Plan and provide substantially greater benefit to a greater area. (Red River Basin Commission, *Progress Report to the Minnesota Legislature*, http://www.redriverbasincommission.org/2-3-2010_MN_Leg_Rpt.pdf, Appendix 4 (Accessed June 11, 2011)).

The Corps Planning Guidance Notebook, Regulation ER 1105-2-100, contains, in Appendix H, a "Project Study Issue Checklist" ("Corps Issue Checklist") that includes the following planning checklist item (No. 26): "Was the planning effort conducted in a systems/watershed context and was this reflected in the presentation of the without-project conditions, problem and opportunity statements, and the plan formulation, evaluation and selection?" Failure of the SDEIS to consider - or even mention - Technical Paper 11, the RRBC Progress Report, or the substantial technical literature of which these important studies are a part, evidences the Corps' intent to arbitrarily limit consideration of reasonable alternatives, to an extent that not only renders the SDEIS seriously inadequate under NEPA but also patently nonconforming with the Corps' own regulations and guidance.

CEQ Regulations require that an EIS "discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law." (40 CFR Section 1506.2) The DEIS wholly fails to address local plans and policies, including the regional flood reduction policy of the Red River Watershed Management Board (RRWMB), a joint-powers agency comprised of Minnesota watershed districts within the Red River basin. This policy, called the "20% Reduction Policy," developed for the entire basin by the RRBC, centers on the concept of flood flow reduction on the Red River main stem and its tributaries by altering the hydrology of the contributing watersheds on a basin-wide effort. (Red River Basin Commission, *Progress Report to the Minnesota Legislature*, http://www.redriverbasincommission.org/2-3-2010_MN_Leg_Rpt.pdf, Appendix 4 (Accessed June 11, 2011))

On June 14, 2010, the Board of Managers of the RRWMB formally adopted the 20% Reduction Policy. These minutes note, in their words, the Corps' "disagreement" on the benefits of such policy. That the Corps might disagree with a local policy is not a sufficient reason to ignore the policy in the SDEIS or to fail to study the alternatives on which the policy is based. In this case, the 20% Reduction Policy has been developed by the RRBC and adopted by the RRWMB as a policy direction for itself and its constituent watershed districts. As noted throughout these

comments, the Corps' planning approach to flood protection in the F-M Metro, as set forth in the SDEIS, materially conflicts with the 20% Reduction Policy. The SDEIS fails to squarely address and analyze the conflict of this policy with both the Proposed Action as well as with the Tentatively Selected Plan itself. (See also 40 CFR 1502.6(c) (need to discuss possible conflicts between the Tentatively Selected Plan and objectives of Federal, regional, State and local land use plans, policies and controls))

Funding for development of the 20% Reduction Strategy has included $1 million in funding from the North Dakota and Minnesota legislatures ($500,000 from each); to the extent both states have encouraged, and funded this policy development and are receiving progress reports on it, including the RRBC Progress Report, the work of the RRBC and the 20% Reduction Policy may also be considered policies of the States of Minnesota and North Dakota. Moreover, the State of Minnesota, through its Flood Damage Reduction program administered by the Department of Natural Resources, has invested heavily in storage projects in the Red River Basin. These projects are consistent with the 20% Reduction Strategy.

The Corps Issue Checklist requires response to the following checklist item (No. 28): "Did the planning effort collaborate with other Federal, state, Tribal, and local entities to develop solutions that integrate expertise, policies, programs, and projects across public entities?" Failure of the SDEIS to consider, and either integrate or explicitly justify non-integration of the 20% Reduction Policy, or similar state or regional watershed policies, with the Proposed Action and with the Tentatively Selected Plan not only contravenes NEPA, as discussed above, but also the Corps' own guidance.

The SDEIS failed to utilize a sufficiently large study area in order to evaluate the impacts of wetland drainage on flood frequency and the opportunity to restore the natural flood attenuating effects of wetlands on flood frequency, flood timing and flood magnitude:

The Corps, though evaluating flood impacts and alternatives measures to prevent flooding within the Fargo-Moorhead Metropolitan Area, did not look beyond its narrowly defined study area. The limited study area did not allow the Corps to accurately evaluate the causes of increased flooding in the Red River basin or the full range of alternative remedies, including wetland restoration and other watershed management possibilities. Ample evidence demonstrates that the loss of natural storage capacity, including wetland drainage, throughout the Red River basin has significantly contributed to increased flood frequencies and flood peaks.

The prairie pothole wetlands of the northern Great Plains are one of the world's great natural resource treasures. Within this 300,000 square mile area, retreating glaciers left tens of thousands of small depressions that seasonally fill with water and provide habitat for millions of waterfowl, shore birds and other wildlife species. Almost since farming began in this region in the mid 1800's, wetland drainage has been employed to increase tillable acreage and to facilitate other agricultural activities. The cumulative impacts of this wetland drainage have been staggering. Over the last 100 years, and especially since the end of the Second World War, over 50% of the region's wetlands have been drained with over 90% in some watershed basins.

In addition to the severe impacts to wildlife and water quality, wetland drainage has also impacted the timing, frequency and severity of floods throughout the region. Wetland drains and channels literally crisscross the entire region and dramatically accelerate spring run-off and reduce upstream, upland water storage capacity. For example, much of the damage caused by the extensive flooding along the Mississippi River in 1993 resulted from levee failure as the river reestablished historic connections to the floodplain as well as the loss of upstream wetland storage and the alteration of the landscape that encouraged water to quickly drain into the nearest river or stream. Indeed, a recent study by The Wetlands Initiative noted that the wetlands lost in the upper Mississippi River had the capacity to retain all of the water that caused the 1993 flooding. Thus, although elaborate storage dam, diversion and levee systems can "reclaim" the floodplain for agriculture and human settlement in most years, the increasingly frequent and inevitable large floods the Great Plains and Midwest are seeing impose high disaster costs to society.

Evidence strongly suggests that wetland drainage has significantly impacted flooding in the Red River basin. In fact, the Red River basin has experienced 8 of the 10 all time record flood crests in the past 30 years. One study dealing with watershed contributions to the Red River was published 28 years ago by soil scientists at North Dakota State University. It found an average 60% increase in stream flow rates and concluded that: Significant increases in flow to the Maple, Wild Rice and Goose Rivers have occurred over the last 30 to 40 years. Flow rates were shown to be related to climate (precipitation), however, there appears to be no change in precipitation patterns to account for increase in flow rates. Predicted flow rates were shown to be closely related to basin size due to land drainage in the Maple River and Goose River basins. Since this study was published, wetland drainage has continued throughout the basin. Based on this information, the SDEIS should consider an enlarged study area to include all upstream river basins above Fargo-Moorhead. In taking this step, the SDEIS will necessarily have to evaluate the impacts on flood crests, flood frequencies and flood severity of wetland drainage. Through

this evaluation, the SDEIS can then take the next and most critical step – evaluating the benefits of wetland restoration in terms of reducing these flood impacts.

The Corps should have considered a wetland restoration alternative:

Restoring upstream storage capacity must be studied as an alternative to flood mitigation for the Red River. Several studies have demonstrated the effectiveness and feasibility of restoring wetlands or using upland depressions to temporarily store water during a flood event. One such study concluded that, "non-structural means as temporary storage of runoff on agricultural lands in the upland areas of the watershed during periods when flood risks are high, may provide ecological benefits . . . at the same time diminishing the threat of downstream flooding." (A. Manale, *Flood and Water Quality Management through Targeted, Temporary Restoration of Landscape Functions: Paying upland farmers to control runoff*, Journal of Soil and Water Conservation, Summer 2000 55.3, 285) Another study concluded that, "floodwater attenuation is one of the most widely recognized ecosystem services provided by restored wetlands . . ." The potential storage capacity on USDA program lands in the Prairie Pothole Region (PPR) alone is, conservatively, 458,151 acre-feet of water, if filled to maximum capacity. (USGS, Robert A. Gleason & Brian A. Tangen, *Ecosystem Services Derived from Wetland Conservation Practices in the United States Prairie Pothole Region with an Emphasis on the U.S. Department of Agriculture Conservation Reserve and Wetlands Reserve Programs*, Chap. D: Floodwater Storage, http://pubs.usgs.gov/pp/1745/pdf/pp1745web.pdf (accessed June 11, 2011). Additionally, restoring drained and farmed wetlands could increase the water retention capacity of a watershed in the PPR of Minnesota, "by up to 63%." (Id.)

The restoration of wetlands can significantly reduce flood frequency and severity while also providing vital ecosystem benefits:

The benefits of wetland restoration are numerous. Wetlands provide various ecosystem services to farmers and communities, recreational opportunities, global warming mitigation, and most importantly, flood control. One study concluded that, "wetlands on [USDA] program lands [in the PPR] have significant potential to intercept and store precipitation that otherwise might contribute to "downstream" flooding. (Id.) Additionally, the "conversion of cultivated cropland to grassland cover as part of conservation programs results in a reduction in surface runoff and, ultimately, reduces the rate at which a basin refills and overflows." (Id.)

An Army Corps study on the Charles River in Massachusetts concluded that the floodplain wetlands were so effective for flood control the Corps purchased the wetlands rather than drain them to build a levee system. Maintaining the 3,400 hectares of wetlands in the Charles River basin rather than draining them saved Boston an additional $17 million in flood damages per year. (William J. Mitsch & James G. Gosseling, Wetlands, 347 (John Wiley & Sons, 2007)). Another study looking at the relationship between upstream wetland drainage and downstream flooding concluded that, the increase in peak stream flow was significant for all sizes of streams when wetlands were removed. (Id. at 349)

Utilizing wetlands for flood protections provide a multitude of additional benefits. Increasing wetland habitat will provide stability to migrating and nesting bird habitats as well as numerous other species of wildlife. This in turn creates opportunities for hunting, fishing, bird watching, hiking and other types of recreation. Wetlands also serve as nature's kidneys, filtering polluted water and releasing cleaner water into both nearby ground and surface waters. This improves water quality. Wetlands further serve to recharge ground and surface waters, meaning that while they prevent flooding in wet times, they serve to replenish and retain adequate water supplies and stream flow during drier times. As climate change increases the severity and frequency of both floods and droughts, these functions will become crucial to maintaining healthy aquatic systems and to protecting communities from the impacts of climate change. Wetlands play at least two critical roles in mitigating the effects of climate change, "one in the management of greenhouse gases (especially carbon dioxide) and the other in physically buffering climate change impacts." (The Ramsar Convention on Wetlands, Wetland Values and Function: Climate Change Mitigation, http://www.ramsar.org/pdf/cop8/cop8_doc_11_e.pdf (November 2002))

Studies show the great potential for wetlands to act as carbon sinks to sequester carbon, thus mitigating the impacts of global warming. USGS data suggests that terrestrial carbon capture may be greater in wetlands over smaller acreage than the potential capture on a larger area of cropland. (USGS, Prairie Wetlands are Important for Carbon Storage, http://biology.usgs.gov/cro/Fact%20Sheets/carbonnewban.pdf (last updated July 2002)) Given the multitude of benefits in addition to flood protection that wetland restoration provides, especially in light of the many challenges presented by climate change, it is the most effective, affordable, and ecologically sound solution for the Red River basin, and must be given the full consideration of the Army Corps of Engineers, when preparing the EIS for the proposed flood protection plan, found at 74 FR 20684.

Grassland areas upstream of Moorhead provides viable distributed storage opportunities not possible with the consolidated storage component of the Tentatively Selected Plan in the SDEIS:

Grasslands or grazing lands span approximately 600 million acres of the United States. Grasslands have proven to be a major source of watershed filtration, ground water recharge, and carbon sequestration. Grasslands have excellent potential to markedly improve water and air quality. (Grazing Land Conservation Initiative Strategic Plan 2010-2015, http://www.glci.org/images/Current%20News/StrategicPlan_WebVersion3.pdf (accessed June 11, 2011)) Proper management of existing grasslands can enhance the land's ability to better reduce erosion and flooding by slowing and more evenly distributing surface waters. Grasslands also help the percolation of precipitation creating recharged groundwater aquifers. Conservation of grasslands can occur on private and public lands, and wildlife populations thrive with the availability of these habitats. Through cooperative efforts with agencies such as the Bureau of Land Management (BLM) and the Natural Resources Conservation Service (NRCS), private landowners can learn to maintain their property as grasslands in a manner that is most effective in preventing soil erosion and flooding in the Red River basin. Again, the Corps failed to explore this economically feasible and ecologically friendly alternative in its DEIS.

Based on this information, the Corps should enlarge its study area to include all upstream river basins above Fargo-Moorhead. As a result, the Corps will necessarily have to evaluate the impacts of flood crests, flood frequencies and flood severity of wetland drainage. It is only then that the Corps can adequately evaluate the benefits of wetland and grassland restoration in terms of reducing these flood impacts.

The Waffle Project, combined with wetland restoration is also a viable alternative:

One effort currently being studied and potentially implemented in the Red River basin is called the Waffle Project. The Energy & Environmental Research Center (EERC) "recognized the need for alternative methods of flood protection to augment existing flood protection measures. This sentiment was mirrored by other major organizations and agencies in the Red River Basin, and it was determined that innovative concepts of nonstructural measures should be explored to augment the design capacities of structural measures planned to protect against future floods similar in scope to, or greater than, the 1997 flood." (Bethany Bolles, Xixi Wang, Lynette de Silva, Heith Dokken, Gerald Groenewold, Wesley Peck & Edward Steadman, An Innovative, Basinwide Approach to Flood Mitigation: The Waffle Project,

http://www.undeerc.org/Waffle/info/pdfs/bb-floodmitigation.pdf (accessed June 11, 2011)) As Minnesota Public Radio reported in 2006, "the waffle plan is simple. Existing roads serve as levees to store water in farmers' fields. The potential for storage is amazing. One square mile storing water a foot deep would hold more than 200 million gallons of water." (Bob Reha, Waffle Plan researchers convinced they can lower flood levels, Minnesota NPR, http://minnesota.publicradio.org/display/web/2006/04/13/waffleredux/ (April 17, 2006)) Because this plan looks to slow the movement of water entering the system at any time, the chances of flooding are greatly minimized. The additional benefit of the plan would allow the retained water to recharge the aquifer and prevent droughts in the future.

The Waffle Plan is also a more affordable solution to mitigating flood damage, with the price tag to implement the Plan across the Red River basin "estimated at $50 million. The protective dike system in Grand Forks cost $397 million." (Id.) And, the estimated cost of levees or a diversion channel along the Red River far exceed Grand Forks at $625 million and $909 million, respectively. In this economy, haphazard spending for a levee or diversion project is not only unwarranted, but also irresponsible management of resources, both economically and ecologically. And the extraneous building costs are not a one-time expense. Levees will require continued spending for maintenance and upkeep, and they are uncertain to retain flood waters in our world of extreme weather patterns, so greater structures may have to be built in the future, at greater costs, in order to seize the swelling waters of the Red River.

When the Waffle Project is implemented in conjunction with continued wetland restoration, a successful and long-term flood protection plan results. Programs such as the Waffle Project, Wetland Reserve Program, and other studies and programs through Ducks Unlimited, US Fish & Wildlife, and numerous other agencies and organizations, provide ample data and opportunity to implement wetland restoration as a significant option to prevent flooding downstream.

Flood stages in Fargo-Moorhead during the 1997 flood (nearly a 1-percent chance flood event) could have been reduced by 3.3 to 4.4 feet if the Waffle Project had been in place. But this data is not considered in the SDEIS. The SDEIS omits mention entirely of a later EERC report estimating that had some form of "waffle" been in place upstream in 1997, it would have reduced the crest height at Fargo and Moorhead by between 3.91 feet to as much as 6.17 feet, depending on the scale on which it were deployed. The EERC Report concludes that "[i]n the case of Fargo/Moorhead, the anticipated crest height reductions appear to be substantial." (D.A. Bangsund, F.A. DeVuyst & F.L. Leistritz, *Benefit-cost Analysis of the Waffle®: Initial Assessment*, July 2008, http://ageconsearch.umn.edu/bitstream/42216/2/AAE603.pdf at page

40 (Accessed June 11, 2011)) Overall, the analysis concludes that "the Waffle appears to be capable of generating around $200 million to $600 million in net benefits over a 50-year period." (Id. at p. 56) Failure to accurately characterize and soundly analyze research studies and data on the "waffle" renders the SDEIS' lack of consideration of this alternative incomplete, misleading and in violation of NEPA.

The SDEIS should evaluate an alternative combining diversion alignments and a mix of distributed storage options against the current diversion/consolidated storage configuration of the Tentatively Selected Plan:

Alternatives incorporating distributed upstream storage as a component of the Proposed Action should have been considered in the SDEIS alongside the Tentatively Selected Plan. As it is, the Corps has only performed a detailed analysis of a single alternative in the SDEIS. The suggested, additional alternatives analysis is required by NEPA and, as noted above, is supported by considerable technical study and opinion. Because detailed analysis of distributed storage alternatives was omitted from feasibility screening and, thus, left out of the SDEIS, it is not possible to know whether distributed upstream storage will cause less economic, social and environmental damage than the Tentatively Selected Plan.

Similar to the EERC's Waffle, the Red River Basin Commission (RRBC) also created a strategy that would decrease flood levels in the Red River basin. They simulated 1997 flood conditions (9.25" of precipitation) and found that their storage areas could reduce flood levels in the Red River up to 20% in some areas. They found that the most significant reduction was a 20% peak flow reduction and 20% volume reduction at White Rock, South Dakota. The study demonstrates that storage areas built in river basins are 80% effective, and if all of the tributary basins upstream of the Red River do their share in flood storage, effects on Red River flood reduction can be substantial. (Red River Basin Commission and Bois de Sioux Watershed District, Application of the Flow Reduction Strategy in the Bois de Sioux Watershed, 7-18 (JOR Engineering 2010))

There was no formal cost-benefit analysis done for this study. However, preliminary estimates showed that upstream storage competes very favorably with the Corps' diversion channel option because of the ratio based on the Fargo-Moorhead area damages alone. There would also be more widespread flood control benefits, in addition to a great potential for natural resource benefits under this program.

It is clear that the optimal strategy for minimizing flood risk, while also improving water quality and fish and wildlife habitat in the Red River basin, would involve a combination of wetland restoration and utilizing farm fields for temporary storage. The Corps, working with state fish and wildlife agencies and other federal agencies including the USFWS and the Natural Resources Conservation Service, should develop an alternative or alternatives that combine these approaches. The National Wildlife Federation urges the Corps to formulate an alternative that would include 500,000 acre-feet of storage through wetland and grassland restoration and an additional 500,000 acre-feet of storage through temporary storage utilizing farm fields.

Wetland and grassland restoration, combined with flood storage, will have many positive impacts:

A successful and long-term flood protection plan results when flood storage concepts, such as those developed by EERC and RRBC, are implemented in conjunction with grassland and wetland restoration. In evaluating such an alternative, the Corps should consider the following costs and benefits: flood control benefits; water quality benefits; fishery benefits; benefits to upland and migratory birds; and recreational benefits, including increased hunting and fishing opportunities.

1. Protects more than just two cities: The Corps' Tentatively Selected Plan will only provide significant flood protection for two major metropolitan areas, Fargo and Moorhead. Upstream communities will be damaged and remaining areas of the basin will not receive the benefited flood protection, and will likely see flooding similar to that they are now experiencing. Should wetland and grassland restoration strategies be implemented along with flood-water-storage projects, not only will Fargo-Moorhead see decreased flooding, but communities throughout the basin will also experience flood relief. Basin-wide flood reduction only adds to the overall benefit of wetland and grassland restoration and flood storage efforts. Programs such as EERC's Waffle Project, RRBC's Flow Reduction Strategy, and concepts created by numerous other agencies and organizations, including Wetland Reserve Program and USFWS, provide ample data and opportunity to implement wetland and grassland restoration and flood storage as viable alternatives to the consolidated upstream storage currently proposed.

2. Creates and enhances wildlife habitat and recreation, while also mitigating affects of climate change: Increasing wetland habitat will provide stability to migrating and nesting bird habitats, as well as numerous other species of wildlife. This in turn creates opportunities for hunting, fishing, bird watching, hiking and other recreation. Wetlands also play an important

role in filtering polluted water and recharging the aquifer into both nearby ground and surface waters, greatly improving water quality. Grasslands further reduce the runoff of water and sediment, creating a more stable water level and providing an area to host a diverse community of native grasses, sedges, rushes and other submersed vegetation. (R. R. Johnson, F. T. Oslund & D. R. Hertel, *The past, present and future of prairie potholes in the United States*, Journal of Soil and Water Conservation, May/June 2008, 63(3), 85A. at p. 14)

Wetlands play at least two critical roles in mitigating the effects of climate change, "one in the management of greenhouse gasses (especially carbon dioxide) and the other in physically buffering climate change impacts."(The Ramsar Convention on Wetlands, *Wetland Values and Function: Climate Change Mitigation*, http://www.ramsar.org/pdf/cop8/cop8_doc_11_e.pdf (November 2002)) Wetlands International, a global organization that works to sustain and restore wetlands, states that "inland wetlands in arid regions can play a very cost effective role in attenuating the impacts of extreme weather events such as the impacts of extremes in precipitation and increases in evaporation due to higher temperatures." (Moreno J. Garcia, *Cost-effectiveness of maintaining and restoring wetlands as an adaptation measure against climate change*, Wetlands International, http://www.indiaenvironmentportal.org.in/files/wetlands%20and%20climate%20change.pdf, (last updated April 2010)) Wetlands serve to recharge ground and surface waters, meaning that while they prevent flooding in wet times, they serve to replenish and retain adequate water supplies and stream flow during drier periods.

The benefits of wetland and grassland restoration are numerous. Wetlands and grasslands provide various ecosystem services to farmers and communities, recreational opportunities, global warming mitigation, and most importantly, flood control. One study concluded that, "wetlands on [USDA] program lands [in the PPR] have significant potential to intercept and store precipitation that otherwise might contribute to downstream flooding." (Gleason & Tangen, supra) Additionally, the conversion of cultivated cropland to grassland cover as part of conservation programs results in a reduction in surface runoff and, ultimately, reduces the rate at which a basin refills and overflows.

3. Economic benefit to farmers: The Tentatively Selected Plan will eliminate tens of thousands of acres of prime and unique farmland from operation and place still more at risk of limite production. On the other hand, the Waffle or Flow Reduction Strategy would only "borrow" or "rent" land from willing landowners in the event of flooding and, in most cases, will use natural storage areas to store greater amounts of water. Even if cropland was used to store water, it

would be done early enough in the spring so that the landowner would still be able to farm their crop in most years. Therefore, the payment from these flood storage programs would be a bonus above and beyond the farmer's "normal" agricultural income.

4. Set precedence for other green flood control solutions: As human activity continues to escalate and their harmful affects become increasingly evident through climate change, environmentally friendly alternatives will only gain in popularity. The states of North Dakota and Minnesota have a unique opportunity to show the rest of the nation a more natural and cost effective method of flood control. The precedent could be set for more ecologically favorable flood mitigation efforts rather than more expensive, concrete and environmentally damaging solutions. There has already been an international trend to move toward nonstructural flood control methods, and it is in our nation's best interest to closely follow in the same direction.

The SDEIS omits analysis of connected actions and cumulative effects:

An additional requirement for the Corps to consider in its SDEIS are the simultaneous actions of the Fargo-Moorhead Metro Project and the Southside Flood Control Project, which calls into question requirements under NEPA regarding connected actions. An assessment of cumulative impacts is required by the Council on Environmental Quality (CEQ) regulations under NEPA. (Council on Environmental Quality, Considering Cumulative Effects Under the National Environmental Policy Act (Jan. 1997)) Cumulative effects are defined as, "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." (40 CFR § 1508.7) When considering whether there are cumulative effects or connected actions, an agency must look at the scope of the proposed project and must consider 3 types of actions: connected actions, cumulative actions and similar actions. (40 C.F.R. § 1508.25) A connected action means that there is a close relationship between actions which must be considered in a single EIS. Similarly, a single EIS must be prepared for cumulative actions, which when viewed with other actions "have cumulatively significant impacts and should therefore be discusses in the same impact statement." (40 C.F.R. § 1508.25(a)(2)) A similar action is one, when viewed with other proposed or reasonably foreseeable actions have similarities that would be reasonable to analyze together in a single impact statement. (40 C.F.R. § 1508.25(a)(3)) In the context of the Fargo-Moorhead and Southside Projects, given their timing, scope, relatedness, and proximity, the projects would be considered cumulative actions, and are required, by NEPA, to be

considered under a single EIS. (42 USC §§ 4321, et. seq. See also, *Kleppe v. Sierra Club*, 427 U.S. 390, 96 S.Ct. 2718 (1976))

Cumulative effects analysis is an additional, central, and critical component of NEPA. (See Council on Environmental Quality, Considering Cumulative Effects, http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm, January, 1997 (Accessed June 11, 2011)) Incomplete modeling of flood impacts upstream of the diversion structure and tie-back levees for the Tentatively Selected Plan, and failure of the SDEIS to consider anything beyond possible "taking" of real property, make a meaningful evaluation of cumulative effects on upstream communities impossible. Based on the incomplete information in the SDEIS, there is no way for any of the communities in the upstream storage area, or any other commenter for that matter, to evaluate the effect, over time, of frequent and persistent innundation:

- Impacts to agricultural land, including delayed planting, crop stress, prevented access to fields.
- Damage to improvements, including rural infrastructure, residential and commercial properties and social, religious and educational institutions.
- Additional economic and psychological burden to local residents from increased or new flood protection and risk mitigation efforts.
- Economic damage to residents, including reduced farm or business income, reduced property values and increased mitigation costs.
- Increased flood insurance expense, including rejection of crop insurance.
- Increased risk to persons and property resulting from flood-delayed response by law enforcement and other emergency responders, such as fire and ambulance.
- High fiscal burdens to residents for maintenance, repair or replacement of infrastructure or private improvments.
- Accelerated migration of rural residents, particularly younger people, to the safety of non-flood prone or protected areas. Local communities, left with declining and aging populations, and vulnerable to flood, more than they are today, will suffer irreversible decay. NEPA requires analysis of this socioeconomic degeneration. (Id., Appendix A, Section 11) But the SDEIS is silent on it and on this basis alone is inadequate and must be supplemented before it is presented to the Corps' final decision maker.

Upstream communities and residents, including then members of MnDak, are being asked to bear new burdens for the sake of Fargo-Moorhead and for the sake of eliminating downstream impacts. The upstream communities and residents are owed a detailed analysis and explanation

of the impacts, including cumulative impacts listed above, under the Tentatively Selected Plan. Without such analysis, the SDEIS is inadequate and must be supplemented.

The SDEIS fails to adequately address the negative consequences of the Red River diversion channel options:

In the SDEIS, the Corps has evaluated only one alternative, the Tentatively Selected Plan against the NED pan and FCP developed prior to the SDEIS. Neither the NED plan nor the FCP were updated during development of the SDEIS.

Under NEPA, it is "mandate[d] that federal agencies take a hard look at the environmental consequences of a major federal action before taking that action." *Mid States Coalition for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 533 (8th Cir.2003). Discussed below are several potentially damaging effects of the Corps' LPP, which seriously call into question the thoroughness of the Corps' SDEIS.

The Tentatively Selected Plan will result in greater ecological impacts than both the FCP and the NED plan. More tributaries and hundreds more acres of wetlands, forests, aquatic riverine, and fish tributaries and passages will be affected by the Tentatively Selected Plan than the FCP. The Tentatively Selected Plan will have a greater impact on wildlife and fisheries than the FCP and the NED. Under the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the U.S. Fish and Wildlife Service (USFWS) is authorized to provide recommendations to the Corps on federally funded water development projects. For the reasons listed above, it is likely that the USFWS will recommend the FCP alternative rather than the Tentatively Selected Plan. As discussed herein, such a recommendation will be problematic for the Corps since the FCP is no longer a practicable alternative to achieve the ever-changing project purpose.

The Corps selected the Tentatively Selected Plan primarily because of political considerations. The primary impetus for the construction of the massive diversion channel and consolidated upstream storage area being proposed has come from the North Dakota congressional delegation and the City of Fargo. Because of lukewarm support for the project by Moorhead and other Minnesota political entities, North Dakota supporters pressured the Corps and the Assistant Secretary of the Army for Civil Works to accept the Tentatively Selected Plan – mind you they previously pressured the ASA-CW to approve a LPP that later proved to cause massive downstream damage. The result is that the SDEIS has identified a Tentatively Selected Plan that is the most ecologically harmful and the most expensive, the 36-mile North Dakota LPP. The

comparable costs (in billions) of the Tentatively Selected Plan, FCP, and NED are $1.7, $1.2 , and $1.4, respectively.

The DEIS states that upstream effects of the consolidated storage area on social resources could be significant, but it fails to adequately measure these impacts. The river's northward flow creates an increased possibility of ice downstream further impeding the flow of water through the diversion structure increasing the magnitude of upstream flooding in an area not normally prone to flooding except in the largest run-off events. The Tentatively Selected Plan exacerbates this problem by removing thousands of acres of floodplain associated with the diversion.

The SDEIS fails to give any concrete sedimentation data. The Corps' diversion channel will substantially affect sedimentation in the Red River and other connected tributaries. Sedimentation is a major problem in many rivers and lakes, which can cause a reduction in storage capacity that can lead to flooding. A build up of sediment can also lead to many aquatic changes that could have negative impacts on aquatic life. As a result, fish may begin avoiding areas of heavy sedimentation, ultimately changing their migratory patterns, wintering grounds, nursery areas, or spawning habitat. Valuable fish spawning areas could be covered in silt, and the sediment increase could lead to adult and juvenile fish mortality if their gills become filled with sediment. Fish foraging success will decline, which could also lead to mortality, especially in younger fish, and adult fish could be kept from spawning due to malnutrition.

Therefore, sedimentation impacts and sedimentation mitigation costs must be, but were not included in the SDEIS. The diversion channel will affect more than 200 acres of wetlands. The Corps has suggested that any wetland taken away or adversely affected by the diversion channel will be replaced with new wetlands within the diversion channel in a low flow channel. The SDEIS describes the low flow channel as "a channel that is typically in the center of a larger channel which is sized to handle small flows from drains, ditches or groundwater." It will be approximately 10 feet wide and 3 feet deep. A strip of wetlands 10 feet wide does not provide the security and benefits that larger blocks of wetlands provide. The SDEIS does not address how these wetlands will be comparable to the previously existing wetlands that were affected by the diversion and does not describe the diversion channel wetlands' functions for surrounding wildlife. In addition, many problems can arise with a low flow channel. The channel will need frequent maintenance and modifications to ensure that it is effective, and it can be very easily damaged in severe situations such as flooding or drought. Wetlands near the five North Dakota tributaries intercepted by the diversion channel will not receive the same

recharge from overland flooding that they have received in the past. The SDEIS does not address these impacts or their mitigation. The SDEIS must include projected mitigation costs for additional wetlands that will be impaired such as those near the five North Dakota tributaries. The Corps must also include in its SDEIS exactly what function the low flow channel will serve and how it is guaranteed to adequately compensate for existing wetlands adversely affected by the diversion channel.

The diversion contemplated in the Tentatively Selected Plan will cross five tributaries: Wild Rice River, Sheyenne River, Maple River, Lower Rush River, and Rush River. In addition, the SDEIS states that "[t]he channels of the Lower Rush and Rush Rivers between the diversion channel and downstream to their confluences with the Sheyenne River will be abandoned . . . Nesting birds, mammals, and mussel species could be displaced or killed during the project's construction, and nesting birds' eggs could be abandoned or crushed. Construction and excavation within the riverine aquatic habitats could kill adult or juvenile fish," and some fish mortality is unavoidable. The additional sediment load, deposition, and accumulation into the Red River could alter aquatic and riverine habitat.

The SDEIS indicates that fish could use the diversion channel, but the diversion channel will not contain any meaningful fisheries. The SDEIS continues on to state that fish ending up in the diversion channel without their natural habitat will not be a significant issue during the operation of the diversion channel. Fish caught in the diversion channel during flooding, however, will be forced to use concrete fish ramps for passage. It is not known at this point whether certain sensitive fish species, such as the Lake Sturgeon, will be successful at using artificial passages. The DEIS also does not address how changing the velocity of water within the diversion might affect certain fish species. The velocity of the water within the diversion and downstream of the diversion could be too strong and prevent certain species and juvenile fish from traveling upstream.

The diversion channel will create numerous problems for multiple tributaries and wildlife and aquatic species. The final EIS must address the negative impacts to all tributaries and the specific adversities facing wildlife and aquatic life. A plan to mitigate these adversities must be identified and mitigation costs must be included in the final EIS.

Failure to adequately consider impacts to prime and unique farmland:

It is a requirement under the Farmland Policy Protection Act (FPPA) that projects with impacts to agricultural lands be reviewed to determine their impact on agricultural lands and that an assessment be completed related to those impacts. The assessment is documented by the USDA using a form AD 1006 "Farmland Conversion Impact Rating". Instructions for the form indicate the inclusion of indirectly converted farmland. Indirect conversion includes "acres not directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them." For the Tentatively Selected Plan, the USDA did not include converted farmland in the staging area upstream of the diversion structure and tie-back levees. Rather, the USDA only included farmland directly converted by the diversion channel, levees and structures associated with the Tentatively Selected Plan. The modeling data in the SDEIS demonstrates that thousands of acres of prime and unique farmland will be inundated upstream of the diversion structure in relatively small storm-flow events. The duration or long term impact of inundation is not calculated but will, in all scenarios, prevent access to farmland for production, destroy growing crops and prevent harvest of mature crops. Additional analysis is necessary to determine and document actual indirect impacts to farmland as required by the FPPA. (see Appendix F to SDEIS, p. F-42-73)

The Tentatively Selected Plan violates the directive of Executive Order 11988:

As proposed, the Tentatively Selected Plan violates Executive Order 11988. Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to **avoid direct and indirect support of floodplain development wherever there is a practicable alternative**. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions: acquiring, managing, and disposing of federal lands and facilities; providing federally-undertaken, financed, or assisted construction and improvements; and conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

The guidelines address an eight-step process that agencies should carry out as part of their decision-making on projects that have potential impacts to or within the floodplain. The eight steps, which are summarized below, reflect the decision-making process required in Section 2(a) of the Order.

1. Determine if a proposed action is in the base floodplain (that area which has a one percent or greater chance of flooding in any given year).
2. Conduct early public review, including public notice.
3. Identify and evaluate practicable alternatives to locating in the base floodplain, including alterative sites outside of the floodplain.
4. Identify impacts of the proposed action.
5. If impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate.
6. Reevaluate alternatives.
7. Present the findings and a public explanation.
8. Implement the action.

Among a number of things, the Interagency Task Force on Floodplain Management clarified the EO with respect to development in flood plains, emphasizing the requirement for agencies to select alternative sites for projects outside the flood plains, if practicable, and to develop measures to mitigate unavoidable impacts.

With regarding to the Tentatively Selected Plan, the City of Fargo has made clear its desire and intent to open additional areas of the flood plain to development. This is one reason why management of flooding from the five North Dakota tributaries has become so important in rushing the Tentatively Selected Plan to decision. During re-scoping from November 2010 through March 2011, Fargo specifically requested the diversion channel alignment be moved further west. The request was made with the expressed intent of providing additional protection to lands in the current flood plain for future development. While the request was rejected, the current design supports the same intent. The current design eliminates thousands of acres from the flood plain. The diversion channel includes 15 foot, elevated spoil banks designed to serve as flood levees. (See SDEIS figures 15 and 29 and §3.5.3.3)

Several practicable alternatives to this design exist that would prevent federal support to future flood plain development. These same practicable alternatives would increase the efficacy of distributed storage and/or reduce the requirement for the currently proposed consolidated storage area. For example, if the diversion channel were designed to take advantage of the additional, nature flood attenuation provided by the flood plain, rather than closing it behind spoil levees, less new storage would be required and a smaller diversion channel could be planned. Alternatively, moving the diversion structure further north would allow storage in naturally flood prone areas of the flood plain – again reducing the requirement for new storage. If combined with the distributed storage alternatives discussed herein, the consolidated storage component of the Tentatively Selected Plan, upstream of the diversion structure and tie-back

levees, could be eliminated. Elimination of the consolidated storage area would preserve four small communities and tens of thousands of acres of prime and unique farmland.

By all objective standards in the SDEIS, the Tentatively Selected Plan is the least effective, most expensive and most environmentally damaging alternative:

The comparison of alternative begins in section 3.8 of the SDEIS. The three alternatives considered in comparison were the FCP (a Minnesota diversion without storage); the ND35K (a North Dakota diversion without storage) and the Tentatively Selected Plan, or LPP. As discussed herein, it is questionable, based on prior analysis, that the FCP or the ND35K are practicable alternatives.

Under all evaluative criteria applied in the SDEIS, the Tentatively Selected Plan is less effective, more expensive and more environmentally damaging than the FCP or ND35K. For example, the LPP damages the most acres of aquatic habitat, directly impacts the most acres of wetland, takes the more area out of the flood plain than the FCP and impacts the most acres of prime and unique farmland. (SDEIS table 13). The Tentatively Selected Plan will cause significant social disruption to communities south of the diversion structure and tie-back levees – in the consolidated storage area. (SDEIS table 16.) In the 1% change flood, the Tentatively Selected Plan floods 54,721 acres of land south of the diversion structure and tie-back levees that is not otherwise subject to flooding in such an event (SDEIS figure 32). In the 1% chance flood, the Tentatively Selected Plan will require relocation of the communities of Oxbow, Hickson, Comstock and the Bakke Addition and the relocation or protection of 185 residences and 429 other structures. (SDEIS table 16, figure 39).

Though the Federal share of any project will be based either on the NED plan or FCP, the non-Federal costs will be paid by the local sponsors. With regard to the Tentatively Selected Plan, residents of the Fargo and Moorhead as well as the States of North Dakota and Minnesota will pay over $931 million. (Compare SDEIS tables 25 and 26). The Tentatively Selected Plan is the most expensive of those considered in the SDEIS. While cost not the determining factor in any project, where the most expensive plan is also the most damaging and least effective, it should be rejected.

Conclusion:

The U.S. Army Corps of Engineers is planning a 35,000 acre water storage area and a 36-mile-long diversion channel around Fargo that will cost North Dakota and the Federal government $1.7 billion to construct, with the Federal government's share limited to $782 million. The projected $1.7 billion cost does not include mitigation and long term maintenance expenses in the years after construction of the diversion channel has been completed. During this country's time of economic uncertainty, the Corps' project seems not only irrational and impractical, but also downright irresponsible when other, less expensive alternatives to restore wetlands and grasslands along with creating flood storage have proven to be effective and create more and further reaching benefits. The Corps' colossal and esthetically displeasing diversion channel will be not only a massive state and federal expenditure, but also an ecological nightmare with resounding affects for centuries. If cities and communities within the Red River Basin do not want to face even bigger and more expensive problems combined with wildlife habitat destruction and decline a decade from now, the Corps must seriously reconsider their Tentatively Selected Plan.

Much of the Red River Basin flooding and associated damage has been a direct result of encroachment into the floodplain and loss of natural storage. These losses of natural storage are best replicated and replaced through distributed storage measures. Poor and marginal farmland and drained areas not currently under production, along with some active and productive farmland can be used as temporary flood storage that would prevent dangerous flood levels. Grasslands and wetlands not only have remarkable abilities to store excess water runoff, but they are also attractive and provide much needed wildlife habitat in a region of the country that continues to have rapid human population increases. In its SDEIS, however, the Corps all but completely ignores these alternatives and certainly did no analysis to compare them to its Tentatively Selected Plan.

The absence of substantial and significant information regarding the environmental and other impacts of the Tentatively Selected Plan likewise renders the SDEIS inadequate on its face and requires that the Corps prepare an additional Supplemental DEIS to fully compare alternatives and to include all information on which the Corps based its decision to adopt the Tentatively Selected Plan. The Corps' failure to include critical impact information in the SDEIS violates NEPA and its own NEPA regulations, is arbitrary and capricious as well as unreasonable.

In recent case law, it is determined that "[w]hile the EIS need not be exhaustive, the existence of a viable but unexamined alternative renders an [EIS] inadequate." *Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999). There is no doubt that the Corps' SDEIS leaves many alternatives largely unexamined. We strongly urge the Corps to fully address and consider the use of distributed storage and non-structural techniques for flood control. It is irresponsible for the Corps not to consider more reasonable, but similarly effective solutions that do not have the long-term effects on the tributaries and streams of the Red River.

Sincerely,

/s/ John C. Kolb
John C. Kolb
JCK/cmt

cc: MnDak Upstream Coalition

June 20, 2011

VIA U.S. MAIL AND E-MAIL (aaron.m.snyder@usace.army.mil)

Mr. Aaron Snyder
Corps of Engineers Planner and Project Manager
180 E. Fifth Street East, Ste. 700
St. Paul, MN 55101–1638

Re: Comments on Supplemental Draft Feasibility Report and Environmental Impact Statement on the Fargo-Moorhead Metropolitan Area Flood Risk Management Project on the Red River of the North

Dear Mr. Snyder:

The National Wildlife Federation (NWF) has previously identified areas of the Draft Feasibility Report and Environmental Impact Statement (DEIS) that required further attention and consideration of more environmentally and community friendly alternatives.[1] In proceeding forward with additional comments, the NWF has identified problems with the Supplemental Draft Feasibility Report and Environmental Impact Statement (SDEIS) and the need for appropriate alternatives to the proposed project.

Controlling flooding in the Fargo-Moorhead area is important, but it should not be done without a basin-wide analysis of flood risk management and mitigating the harmful environmental impacts and increased threat of flooding to upstream and downstream communities. Furthermore, other structural and non-structural alternatives that provide environmental and economic benefits beyond flood management must be included in the proposed plan. Options for flood management must protect the local economies, air and water quality, the natural environment, and fish and wildlife resources.

[1] Ltr. from Tom France, Regional Executive Director, National Wildlife Federation, to Aaron Snyder, U.S. Army Corps of Engineers Planner and Project Manager, *Comments on Draft Feasibility Report and Environmental Impact Statement on the Fargo-Moorhead Metropolitan Area Flood Risk Management Project on the Red River of the North* (Aug. 9, 2009) (copy on file with Natl. Wildlife Fedn.).

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NWF cannot support moving forward with the U.S. Army Corps of Engineers' (Corps) preferred alternative in the SDEIS, a massive and unduly expensive diversion channel that will cause unacceptable environmental impacts and put upstream and downstream landscapes at additional flood risk. On behalf of the NWF, we offer the following comments to the SDEIS.

A. Introdnction

Human activities and alterations in, and around, the Red River Basin (RRB) have led to significant environmental changes throughout the watersheds, including the metropolitan areas of Fargo, North Dakota and Moorhead, Minnesota and their surrounding rural and agricultural communities. Fargo-Moorhead has always been threatened by flooding from the Red River of the North. In the last two decades, however, floods have become more frequent and more severe because thousands of wetlands throughout the RRB have been drained and converted into farmland. Prairie wetlands that once soaked up thousands of acre feet of water have been ditched and drained, increasing both the amount of spring melt water and the rate at which it enters the Red River. North Dakota and Minnesota have lost several hundred thousand acres of wetlands since the establishment of agricultural communities beginning in the 1800s, and North Dakota's wetlands continue to be drained at a rate of 20,000 acres per year.[2] Climate change has also led to earlier and more abundant springtime runoff into the RRB and will continue to do so for the unforeseeable future. As both flood peaks and floods have increased, so too has the cost of fighting floods. The communities of Fargo and Moorhead now spend more than $195 million annually for flood damages.

In response to the threat of more severe and more frequent flooding, the Corps has evaluated a limited number of engineering alternatives to reduce the threat of flooding in the Fargo-Moorhead area. Based on this evaluation, the Corps now proposes to build a 36-mile-long diversion channel around the Fargo-Moorhead area. The preferred diversion channel alternative will cover 9,382 acres, and will impact 137 acres of forest habitat, 226 acres either directly or indirectly of wetlands, and 39 acres of riverine aquatic habitat. The diversion channel will span between 100 and 300 feet in width. The projected cost of the diversion channel construction is $1.7 billion, although some believe this estimate understates the cost of the project. The Corps'

[2] Gary L. Pearson, *Draining the Great Marsh*, USA Today, November 1985: 83-89.

SDEIS fails to factor into its cost estimations the expense of potential downstream mitigation that may also be needed, as well as maintenance and operation costs in the future.

The National Wildlife Federation strongly opposes the Corps' proposed diversion channel, and disagrees with many assessments made in the DEIS and subsequent SDEIS. Not only will the project be a massive federal and state expenditure, but also does not even guarantee to solve the RRB's current catastrophic flooding problems. Furthermore, the diversion channel will offer no ecological benefits, and will almost certainly have large negative impacts on the region's fish and wildlife and their habitats.

B. The SDEIS failed to adequately evaluate reasonable non-structural and flood storage alternatives.

Without the Corps' study of the entire RRB, it would be impossible to fully and accurately evaluate non-structural alternatives at scale because the study did not identify an analysis of an area that was properly scaled. The study only included Fargo-Moorhead, and for that area only, the DEIS identifies several measures retained for possible inclusion as features of the alternative plans. Those measures include: non-structural measures, flood storage, and wetland and grassland restoration. The DEIS provides an extensive analysis of a non-structural measure contained in Appendix P, which illustrates a very invasive and tedious process of raising and flood-proofing individual homes at a significant cost. However, all other measures, including wetland restoration, grassland restoration, and flood storage are dismissed as stand-alone plans with less than a page of justification in the DEIS.

In Section 3.4.6.2 of the SDEIS, the Corps asserts that diversion plans provide larger and more reliable flood management. The Corps' assertions about the costs of upstream flood storage do not take into account the ecological benefits. The analysis the Corps made seems to be based on "financial investment" while completely ignoring other means of analyzing costs and benefits.

1. The Corps must evaluate other flow reduction strategies.

Similar to the EERC's Waffle, the Red River Basin Commission (RRBC) also created a strategy that would decrease flood levels in the RRB. They simulated 1997 flood conditions (9.25" of precipitation) and found that their storage areas could reduce flood levels in the Red

River up to 20% in some areas. They found that the most significant reduction was a 20% peak flow reduction and 20% volume reduction at White Rock, South Dakota. The study demonstrates that storage areas built in river basins are 80% effective, and if all of the tributary basins upstream of the Red River do their share in flood storage, effects on Red River flood reduction can be substantial.

There was no formal cost-benefit analysis done for this study. However, preliminary estimates showed that upstream storage competes very favorably with the Corps' diversion channel option because of the ratio based on the Fargo-Moorhead area damages alone. There would also be more widespread flood control benefits, in addition to a great potential for natural resource benefits under this program.

2. The Corps must evaluate an alternative that combines wetland and grassland restoration and other flow reduction strategies.

It is clear that the optimal strategy for minimizing flood risk, while also improving water quality and fish and wildlife habitat in the RRB, would involve a combination of wetland restoration and utilizing farm fields for temporary storage. The Corps, working with state fish and wildlife agencies and other federal agencies including the USFWS and the Natural Resources Conservation Service, should develop an alternative or alternatives that combine these approaches. The National Wildlife Federation urges the Corps to formulate an alternative that would include 500,000 acre-feet of storage through wetland and grassland restoration and an additional 500,000 acre-feet of storage through temporary storage utilizing farm fields.

In evaluating such an alternative, the Corps should consider the following costs and benefits:

- Flood control benefits
- Water quality benefits
- Fishery benefits
- Benefits to upland and migratory birds
- Recreational benefits, including increased hunting and fishing opportunities.

C. The SDEIS does not include basin-wide analysis for flood risk management

The analysis area needs to be basin-wide for a holistic look at flooding in the Red River of the North. A basin-wide analysis addresses the flood risk on a larger scale and has the

potential to alleviate flooding basin-wide rather than only eliminating flooding in the areas immediately around Fargo-Moorhead Metropolitan Area. A basin-wide analysis provides a full range for use of non-structural alternatives and increased environmental and economic benefits. For example, a basin-wide analysis may look at the impacts of wetland restoration, grassland restoration, and farm field storage which provides flood control, environmental benefits, and benefits for fish and wildlife resources, water quality, and local economies. Non-structural alternatives also protect upstream and downstream communities from the additional flooding caused by diversion channels and levees. As stated in the *Intent To Prepare a Supplemental Draft Environmental Impact Statement for a Proposed Flood Risk Management Project on the Red River of the North in Fargo, ND, and Moorhead, MN*, the Corps previously declined to expand the scope of the project for the preparation of the SDEIS.[3] For the flood management plan to be effective, the scope of the analysis area should be expanded to include the entire Red River of the North basin.

As seen in the effects of flooding on the Mississippi River, levees and channelization approach to flood protection is in sufficient and leads to the loss of lives and property. The breach of levees to save cities comes at the expense of ruining farms. Where the levees have been breached along the Mississippi River, academics call for restoring the lands to wetlands and keeping the levees down. The Red River of the North flood management plan must strategically identify areas where there is room for excess waters. The Red River of the North requires more room during high water periods. Diversion channels and levees can only handle a portion of the total water load and they have taught us that big structures to confine water are not the only solution for going forward.

In a letter dated June 22, 2009, NWF urged the Corps to look for a flood mitigation plan that would alleviate flooding basin-wide rather than just the areas of Fargo and Moorhead.[4] The limited study area of only Fargo-Moorhead does not allow the Corps to accurately evaluate the causes of increased flooding in the RRB or the full range of alternative remedies. The entire

[3] 75 Fed. Reg. 81249, 81249 (Dec. 27, 2010).

[4] Ltr. from Tom France, Regional Executive Director, National Wildlife Federation, to Terry J. Birkenstock, U.S. Army Corps of Engineers; Chief, Environmental and GIS Branch, *Scoping Comments on Proposed Flood Risk Management Project on the Red River of the North* (June 22, 2009) (copy on file with Natl. Wildlife Fedn.).

Flood Risk Management study has been flawed from the beginning because the RRB was not analyzed in its totality.

The Red River of the North has exceeded the National Weather Service flood stage of 18 feet in 48 of the past 109 years, and every year from 1993 through 2011.[5] The increased flooding over the past century has been a direct consequence of wetland loss in the interest of agricultural development. Studies have demonstrated that wetland drainage in the RRB has significantly increased both the timing and size of Red River floods and also that wetland drainage continues to affect thousands of acres annually. Wetland restoration throughout the RRB would help offset these destructive land use practices that are so costly in terms of water quality, wildlife and flood costs. Several studies have demonstrated the effectiveness and feasibility of restoring wetlands or using upland depressions to temporarily store water during a flood event. The restoration of wetlands can significantly reduce flood frequency and severity while also providing vital ecosystem benefits.

A possibility for wetland restoration lies in the Prairie Pothole Region's wetlands of the northern Great Plains, which span more than a 300,000-square-mile area. Almost since farming began in this region in the mid 1800's, wetland drainage has been employed to facilitate agricultural activities. According to the 1997 Minnesota Wetlands Conservation Plan, more than 95% of the native wetlands in the Minnesota portion of the RRB and upstream sub-basin have been lost. The cumulative impacts of this wetland drainage have been significant with more than 50% of the region's wetlands having been drained with more than 90% in some watershed basins. Wetlands in the Devils Lake basin of North Dakota have the potential to store approximately 72% of the total runoff volume from a 2-year frequency runoff event and 41% of a 100-year frequency runoff event.[6] Restoring drained and farmed wetlands could increase the water retention capacity in the Prairie Pothole Region of Minnesota "by up to 63%."[7] Furthermore, potholes are natural filters for nutrients such as sediments containing nitrogen and

[5] Corps of Engineers, *supra* n. 4 at 5.
[6] Robert A. Gleason & Brian A. Tangen, *Ecosystem Services Derived from Wetland Conservation Practices in the United States Prairie Pothole Region with an Emphasis on the U.S. Department of Agriculture Conservation Reserve and Wetlands Reserve Programs* ch. D: Floodwater Storage, http://pubs.usgs.gov/pp/1745/pdf/pp1745web.pdf (last accessed June 15, 2011).
[7] *Id.*

phosphorous, therefore, improving water quality.[8] We recommended to the Corps in our June 22, 2009 letter that they explore and analyze this reasonable and logical alternative, however, the Corps' DEIS and SDEIS failed to do so.

Grasslands or grazing lands span approximately 600 million acres of the United States. Grasslands have proven to be a major source of watershed filtration, ground water recharge, and carbon sequestration. Grasslands have excellent potential to markedly improve water and air quality.[9] Proper management of existing grasslands can enhance the land's ability to better reduce erosion and flooding by slowing and more evenly distributing surface waters. Grasslands also help the percolation of precipitation creating recharged groundwater aquifers. Conservation of grasslands can occur on private and public lands, and wildlife populations thrive with the availability of these habitats. Through cooperative efforts with agencies such as the Bureau of Land Management (BLM) and the Natural Resources Conservation Service (NRCS), private landowners can learn to maintain their property as grasslands in a manner that is most effective in preventing soil erosion and flooding in the Red River basin. Again, the Corps did not explore this economically feasible and ecologically friendly alternative in its SDEIS.

Based on this information, the Corps should enlarge its study area to include all upstream river basins above Fargo-Moorhead. As a result, the Corps will necessarily have to evaluate the impacts of flood crests, flood frequencies and flood severity of wetland drainage. It is only then that the Corps can adequately evaluate the benefits of wetland and grassland restoration in terms of reducing these flood impacts.

D. Wetland and grassland restoration, combined with flood storage, will have many positive impacts.

Wetlands and grasslands need to be further incorporated into the proposed flood storage concepts in order to have a successful and long-term flood protection plan. Wetlands and grasslands may serve as alternatives for upstream and downstream staging and storage of flood waters and as important components of the ecosystem. The loss of wetlands and grasslands has

[8] Rex R. Johnson, Fred T. Oslund & Dan R. Hertel, *The Past, Present and Future of Prairie Potholes in the United States*, J. of Soil and Water Conserv. 63(3), 86A. (May/June 2008).
[9] Grazing Land Conservation Initiative, *Strategic Plan 2010-2015* 16, http://www.glci.org/assets/StrategicPlan_WebVersion3.pdf (last accessed June 15, 2011).

contributed to the effects of flooding in the region due to the loss of drainage of the natural hydrology and natural vegetation.[10] Over ninety-five percent of wetlands have been drained in the region of the proposed diversion project.[11] It is not enough to merely offset the loss of naturally occurring wetlands with wetlands that will be created or exist at the bottom of the diversion channel.[12] Upland habitat that has been converted to cropland presents a loss as severe and impactful as the loss of the wetlands. Like wetlands, upland habitats serve as riparian corridors and are important to wildlife.[13] Permanent loss of upland habitat cannot be mitigated solely by the replanting of trees and native grasses.[14] While replanting trees and native grasses in disturbed areas is a step in the right direction, it does not go far enough to restore the functionality of the habitat.[15] The Army Corps of Engineers' claim that the diversion channel project would have a beneficial impact[16] to the upland habitat is unfounded.

1. Protects more than just two cities

The Corps' diversion channel will only provide significant flood protection for two major metropolitan areas, Fargo and Moorhead. All other downstream cities and communities will not receive the benefited flood protection, and will likely see more flooding due to increased water flow from the diversion channel. Should wetland and grassland restoration strategies be implemented along with flood-water-storage projects, not only will the Fargo-Moorhead Metropolitan Area see decreased flooding, but downstream cities and communities will also experience flood relief. Flooding is also likely to be decreased upstream from Fargo and Moorhead, which only adds to the overall benefit of wetland and grassland restoration and flood storage efforts. Programs such as RRBC's Flow Reduction Strategy and concepts created by numerous other agencies and organizations, including Wetland Reserve Program and USFWS, provide ample data and opportunity to implement wetland and grassland restoration and flood storage as viable alternatives for downstream flood prevention.

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[10] Corps of Engineers, *supra* n. 4 at 226.
[11] *Id.* at 338.
[12] *Id.*
[13] *Id.* at 339.
[14] *Id.*
[15] A complete discussion of habitat loss, mitigation needs, and adaptive management is discussed in Attachment 6. *Id.* at Attachment 6.
[16] *Id.* at 339.

2. Creates and enhances wildlife habitat and recreation, while also mitigating affects of climate change

Increasing wetland habitat will provide stability to migrating and nesting bird habitats, as well as numerous other species of wildlife. This in turn creates opportunities for hunting, fishing, bird watching, hiking and other recreation. Wetlands also play an important role in filtering polluted water and recharging the aquifer into both nearby ground and surface waters, greatly improving water quality. Grasslands further reduce the runoff of water and sediment, creating a more stable water level and providing an area to host a diverse community of native grasses, sedges, rushes and other submersed vegetation.[17]

Wetlands play at least two critical roles in mitigating the effects of climate change, "one in the management of greenhouse gasses (especially carbon dioxide) and the other in physically buffering climate change impacts."[18] Wetlands International, a global organization that works to sustain and restore wetlands, states that "inland wetlands in arid regions can play a very cost-effective role in attenuating the impacts of extreme weather events such as the impacts of extremes in precipitation and increases in evaporation due to higher temperatures."[19] Wetlands serve to recharge ground and surface waters, meaning that while they prevent flooding in wet times, they serve to replenish and retain adequate water supplies and stream flow during drier periods.

The benefits of wetland and grassland restoration are numerous. Wetlands and grasslands provide various ecosystem services to farmers and communities, recreational opportunities, global warming mitigation, and most importantly, flood control. One study concluded that, "wetlands on [USDA] program lands [in the PPR] have significant potential to intercept and store precipitation that otherwise might contribute to downstream flooding."[20] Additionally, the conversion of cultivated cropland to grassland cover as part of conservation

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[17] Johnson, Oslund &Hertel, *supra* n. 50 at 85A.
[18] The Ramsar Convention on Wetlands, *Wetlands and Climate Change* § 2.4, (1999).
[19] Moreno J. Garcia, *Cost-effectiveness of maintaining and restoring wetlands as an adaptation measure against climate change*, Wetlands International, http://www.indiaenvironmentportal.org.in/files/wetlands%20and%20climate%20change.pdf (last updated Apr. 14, 2010).
[20] Gleason & Tangen, *supra* n. 48.

programs results in a reduction in surface runoff and, ultimately, reduces the rate at which a basin refills and overflows.

3. Set precedence for other green flood control solutions

As human activity continues to escalate and their harmful affects become increasingly evident through climate change, environmentally friendly alternatives will only gain in popularity. The states of North Dakota and Minnesota have a unique opportunity to show the rest of the nation a more natural and cost effective method of flood control. The precedent could be set for more ecologically favorable flood mitigation efforts rather than more expensive, concrete and environmentally damaging solutions. There has already been an international trend to move toward nonstructural flood control methods, and it is in our nation's best interest to closely follow in the same direction.

E. The SDEIS fails to adequately address the negative consequences of the Red River diversion chanuel options.

Finally, the massive expense of the project, over $1.7 billion dollars,[21] cannot be justified without consideration of the ecosystem values being lost in "brick and mortar" proposals. There has been little analysis of the costs and impacts of the new reservoirs and storage facilities. Most importantly, wetland and grassland natural system restoration and maintenance needs to be a top priority for project officials. Without the presence of comprehensive restoration and maintenance provisions in the plan, the benefits of the wetland and grassland landscape will be lost.

1. Most damaging and expensive plan

The proposed Locally Preferred Plan (LPP) will result in greater negative impacts to environmental quality than the other options. For example, the LPP impacts more tributaries and roughly 180 more acres of wetlands than other options.[22] More grasslands, forests, aquatic riverine, fish tributaries and passages, and farmland will be affected by the LPP than the Federally Comparable Plan (FCP).[23] The LPP will also have a greater impact on wildlife and

[21] Corps of Engineers, *supra* n. 4 at 366.
[22] *Id.* at 88, Table 13.
[23] *Id.*

fisheries than the FCP.[24] Under the Fish and Wildlife Coordination Act,[25] the U.S. Fish and Wildlife Service (USFWS) is authorized to provide recommendations to the Corps on federally funded water development projects. For the reasons listed above, the USFWS has recommended the FCP alternative rather than the LPP.

The LPP is the most expensive of the three alternatives.[26] The Corps selected the LPP primarily because of political considerations. The primary impetus for the construction of the massive diversion channel being proposed has come from the North Dakota congressional delegation and the City of Fargo. Because of lukewarm support for the project by Moorhead and other Minnesota political entities, North Dakota supporters pressured the Corps and the Assistant Secretary for Civil Works to accept the LPP alternative. The result is that the SDEIS has identified a preferred alternative that is the most ecologically harmful and the most expensive, the 36-mile North Dakota LPP.

2. Changes in sediment distribution

The Corps' diversion channel will substantially affect sedimentation in the Red River and other connected tributaries. The SDEIS reported on sedimentation data and the results of the geomorphic study the Corps conducted after the release of the DEIS. Section 5.2.1.1 of the SDEIS discusses the geomorphology and the impacts of the proposed plan on the Red River of the North. With the proposed LPP, sixty miles of Red River habitat will be affected by the diversion structure as well as miles along the adjoining rivers and creeks.[27] Upstream geomorphic conditions, downstream sediment flow, and existing river routes will all be affected by the LPP.[28] Detrimental changes in channel length, slope, shape, stability, and bank stability are all expected as a result of the project.[29]

Sedimentation is a major problem in many rivers and lakes, which can cause a reduction in storage capacity which can lead to flooding. A build up of sediment can also lead to many aquatic changes that could have negative impacts on aquatic life. As a result, fish may begin

[24] *Id.*
[25] 16 U.S.C. 661 et seq.
[26] Corps of Engineers, *supra* n. 4 at 84, Table 11.
[27] *Id.* at 192.
[28] *Id.*
[29] *Id.* at 192-194.

avoiding areas of heavy sedimentation, ultimately changing their migratory patterns, wintering grounds, nursery areas, or spawning habitat. Valuable fish spawning areas could be covered in silt, and the sediment increase could lead to adult and juvenile fish mortality if their gills become filled with sediment.[30] Fish foraging success will decline, which could also lead to mortality, especially in younger fish, and adult fish could be kept from spawning due to malnutrition. Therefore, sedimentation impacts and sedimentation mitigation costs must be included in the final EIS.

3. Destruction of wetlands

The diversion channel will affect nearly 1,000 acres of wetlands throughout the construction process.[31] The Corps has suggested that any wetland taken away or adversely affected by the diversion channel will be replaced with new wetlands within the diversion channel in a low flow channel.[32] The SDEIS describes the low flow channel as "a channel that is typically in the center of a larger channel which is sized to handle small flows from drains, ditches or groundwater."[33] It will be approximately 10 feet wide and 3 feet deep.[34]

The National Wildlife Federation challenges the feasibility of the Corps' solution of simply "replacing" wetlands by simulating wetland conditions on the bottom of the diversion channel in a low flow channel and a "prairie swale buffer up the side of the channel."[35] A strip of wetlands 10 feet wide does not provide the security and benefits that larger blocks of wetlands provide. The SDEIS does not address how these "mitigated" wetlands will be comparable to the previously existing wetlands that were affected by the diversion and does not describe the diversion channel wetlands' functions for surrounding wildlife. In addition, many problems can arise with a low flow channel. The channel will need frequent maintenance and modifications to ensure that it is effective, and it can be very easily damaged in severe situations such as flooding or drought.

[30] Gleason & Tangen, *supra* n. 48.
[31] Corps of Engineers, *supra* n. 4 at 229, Table 45.
[32] *Id.* at 228.
[33] *Id.*
[34] *Id.*
[35] *Id.*

Section 5.2.1.5.3 of the SDEIS discusses the direct and indirect causes of wetland loss and change in wetland function.[36] However, there is nothing further discussing how those negative impacts will be mitigated and what mitigation efforts will cost. The final EIS must include projected mitigation costs for additional wetlands that might be impaired such as those near the Lower Rush and Rush rivers. The Corps must also include in its final EIS exactly what function the low flow channel will serve and how it is guaranteed to adequately compensate for existing wetlands adversely affected by the diversion channel.

4. Diversion will affect multiple tributaries and harm fisheries resources, aquatic habitats, and wildlife

The LPP would cross five tributaries: Wild Rice River, Sheyenne River, Maple River, Lower Rush River, and Rush River resulting in channel abandonment, loss of habitat, and changes to habitat.[37] Additionally, the proposed project plan creates a problem with aquatic habitat connectivity and fish stranding in the diversion channel and the floodplain.[38] Construction and excavation within the riverine aquatic habitats could kill adult or juvenile fish and some fish mortality is unavoidable, but the extreme conditions and rapidly fluctuating water levels created by the LPP would be frequent and drastic enough to impact fish populations.[39] The USFWS also states that the additional sediment load, deposition, and accumulation into the Red River could alter aquatic and riverine habitat.

The SDEIS indicates that fish could use the diversion channel, but the diversion channel will not contain any meaningful fisheries.[40] The SDEIS continues on to state that fish ending up in the diversion channel without their natural habitat will not be a significant issue during the operation of the diversion channel.[41] Fish caught in the diversion channel during flooding, however, will be forced to use concrete fish ramps for passage.[42] It is not known at this point whether certain sensitive fish species, such as the Lake Sturgeon, will be successful at using artificial passages. The SDEIS does not address how changing the velocity of water within the

[36] *Id.* at 233-234.
[37] *Id.* at 245-246.
[38] *Id.* at 254-259.
[39] *Id.* at 256.
[40] *Id.* at 254.
[41] *Id.* at 255.
[42] *Id.* at 256.

diversion might affect certain fish species. The velocity of the water within the diversion and downstream of the diversion could be too strong and prevent certain species and juvenile fish from traveling upstream.

The diversion channel will create numerous problems for multiple tributaries and wildlife and aquatic species. The final EIS must address the negative impacts to all tributaries and the specific adversities facing wildlife and aquatic life. A plan to mitigate these adversities must be identified and mitigation costs must be included in the final EIS.

Conclusion

The SDEIS suggests that the Locally Preferred Plan, the North Dakota Diversion with storage and staging, be authorized for implementation as the federal project.[43] As the project currently stands, it should not be implemented as a federal project due to its shortcomings in addressing the actual impacts of creating the thirty-six mile diversion channel. The projected $1.7 billion cost does not even include mitigation and maintenance expenses in the years after construction of the diversion channel has been completed. The Corps's proposed plan fails to develop a basin-wide approach to flood control. The magnitude of this project emphasizes the need for wetland and grassland restoration.

The currently proposed project does not include sufficient non-structural alternatives and natural solutions to flooding. Wetlands and grasslands must be identified as primary alternatives to the proposed project. Furthermore, the importance of these habitats and benefits to the ecosystem must be recognized and featured in the proposed plan.

During this country's time of economic uncertainty, the Corps' project seems not only irrational and impractical, but also downright irresponsible when other green options to restore wetlands and grasslands along with creating flood storage have proven to be just as effective and a far less expensive means of flood mitigation. The Corps' colossal and esthetically displeasing diversion channel will be not only a massive state and federal expenditure, but also an ecological nightmare with resounding affects for centuries. If cities and communities within the Red River Basin do not want to face even bigger and more expensive problems combined with wildlife

[43] *Id.* at 366.

habitat destruction and decline a decade from now, the Corps must seriously reconsider their chosen diversion channel alternative.

Much of the Red River Basin flooding has been a direct result of wetland and grassland elimination during the past century for the sake of agricultural development. However, even though agricultural land is largely to blame for the present-day flooding predicament, it can now be used as temporary flood storage that would prevent dangerous flood levels. Grasslands and wetlands not only have remarkable abilities to store excess water runoff, but they are also attractive and provide much needed wildlife habitat in a region of the country that continues to have rapid human population increases. In its SDEIS, however, the Corps all but completely ignores these environmentally friendly alternatives.

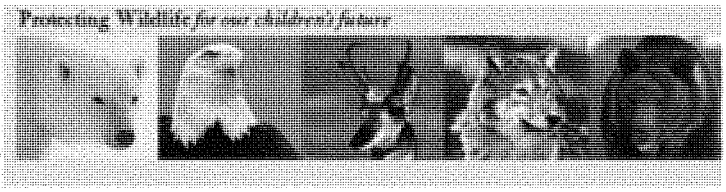
In recent case law, it is determined that "[w]hile the EIS need not be exhaustive, the existence of a viable but unexamined alternative renders an [EIS] inadequate."[44] There is no doubt that the Corps' SDEIS leaves many alternatives largely unexamined. We strongly urge the Corps to fully address and consider the use of non-structural techniques for flood control. It is irresponsible for the Corps not to consider more reasonable, but similarly effective solutions that do not have the long-term effects on the tributaries and streams of the Red River.

The National Wildlife Federation sincerely thanks you for considering these comments on the Supplemental Draft Feasibility Report and Environmental Impact Statement on the Fargo-Moorhead Metropolitan Area Flood Risk Management Project on the Red River of the North. Please do not hesitate to contact us if you have questions or would like additional information.

Thomas France

Thomas France, Regional Executive Director
National Wildlife Federation

[44] *Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999).



May 31, 2011

Mr. Aaron Snyder
Corps of Engineers Planner and Project Manager
180 E. Fifth Street East, Ste. 700
St. Paul, MN 55101–1638

Dear Mr. Snyder:

On behalf of the National Wildlife Federation (NWF), I would like to officially request an extension of the 45-day public review and comment period for the Supplemental Draft Feasibility Report and Environmental Impact Statement (SDEIS) of the Fargo-Moorhead Metropolitan Area Flood Risk Management Project. NWF has been intensely involved with this issue since the U.S. Army Corps of Engineers (USACE) started their scoping process. NWF is deeply committed to ensuring a positive outcome for fish and wildlife species in the Red River basin.

The SDEIS warrants an extension of the public review and comment period due to the length and complexity of the document and proposed project. An extension is necessary in order to formulate meaningful and scientific comments from stakeholders, farmers, citizens, and conservationists. NWF requests 30 additional days for the public review and comment period.

With costs estimated at over $1.7 billion, all alternatives and publics comments should be fully researched and exhausted before the USACE reaches a final decision. In this economy, haphazard spending for a diversion project is unwarranted and irresponsible management of economic and ecological resources.

Thank you for considering our request.

Best regards,

Tom France

Tom France, Regional Executive Director

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June 20, 2011

Via Hand Delivery, U.S. Mail and Electronic Mail

Aaron M. Snyder
Project Manager
U.S. Army Corps of Engineers, St. Paul Division
180 East 5th Street, Suite 700
St. Paul, MN 55101-1678

Re: Comments on Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement – April 2011

Dear Mr. Snyder:

On behalf of Red River Flood Control Impact Group, Lindquist & Vennum PLLP submits the following comments to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement dated as of April 2011 ("SEIS") prepared by St. Paul District, U.S. Army Corps of Engineers ("Corps"). These comments are furnished pursuant to (i) the Corps' "Notice of Intent to Prepare a Supplemental Draft Environmental Impact Statement for a Proposed Flood Risk Management Project on the Red River of the North in Fargo, ND & Moorhead, MN" dated December 15, 2010, and published in the *Federal Register* Volume 75, Number 247, on December 27, 2010, as required by regulations of the President's Council on Environmental Quality ("CEQ") at 40 CFR 1503 et seq. and Corps regulations at 33 CFR 230.19 et seq.; and (ii) the Environmental Protection Agency's Notice of Availability for public review, EIS No. 20110138, Draft Supplement, USACE, 00, Fargo-Moorhead Metropolitan Area Flood Risk Management, dated May 3, 2011, and published in the *Federal Register* Volume 76, Number 88, on May 6, 2011.

Very truly yours,

LINDQUIST & VENNUM PLLP

Julie M. Duckstad

Jonathan P. Scoll

JPS/lng

Enclosure

DOCS-#3472200-v1

COMMENTS OF

RED RIVER FLOOD CONTROL IMPACT GROUP

on

U.S. Army Corps of Engineers

Fargo-Moorhead Metropolitan Area
Flood Risk Management
Supplemental Draft Feasibility Report and Environmental Impact Statement
dated as of April, 2011

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June 20, 2011 VIA COURIER & U.S. MAIL

Aaron M. Snyder
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St. Paul, MN 55101-1678

Re: Comments on Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement – April 2011

Dear Mr. Snyder:

On behalf of the Red River Flood Control Impact Group ("RRFCIG"), Lindquist & Vennum PLLP submits the following comments to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement dated as of April, 2011 ("SEIS") prepared by St. Paul District, U.S. Army Corps of Engineers ("Corps"), pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 et seq. ("NEPA"). These comments are furnished pursuant to (i) the Corps' "Notice of Intent to Prepare a Supplemental Draft Environmental Impact Statement for a Proposed Flood Risk Management Project on the Red River of the North in Fargo, ND & Moorhead, MN" dated December 15, 2010, and published in the *Federal Register* Volume 75, Number 247, on December 27, 2010, as required by regulations of the President's Council on Environmental Quality ("CEQ") at 40 CFR §§ 1503 et seq. and Corps regulations at 33 CFR §§ 230.19 et seq., and (ii) the Environmental Protection Agency's Notice of Availability for public review, EIS No. 20110138, Draft Supplement, USACE, 00, Fargo-Moorhead Metropolitan Area Flood Risk Management, dated May 3, 2011, and published in the *Federal Register* Volume 76, Number 88, on May 6, 2011.

The RRFCIG is a coalition of the following public entities in Minnesota and North Dakota pursuant to a Joint Powers Agreement: City of Hendrum, MN; City of Perley, MN; City of Halstad, MN; City of Shelly, MN; City of Drayton, ND; Norman County, MN; Walsh County, ND; and Halstad Township, MN.

The City of Hendrum, which is part of the RRFCIG, submitted comments ("2010 Hendrum Comments") to the Corps on August 9, 2010 on the Fargo-Moorhead Metropolitan Area Flood Risk Management Draft Feasibility Report and Environmental Impact Statement dated as of May, 2010 ("2010 DEIS") prepared by St. Paul District. In its 2010 Comments, the City of Hendrum noted, among other inadequacies, the failure of the Corps to provide critical technical

information in the 2010 DEIS, and to adequately consider a reasonable range of alternatives to, and all environmental effects of, the Preferred Alternative in the 2010 DEIS.

To the extent the 2010 Hendrum Comments are consistent herewith, they are deemed restated by this letter and incorporated herein. Specifically, the portions of the 2010 Hendrum Comments dealing with the adequacy of the Corps' analysis of alternatives under NEPA, as well as the Appendices to the 2010 Hendrum Comments containing engineering study data, while omitted from this letter for the sake of brevity, are incorporated herein without attachment.

Since the Corps has failed to sufficiently describe the Preferred Alternative, and re-evaluate alternatives commensurate with the Proposed Action, among other inadequacies in the SEIS, the RRFCIG respectfully requests that the existing SEIS be supplemented to address issues raised in these comments, and, once complete, provide a notice and comment period for the supplemented information.

1. In General.

While the Preferred Alternative, termed the "North Dakota diversion with upstream staging and storage," SEIS Section 3.7.2, as set forth in the SEIS, represents a commendable design advance over the earlier (2010) Preferred Alternative, its presentation in the SEIS once again fails to meet the letter and spirit of NEPA "to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 CFR §1500.1. In summary, it is incompletely described, its impacts are not fully discussed, and the alternatives against which it is compared are not comparable to it in nature and scope.

"[A] complete formal impact statement [under NEPA] represents an *accessible* means for opening up the agency decision-making process and subjecting it to critical evaluation by those outside the agency, including the public." *Environmental Defense Fund, Inc. v. Froehlke*, 473 F. 2d 346 (8th Cir., 1972). The SEIS lacks critical information, study data, and analysis of such data, bearing on the Preferred Alternative and on comparable alternatives. Its key conclusions lack foundation, making critical evaluation of the Corps' decision-making process in the selection of the Preferred Alternative impossible.

2. Although presented as a "supplement" to its original (2010) design, the modified design incorporates radically new features constituting it in effect an entirely new project, requiring a new NEPA alternatives analysis.

The Corps' September 2010 downstream impact data revealed that a diversion-only project was unworkable. SEIS, Page ES-7. In response, the Corps in effect recast its design as new plan (called in this letter the "Hybrid Plan") that now combines a reduced-capacity channel (20,000 cfs) with 200,000 acre-feet of upstream staging and basin storage retention. The Hybrid Plan, as described in the SEIS and referred to therein as the "Locally Preferred Plan" or "LPP", is a more regionally-compatible solution to flooding, than the diversion-only plan, consistent with SEIS Study Objective No. 1, "to develop a regional system to reduce flood risk." SEIS, Section 1.2.

The Hybrid Plan is now the NEPA "Proposed Action" and, under NEPA, the Corps is required to describe it, and its environmental impacts, in adequate detail, as well as to re-evaluate a reasonable range of comparable alternatives to it. The Hybrid Plan incorporates, in the Corps own words, "significant design changes" from the 2010 diversion-only plan. SEIS, Section 3.7.2. As such, it must be approached and analyzed *de novo*, for NEPA purposes. See *Natural Resources Defense Council v. United States Forest Service*, 421 F.3d. 797 (9th Cir., 2005), in which the court required the agency, after the failure of its earlier key assumptions, to re-consider an adequate range of alternatives "in light of the correct interpretation of [its] data." The Corps' SEIS must reconsider an adequate range of alternatives reflecting the correct interpretation of its data and the Hybrid Plan itself, as discussed in more detail below.

3. The SEIS is deficient in that the LPP is inadequately described. No description is provided as to how the LPP would operate under flood conditions, or of the safety issues its flood water retention and staging components may pose, or of how these safety issues will be addressed in project design or operation.

The Hybrid Plan is a more sophisticated and operationally more complex proposal than the original ND 35K proposed in the 2010 DEIS. Instead of a single diversion channel, whose operation in a particular flood event would be dictated by flood flow at its upstream end, the Hybrid Plan has three components, an upstream flood staging area, an upstream temporary flood storage area, and the (downsized) diversion channel itself.

Other than the conclusory statement that "the diversion works would be operated not only based on peak flows but primarily based on total hydrograph volumes, in particular, those during the rising limb of the hydrograph," SEIS, Sections 3.7.2, 3.13.1, little or no detail is provided as to how, precisely, this complex system, on which the safety of both Fargo-Moorhead and downstream communities will depend, would actually be operated during floods. For example, it is not clear what sequence of measures would be followed in a given flood event, i.e., first, flood staging, second, basin storage, and third, opening of the diversion channel. Very likely, the Corps' designers know the answer; it simply hasn't been communicated. Instead, the Corps trivializes this operational complexity and postpones a description of actual operating detail pending the future issuance of an "operating manual:"

> The diversion channel alternatives require relatively minimal operations. Operations are necessary at the control structure on the Red River for the Minnesota plan. The North Dakota plan will require operations at the Red River control structure, Wild Rice control structure, and the Maple River tributary structure. The operations and maintenance of these structures and all project features will be dictated in the Operations and Maintenance manual that will be provided to the non-federal sponsors upon transfer of the project.

SEIS, Appendix O, Section 7.5.3.1; SEIS, Section 3.8.3.1. Identical language was used for the "passive" diversion-only alternative of 2010. 2010 DEIS, Section 3.7.3.1.

CEQ Regulations implementing NEPA require that an EIS "rigorously explore and objectively evaluate" all reasonable alternatives, including the one selected. 40 CFR § 1502.14(a). In this

case, the Corps has moved from a passive diversion channel to the active management of a potentially catastrophic volume of flood water, in the forms of a 50,000 acre-foot storage basin and a "staging area" in the form of a 150,000 acre-foot, temporary "lake," adjacent to the Fargo-Moorhead metro. The primary design feature of the staging area is an extensive "embankment" (the Corps' term) at the downstream end of the retention area immediately south of Fargo-Moorhead.

"Rigorous" exploration of the Hybrid Plan necessarily includes detail as to how it will operate when called on, and the potential risks – including failure risks – inherent in such operation. In regard to the latter, the SEIS notes, Section 3.10.3, that

> The [LPP] project will be designed using appropriate measures and factors of safety to ensure that the constructed system is robust and resilient. However, there will be a residual risk of a component failure or exceedance of the system's design capacity. * * * An overtopping or breach of a tie-back levee, storage area levee, or failure of a control structure in any of the alternatives could allow flood water into the protected area during any flood event in which the failure occurred. *The effects of such a failure could be catastrophic, depending on the magnitude and timing of the stage increases within the protected area* (emphasis added).

No detail is given in the SEIS of the nature of the "appropriate measures and factors of safety", which could assist the agency or reviewing public in understanding the risks involved. (The SEIS refers to technical engineering appendices, SEIS Section 3.13.2.) The SEIS hints at the very real potential danger inherent in storing 200,000 acre-feet of flood water immediately upstream of a metropolitan area. But, and as analyzed below, in the consideration of alternatives, nowhere does the Corps consider the possibility that additional upstream, e.g, distributed, storage might serve the useful purpose of adding to the project's margin of safety.

This is not to say the Hybrid Plan is a poor idea; rather the issue is one of communication to the policy-maker and the public of *the radical difference between the LPP of today compared to the LPP of 2010*, as to which, the Corps' 2010 DEIS had this to say about safety:

> History has shown that residents in the study area do not evacuate, preferring to stay and maintain the emergency flood barriers. * * * With a diversion project in place, the potential for loss of life [from floods] is expected to be significantly lower. An engineered permanent project would be far less likely to fail and would significantly reduce the frequency, duration and magnitude of flood events in the developed areas.

2010 DEIS, Section 3.7.2.5, repeated verbatim in Appendix O to SEIS, Section 7.5.2.5.

4. The SEIS is inadequate under NEPA because the "alternatives" considered by the Corps are not comparable, as within the "range and scope" of the LPP.

The Corps' 2011 Hybrid Plan implicitly (if not explicitly) recognizes, as the 2010 diversion-only plan did not, the interlocking functions of flood staging, storage and diversion, applied together as a flood control system. In this respect, it represents an engineering and policy advance over

the earlier Corps plan, as described in the 2010 DEIS. The Hybrid Plan appears from the SEIS to more adequately address downstream flood stage impacts while providing the same protection as its 2010 proposal to the Fargo-Moorhead area itself.

The staging and storage components of the Hybrid Plan were developed by the Corps to eliminate downstream impacts caused by the diversion. But it is sounder from both the common sense and engineering standpoints to view these components from the perspective of both the Fargo-Moorhead area itself and the region as a whole. For a given flood flow, the greater the capacity of upstream staging / storage, the smaller the diversion channel needed to safely carry off any excess. The smaller the flow carried in the diversion channel, in turn, the lesser the downstream impacts from such diversion. For the first time, and depending on how it is operated, the Corps' proposal offers the possibility of increased protection to the region downstream of Fargo-Moorhead.

Re-ordering the priority of the three components of the Corps' Hybrid Plan in this way puts the true NEPA alternatives analysis into sharper focus. It becomes clear that staging and retention alternatives are critical aspects of such analysis. Consideration of alternatives is "the heart of the environmental impact statement." 40 CFR Sec. 1502.14. "...[w]here changed circumstances affect the factors relevant to the development and evaluation of alternatives ... [the agency] must account for such change in the alternatives it considers." *Natural Resources Defense Council v. United States Forest Service*, 421 F.3d, 797 (9th Cir., 2005). A change in the Proposed Action will open for consideration new alternatives not previously available. "An agency must look at every reasonable alternative, *with the range dictated by the nature and scope of the proposed action*, and sufficient to permit a reasoned choice." *Idaho Conservation League vs. Mumma*, 956 F.2d 1508 (9th Cir, 1992). (emphasis added). In the current context, the need for the Corps to have considered in the SEIS a new range of alternatives to embrace combinations of storage/ retention and diversion, with greater weight on storage or retention, becomes apparent.

But the Corps has not moved beyond its obsolete 2010 analysis. SEIS Section 8.4.3.5 provides that "[f]lood storage combinations were considered *based on the alternatives developed in the Fargo-Moorhead and Upstream Feasibility Study* (FM Upstream Study)" (SEIS, Appendix O, Section 8.4.3.5) (emphasis added). The FM Upstream Study, relied on in the SEIS as in the 2010 DEIS, has never been published and – equally significantly – has never even been finished! And the final alternatives considered in detail in the SEIS are, as in 2010, and as noted in the 2010 Hendrum Comments, merely engineering design variations of the same diversion-only project. The Corps remains unwilling to accept the conclusions of its own hydrological study: protection of Fargo-Moorhead requires more than a diversion channel to avoid downstream impacts.

As discussed below, the Corps, in its feasibility screening ("Phase 4 Feasibility"), eliminates distributed basin storage as ineffective, and considers no form of such storage, whether on a standalone basis or as an adjunct to a Corps staging/ storage/ diversion project, as a NEPA alternative. Its opposition to distributed storage may stem, in part, from its own "big project" engineering culture. But it may also legitimately reflect the current status of such storage, as taking decades to accomplish at meaningful basin-wide scale. The current pace of storage development does not preclude the Corps' consideration, under NEPA, of the possibility of

distributed storage on a greatly accelerated timetable and scale, in the form of a unitary, federally-funded initiative. In the present instance, as is well known, U.S. Congressman Collin Peterson has advanced a proposal to do just that, as part of a U.S. Department of Agriculture authorization, to incrementally fund at large scale, over a time frame comparable to that required to implement to Hybrid Plan, the development of a such a basin-wide storage network.

Where, as here, a project's purpose and need engages a broad, regional problem, the agency has a duty under NEPA to go beyond its own jurisdictional boundaries and its own regulations in the formulation of reasonable alternatives, to set forth those which may require legislation, or implementation by other agencies, or both. *Natural Resources Defense Council, Inc. v. Morton*, 458 F.2d 827 (D.C. Cir., 1972). While the Corps may not be required to analyze the Collin Peterson proposal as such as a NEPA alternative, *Morton* dictates that the agency consider alternatives of comparable scale and nature. The Corps' own regulations follow *Morton*: "Alternative plans shall not be limited to those the Corps of Engineers could implement directly under current authorities. Plans that could be implemented under the authorities of other Federal agencies, State and local entities and non-government interest should also be considered." Planning Guidance Notebook ER 1105-2-100, Section 2-3.

5. The Corps' rejection of upstream storage alternatives is inadequate under NEPA as failing to set forth the scientific or technical foundation upon which such rejection is based.

Alternatives to the Hybrid Plan would be conceptually comparable in overall engineering approach.[1] In the SEIS Phase 4 Feasibility, the Corps sets out a number of "conclusions," which it describes as "pivotal," to its evaluation of flood storage and wetland/ grassland restoration as alternatives. SEIS, Appendix O, Section 8.4.3. These "conclusions" are unsupported by citation to study data or reports, by the Corps or by third parties (other than the incomplete, and unpublished, "Fargo-Moorhead and Upstream Feasibility Study", cited as authority in Section 8.4.3.5), as required by CEQ regulations at 40 CFR § 1502.24 (Methodology and scientific accuracy). This regulation requires that agencies

> [I]nsure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.

Absence of study data or citation to authority renders the Corps' conclusions impossible for a reviewer to evaluate. Examples of unsupported Corps statements in Appendix O, Section 8.4.3.5, include the following:

- "There are opportunities to implement flood storage and wetland/ grassland restoration basin. These measures could have substantial cumulative benefits basin- wide; however

[1] One such alternative (distributed basin storage) was the subject of an email sent by the Corps Planning Manager on June 3, 2011 titled "Metro Work Group Update #6 – Upstream Storage – Not the Silver Bullet" discussed further below.

they are relatively ineffective in reducing the significant problem of flooding in the F-M Metro area."

Comment: The Corps has failed to identify (i) what flood storage opportunities exist in the Red River basin-wide, (i) what their substantial cumulative benefits are; and (iii) how they are "ineffective" in reducing flooding.

- "The most cost effective and timely way to implement a storage system is in increments, creating small impoundments as opportunities arise."

  Comment: The exact opposite to this statement appears equally or even more logical: the most cost effective and timely way to implement basin level storage would be in conjunction with, or in tandem with, a Corps project, when attention and funding were concentrated on broad-scale, coordinated solutions.

- "Although flood storage and wetland/ grassland restoration measures provide environmental quality benefits and additional wildlife habitat, they would not be justified as an increment to the project, nor would have much ability to reduce flood damages in the project area."

  Comment: This statement is similar to the first example above, in that the Corps provides no information or data to support this statement to help a reviewer to understand the Corps' investigation and data so that the reason for its choice of a course of action are clear.

The Corps' unsupported "conclusions" contravene the requirement of NEPA and its implementing CEQ regulations, requiring an agency to "rigorously explore and objectively evaluate all reasonable alternatives ... and devote substantial treatment to each alternative considered in detail, including the proposed action, so that reviewers can may evaluate their comparative merits." 40 C.F.R. § 1502.14(a).

6. The Corps has impermissibly pre-determined a diversion channel to be its primary and favored approach to meet the project's purpose and need.

The SEIS continues to reflect the Corp's "diversion-centric" thinking. SEIS Appendix O, Section 8.4.2.1, for example, tellingly states that its earlier (2010) "selection of diversions as the only standalone alternatives [to be] considered [is] still valid, however * * * additional measures will be considered as incremental features to *improve the performance of the diversion channel alternatives* * * *." (emphasis added.) This bias permeates the entire Phase 4 Feasibility discussion in Part 8 of SEIS Appendix O.

The result of this focus is an inevitable de-emphasis of all non-diversion alternatives, both structural and non-structural, and an "all or nothing" approach whereby all alternatives are judged on their merits only as "standalone," (complete) solutions. Despite its stated willingness to evaluate "combination alternatives * * * on an incremental basis, with the goal of identifying measures that improve the performance of diversion alternatives [themselves] * * *," SEIS

Appendix O, Section 8.4.3, the Corps is unwilling to recognize, and seriously consider, combinations of flood control measures in which diversion does not occupy center stage.

7. The Corps' advancing a rationale for eliminating upstream storage in an email sent subsequent to the release of the SEIS for public comment, renders the alternatives analysis in the SEIS facially inadequate.

Several weeks after the SEIS was published for public comment, the Corps set out rationale for eliminating upstream storage as a "standalone" alternative to the project, a rationale that was not included in the SEIS or any Appendix.

The USACE Planning Manager for the project sent out an e-mail titled "Metro Work Group Update #6 - Upstream Storage - Not the Silver Bullet" reading in part as follows:

> "The staging and storage as part of the proposed project is effective storage. *The further you move the storage away from Fargo-Moorhead the less effective it becomes and the smaller the benefits.* To have an equal amount of effective storage further upstream, the total acre-feet required would be significantly more than what is needed with the proposed project, with estimates ranging from 400,000 to greater than 600,000 acre feet.
> * * *
>
> Several of the comments we received at [recent public] meetings indicated that people believed the 20-percent flow reduction plan that was analyzed by the Red River Basin Commission [RRBC] would solve many of the basin's problems and would be a basin wide solution. This is not the case. The plan for 20-percent flow reduction is based on the 1997 flood, which is a small flood event in the Fargo-Moorhead area and was only 28,000 cfs. The 20-percent reduction would provide some benefits for that event, but it would not solve the problem. The proposed diversion project is designed for flows in excess of 61,000 cfs. *To achieve the 20-percent reduction for a large flood event, such as 61,000 cfs, would require much more storage than is available upstream of Fargo-Moorhead.* Even if it was possible to construct enough upstream storage to reduce a 0.2-percent (500-yr) event by 20-percent, the resulting peak flow at the Fargo gage would exceed that seen in 2009 by more than 60-percent. The problem cannot be solved with storage upstream in the Red River basin." [Emphasis added.]

NEPA requires not only adequate analysis of alternatives, but that the analysis of such alternatives *be expressly set out in the body of the environmental impact statement itself.* CEQ regulations implementing NEPA set forth this requirement explicitly: 40 CFR 1502.14 requires, among other things, that the EIS

> "(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated..."

The e-mail above sets out the Corps' rationale for eliminating upstream storage as a "standalone" alternative to the project. The analysis belonged in the SEIS itself, not in an e-mail. As with the

Corps' 2010 DEIS, *the SEIS makes no reference to the RRBC 20 Percent Reduction Strategy nor to the supposed absence of sufficient upstream capacity.* For the first time, in this e-mail, the reader learns the Corps' logic in rejecting the RRBC approach.

The correctness or incorrectness of this logic is not the issue. Rather, the absence of any discussion of a critical study conclusion vitiates an EIS, as contrary to the "NEPA mandated discussion of alternatives *in the environmental impact statement itself*," *Grazing Fields Farm v. Goldschmidt*, 626 F.2d 1068, 1074 (1st Cir., 1980)(emphasis added).

8. The SEIS is deficient under NEPA in that it omits analysis of the probability that the LPP, once implemented, will effectively preclude further large-scale funding for flood protection to communities outside of the Fargo-Moorhead metro, and the effects such lack of funding may have on such communities.

CEQ regulations implementing NEPA at 40 CFR § 1508.8 define the "effects" which require discussion in the EIS:

> "Effects" include:
>
> > (a) Direct effects, which are caused by the action and occur at the same time and place.
> >
> > (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. *Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate*, and related effects on air and water and other natural systems, including ecosystems.
>
> Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, *economic*, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, *even if on balance the agency believes that the effect will be beneficial.* [Emphasis added.]

The LPP, as updated by the Hybrid Plan, represents an enormous commitment of public resources mostly benefitting the Fargo-Moorhead Metro Area only. It is not speculation to assume that once implemented, further political and policy motivation to provide large-scale funding for urban and agricultural communities outside the Fargo-Moorhead area will be sharply diminished.

An EIS is a policy document. It is supposed to consider all the effects that each alternative including, most importantly, the preferred alternative, entails. The funding ramifications of the LPP for non-Metro communities, both upstream and downstream, should be articulated in the SEIS. As noted in the 2010 Hendrum Comments, the potential of the LPP in this instance, as with the 2010 Corps proposal, as described in the 2010 DEIS, for adverse environmental, social

and economic effects to these unprotected communities and their resultant decline, should be discussed in the SEIS.

An EIS for a project of this nature and scale must do more than present an array of technical alternatives and designs. Consistent with the purpose of NEPA as a tool for informing public debate and sound decision-making, the SEIS should discuss the merits of the LPP as opposed to the merits of a broader, basin-wide flood protection alternative, in terms of the "effects" of each on both the urban and rural populations of the Red River Basin as a whole.

9. Conclusion.

The Corps' proposal to address flooding in Fargo-Moorhead has broad environmental, social and economic implications for Minnesota and North Dakota communities basin-wide. It is a major undertaking demanding thorough consideration. NEPA requires "information sufficient to permit a reasoned choice of alternatives so far as environmental aspects are concerned." *Morton, supra,* at 836. Such information must be a useful guide for both the agency and the public alike. Strict conformity to the letter and spirit of NEPA is essential for a project as consequential to such a large region and its inhabitants. The Corps has proposed a project for the benefit of Fargo-Moorhead which, by its nature, omits protection for those outside its boundaries. The Corps' NEPA discussion, in its SEIS, once again markedly fails to engage a solution which has ramifications for much wider flood protection: distributed flood storage. The Corps has fallen short of fulfilling its responsibility under NEPA.

The RRFCIG reserves the right to provide additional comments at such time as any further "update" information is provided by the Corps to the public for comment.

Respectfully Submitted

Lindquist & Vennum PLLP

Julie M. Duckstad

Jonathan P. Scoll

cc: The Hon. Curt Johannsen, Mayor, City of Hendrum, Minnesota
The Hon. Ann Manley, Mayor, City of Perley, MN
The Hon. Steve Sortland, Mayor, City of Halstad, MN
Jodi Neil, Shelly City Clerk, City of Shelly, MN
Chip Olson, Drayton City Council, City of Drayton, ND
Steve Jacobson, Norman County Commissioner
Luther Meberg, Walsh County Commissioner
Rod Olson, Halstad Township

DOCS-#3470176-v5

Diana Ista, Wild Rice Watershed District
Thomas Pursell
Howard Kenison

Resolution opposing the Red River Diversion
For the Members of the Bakke Homeowners Association

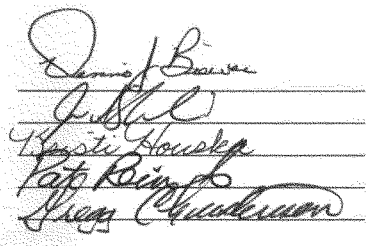
WHERAS, the United States Army Corps of Engineers (USACE) has proposed diverting floodwaters from the Red River around the cities of Fargo and Moorhead,

AND WHEREAS, the USACE has proposed constructing a dam as part of the diversion project that would require mitigation of all the homes in the Bakke Development,

NOW THEREFORE BE IT RESOLVED, that the Members of the Bakke Homeowners Association oppose the Red River Diversion project as currently proposed.

As of this date, June 20th, 2011

Dennis J. Biewer - President:
Jim Schlieman - Vice President:
Kristi Houska - Secretary/Treasurer:
Pat Reinke:
Gregg Christensen:



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ZACHARY E. PELHAM
zep@pearce-durick.com

June 15, 2011

Via FedEx

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron M. Snyder
180 E. 5th Street, Suite 700
St. Paul, MN 55101-1678

RE: Fargo Flood Diversion Project

Dear Mr. Snyder:

On behalf of Kindred School District #2 ("District"), the following comments are respectfully submitted to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement ("SDEIS"), dated April 2010, prepared by the U.S. Army Corps of Engineers ("USACE"). To be clear, the District supports plans to protect the metro area of the Red River Valley from flooding. The District, however, cannot support the locally preferred flood retention plan that is being recommended by USACE. To do so would cause the District severe financial hardships and extreme student population loss that would threaten the very purpose of the District. The District calls on USACE to re-evaluate its plans to uproot entire communities in North Dakota and to consider viable alternatives.

Extreme Adverse Economic Effect

Under USACE's recommended Locally Preferred Plan ("LPP"), the District will suffer. There are currently 125 students who live in communities that are likely to be bought out—about 20% of the District's student population. The District stands to lose about $475,000 in state student aid per year. As if that were not bad enough, the District stands to lose about 25% of its taxable valuation through proposed buy-outs of homes and businesses within the District—primarily Oxbow, Hickson/Bakke's Addition, and Pleasant Township. These proposed buy-outs will reduce the taxable valuations of the District by a total of $3,538,427 based on current valuations. Finally, the District's patrons approved in the Spring of 2010 a new $14,700,000 school to be funded through bond sales and increased mill levies. The District has serious concerns about its ability to burden the financial realities that now appear to be upon it as a result of USACE's recommended LPP.

The District's 398 square miles are within Cass, Richland, and Ransom Counties, just south of the Fargo metropolitan area. It serves the communities of Davenport, Hickson/Bakke Addition, Kindred, Leonard, Oxbow, and Walcott. 672 students were enrolled for the 2010-11 school year. Nearly 100 individuals, including 58 teachers, work for the District. It is the largest employer by far within the District.

The District estimates in order to cover predicted lost valuations as a result of proposed buy-outs, the District's mill rate for Sinking and Interest will have to increase from 70.56 mills to about 92 mills. The District currently levies 105 mills for the general fund and it could increase to as much as 135 mills if the LPP project goes forward. Even if the District wanted to increase the general fund mills to 135, state law sets a maximum of 110 mills. The District will have little choice but to potentially default on its obligations as a result of USACE's recommended LPP and associated buy-outs. Even if the District could increase its mills to these extreme levels, the citizens of the District should not be responsible to bear the burden of increased property taxes because of the unilateral decision making of USACE and its local sponsors. This is especially true of patrons residing in Richland and Ransom counties. The District, if this plan is adopted, will suffer extreme and long-term hardships.

The District needs mitigation if USACE's recommended LPP is approved. The District appreciates the leadership of its local state legislators who attempted to provide some mitigation to the District in the last legislative session. While this effort to attach an amendment to SB 2020 was unsuccessful, it is this type of action and leadership that the District expects and needs to receive from officials representing patrons within the District. The District also appreciated the March 30, 2011, letter from the Metro Flood Study Committee stating a willingness to support the District in mitigation efforts for excessive revenue losses. While appreciated, the District looks forward to a more definitive plan to adequately mitigate extreme revenue losses in the event USACE's recommended LPP project proceeds. The District needs a concrete mitigation plan from state, local, and federal leaders if the LPP project is approved.

As for USACE, it has conveniently washed its hands of this issue by concluding it has no obligation to do anything about the problem it is directly causing. The time has come for USACE and federal officials to realize that they cannot not sit back, cross their arms, and nod to local and state governments to provide the sole source of mitigation to the District as a result of this proposed federal, state, and local project.

Prudent Management, Stable Growth

The District did its homework before committing to build a new school. The District took the prudent course of retaining a consulting firm to analyze the District's needs and status in 2008. The consultants prepared an Organizational Analysis Study ("Study") for the District. The District was deemed a "financially well-managed educational organization." *See* Organizational Analysis Study, Dr. Kay T. Worner and Dr. Roger B. Worner, June 2008, Exhibit 1, p. 34. The taxable valuations for the District have grown every year since at least 2004. *See* Taxable

Valuations Spreadsheet, attached as Exhibit 2; *see also* Ex. 1, pp. 40-50. The Study concluded that the District has a stable student enrollment and would realize "substantial student enrollment growth over the course of the next two decades." Ex. 1, p. 17. A new facility was recommended because the District has experienced over-crowding at its facilities that were projected to continue. Ex. 1, p. 9. The Study further recommended that the District "begin—in earnest—preparing for the certain general population and student population growth which will substantially impact the organization's programs, services, staffing, and facilities." Ex. 1, pp. 25, 30. The patrons of the District prudently approved the funding of their new school based on detailed and competent information.

The District has "demonstrated prudent, conservative, sound fiscal management of taxpayer dollars entrusted to the organization." Ex. 1, p. 45. This fiscal discipline is now at risk, not by actions of the District, but by the actions of USACE. This taking of a large portion of the District's student population and tax base, without any compensation, cannot stand.

The Study noted that a District the size of Kindred has less "flexibility or capability of recovering from unanticipated down turns, unplanned events, or conditions that could jeopardize the organization's long-term survival . . . ." Ex. 1, p. 13. The Study was somewhat prophetic: "an enrollment drop of 100 students in two school districts—one with 5,000 students and the other 500 students—presents a problem of the same numerical magnitude . . . but one of dramatically different proportionate magnitude (2.0% versus 20% loss of students)." Ex. 1, p. 13. This scenario, from a Study prepared in June 2008, is exactly the scenario the District now faces as a result of USACE's decision to recommend the LPP. USACE will directly cause the District to experience a steep and long-term enrollment and taxable valuation decline. Now, at the bidding of complete strangers to the District, and without any formal participation in formulating a flood control plan, USACE is prepared to effectively gut a large portion of the District without providing the District anything in return.

USACE's brief, and only, reference concerning the District in the SDEIS is as follows: "plans for a new school in Kindred would be impacted in the short term due to a potential loss of tax base and diminished student body." SDEIS, § 5.2.3.1.7. The District has already committed to construct and finance the new school—these are not "plans." USACE proffers nothing to support its cursory conclusion that the District would only be impacted in the short term. The District's obligation to repay its obligations on the new school will continue for over a decade. It is unlikely the District will regain the level of taxable valuation it currently has in the "short term" as USACE's concludes. And, finally, a drop in student population caused by buy-outs would impact the District for decades. USACE has failed to adequately address the impact the recommended LPP will have on the District.

Federal Grant Funds Lost

If USACE's recommended LPP goes forward, USACE will cause the District to lose thousands of dollars in federal educational grants. Nearly $150,000 in federal funds in the form of Title I, Title IIA, and Perkins grants were provided to the District in 2010-11. It would seem that

USACE would have a responsibility to allow political subdivisions that receive federal funds to have formal input and decision-making authority before unilateral decisions are made by those with little connection to the areas that will be adversely affected. It would also seem USACE does not even consider federal educational grants provided directly to school districts that will be significantly harmed by its actions. USACE will directly cause the District to lose future federal educational grants by its action of reducing the student population of the District. USACE must compensate the District for this direct loss.

Locked Out

The District—along with local Townships (who independently maintain zoning control) and other cities in Cass and Richland Counties—were locked out of having any formal place at the table while USACE and local sponsors formulated and planned the flood protection plan. The District is so far off of USACE's radar screen that it is not even included on USACE's lengthy mailing list. The District and other local governmental entities must be given a formal voice by USACE.

The beneficiaries, the local sponsors of the recommended LPP project, made decisions diametrically opposed to the District. It is this local committee recommendation that USACE uses to support its recommendation of the LPP. It is true District officials have corresponded with local committee members informally, and have received written responses. The District appreciates the willingness of these local committee members to listen to its concerns. But the District should have been formally involved in the planning process and given a right to vote as an official committee member. Because the District was denied any formal right to be involved in the decision making processes, the District requests that it be given a formal role in this process. Further, the District requests that USACE strike reference in the SDEIS that the proposed plan was recommended by a "local" committee. The local committee was "local" only in the sense that those benefitting from the proposed flood protection plan were formally represented.

Local Funding Erroneous Information

USACE should be aware that the local Cass County funding apparatus that was recently approved by voters was based on erroneous information. Cass County Resolution #2010-26 authorized a ballot question to increase sales taxes. *See* Resolution, Exhibit 3. The Resolution is premised on the locally preferred option for flood control adopted by the Metro Flood Group at the time of the Resolution. The Resolution was adopted in August 2010; the locally preferred plan at that time was different from the current locally preferred plan. A county-wide vote took place in November 2010 on a ballot question based on Resolution #2010-26. At the time the vote occurred, the electorate understood that the proposed flood project would not impact upstream communities and would not severely impact downstream communities. One week after the county-wide vote, it was announced that the DEIS was defective because of miscalculations on the effect of downstream flow.

USACE is cautioned that the vote to approve local funding of the LPP was not presented to Cass County citizens properly. Indeed, it would seem that notions of fair play and justice, alone, should convince Cass County Commissioners to present to their constituents a measure that is fairly and adequately explained prior to voting on it. It is disingenuous for USACE to ignore the reality that the local Cass County funding mechanism for the proposed project was obtained based on incorrect information presented to an ill-informed electorate.

Finally, it is difficult to state how much local funding for USACE's recommended LPP will be required when USACE has not provided an updated cost analysis in the SDEIS. It would seem the costs will far exceed the $1.7 billion currently estimated.

Alternative Plans Disregarded

USACE definition of the project ignores the rest of the Red River Valley. The purpose of the SDEIS is only "to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." SDEIS, § 2.5. The National Environmental Policy Act requires USACE to cast a wider net—to include the upstream and downstream communities outside of the Fargo-Moorhead. The entire SDEIS is unduly narrow, fails to address cooperation between the metro and rural communities, and fails to adequately consider alternatives to the proposed LPP retention project.

While USACE gives lip service to the need for a "regional system to reduce flood risk," the SDEIS ignores the harm that will befall entire upstream communities within the District. SDEIS, § 1.2. USACE fails to comply with NEPA and CEQ regulations requiring it to adequately appraise and give in-depth analysis to alternatives and compare these alternatives. Specifically, a plan proposed by Minnesota Congressman Collin Peterson merits a long and hard look—as it would potentially save millions of taxpayer dollars and provide protection to upstream communities within the District. USACE responded to a direct question at the Kindred public meeting on May 24th that it "hasn't studied" this plan.

The Alternatives Screening Document included the "waffle plan." But the SDEIS does not even mention it. USACE should consider the "waffle plan" as an alternative, and possibly to be used in tandem with the recommended LPP. The elimination of the "waffle plan" was unreasonable, arbitrary, and capricious and violates NEPA and CEQ requirements.

"Minor" Controversy

USACE devoted less than one page of its nearly 500 page SDEIS report to controversies. SDEIS, § 5.3. In of itself, this shows that USACE does not take alternatives to the proposed project, or mitigation for the District, seriously. USACE seems to chalk the controversy up to a "not in my backyard" resistance to the LPP. This reasoning is inexcusable and insulting to the upstream communities within the District. The District stands to lose a large portion of its student population and taxable valuation. As a political subdivision that has to balance its budget, the District will potentially lose its ability to pay its bond indebtedness back on its new

school, will likely have to lay-off employees, and consider other extreme measures to account for USACE's recommended LPP project. To conclude that the "controversy" of USACE's project merits a one page discussion is further proof that USACE does not consider alternatives or community concerns from areas that actually will be impacted by the recommended LPP project.

Executive Order 11988 Doublespeak

USACE states that one goal of Executive Order 11988 is to "avoid direct or indirect support of floodplain development wherever there is a practicable alternative." If avoiding the floodplain altogether is not practicable, EO 11988 requires federal agencies to "minimize potential harm to or within the floodplain." SDEIS, § 3.7.3.6. What USACE should have said is it has determined the upstream communities are expendable and their interests are inexplicably less than other communities in the Red River basin according to EO 11988.

USACE uses EO 11988 as both a sword and a shield. On one hand USACE states that it cannot impact downstream communities because of EO 11988. On the other hand, USACE's position is it can effectively uproot entire upstream communities within the District because of EO 11988. Further proof of USACE's bizarre position on EO 11988 is its conclusion that moving the alignment of the diversion to the south would be incompatible with EO 11988. SDEIS, § 3.7.4. The District fails to comprehend how USACE can take diametrically opposed positions on this project and point to EO 11988 as justification for both positions at the same time.[1] It is in the name of EO 11988 that USACE justifies destruction of entire communities. And, at the same time, it is in the name of EO 11988 that USACE unilaterally determines to save entire communities. Such application is an egregious abuse of power by USACE.

County Road 17 Tieback

The District does not believe USACE has addressed the integrity of Cass County Highway 17—which will be incorporated into a tieback levee if the LPP is approved. USACE should address the costs and level of protection that this particular road will provide to the city of Kindred—where the District's facilities are primarily located. In questioning at public meetings, USACE has admitted it has not calculated any cost involved with this.

Conclusion

The District is opposed to USACE's recommended LPP diversion project. The preservation of the integrity of the District must be its priority. There are viable alternatives that USACE is either dismissing without proper analysis, or has ignored in the name of expediency and ease. In the event the recommended LPP proceeds, the District must receive mitigation in order to stay

[1] To be clear, the District does not advocate for a southern realignment of the recommended LPP. To do so would essentially push the problem USACE will potentially cause to other established communities. Unlike USACE, the District does not advocate intentionally flooding entire communities without critical analysis.

viable—both in an educational and financial sense. If the homes and businesses within the District are bought out because of USACE's recommended LPP, the District will likely default on its financial obligations for its new school and suffer long-term hardships as a direct result.

The District, and other upstream communities, are being unjustifiably and inexplicably sacrificed with absolutely no formal right to intervene. It is true, generally speaking, that all communities must sacrifice in this endeavor to attempt to prevent future flooding in the Red River Valley. But the communities of the District will receive absolutely no benefit from USACE's diversion project. As it stands, the District will receive no mitigation from the federal, state, or local governments. As a result, the District is left with no alternative but to fight the USACE and local sponsors on the recommended LPP project. The District urges USACE to reconsider its recommendation of the LPP.

Sincerely,

PEARCE & DURICK

JEROME C. KETTLESON

ZACHARY E. PELHAM

ZEP/ak

cc: Governor Jack Dalrymple
U.S. Senator Kent Conrad
U.S. Senator John Hoeven
U.S. Representative Rick Berg
State Representative Wesley Belter
State Senator Gary Lee
Mayor Dennis Walacker
Cass County Commissioner Darrell Vanyo
Cass County Commissioner Vern Bennett
Cass County Commissioner Robyn Sorum
Cass County Commissioner Ken Pawluk
Cass County Commissioner Scott Wagner

6-13-08

Exhibit 1

KINDRED SCHOOL DISTRICT

ORGANIZATIONAL ANALYSIS STUDY

Prepared for
Steven T. Hall
Superintendent of Schools
and
School Board
Kindred School District #2
Kindred, North Dakota

Dr. Kay T. Worner
Project Consultant
Roger Worner Associates, Inc.

Dr. Roger B. Worner
Project Consultant
Roger Worner Associates, Inc.

June, 2008

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CHAPTER I
DESIGN OF THE STUDY

1.0 Purpose of the Study

Superintendent of Schools Steven T. Hall and the School Board of Kindred School District #2 determined it was timely and necessary to commission the conduct of an **Organizational Analysis Study** to assess the status of the school enterprise and, further, to gather and analyze school district data, present findings, draw conclusions, identify alternatives, and prepare recommendations which would assist in short-term and long-term planning, enhance organizational cost/effectiveness, strengthen student marketshare, facilitate quality program and service delivery, improve teaching/learning environments, reduce future over-crowding of the school district's facilities, and strengthen communication with all sectors of the school district's communities.

The Superintendent of Schools served as the school district's key spokesperson, representative, and liaison throughout the course of the conduct of Kindred School District #2's **Organizational Analysis Study.**

The School Board and Superintendent of Schools selected Roger Worner Associates, Inc., Educational Systems' Consultants, Cedar, Minnesota to design and conduct the **Organizational Analysis Study** and serve as the school district's **independent third party neutrals** throughout the duration of the study. Dr. Roger Worner and Dr. Kay Worner of Roger Worner Associates, Inc. were engaged as the study's Project Consultants.

As designed by the Project Consultants, the **Organizational Analysis Study** focused on a comprehensive examination of the school district's enrollment and enrollment trends, finances, programs, services, staffing, and facilities.

The timetable of the **Organizational Analysis Study** spanned four and a one-half months, commencing on or about February 1, 2008 and concluding on or about June 15, 2008.

1.1 Need for the Study

Kindred School District #2 is a large critical student mass school district by State of North Dakota standards and is located in the greater Fargo-Moorhead metropolitan area and the Red River Valley growth corridor. The area has experienced continuous population and student enrollment growth over the course of the past three decades. That growth is projected to continue over the span of the next two—if not three—decades and will significantly impact Kindred School District #2's enrollment, staffing, programs, services, and facilities. The school district's facilities are already operating at (or slightly beyond) capacity and experiencing over-stressing.

The Project Consultants assessed that, as rural to urban migration continues to occur in North Dakota and the Red River Valley, there is every reason to believe that commercial and industrial development will occur in Kindred School District #2, resulting in growth in the school district's number of families and student enrollment.

The School Board and Superintendent of Kindred School District #2 believe it is a function of the organization's leadership to anticipate and plan for predictable change. As such, the primary need for the proposed **Organizational Analysis Study** is to examine the school district's current status—including strengths, needs, and priorities—to assist in preparing short-term and long-term goals and plans of action to strengthen the organization's effectiveness, efficiency, and cost/effectiveness.

The Project Consultants verified that additional needs justifying the Kindred School District #2 **Organizational Analysis Study** include the following:

- The school district has a need to provide programs, services, staffing, and facilities that are cost/effectively operated within the financial parameters of the school district's budget.

- The school district has a need to insure that programs, services, staffing, organizational configuration, methodologies, delivery systems, and facilities will be enhancing to the teaching/learning process in the future and increase the probability the organization will maintain or, more importantly, expand its marketshare of mobile families, parents, and students who choose to locate/reside in or open enroll into the school district and its communities.

- The school district has a need to provide programs and services within facilities that are philosophically and architecturally modern-day and meet Federal and State statutes and code for health, life safety, and accessibility.

- The school district has a need to provide quality programs, services, staffing, and facilities that will accommodate the short-term and long-term educational, extra-curricular, co-curricular, recreational, social, and support programs and services for the communities' pre-school, school-aged, and adult populations.

1.2 Methodology

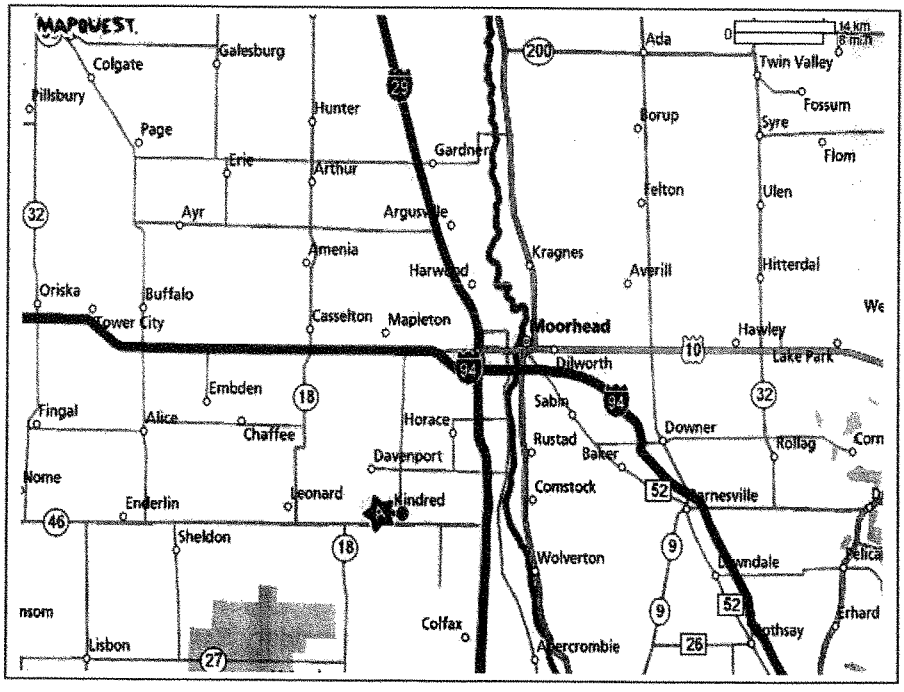
At the time of the design of the framework for Kindred School District #2's **Organizational Analysis Study,** the Project Consultants identified methodological procedures to address the purpose and needs of the study. Central components of the study's methodology were as follows:

- Interview the Superintendent of Schools.
- Interview members of the School Board.
- Interview key district-level administrators.
- Interview building Principals.
- Interview a (small) sampling of key community patrons.
- Interview key governmental officials.
- Analyze area demographic data/trends.
- Analyze current K-12 enrollment data.
- Analyze enrollment trend (past) data.
- Analyze projected enrollment data.
- Analyze open enrollment, non-resident agreement, parochial, and home school data.
- Analyze financial trend data.

- Analyze class size data.
- Analyze school schedules.
- Analyze programs and services.
- Analyze course offerings.
- Analyze community education programming.
- Analyze facility ages, square footages, and square footage/student.
- Analyze facility operating costs.
- Analyze condition/status of facilities.
- Analyze educational adequacy of facilities.
- Analyze bonded indebtedness.
- Analyze curriculum adoption/development processes.
- Analyze staff development process/focuses.
- Analyze achievement test data.
- Confer with the school district's public-finance-advisor.
- Confer with a construction management firm.
- Confer with the North Dakota Department of Public Instruction.
- Gather/analyze other data as may be warranted.
- Prepare the **Organizational Analysis Study** final document.
- Present the **Organizational Analysis Study**, conclusions, alternatives, and recommendations to the School Board and Superintendent.

1.3 Geographic Setting

Kindred School District #2 is a large critical student mass school enterprise by State of North Dakota standards. Located immediately south of the City of Fargo and in the Fargo-Moorhead metropolitan area "growth corridor," this school district encompasses 398 square miles of rich Red River Valley farmland. The property of Kindred School District is located largely in Cass and Richland Counties and, minimally, Ransom County.



Major population centers in Kindred School District #2 include Kindred (2000 census population of 614 residents), Leonard (255 residents), Oxbow (248 residents), Davenport (216 residents), Walcott (189 residents),

and Bakke addition (168 residents). The school district's total resident population (2000 census) was 3,491 residents.

Kindred School District #2 is contiguous to or in close proximity with seven North Dakota school districts. They are Richland School District (enrollment of 345 students); Wyndmere School District (242 students); Enderlin School District (305 students); Central Cass School District (825 students); Mapleton School District (67 students); West Fargo School District (5,901 students); and Fargo School District (10,646 students).

Significant businesses located in Kindred School District #2 include Kindred School District #2 (86 FTE employees); Braaten Cabinets (30 employees); Dakota Ag Co-op (Cenex) (30 employees); Dakota Hills Electric (20 employees); RDO Equipment (20 employees); Cass County Electric (16 employees); Oxbow Country Club (12 employees and 70 summer employees); and others.

The main headquarters of Kindred School District #2 is located in the City of Kindred at 55 1st Avenue South, Kindred, North Dakota 58051.

The School Board of Kindred School District #2 conducts its regular and special meetings in the Kindred Elementary/Secondary School facility at 55 1st Avenue South, Kindred, North Dakota.

1.4 Questions of the Study

At the initiation of the Kindred School District #2 **Organizational Analysis Study,** the Project Consultants identified critical questions to aid in

investigating the purpose of and needs for the study. Subsequently, the Project Consultants gathered and analyzed data which would permit the formulation of findings, conclusions, alternatives, and recommendations for review and consideration by the school district's School Board and Superintendent of Schools.

The specific questions prepared to guide the Project Consultants and furnish substantial content for the **Organizational Analysis Study** document were as follows:

- What is the current status of the school district, including its enrollment, enrollment trends, finances, programs, services, staffing, organizational configuration, facilities, and related issues?

- What conclusions may be drawn about the effectiveness, efficiency, and cost/effectiveness of the school district's operations?

- What alternatives are plausible for increasing the effectiveness, efficiency, and cost/effectiveness of the school district's operations?

- What recommendations do the Project Consultants suggest may be employed to increase the effectiveness, efficiency, and cost/effectiveness of the school district's operations?

1.5 Assumptions

The Project Consultants identified specific operating assumptions that would facilitate the qualitative conduct of the **Organizational Analysis**

Study for Kindred School District #2. Prior to actually gathering and analyzing comprehensive data, presenting findings, drawing conclusions, identifying alternatives, and tendering recommendations, the Project Consultants established the following operating assumptions:

- Kindred School District #2 is a large critical student mass school district—and will continue to be so—by State of North Dakota standards.

- Kindred School District #2 has experienced stable student enrollment in recent years and, likely, will realize substantial student enrollment growth over the course of the next two decades.

- Kindred School District #2 has experienced select over-crowding and over-stressing with school facilities in the recent past and is predicted to encounter such circumstances in the future as a result of projected, future, student enrollment growth.

- Kindred School District #2 has experienced modest non-resident student in-migration in the past and is projected to anticipate greater numbers in the future.

- Kindred School District #2 maintains a quality array of programs and services for its student clientele.

- Kindred School District #2 has had a reputation for cost/effectively expending its budgetary resources.

- Kindred School District #2 has been a low-spending school district by State of North Dakota standards.

- Kindred School District #2 has been a low-taxing school district by State of North Dakota standards.

- Kindred School District #2 operates a cost/ineffectively small elementary school.

- Kindred School District #2 operates an elementary/secondary school complex which displays site limitations, safety concerns, deferred maintenance needs, minimal potential for long-term student population growth, and select facility limitations/inadequacies (by modern-day standards).

- Kindred School District #2's parents and patrons desire that quality, modern-day programs, services, class sizes, course offerings, teaching methodologies, delivery systems, organizational configurations, and teaching/learning processes be made available to the school district's youth.

- Kindred School District #2's parents and patrons are committed to providing high-quality, cost/effective programs, services, class sizes, course offerings, staffing, methodologies, delivery systems, organizational configurations, and facilities that best meet the needs of young people and adults served by the school district.

- Kindred School District #2's parents, patrons, and community leaders believe that the school district is the **centerpiece** of the area's infrastructure and essential to the vitality of its communities.

- Kindred School District #2's parents and patrons will support, financially, improvements to and/or expansions of the organization's programs, services, and/or facilities to maintain the quality and reputation of the school district and to insure the judicious and cost/effective management and expenditure of the taxpayers' dollars.

1.6 Organization of the Study

Kindred School District #2's **Organizational Analysis Study** is organized in a six chapter format. Chapter I contains the study's design, including purpose, needs, methodology, geographic setting, questions, assumptions, and organization. Chapters II-V present the Project Consultants' findings regarding the school district's enrollment and enrollment trends; finances; programs; services; staffing; and additional information; and facilities. Chapter VI offers the Project Consultants' conclusions, alternatives, and recommendations for deliberation and future action by the Superintendent, School Board, parents, patrons, and administrative and teaching staffs of Kindred School District #2.

CHAPTER II
DISTRICT SIZE AND ENROLLMENT TRENDS

2.0 Introduction

The two most significant variables which impact the long-term financial and programmatic viability of an educational enterprise—whether a large, urban school district, a medium-sized, suburban school district, a large, rural educational enterprise, or a remote, small school district—are **school district size** and **enrollment trends**. In that light, it was most logical that the Project Consultants would begin the Kindred School District #2 **Organizational Analysis Study** by gathering and analyzing actual past and current student enrollments, projected enrollments, non-public school enrollments, open enrollment in-migration and out-migration data, recent census figures, and related information. It was anticipated that, with the aforementioned information in hand, the Project Consultants, Superintendent of Schools, School Board, and school district parents, patrons, and staff would be in a position to undertake a strategic planning process to provide short-term and long-term qualitative direction for the school district's finances, staffing, programs and services, organizational configuration, and facilities.

District size provides a critical perspective on the status of any given school enterprise. While some exceptions will be noted, small school districts tend to have fewer staff members, smaller budgets, less course offerings, fewer services, teachers involved in more course preparations, greater percentages of cost/ineffective courses or class section sizes, proportionately smaller fund balances, more frequent problems with the

adequacy of their school facilities, and less bonded indebtedness. Larger-sized school districts typically enjoy larger budgets, greater and more diversified staff, less teacher preparations, more expansive course offerings, a greater array of services, more updated (but not necessarily state-of-the-art) facilities, and a higher level of cost/effectiveness, but they typically encounter, as well, higher tax rates, greater bonded indebtedness, larger class sizes (though more cost/effective than their smaller district counterparts), and much more.

One critical disadvantage experienced by low critical mass school districts (those smaller than the average size of school districts in the State) is the lesser flexibility or capability of recovering from unanticipated down turns, unplanned events, or conditions that could jeopardize the organization's long-term survival, such as high inflation, meager (or no) increases in educational funding from the State level, increases in unfunded mandates, enrollment decline through weakening birth rates, loss of enrollment to other school districts, changes in statute, unnatural calamity (fire), vandalism, or the like. As an example, an enrollment drop of 100 students in two school districts—one of 5,000 students and the other 500 students—presents a problem of the same numerical magnitude (loss of 100 students each) but one of dramatically different proportionate magnitude (2.0% versus 20% loss of students). In the former case, the loss of students is unwelcome but presents a problem that can likely be dealt with as a part of a standard budget reduction process, while in the latter case, the loss of students would have a devastating impact on the school district's program and service delivery. Indeed, district size is a crucial variable for any school district to consider in planning its future options. The Project

Consultants noted the importance of the district size variable in Kindred School District #2.

A district's enrollment trend is a second and equally vital variable for a school organization to consider in mapping its future. Enrollment is the variable which drives the funding of school districts in the State of North Dakota and virtually every other state. Enrollment trends (growth, stability, and decline) are the harbingers of change in the school district's budget, budget reserves, tax rates, staffing, programs and services, facility needs, ability to respond to changes in State requirements, needs, interests, and expectations (of students, parents, and patrons), as well as many other operational conditions. It is a certainty that smaller school districts—experiencing long-term moderate or steep enrollment decline—are much more vulnerable than school districts able to boast a large critical mass of students and experiencing stable or increasing enrollment.

2.1 District Size

Table 1 of the **Organizational Analysis Study** furnishes an overview of Kindred School District #2's grade level enrollments during the 2007-08 school year. The table illustrates that 667 students were enrolled in grades K-12 during the 2007-08 school year. The school district's critical student mass would place it among the largest one-fifth of all public K-12 school district's in the State of North Dakota during the 2007-08 school year. By State of North Dakota standards, Kindred School District #2 would be classified as a large critical student mass school organization.

TABLE 1 KINDRED SCHOOL DISTRICT #2 ENROLLMENT 2007-08		
Grade	**Enrollment**	**Rank by Size**
K	54	6
1	55	5
2	42	12
3	60	3
4	38	13
5	61	2
6	50	7-8
7	57	4
8	63	1
9	50	7-8
10	44	10-11
11	49	9
12	44	10-11
Total	667	
K	54	
1-6	306	
7-8	120	
9-12	187	
Total	667	
Largest three-grade level enrollment span: grades 6-8 and 7-9 = 170 students **Smallest three-grade level enrollment span: grades 10-12 = 137 students**		

Table 1 data reveal that 54 students were enrolled in the kindergarten level of instruction, 306 students were enrolled in grades 1-6, 120 students were enrolled in grades 7-8, and 187 students were enrolled in grades 9-12. The school district's largest grade level enrollments in 2007-08 were to be found in grade 8 (63 students), grade 5 (61 students), grade 3 (60 students), grade 7 (57 students), and grade 1 (55 students). The school district's

smallest grade level enrollments during the 2007-08 school year occurred in grade 4 (38 students), grade 2 (42 students), and grades 10 and 12 (44 students each).

The largest three-grade level enrollment spans in Kindred School District #2 occurred in both grades 6-8 and 7-9 with enrollments of 170 students each during the 2007-08 school year. The school district's smallest three-grade level enrollment span was reported in grades 10-12 with 137 students enrolled during the 2007-08 school year.

The Project Consultants computed that the 2007-08 student enrollments in each of grades 6-8 and 7-9 (170 students), the school district's largest three-grade level enrollment spans, were +33 students or +24.1% larger than the grades 10-12 student enrollment (137 students), the smallest three-grade level enrollment span in Kindred School District #2. Thus, the Project Consultants found significant enrollment variance between the school district's largest and smallest three-grade level enrollment spans.

Kindred School District #2's average grade level enrollment size during the 2007-08 school year was 51.3 students. That figure amounted, on average, to the equivalent of approximately 2 sections of 25 students/section. Assuming class section sizes of approximately 25 students/section throughout the school district's K-12 span, the number of grade level sections in Kindred School District #2 during the 2007-08 school year ranged from approximately 2.5 (grade 8) to 1.5 (grade 4) sections.

The Project Consultants concluded that Kindred School District #2's student enrollment by grade level in 2007-08 yielded good current and future potential for retaining highly cost/effective staffing and favorable ability to balance class section sizes.

The Project Consultants further concluded that Kindred School District #2 presented itself, organizationally, as a stable enrollment school district with potential for future growth.

2.2 Enrollment Trends: Actual

Kindred School District #2's actual past enrollment trends are reported in Table 2 for each of the school years from 1996-97 through 2006-07 as reported by the school district and verified by the North Dakota Department of Public Instruction. (It should be noted that past enrollment data reported by Kindred School District #2 varied—on an annual basis—slightly from those data reported by the North Dakota Department of Public Instruction. Those slight data variations occur in all North Dakota school districts and are to be expected as an outcome of student mobility into and out of school districts). The data permit the reader to evaluate changes in enrollment conditions over a ten year span of time and, more critically, aid the school district's leadership in projecting changes that have or have not (or might or might not have) occurred in funding, staffing, programs and services, and facility utilization/renovation/construction for students and adults in the school district in both the past and future.

TABLE 2 KINDRED SCHOOL DISTRICT #2 ACTUAL PAST ENROLLMENT 1996-97 / 2006-07											
District	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07
#2	656	691	720	727	727	704	712	687	714	674	690

Kindred School District #2 enrolled an average daily membership of 656 students in 1996-97 (base year) and 690 students in 2006-07, a net gain of +34 students or +5.2% over the ten year span of time evaluated.

Kindred School District #2's "low-water mark" enrollment between 1996-97 and 2006-07 was in 1996-97 when 656 students (average daily membership) were enrolled in the school district's K-12 programs. The school district's "high-water mark" enrollments for the organization during the same ten year span of time was in 1999-00 and 2000-01 when 727 students were enrolled in grades K-12. From the 1996-97 base year, then, Kindred School District #2 experienced six years of student enrollment growth, three years of student enrollment decline, and one year of enrollment stability.

The Project Consultants concluded that Kindred School District #2 would be classified as a **stable enrollment school district.**

2.3 Enrollment Trends: Projected

Kindred School District #2 administrators provided the Project Consultants with enrollment projections for the organization at one year, three year, and

five year intervals from the 2006-07 (base year) through 2011-12. Those data are reported in Table 3 and reveal modest student enrollment decline.

As detailed in Table 3, Kindred School District #2's administrators projected the organization's student enrollment would decrease from 690 students in 2006-07 to 666 students in 2011-12, a net loss of -24 students or -3.5%.

TABLE 3
KINDRED SCHOOL DISTRICT #2
ENROLLMENT PROJECTIONS
2006-07 / 2011-12

District	(Current)	(1 Year)	(3 Year)	(5 Year)
#2	690	667	670	666

It should be noted that the Project Consultants could find substantial reason to believe the organization's enrollment projections could be understated for the future if (a) the school district were to experience further increases in the "in-migration" of non-resident students through open enrollment, (b) the school district were to receive overtures from neighboring school districts to consider the possibility of organizational restructuring and/or consolidation, and (c) most likely, the school district were to experience new residential and commercial development/growth as a result of the organization's geographic location in the Fargo-Moorhead metropolitan area "growth corridor."

The Project Consultants concluded that Kindred School District #2 could anticipate continued stability in—if not expansion of—programs, services, and staffing in the future as a result of increasing resident (and non-

resident) student enrollment, and, in fact, total enrollment would likely be further strengthened if future measures (e.g. new school construction) were instituted by the school district to increase non-resident in-migration through open enrollment and/or new residential and commercial development within the organization's boundaries.

2.4 Changes in Average Daily Membership

Average daily membership trends between 1996-97 and 2011-12 for Kindred School District #2 are presented in Table 4. Over the 15 year span of time, the school district's enrollment (actual and projected) depicts an increase of +10 students or +1.5% from the base year enrollment (1996-97) figure of 656 students in grades K-12.

TABLE 4
KINDRED SCHOOL DISTRICT #2
TRENDS IN AVERAGE DAILY MEMBERSHIP
1996-97 / 2011-2012

District	Actual Change 1996-97 / 2006-07	Projected Change 2006-07 / 2011-12	Gain/Loss
#2	+34	-24	+10

The Project Consultants concluded that Kindred School District #2's actual and projected student enrollment increase—as presently projected—will not have an impact on the school district's operations in the future. To be sure, however, the Project Consultants are convinced the organization will grow, but the pace and magnitude of that growth will be dependent, largely, on the growth of the Fargo-Moorhead metropolitan area "growth corridor"

development and the school district leadership's position on "posturing the organization for future growth" through addressing the current limitations and/or inadequacies of the organization's teaching/learning facilities. Kindred School District #2 would clearly appear to be poised to experience a trend of student enrollment increase which, in turn, will strengthen the communities' infrastructure, broaden the school district's revenue base, and signal the need for expanded staff, programs, services, and facilities.

2.5 Open Enrollment

The North Dakota Open Enrollment Statute introduces a variable which can significantly impact the short-term and long-term enrollments, finances, programs and services, and staffing of North Dakota school districts and, as a consequence, was examined by the Project Consultants as it (open enrollment) applies to Kindred School District #2.

Open enrollment in North Dakota school districts provides the latitude for parents to enroll their youngsters in an alternative school district to the one in which they reside—providing there is sufficient space available in the receiving school district to accept such in-migrating students. If a school district experiences a larger number of out-migrating resident students than in-migrating non-resident students, a school district's future could be jeopardized through losses in enrollment, finances, staffing, and programs and services. Conversely, if a school district experiences a larger number of in-migrating non-resident students than out-migrating resident students, the school district's future could be stabilized or strengthened through gains in enrollment which, in turn, strengthen finances, staffing, programs, and services.

Based on information provided by Kindred School District #2 and verified by the North Dakota Department of Public Instruction, the Project Consultants learned that in 2007-08, the school district enrolled +28 non-resident students through open enrollment in-migration from other school districts and lost -19 resident students through open enrollment out-migration to other school districts. The school district's excess of in-migration of non-resident students to out-migration of resident students resulted in a net gain of +9 students in 2007-08. Thus, Kindred School District #2 generated additional General Fund revenue as a result of the State of North Dakota's Open Enrollment Statute.

TABLE 4-A
KINDRED SCHOOL DISTRICT #2
OPEN ENROLLMENT
2007-08

District	In-Migration	Out-Migration	Net
#2	+28	-19	+9

Kindred School District #2 has reason to view its organization in a most positive light, given that its staff, programs, and services would be so attractive to the parents of non-resident students as to lure them to this educational enterprise. The Project Consultants could envision that, if Kindred School District #2 were to address observable limitations in its teaching/learning facilities in the future, there would be substantial reason for non-resident parents to open enroll their children in this school enterprise and, indeed, for mobile families/parents to locate in the

geographic boundaries of the school district, construct homes, and establish permanent affiliation with the school district and its communities.

2.6 Non-Public School and Home School Attendance

The State of North Dakota offers "choice options" for parents to educate their children beyond those provided by the State of North Dakota's Open Enrollment Statute. Attendance in non-public/parochial/private or home school settings is available for parents (and their children) to choose as beliefs, desires, and/or opportunities may dictate.

Kindred School District #2's 2007-08 resident student enrollments in non-public/parochial/private school and home school settings are recorded in Table 4-B. Eleven of the school district's resident students attended traditional non-public/parochial/private schools during the 2007-08 school year. That figure represented a disproportionately small number of the school district's total resident student population.

TABLE 4-B
KINDRED SCHOOL DISTRICT #2
PAROCHIAL AND HOME SCHOOL ENROLLMENT
2007-08

District	Parochial School	Home School	Total
#2	-11	-19	-30

During the 2007-08 school year, Kindred School District #2 reported -19 resident students received alternative programs and services in their homes through home schooling. Once again, the number of resident

students participating in home schooling represented a small percentage of the school district's resident student population.

By State of North Dakota standards, Kindred School District #2's non-public school and home school enrollments would be considered below-average for school districts of like-size.

2.7 Growth Potential

Table 4-C provides a perspective on population trends in the State of North Dakota and Cass County, employing U.S. Census population figures for 1980, 1990, 2000, and 2006 (estimates). These data revealed for the Project Consultants an assessment of the short-term and long-term growth potential for Cass County and Kindred School District #2.

According to Table 4-C data, the State of North Dakota's population decreased from 652,717 residents in 1980 to (at that time) a 2006 estimate of 635,867 residents, resulting in a net loss of -16,850 residents or -2.6%.

U.S. Census population figures revealed that Cass County's population increased from 88,247 residents in 1980 to 132,525 residents in 2006, a staggering gain of +44,278 residents or +50.2%.

With the continuing national trend of rural to urban migration, the Project Consultants could envision no plausible reason why the explosive population growth experienced by Cass County over the course of the past quarter century would stabilize or decrease and, further, why residential,

commercial, and industrial expansion would not continue to occur to the north, west, and south of both the City of Fargo and the City of Moorhead.

The Project Consultants concluded that the general population, student population, and residential, commercial, and industrial developments will continue to expand in the Fargo-Moorhead "growth corridor" over the course (minimally) of the next 2-3 decades. The anticipated growth will outstrip the already over-stressed school facilities of Kindred School District #2 and necessitate further school expansion/remodeling **and** new school construction to accommodate the burgeoning general and student populations.

The Project Consultants recommend Kindred School District #2's School Board and Superintendent begin—in earnest—preparing for the certain general population and student population growth which will substantially impact the organization's programs, services, staffing, and facilities.

TABLE 4-C
KINDRED SCHOOL DISTRICT #2
POPULATION TRENDS: NORTH DAKOTA AND CASS COUNTY
1980 – 2006 (Est.)

	Census Population					
	1980	1990	2000	2006 (Est.)	Change	% Change
North Dakota	652,717	638,800	642,200	635,867	-16,850	-2.6%
Cass County	88,247	102,874	123,138	132,525	+44,278	+50.2%

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2.8 Summary

Detailed below for Kindred School District #2 are salient school district and enrollment trend data/facts:

- The school district enrolled 667 students in grades K-12 during the 2007-08 school year.

- By State of North Dakota standards, the school district would be classified as a large critical student mass organization.

- The school district's largest grade level enrollments in 2007-08 were to be found in grade 8 (63 students), grade 5 (61 students), grade 3 (60 students), grade 7 (57 students), and grade 1 (55 students).

- The school district's smallest grade level enrollments during the 2007-08 school year occurred in grade 4 (38 students), grade 2 (42 students), and grades 10 and 12 (44 students each).

- The school district's largest three-grade level enrollment span occurred in both grades 6-8 and 7-9 with enrollments of 170 students each during the 2007-08 school year.

- The school district's smallest three-grade level enrollment span was reported in grades 10-12 with 137 students enrolled during the 2007-08 school year.

- The school district's average grade level enrollment size during the 2007-08 school year was 51.3 students.

- The school district offered—on average—the equivalent of approximately two sections of 25 students/section in each grade level during the 2007-08 school year.

- The Project Consultants concluded that the school district's enrollment by grade level in 2007-08 yielded good current and future potential for retaining highly cost/effective staffing and favorable ability to balance class section sizes.

- The Project Consultants concluded that the school district presented itself, organizationally, as a stable enrollment school district with potential for future growth.

- Between 1996-97 and 2006-07, the school district's average daily membership increased from 656 students to 690 students, yielding a net gain of +34 students or +5.2% over the ten year span of time evaluated.

- The school district's "low-water mark" enrollment between 1996-97 and 2006-07 was in 1996-97 when 656 students were enrolled in the school district's K-12 programs.

- The school district's "high-water mark" enrollment between 1996-97 and 2006-07 was in 1999-00 and 2000-01 when 727 students were enrolled in grades K-12.

- The Project Consultants concluded that the school district would be classified as a stable enrollment school district.

- The school district's administrators projected the organization's student enrollment would decrease from 690 students in 2006-07 to 666 students in 2011-12, a net loss of -24 students or -3.5%.

- The Project Consultants could find substantial reason to believe the organization's enrollment projections could be understated for the future if (a) the school district were to experience further increases in the "in-migration" of non-resident students through open enrollment, (b) the school district were to receive overtures from neighboring school districts to consider the possibility of organizational restructuring and/or consolidation, and (c) most likely, the school district were to experience new residential and commercial development/growth as a result of the organization's geographic location in the Fargo-Moorhead metropolitan area "growth corridor."

- The school district's enrollment (actual and projected) over the 15 year span of time from 1996-97 through 2011-12 depicts an increase of +10 students or +1.1% from the base year enrollment figure of 656 students in grades K-12.

- The Project Consultants concluded that the school district's actual and projected student enrollment increase—as presently projected—will not have an impact on the school district's operations in the future.

- The Project Consultants are convinced the organization will grow, but the pace and magnitude of that growth will be dependent, largely, on the growth of the Fargo-Moorhead metropolitan area "growth corridor" development and the school district leadership's position on "posturing the organization for future growth" through addressing the current limitations and/or inadequacies of the organization's teaching/learning facilities.

- The school district enrolled +28 non-resident students through open enrollment in-migration from other school districts and lost -19 resident students through open enrollment out-migration to other school districts, yielding a net gain of +9 students through open enrollment in 2007-08.

- The school district reported the attendance of 11 resident students in traditional non-public/parochial/private schools and 19 resident students in home schooling during the 2007-08 school year.

- By State of North Dakota standards, the school district's non-public school and home school enrollments would be considered below-average for school districts of like-size.

- Over the quarter-century span of time from 1980 through 2006, the State of North Dakota realized a loss in general population of -16,850 residents or -2.6%.

- Over the quarter-century span of time from 1980 through 2006, Cass County experienced a gain in general population of +44,278 residents or +50.2%.

- The Project Consultants concluded that there is every reason to believe the general population and student population of Cass County and Kindred School District #2 will realize substantial general population and student population increase over the course of the next 2-3 decades.

- The Project Consultants concluded that Kindred School District #2 would be well advised to plan for the remodeling of the current Kindred Elementary/Secondary School facility and the construction of a new school facility(ies) to reduce current facility over-stressing and accommodate the certain growth that will occur in the school district's general population and student population.

CHAPTER III
FINANCES

3.0 Background Information

School district size, enrollment, and enrollment trends are the most significant factors which impact the financial condition of a school district. In that light, it was most appropriate that the Project Consultants would follow the analysis of Kindred School District #2's demographics with a study of the organization's financial condition.

The purposes of the Kindred School District #2 financial analyses were to assess the quality of the organization's fiscal management, ascertain financial trends, determine the organization's reserves, compare the school district's spending patterns with the average of all North Dakota school districts and the average of all like-sized (peer group) North Dakota school districts, determine taxable valuation and mill levy trends, and ascertain the organization's capabilities in addressing future staffing, program, service, and facility needs in a geographic setting ("growth corridor") which will arguably experience significant change over the course of the ensuing 2-3 decades.

The Project Consultants have ascertained through past experience that school district patrons are vitally interested in being apprised of the fiscal condition of the educational enterprise they support with their tax dollars **prior to** approving referenda to improve or expand the organization's future capabilities.

3.1 General Fund Revenues, Expenditures, and Fund Balances

The Project Consultants examined Kindred School District #2's audit reports for each of the six fiscal years from 2001-02 through 2006-07 as a part of the school district's **Organizational Analysis Study.** Particularly, the Project Consultants focused on the status of the school district's General Fund budget.

The General Fund budget is the largest and most flexible fund operated by a school district and contains dollar allocations for the employment of administrators, teachers, specialists, custodians, secretaries, paraprofessionals, and other school district personnel and the purchase of textbooks, instructional materials, staff development, curriculum development, equipment, utilities, insurances, fringe benefits, and much more. Table 5 details the General Fund revenues, expenditures, and fund balances for Kindred School District #2 for the six inclusive years from 2001-02 through 2006-07.

Table 5 data delineate that the school district's General Fund revenue increased from $3,729,292 in 2001-02 (base year) to $4,664,630 in 2006-07, an increase of +$935,338 or +25.1%. Within the same five year span of time, the school district's General Fund expenditures increased from $3,669,562 in 2001-02 to $4,605,283 in 2006-07, a gain of +$935,721 or +25.5%.

Between the base year 2001-02 and 2006-07, Kindred School District #2's General Fund balance increased from $677,833 (2001-02) to $893,030 (2006-07), an increase of +$215,197 or +31.7%.

At the conclusion of the 2006-07 school year, Kindred School District #2's General Fund balance of $893,030 amounted to a commendable 19.4% of the school district's General Fund expenditure budget of $4,605,283.

TABLE 5
KINDRED SCHOOL DISTRICT #2
GENERAL FUND REVENUES, EXPENDITURES, FUND BALANCES
2001-02 / 2006-07

Fiscal Year	Revenue	Expenditure	Fund Balance
2001-02	$3,729,292	$3,669,562	$677,833
2002-03	$3,936,217	$4,749,565*	$595,941
2003-04	$4,082,288	$4,005,850	$672,379
2004-05	$4,152,728	$4,071,551	$753,556
2005-06	$4,387,387	$4,302,375	$838,568
2006-07	$4,664,630	$4,605,283	$893,030
Change	+$935,338	+$935,721	+$215,197
% Change	+25.1%	+25.5%	+31.7%

*$731,606 in bond proceeds as offset.

Kindred School District #2 operated balanced General Fund budgets in five of the six years reported in Table 5, including the four most recently reported fiscal years (2003-04, 2004-05, 2005-06, and 2006-07).

The Project Consultants observed that Kindred School District #2's five year growth in General Fund revenue (+$935,338) **was virtually identical to** the organization's five year growth in expenditures (+$935,721).

The Project Consultants concluded that, by every indicator, Kindred School District #2 displays itself as a **financially well-managed educational organization.** The Superintendent of Schools, School Board, and business administrative staff of the school district are to be congratulated on their prudent management of the taxpayers' resources during a time period when the school district has experienced relatively stable student enrollment, modest increases in General Fund revenue, and the pervasive (negative) impact of inflation.

3.2 Eight Year Comparative District Expenditures

Table 6 provides an analysis of Fund Group I expenditures for Kindred School District #2 over the eight year span of time from 1998-99 through 2006-07.

In the following section of Chapter III, a similar eight year Fund Group I analysis of expenditures for the average of all peer group (similarly-sized) State of North Dakota school districts will be undertaken. Expenditure comparisons are furnished for the following Fund Group I cost centers: salary/benefits for teacher expenditures; salary/benefits for support staff expenditures; other instructional expenditures; school administration expenditures; general administration expenditures; operation and maintenance of plant expenditures; student transportation expenditures; capital projects expenditures; extracurricular expenditures; all other expenditures; and total Fund Group I expenditures.

In reviewing the comparative school district expenditures, the reader is encouraged to note that, between 1998-99 and 2006-07, Kindred School

District #2 experienced a -30 student or -4.2% loss in student enrollment from 720 students (1998-99) to 690 students (2006-07).

Over the eight year span of time from 1998-99 to 2006-07, the school district's expenditures for salary/benefits of teachers increased from $2,211/ADM to $3,078/ADM, a gain of +$867/ADM or +39.2%.

Kindred School District #2's expenditures for salary/benefits of support staff increased over the eight year span of time from 1998-99 through 2006-07 from $51/ADM to $52/ADM, an increase +$1/ADM or +2.0%.

The school district's other instructional expenditures from 1998-99 through 2006-07 declined from $341/ADM to $327/ADM, a decrease of -$14/ADM or -4.1%.

Kindred School District #2's school administration expenditures increased from $187/ADM in 1998-99 to $250/ADM in 2006-07, an increase of +$63/ADM or +33.7%, while the school district's general administration expenditures increased from $263/ADM in 1998-99 to $376/ADM in 2006-07, a gain of +$113/ADM or +43.0%.

Expenditures for operation and maintenance of plants in Kindred School District #2 increased from $392/ADM in 1998-99 to $812/ADM in 2006-07, a gain of +$420/ADM or +107.1% over the eight year span of time.

TABLE 6
KINDRED SCHOOL DISTRICT #2
DISTRICT FUND GROUP I COSTS
1998-99 / 2006-07

	1998-99	2006-07	Change	% Change
Salary/Benefits Teachers	$2,211	$3,078	+$867	+39.2%
Salary/Benefits Support	$51	$52	+$1	+2.0%
Other Instructional	$341	$327	-$14	- 4.1%
School Administration	$187	$250	+$63	+33.7%
General Administration	$263	$376	+$113	+43.0%
Operation/Maintenance of Plant	$392	$812	+$420	+107.1%
Student Transportation	$320	$441	+$121	+37.8%
Capital Projects	0	0	0	0
Extracurricular	$135	$247	+$112	+83.0%
All Other Expenditures	$317	$856	+$539	+170.0%
Total	$4,215	$6441	+$2,226	+52.8%

Student transportation expenditures increased in Kindred School District #2 from $320/ADM in 1998-99 to $441/ADM in 2006-07, a growth of +$121/ADM or +37.8%.

Kindred School District #2 did not display expenditures for capital projects between 1998-99 and 2006-07.

Kindred School District #2's extracurricular expenditures grew from $135/ADM in 1998-99 to $247/ADM in 2006-07, an increase of +$112/ADM or +83.0%. All other expenditures in Kindred School District #2 increased

from $317/ADM in 1998-99 to $856/ADM in 2006-07, a gain of +$539/ADM or +170.0%.

Kindred School District #2's Fund Group I Expenditures increased from $4,215/ADM in 1998-99 to $6,441/ADM in 2006-07, an increase of +$2,226/ADM or +52.8%.

The Project Consultants concluded that, even in light of relatively stable enrollment in the school district, Kindred School District #2's increases in individual and collective Fund Group I cost centers over the eight year span of time from 1998-99 through 2006-07 would be considered modest and prudent by comparison with the eight year cost growth in the average of all peer group State of North Dakota school districts and the average of all State of North Dakota school districts.

Kindred School District #2's leadership can be justifiably proud of having displayed sound, prudent fiscal management and conservative, restrained spending over the eight year span of time from 1998-99 through 2006-07.

3.3 Eight Year Comparative Peer Group State of North Dakota Expenditures

Table 6-A details the changes in Fund Group I expenditures for the average of all peer group (like-sized) State of North Dakota school districts over the eight year span of time from 1998-99 through 2006-07. (For comparative purposes, Kindred School District #2's peer group is comprised of North Dakota High School school districts with average daily members that range between 200-299 ADM). The table's data reveal

changes in the average of all peer group State of North Dakota expenditures in the identical cost centers examined in Table 6 for Kindred School District #2 over the same eight year span of time: salary/benefits for teacher expenditures; salary/benefits for support staff expenditures; other instructional expenditures; school administration expenditures; general administration expenditures; operation and maintenance of plant expenditures; student transportation expenditures; capital projects expenditures; extracurricular expenditures; all other expenditures; and total Fund Group I expenditures.

Over the eight year span of time from 1998-99 through 2006-07, expenditures for salary/benefits of teachers in the average of all peer group State of North Dakota school districts increased from $2,538/ADM to $3,728/ADM, a gain of +$1,190/ADM or +46.9%.

The average of all peer group State of North Dakota expenditures for salary/benefits of support staff increased from $183/ADM in 1998-99 to $338/ADM in 2006-07, a growth of +$155/ADM or +84.7%.

Other instructional expenditures for the average of all peer group State of North Dakota school districts increased from $350/ADM in 1998-99 to $455/ADM in 2006-07, a gain of +$105/ADM or +30.0%.

The average of all peer group State of North Dakota expenditures for school administration grew from $223/ADM in 1998-99 to $322/ADM in 2006-07, an increase of +$99/ADM or +44.4%, while expenditures for general administration in the average of all peer group State of North

Dakota school districts increased from $382/ADM in 1998-99 to $568/ADM in 2006-07, an increase of +$186/ADM or +48.7%.

The average of all peer group State of North Dakota school districts' expenditures for operation and maintenance of plants climbed significantly from $397/ADM in 1998-99 to $783/ADM in 2006-07, a gain of +$386/ADM or +97.2%.

Student transportation expenditures in the average of all peer group State of North Dakota school districts increased from $314/ADM in 1998-99 to $461/ADM in 2006-07, a gain of +$147/ADM or +46.8%.

Expenditures for capital projects in the average of all peer group State of North Dakota school districts decreased from $3/ADM in 1998-99 to $0/ADM in 2006-07.

Extracurricular expenditures in the average of all peer group State of North Dakota school districts substantially increased from $121/ADM in 1998-99 to $243/ADM in 2006-07, a growth of +$122/ADM or +100.8%.

All other Fund Group I expenditures in the average of all peer group State of North Dakota school districts increased from $277/ADM in 1998-99 to $587/ADM in 2006-07, expanding by +$310/ADM or +111.9% over the eight year span of time.

Total Fund Group I expenditures grew in the average of all peer group State of North Dakota school districts from $4,789/ADM in 1998-99 to $7,485/ADM in 2006-07, a gain of +$2,696/ADM or +56.3%.

TABLE 6-A
KINDRED SCHOOL DISTRICT #2
PEER FUND GROUP I COSTS
1998-99 / 2006-07

	1998-99	2006-07	Change	% Change
Salary/Benefits Teachers	$2,538	$3,728	+$1,190	+46.9%
Salary/Benefits Support	$183	$338	+$155	+84.7%
Other Instructional	$350	$455	+$105	+30.0%
School Administration	$223	$322	+$99	+44.4%
General Administration	$382	$568	+$186	+48.7%
Operation/Maintenance of Plant	$397	$783	+$386	+97.2%
Student Transportation	$314	$461	+$147	+46.8%
Capital Projects	$3	0	- $3	- 100.0%
Extracurricular	$121	$243	+$122	+100.8%
All Other Expenditures	$277	$587	+$310	+111.9%
Total	$4,789	$7,485	+$2,696	+56.3%

When the Project Consultants conducted a comparative analysis of the contents of Tables 6 and 6-A, it was determined that, over the eight year span of time from 1998-99 through 2006-07, the eight year increase in expenditures for the average of all peer group State of North Dakota school districts **exceeded** the eight year growth in dollar expenditures for Kindred School District #2 in the following cost categories: salary/benefits for

teachers; salary/benefits for support staff; other instructional; school administration; general administration; student transportation; extracurricular expenditures; and total Fund Group I. Only in the cases of operation and maintenance of plants and all other expenditures did the dollar expenditures in Kindred School District #2—over the eight year span of time from 1998-99 through 2006-07—exceed those found in the average of all peer group State of North Dakota school districts.

The Project Consultants further noted that the eight year percent changes in expenditures for the average of all peer group State of North Dakota school districts **exceeded** the eight year percent increase in expenditures for Kindred School District #2 in the following cost categories: salary/benefits teachers; salary/benefits support staff; other instructional; school administration; general administration; student transportation; extracurricular; and total Fund Group I. Only in the cases of operation and maintenance of plants and all other expenditures did Kindred School District #2's eight year percentage change in expenditures between 1998-99 and 2006-07 exceed those of the average of all peer group State of North Dakota school districts' expenditures.

The Project Consultants did not find 1998-99 expenditures, 2006-07 expenditures, or the change of expenditures between 1998-99 and 2006-07 for the average of all peer group school districts in the State of North Dakota to have been excessive, given the status of inflationary presses over that span of time. Thus, the Project Consultants concluded that Kindred School District #2's individual year expenditures and eight year

expenditure change would be categorized as **most reasonable** by State of North Dakota standards.

3.4 Comparative District, Peer, and State Fund Group I Expenditures, 2006-07

Table 6-B delineates comparative Fund Group I expenditures for Kindred School District #2, the average of all peer group school districts in the State of North Dakota, and the average of all school districts in the State of North Dakota for the 2006-07 school year.

In an examination of comparative Fund Group I expenditures, the Project Consultants found that, in 2006-07, Kindred School District #2 expended -$650/ADM or -17.4% less than the average of all peer group school districts in the State of North Dakota and -$1,487/ADM or -32.6% less than the average of all school districts in the State of North Dakota for teachers' salaries and benefits. In that same year, Kindred School District #2 expended -$286/ADM or -84.6% less than the average of all peer group school districts in the State of North Dakota and -$402/ADM or -88.5% less than the average of all school districts in the State of North Dakota for the salaries and benefits of support staff.

In 2006-07, Kindred School District #2 trailed the average of all peer group North Dakota school districts and the average of all State of North Dakota school districts in other instructional expenditures, respectively, by -$128/ADM or -28.1% and -$287/ADM or -46.7%.

In comparing 2006-07 administrative expenditures, Kindred School District #2 expended -$72/ADM or -22.4% less than the average of all peer group school districts in the State of North Dakota and -$173/ADM or -40.9% than the average of all State of North Dakota school districts for school administration and, further, spent -$192/ADM or -33.8% less than the average of all peer group school districts in the State of North Dakota and -$201/ADM or -34.8% less than the average of all State of North Dakota school districts for general administration.

Kindred School District #2's expenditures for operation and maintenance of plants in 2006-07 exceeded the figure for the average of all peer group school districts in the State of North Dakota by +$74/ADM or +10.0% and trailed the average of all State of North Dakota school districts by -$43/ADM or -5.0%.

Student transportation expenditures in Kindred School District #2 were -$20/ADM or -4.3% less than such expenditures in the average of all peer group State of North Dakota school districts, while exceeding the average of all State of North Dakota expenditures in that cost category by +$69/ADM or +18.5% in 2006-07.

In 2006-07, both Kindred School District #2 and the average of all peer group school districts in the State of North Dakota recorded an average of $0/ADM, while the average of all school districts in the State of North Dakota reported $113/ADM of Fund Group I money for capital projects.

TABLE 6-B KINDRED SCHOOL DISTRICT #2 COMPARATIVE FUND GROUP I COSTS 2006-07			
	Kindred	Peer	State
Salary/Benefits Teachers	$3,078	$3,728	$4,565
Salary/Benefits Support	$52	$338	$454
Other Instructional	$327	$455	$614
School Administration	$250	$322	$423
General Administration	$376	$568	$577
Operation/Maintenance of Plant	$812	$738	$855
Student Transportation	$441	$461	$372
Capital Projects	0	0	$113
Extracurricular	$247	$243	$211
All Other Expenditures	$856	$587	$749
Total	$6,441	$7,485	$8,933

Kindred School District #2 reported in 2006-07 expenditures for extracurricular activities which exceeded the average of all peer group school districts in the State of North Dakota by +$4/ADM or +1.6% and the average of all State of North Dakota school districts by +$36/ADM or +17.1%.

All other expenditure costs (debt service, transfers, tuition, and other programs) in 2006-07, revealed that Kindred School District #2 expended +$269/ADM or +45.8% more than the average of all peer group school

districts in the State of North Dakota and +$107/ADM or +14.3% more than the average of all State of North Dakota school districts.

In 2006-07, Kindred School District spent $6,441/ADM for the total of all Fund Group I expenditures, while the average of peer group State of North Dakota school districts expended $7,485/ADM, and the average of all State of North Dakota school districts expended $8,933/ADM. Thus, in that year, Kindred School District #2 trailed, respectively, in total Fund Group I expenditures the average of all peer group State of North Dakota school districts by -$1,044/ADM or -14.0% and the average of all State of North Dakota school districts by -$2,492/ADM or -27.9%.

The Project Consultants concluded that, when compared to the average of all North Dakota peer group school districts and/or average of all State of North Dakota school districts, Kindred School District #2 would be classified as a **low-spending educational organization**. The school district has demonstrated prudent, conservative, sound fiscal management of taxpayer dollars entrusted to the organization. At the same time, however, the Project Consultants noted that, if Kindred School District #2 were enjoying an expenditure level that were equal, respectively, to the average of all peer group school districts in the State of North Dakota and the average of all State of North Dakota school districts, the organization would have available an additional (approximately) $700,000 or $1,662,000 to commit to strengthening the school district's staffing, programs, services, and/or facilities. Given the strategic and advantageous location of Kindred School District #2, it was not viewed by the Project Consultants as beyond reasonable expectations that this educational enterprise would/should **at**

least be expending funds at the level of the average of all peer group school districts in the State of North Dakota **if not** at the level of the average of all State of North Dakota school districts.

3.5 Average Cost/Pupil

The State of North Dakota's average cost per pupil is computed by dividing the reported costs for instruction, administration, and operation and maintenance of plant by the total average daily membership for the appropriate grouping of school districts. Detailed below in Table 7 is a comparative analysis of the average cost/pupil for Kindred School District #2, the average of all peer group school districts in the State of North Dakota, and the average of all school districts in the State of North Dakota over the eight year span of time from 1998-99 through 2006-07.

Table data reveal that, in 1998-99, Kindred School District #2 expended $3,444/ADM, while the average of all peer group school districts in the State of North Dakota and the average of all school districts in the State of North Dakota expended, respectively, $4,073/ADM and $4,747/ADM. Thus, in 1998-99, Kindred School District #2's average cost/pupil lagged behind such expenditures in the average of all peer group school districts in the State of North Dakota by -$629/ADM or -15.4% and the average of all State of North Dakota school districts by -$1,303/ADM or -27.4%. By 2006-07, Kindred School District #2 expended $4,896/ADM and trailed the average of all peer group school districts in the State of North Dakota ($6,194/ADM) by -$1,298/ADM or -21.0% and the average of all State of North Dakota school districts ($7,487/ADM) by -$2,591/ADM or -34.6%. The Project Consultants concluded, thus, Kindred School District #2 lost

substantial ground in the average cost/pupil expenditure—when compared to the average of all peer group school districts in the State of North Dakota and the average of all school districts in the State of North Dakota—over the eight year span of times from 1998-99 through 2006-07.

TABLE 7
KINDRED SCHOOL DISTRICT #2
AVERAGE COST/PUPIL
1998-99 / 2006-07

	1998-99	2006-07	Change	% Change
Kindred	**$3,444**	**$4,896**	**+$1,452**	**+42.2%**
PEER	**$4,073**	**$6,194**	**+$2,121**	**+52.1%**
State	**$4,747**	**$7,487**	**+$2,740**	**+57.7%**

Between 1998-99 and 2006-07, Kindred School District #2's average cost/pupil increased from $3,444/ADM to $4,896/ADM, a gain of +$1,452/ADM or +42.2%. Over that same span of time, State of North Dakota peer group school districts' average cost/pupil increased from $4,073/ADM to $6,194/ADM, a growth of +$2,121/ADM or +52.1%. Even more impressively, the average cost/pupil in the average of all State of North Dakota school districts increased from $4,747/ADM to $7,487/ADM, a gain of +$2,740/ADM or +57.7%, between 1998-99 and 2006-07.

The Project Consultants concluded that Kindred School District #2's average cost/pupil over the eight year span of time from 1998-99 through 2006-07 was sub-standard when compared to the average of all peer group school districts in the State of North Dakota and the average of all North

Dakota school districts. Further, the Project Consultants could not conclude otherwise than that, on a comparative basis, the school district has lost or will lose its qualitative and/or competitive standing in relationship to other North Dakota school districts if the organization's expenditure trend in the future mirrors that of the recent past.

In reviewing the North Dakota Department of Public Instruction's **School Finance Facts** (February 2008), the Project Consultants found that Kindred School District #2 was ranked 154th of 154 high school districts in average cost/pupil expenditures for the 2006-07 organizational year.

3.6 Ending Balance

Table 8 details the change in Kindred School District #2's ending balance over the eight year span of time from 1998-99 through 2006-07.

TABLE 8
KINDRED SCHOOL DISTRICT #2
ENDING BALANCE
2006-07

	1998-99	2006-07	Change	% Change
Kindred #2	**$567,757**	**$893,030**	**+$325,273**	**+57.3%**

In 1998-99, Kindred School District #2 reported an ending balance of $567,757. By the conclusion of the 2006-07 organizational year, that ending balance had climbed to $893,030. Thus, over the eight year span of time recorded, Kindred School District #2's ending balance had increased by +$325,273 or +57.3%.

The Project Consultants concluded that Kindred School District #2 displayed a commendable ending balance at the conclusion of the 2006-07 organizational year. This fund balance status is all the more impressive in light of the school district's low level of Fund Group I expenditures and average cost/pupil expenditures.

3.7 Change in Taxable Value and Taxable Value/Pupil

Tables 9 and 9-A depict, respectively, the changes in taxable value and taxable value/pupil for Kindred School District #2, Cass County, and the State of North Dakota over the eight year span of time from 1999-00 through 2007-08.

Table 9 depicts that the taxable value for Kindred School District #2 increased from $8,224,330 in 1999-00 to $13,855,757 in 2007-08, a gain in taxable value of +$5,631,427 or +68.5%.

TABLE 9
KINDRED SCHOOL DISTRICT #2
TAXABLE VALUE
1999-00 / 2007-08

	1999-00	2007-08	Change	% Change
Kindred #2	**$8,224,330**	**$13,855,757**	**+$5,631,427**	**+68.5%**
Cass County	**$229,763,983**	**$437,065,038**	**+$207,301,055**	**+90.2%**
State	**$1,189,838,388**	**$1,887,339,780**	**+$697,501,392**	**+58.6%**

The taxable value of Cass County grew from $229,763,983 in 1999-00 to $437,065,038 in 2007-08, an eight year growth of +$207,301,055 or +90.2%.

The State of North Dakota's taxable value increased from $1,189,838,388 in 1999-00 to $1,887,339,780 in 2007-08, a gain of +$697,501,392 or +58.6%.

The Project Consultants observed that the taxable value of Kindred School District #2 grew at a substantial rate (an average of +8.5%/year). While Kindred School District #2 eight year growth in taxable value (+68.5%) did not achieve the same level as the Cass County average (+90.2%), its taxable value growth rate exceeded that of the State of North Dakota (+58.6%).

Table 9-A illustrates the taxable value/pupil for Kindred School District #2, Cass County, and the State of North Dakota over the eight year span of time from 1999-00 through 2007-08.

TABLE 9-A
KINDRED SCHOOL DISTRICT #2
TAXABLE VALUE / PUPIL
1999-00 / 2007-08

	1999-00	2007-08	Change	% Change
Kindred #2	**$11,919**	**$20,742**	**+$8,823**	**+74.0%**
Cass County	**$11,888**	**$22,924**	**+$11,036**	**+92.8%**
State	**$9,776**	**$20,066**	**+$10,290**	**+105.3%**

Kindred School District #2's taxable value/pupil increased from $11,919/pupil (1999-00) to $20,742/pupil (2007-08), a net gain of +$8,823/pupil or +74.0%. During the same span of time, the taxable

value/pupil of the school districts of Cass County increased from $11,888/pupil (1999-00) to $22,924/pupil (2007-08), a growth of +$11,036/pupil or +92.8%. The taxable value/pupil of the average of all State of North Dakota school districts increased from $9,776/pupil (1999-00) to $20,066/pupil (2007-08), a gain of +$10,290/pupil or +105.3%.

The Project Consultants concluded that Kindred School District #2's taxable value/pupil grew at an impressive rate over the eight year span of time from 1999-00 through 2007-08, though Table 9-A data reveal that the growth rate in taxable value/pupil in Cass County and the State of North Dakota significantly outstripped both in Kindred School District #2. The Project Consultants would speculate that, in part, the lesser growth in taxable value/pupil in Kindred School District #2 might well be attributable to (a) a lesser/slower rate of residential and commercial development than in other sectors—for example—of Cass County and (b) less appealing school district infrastructure (e.g. teaching/learning buildings) than in competitive school enterprises (e.g. Fargo, West Fargo, Central Cass, Northern Cass).

3.8 Mill Levy

Table 9-B delineates the change in Kindred School District #2's total school district mill levy over the nine year span of time from 1998-99 through 2007-08 and, by comparison, a change in the total school district mill levy for the average of all State of North Dakota school districts.

In 1998-99, Kindred School District #2 was supported by a levy of 197.68 mills. Among the 180 high school districts in the State of North Dakota,

that mill levy ranked 54th. By 2007-08, Kindred School District #2's levy had decreased to 187.48 mills, a drop of -10.20 mills or -5.2%. Among the 154 high school districts in 2007-08, Kindred School District #2's total mill levy ranked 83rd.

The average of all State of North Dakota school district levied a school tax rate of 215.96 mills in 1998-99. Nine years later, the average of all school districts' total mill levy rate was 217.62 mills, reflecting an increase of +1.66 mills or +.8%.

TABLE 9-B
KINDRED SCHOOL DISTRICT #2
TOTAL MILL LEVY
1998-99 / 2007-08

	1998-99	Rank	2007-08	Rank
Kindred #2	**197.68**	**54**	**187.48**	**83**
State	**215.96**	**N/A**	**217.62**	**N/A**

In 1998-99, Kindred School District #2's total mill levy trailed that of the average of all school districts in the State of North Dakota by -18.28 mills or -8.5%. Nine years later in 2007-08, Kindred School District #2's total mill rate trailed the average of all school districts in the State of North Dakota by -30.14 mills or -13.8%.

The Project Consultants concluded that Kindred School District #2's mill rate is substantially below the average of all school districts in the State of North Dakota despite the fact that (a) the school district is low-spending by

State of North Dakota standards, (b) the school district has displayed prudent, conservative, and conscientious management of the taxpayers' resources, and (c) the school district's taxable value/pupil exceeds the average of all school districts in the State of North Dakota.

3.9 Bonded Indebtedness

According to the school district's financial statement for the year ended June 30, 2006, Kindred School District #2 reported outstanding General Obligation Bonds in the amount of $1,340,000 (principal), $285,353 (interest), and $1,625,353 (total).

The school district's general obligation bonds payable were comprised of the following individual issues: school building bonds of 1997 ($235,000); refunding bonds of 1998 ($440,000); 2003 lease revenue bonds ($565,000); 2003 limited tax building bonds ($100,000).

By virtually any standards, Kindred School District #2 has a modest level of bonded indebtedness for a jurisdiction with such substantial taxable property value and growth potential (general population, student population, commercial and residential development, and taxable property value).

As of the conclusion of the 2005-06 organizational year, Kindred School District #2's total long-term debt (excluding compensated absences) amounted to $2,834,000. That figure included $1,340,000 in General Obligation bonds payable, $950,000 in lease revenue bonds of 2006, and $544,000 of State school construction bonds.

3.10 Summary

The Project Consultants identified the following points as reflective of the financial condition of Kindred School District #2:

- The school district's General Fund revenue increased from $3,729,292 in 2001-02 to $4,664,630 in 2006-07, an increase of +$935,338 or +25.1%.

- The school district's General Fund expenditures increased from $3,669,562 in 2001-02 to $4,605,283 in 2006-07, a gain of +$935,721 or +25.5%.

- The school district's General Fund balance increased from $677,833 in 2001-02 to $893,030 in 2006-07, an increase of +$215,197 or +31.7%.

- The school district's General Fund balance of $893,030 at the conclusion of the 2006-07 school year amounted to a commendable 19.4% of the school district's General Fund expenditure budget of $4,605,283.

- The school district operated balanced General Fund budgets in five of the six years between 2001-02 and 2006-07, including the four most recently reported fiscal years.

- The school district's five year growth in General Fund revenue was virtually identical to the organization's five year growth in expenditures between 2001-02 and 2006-07.

- The Project Consultants concluded that, by every indicator, the school district displayed itself as a financially well-managed educational organization.

- The Project Consultants concluded that the school district's increases in individual and collective Fund Group I cost centers over the eight year span of time from 1998-99 through 2006-07 would be considered modest and prudent by comparison with the eight year cost growth in the average of all peer group State of North Dakota school districts and the average of all State of North Dakota school districts.

- The Project Consultants concluded the school district's leadership could be justifiably proud of having displayed sound, prudent fiscal management and conservative, restrained spending over the eight year span of time from 1998-99 through 2006-07.

- Over the eight year span of time from 1998-99 through 2006-07, the school district's Fund Group I costs increased by +$2,226/ADM or +52.8%, while the average of all peer group State of North Dakota school districts' Fund Group I costs increased by +$2,696/ADM or +56.3%.

- Over the span of time from 1998-99 through 2006-07, the eight year increase in expenditures for the average of all peer group State of North Dakota school districts exceeded the eight year growth in dollar expenditures for Kindred School District #2 in the following cost categories: salary/benefits for teachers; salary/benefits for support staff; other instructional; school administration; general administration; student transportation; extracurricular; and total Fund Group I. Only in the cases of operation and maintenance of plants and all other expenditures did the dollar expenditures in Kindred School District #2 exceed those found in the average of all peer group State of North Dakota school districts over the eight year span of time from 1998-99 through 2006-07.

- The Project Consultants concluded that the school district's individual year expenditures and eight year expenditure change would be categorized as most reasonable by State of North Dakota standards.

- In 2006-07, the following Fund Group I expenditures/ADM in Kindred School District #2 trailed those found in the average of all peer group State of North Dakota school districts: salary/benefits for teachers; salary/benefits for support staff; other instructional expenditures; school administration; general administration; student transportation; and total Fund Group I expenditures. Kindred School District #2's expenditures exceeded in 2006-07 those expenditures in the average of all peer group State of North Dakota school districts in the following cost categories: operation and maintenance of plant; extracurricular expenditures; and all other expenditures.

- In 2006-07, Kindred School District #2's Fund Group I expenditures/ADM trailed those found in the average of all State of North Dakota school districts in the following cost categories: salary and benefits for teachers; salary and benefits for support staff; other instructional expenditures; school administration; general administration; operation and maintenance of plant; capital projects; and total Fund Group I expenditures. In that year, Kindred School District #2's Fund Group I expenditures/ADM exceeded the average of all State of North Dakota school districts in the following cost categories: student transportation; extracurricular expenditures; and all other expenditures.

- The Project Consultants concluded that, when compared to the average of all North Dakota peer group school districts and the average of all State of North Dakota school districts, Kindred School District #2 would be classified as a low-spending educational organization.

- Between 1998-99 and 2006-07, the school district's average cost/pupil increased from $3,444/ADM to $4,896/ADM, a gain of +$1,452/ADM or +42.2%. Over that same span of time, State of North Dakota peer group school districts' average cost/pupil increased from $4,073/ADM to $6,194/ADM, a growth of +$2,121/ADM or +52.1%, while the average cost/pupil in the average of all State of North Dakota school districts increased from $4,747/ADM to $7,487/ADM, a gain of +$2,740/ADM or +57.7%.

- The Project Consultants concluded that Kindred School District #2's average cost/pupil over the eight year span of time from 1998-99 through 2006-07 was substandard when compared to the average of all peer group school districts in the State of North Dakota and the average of all school districts in North Dakota.

- The Project Consultants concluded that, on a comparative basis, the school district has lost or will lose its qualitative and/or competitive standing in relationship to other North Dakota school districts if the organization's expenditure trend in the future mirrors that of the recent past.

- The Project Consultants learned that the school district was ranked 154th of 154 high school districts in average cost/pupil expenditures for the 2006-07 organizational year.

- Over the eight year span of time from 1998-99 through 2006-07, the school district's ending balance has increased by +$325,273 or +57.3%.

- The Project Consultants concluded the school district displayed a commendable ending balance at the conclusion of the 2006-07 organizational year.

- Over the eight year span of time from 1999-00 through 2007-08, the taxable value of Kindred School District #2 increased by +$5,631,427 or +68.5%.

- The Project Consultants observed that the taxable value of Kindred School District #2 grew at a substantial rate (an average of +8.5%/year) over the eight year span of time from 1999-00 through 2007-08.

- Over the eight year span of time from 1999-00 through 2007-08, Kindred School District #2's taxable value/pupil increased by +$8,823/pupil or +74.0%. During that same span of time, the taxable value/pupil in Cass County and the State of North Dakota, respectively, increased by +$11,036/pupil or +92.8% and +$10,290/pupil or +105.3%.

- The Project Consultants would speculate that, in part, the lesser growth in the taxable value/pupil in Kindred School District #2 might well be attributable to (a) a lesser/slower rate of residential and commercial development than in other sectors (e.g. Cass County) and (b) less appealing school district infrastructure (e.g. teaching/learning buildings) than in competitive enterprises (e.g. Fargo, West Fargo, Central Cass, Northern Cass).

- In 1998-99, Kindred School District #2 was supported by a levy of 197.68 mills (ranked 54th among North Dakota's 180 high school districts). By 2007-08, the school district's levy had decreased to 187.48 mills, a drop of -10.20 mills or -5.2%. (Ranked 83rd among North Dakota's 154 high school districts).

- In 1998-99, Kindred School District #2's total mill levy trailed that of the average of all school districts in the State of North Dakota by -18.28 mills or -8.5%. In 2007-08, the school district's total mill rate trailed the average of all school districts in the State of North Dakota by -30.14 mills or -13.8%.

- The school district reported on June 30, 2006 outstanding General Obligation Bonds in the amount of $1,340,000 (principal), $285,353 (interest), and $1,625,353 (total).

- By virtually any standard, the school district has a modest level of bonded indebtedness for a jurisdiction with such substantial taxable property value and growth potential.

CHAPTER IV
EDUCATIONAL PROGRAMS, SERVICES, AND STAFFING

4.0 Introduction

Following the analysis of district size, enrollment, enrollment trend, and financial data for Kindred School District #2, data were gathered by the Project Consultants through source documents, interviews, and observations on the organization's educational programs, services, and staffing, the "centerpiece" of the school district's operations.

The primary purpose of the operation of public school districts in North Dakota and throughout the United States is the delivery of instructional programs and services to resident and, through open enrollment and tuition agreements, non-resident P-K-12 students, initially, and, ever more increasingly in recent decades, to resident and non-resident pre-school youngsters and adults. The breadth, scope, and sophistication of the school district's programs and services have manifoldly increased over the past four decades in response to changing societal needs, family structure, business/industrial priorities, population aging, technological expansion, global competition, and a myriad of other interacting and intersecting variables.

The school district's size, enrollment trends, and finances have a direct bearing on the number, breadth, scope, and sophistication of programs and services, the numbers and types of staff members, and the numbers, types, and sophistication of facilities. In this light, it is axiomatic that the Project Consultants would investigate the status of Kindred School District #2's

educational programs, services, staffing, and related issues (including class sizes, staffing, organizational configuration, special education programming, collaboration/cooperation, methodologies, delivery systems, and the like) to serve the school district's pre-school, school-aged, and adult populations and their communities.

A cross-section of the Project Consultants' findings in examining programs, services, staffing, and other indicators is presented in this chapter. The purposes inherent in the analyses of such data are to determine Kindred School District #2's status, assess the organization's strengths and needs, conduct comparative analyses, and, as appropriate, identify potential, future courses of action for consideration by the School Board and Superintendent of Schools.

4.1 Elementary Class Sizes

Kindred School District #2's 2007-08 elementary class section sizes, grades K-6, are summarized in Table 10.

Kindred School District #2 provided elementary instructional programming in grades K-6 for 360 youngsters during the 2007-08 school year. The school district served 109 kindergarten and grade 1 students at Davenport Elementary School and 251 grade 2-6 students at the Kindred Elementary/Secondary School. The school district delivered instructional programs and services to an average of 51.4 students/grade level in grades K-6 during the 2007-08 school year.

An examination of Table 10 illustrates that Kindred School District #2 operated 19 elementary class sections in the Davenport and Kindred Elementary Schools during the 2007-08 school year. Twelve (12) elementary class sections or 63.2% were operated with enrollments of less than 20 students, while 7 elementary class sections or 36.8% enrolled 20-25 students/section. No elementary class sections were operated with enrollments of 26-29 students/section or 30 students or larger during the 2007-08 school year.

TABLE 10
KINDRED SCHOOL DISTRICT #2
ELEMENTARY CLASS SIZES
2007-08

School	Less than 20	20-25	26-29	30 or larger	Total
K-6	12	7	0	0	19
%	63.2%	36.8%	0.0%	0.0%	100.0%

The Project Consultants rated Kindred School District #2's elementary class sections as staffed at a highly desirable, cost/effective level at Davenport and Kindred Elementary Schools.

The average class section size in grades K-6 in Kindred School District #2 during the 2007-08 school year was computed at 18.9 students/section.

4.2 Secondary Class Section Sizes

Table 11 presents Kindred School District #2's secondary class section size data in grades 7-12 during the 2007-08 school year.

Kindred School District #2 operated 174 secondary school (grade 7-12) course sections during the 2007-08 school year. One hundred eighteen (118) secondary school course sections or 67.8% enrolled less than 20 students, 51 course sections or 29.3% enrolled 20-25 students, 1 course sections or .6% enrolled 26-29 students, and 4 course sections or 2.3% enrolled 30 students or more.

The Project Consultants rated the school district's secondary school class section sizes as highly desirable and marginally cost/effective with a comparatively large number and percentage of course sections enrolling less than 20 students and, as well, a comparatively small number and percentage of course sections enrolling 26-29 students or 30 students or larger. Clearly, the substantial majority of secondary school course sections operated during the 2007-08 school year—169 course sections or 97.1%—enrolled between 25 students/section or less.

The Project Consultants concluded that the school district's secondary school class section sizes were balanced, marginally cost/effective, and highly appealing to parents. Kindred School District #2's distribution of secondary class sections would be classified as more favorable than such distributions found in comparably-sized school districts and high schools in the Upper Midwest during the 2007-08 school year.

In examining the secondary school's master schedule, the Project Consultants concluded that, in an effort to be service-oriented to and minimize course conflicts for students at the secondary school level, school administrators provided multiple sections of particular courses—across the

master schedule—when, perhaps, a smaller number of course sections would have sufficed to (numerically) accommodate students. Indeed, through offering additional sections of a course, class section sizes tend to diminish, but, at the same time, the needs of students are more adequately served. Kindred School District #2's leadership has performed expertly in providing desirable class section sizes and—in many instances—multiple sections to enhance student choice and reduce scheduling conflicts. The resultant byproduct of those student accommodations are somewhat lower and more marginally cost/ineffective class section sizes.

TABLE 11
KINDRED SCHOOL DISTRICT #2
SECONDARY CLASS SIZES
2007-08

School	Less than 20	20-25	26-29	30 or larger	Total
Secondary	118	51	1	4	174
%	67.8%	29.3%	0.6%	2.3%	100.0%

The Project Consultants reviewed Kindred School District #2's secondary school course titles which enrolled less than 15 students during the 2007-08 school year and identified the following subject matter disciplines as displaying a higher level of cost/ineffectively staffed course sections: world language; art; agriculture; family and consumer science; and business education/computers. The Project Consultants findings were not deemed to be inconsistent with trends found in school districts of comparable size to Kindred School District #2.

4.3 Senior High School Credit Course Offerings

Kindred School District #2's high school offered a seven period, traditional schedule with 50 minute periods. Four minutes were allocated for passing between periods. School hours extended from 8:40 a.m. to 3:30 p.m.

TABLE 12
KINDRED SCHOOL DISTRICT #2
CREDIT COURSE OFFERINGS, 9-12
2007-08

Discipline/Subject	Credits
Agriculture	8.3
Art	1.5
Business Education/Computers	5.5
English	7.0
Family and Consumer Science	4.0
Mathematics	6.0
Music	1.0
Physical Education & Health	2.0
Science	5.0
Social Studies	5.5
World Languages	3.0
ITV	7.5
Other	0.3
Total	56.6

Kindred School District #2's secondary school courses were primarily structured on a semester and year-long basis.

The Project Consultants examined Kindred High School's (grades 9-12) course offerings during the 2007-08 school year as described in **Kindred High School: Course Descriptions, Grades 9-12, 2007-08.** Table 12 indicates the school district made available 56.6 credit course offerings during the 2007-08 school year. Course offerings spanned 11 disciplines: agriculture; art; business education/computers; English; family and consumer science; mathematics; music; physical education and health; science; social studies; and world languages.

High school students were afforded the broadest array of credit course offerings in the following disciplines: agriculture (8.3 credits); English (7.0); mathematics (6.0); business education/computers (5.5); and social studies (5.5). The narrowest range of high school credit course offerings was made available to Kindred High School's grade 9-12 students in the following disciplines in 2007-08: music (1.0 credit); art (1.5); physical education and health (2.0).

Kindred High School provided an array of course options for high school students to secure advanced electives and/or college credits through interactive learning by way of the school district's participation in the Heart of the Valley Interactive Television Consortium. During the 2007-08 school year, Kindred School District #2 high school students participated in the following HOV-ITV course work: English 110/120 (dual credit); Probability and Statistics; and IT Essentials (dual credit).

The breadth and scope of grade 9-12 credit course offerings made available to Kindred High School students in 2007-08 were somewhat less

than comparable to offerings found in high schools with an average critical student mass of 200 students.

4.4 Course Preparations

The master schedule of Kindred High School for the 2007-08 school year was reviewed by the Project Consultants to determine the number of course preparations assigned to full-time and part-time teaching staff members in grades 7-12. The purpose of reviewing teacher course preparations in a secondary school of any school district is to establish the teaching load assigned to staff members and, further, make judgments about the cost/effectiveness of the school district's staffing operation.

An examination of Table 13 indicates that Kindred School District #2's secondary school employed 20 full-time (regular) teaching staff members and 3 part-time teaching staff members during the 2007-08 school year. One full-time (regular) secondary school teaching staff member or 5% was assigned 1-2 teaching preparations daily, while 19 full-time (regular) secondary school teaching staff members or 95.0% were assigned 3-4 teaching preparations daily. No full-time (regular) secondary school teaching staff member was assigned 5-6 teaching preparations daily. (The reader should note that full-time, regular secondary school teaching staff members depicted in Table 13 do not include administrators, quasi-administrators, or special education staff members).

Table 13 reveals that Kindred School District #2's secondary school employed three part-time (regular) teaching staff members. All three were assigned 1-2 teaching preparations daily.

TABLE 13
KINDRED SCHOOL DISTRICT #2
TEACHER PREPARATIONS*
2007-08

	1-2	3-4	5-6	Total
Full Time	1	19	0	20
Part Time	3	0	0	3

***Does not include special education staff, administrators, or quasi-administrators.**

The Project Consultants concluded that the number and distribution of daily preparations assigned to full-time (regular) teaching staff members in Kindred School District #2's secondary school for the 2007-08 school year were slightly more favorable to those which would be found in similarly-sized, comprehensive high schools.

4.5 Staffing

Kindred School District #2's full-time equivalent licensed staff members were examined by the Project Consultants for the 9 inclusive years from 1998-99 through 2007-08.

Table 14 delineates that the school district employed 49.6 full-time equivalent licensed staff members in 1998-99 and 52.5 full-time equivalent licensed staff members in 2007-08, a net gain of +3.9 FTE licensed staff members or +5.8% over the 9 year period of time.

TABLE 14
KINDRED SCHOOL DISTRICT#2
TOTAL LICENSED STAFF (FTE)
1998-99 / 2007-08

School	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08
/32	49.6	50.4	50.2	51.6	51.7	51.8	57.2	53.2	51.8	52.5

Kindred School District #2's student enrollment decreased from 720 students in 1998-99 to 667 students in 2007-08, a net decline of -53 students or -7.4%. Comparing the school district's student enrollment loss and full-time licensed staff increase over the same span of time, the Project Consultants concluded that the organization has made a continued commitment to maintaining desirable, quality class section sizes, retaining course offerings, and providing services required by the students entrusted to the school district by slightly increasing the number of licensed professional staff during a time span when the organization's enrollment has experienced moderate decline.

The Project Consultants concluded that the leadership of Kindred School District #2 would be cautioned to closely monitor the interrelated student enrollment and staffing trends to insure that, if enrollment decline should occur (reducing revenues), licensed staffing adjustments are commensurately considered (reducing expenditures).

4.6 Instructional Support Services

Kindred School District #2 furnishes (or contracts for the provision of) a broad and comprehensive array of instructional and support services for

pre-school, school-aged, and adult populations that would be characteristic of North Dakota school districts and enrollments of similar or larger critical student masses than that which is found in Kindred School District #2.

Instructional support services are typically defined as programs and services which extend beyond those dispensed by professional teaching staff members **in the regular/general classroom setting** during the regular school day (8:00 am.-4:00 p.m.).

Kindred School District #2's instructional and support services—as reported in Table 15—include programs and services delivered by specialist personnel (e.g. computer; music; physical education; media); special education programs and services (e.g. learning disabilities; autism; speech and language); programs and services for under-achieving students (e.g. Title I); co-curricular and extra-curricular activities (e.g. athletics, band, dramatics); student assistance (e.g. guidance counselors; nurse service); external programming (e.g. on-line course work; cooperative/community programming); and a host of others.

While the content and delivery of regular/general classroom programs have evolved in public school districts over the past 50 years and precipitated the remodeling, retrofitting, and/or new construction of facilities, it is the creation and expansion of sophisticated instructional programs and services—generally in response to parental needs and statutory changes—that have resulted in the most substantial changes in school facility designs, grade level configurations, and school (enrollment) sizes. Witness, for example, that a mere three and a half decades ago, North

TABLE 15 KINDRED SCHOOL DISTRICT #2 INSTRUCTIONAL AND SUPPORT SERVICES (SAMPLE) 2007-08	
• Athletics	• Autism Spectrum Disorder
• Cheerleading	• Learning Disability
• Dramatics/Plays	• Communication/Speech Disorder
• Speech	• Mental Disability
• Band/Marching Band (Fall)	• Emotional/Behavioral Disability
• Choir	• Physical Disability
• Music Ensembles/Musicals	• Other Health Impaired
• Yearbook	• Psychological Services
• Danceline	• Vision Services
• Summer School	• Deaf/Hard of Hearing Disability
• Academic Competitions	• Physical Therapy
• Leadership Groups	• Occupational Therapy
• Clubs	• Early Childhood/Special Education
• Music Specialist	• Early Childhood/Family Education
• Physical Education Specialist	• Cooperative Programming
• Library/Media Specialist	• College in the School
• Computer Specialist	• Pre-School
• Guidance Counselor	• On-Line Course
• Social Worner	• All Day Kindergarten
• Nurse Service	• Title I; Title I After School Program
• School Resource Officer	• Pre-School Screening

Dakota school districts (and all others) offered no women's athletic programs (much less near equity in such programming), special education programs, computer technology, school-aged childcare, early childhood/family education programming, alternative learning programs,

and the like. Obviously then, school districts with facilities constructed prior to 1970 did not have in place many of the specifically designed teaching/learning spaces required to accommodate those instructional programs and services which were designed and implemented after 1970. Indeed, this is the case in Kindred School District #2.

4.7 Organizational Configuration

Kindred School District #2 operated a 2-11 organizational configuration (K-1, and 2-12) during the 2007-08 school year. K-1 instructional programming was furnished at Davenport Elementary School in that school year, while grades 2-12 instructional programming was delivered at Kindred Elementary/Secondary School. Insofar as possible, Kindred School District #2's School Board and administrative leadership attempted to specifically assign/allocate teaching/learning "home-based" spaces for elementary, middle level, and high school students and instruction. This goal could be achieved only partially due to the necessity of students and staff sharing some measure of "core space." To the largest degree, the school district's leadership has been successful in minimizing or eliminating the encroachment of high school level students in the elementary school classroom wing of the facility.

The school district's organizational configuration is an unconventional one by modern-day standards. The Project Consultants concluded that the existing organizational configuration—implemented by Kindred School District #2—was designed to achieve student fit in the existing/available teaching/learning facilities. That is, the school district has available a small, remotely-located, cost/ineffective Davenport Elementary School which has

the capability of accommodating, perhaps, 100 students. Kindred Elementary/Secondary School—on the other hand—has the capability of accommodating, perhaps, 600 students without over-crowding its elementary school wing, encroaching on general purpose classrooms for middle level students, and further over-stressing the already over-stressed core facilities (e.g. gymnasia, multi-purpose areas, music, cafeteria, media, and the like). Given the fact that neither of Kindred School District #2's teaching/learning facilities has the capability of accommodating all of the organization's student population, the existing organizational configuration provides a marginally agreeable solution to a complex problem.

The Project Consultants rated the school district's organizational configuration as poor. That is, if the school district were in a position to design and construct new school facilities—based on sound educational research and desirable teaching/learning and staffing principles—the 2-11 organizational configuration would never be embraced. At the same time, the Project Consultants are cognizant that, at present, the school district's leadership is confronted with the necessity of providing quality programs and services to the youth of the school district's communities with the facility resources that are available.

The Project Consultants also concluded that there is not substantial justification and/or logic for the long-term usage of Davenport Elementary School as a teaching/learning facility, serving the students of Kindred School District #2. The school is a half-century old, diminutive in size, marginal in quality, remotely-located from the school district's main staff and services, only partially served by administrative staffing, and distant in

location as a service center for the school district's youngest and most vulnerable students. The Project Consultants do not view a future closure of Davenport Elementary School as having any significant impact on the growth or decline of the community's population.

If Kindred School District #2's K-12 enrollment increases—as all evidence seems to suggest it will—there is every reason to believe that, in the reasonably near future, the School Board and Superintendent would be well advised to institute a Facility Alternatives Study process which would lead to (a) a determination of a desirable organizational configuration, (b) a determination of the future usage of school district facilities, (c) a study of available school sites, resulting in the purchase of a preferred school site, and (d) the construction of a new school building (either K-12 or 7-12 or 6-12, depending upon future utilization of the current Kindred Elementary/Secondary School).

4.8 Curriculum and Staff Development

The Project Consultants found that Kindred School District #2 has in place a regularized curriculum review cycle that provides a mechanism for reviewing and renewing curricula and textbooks to insure instructional programming is contemporary (modern-day). According to the school district's administration, curricula in reading, science, social studies, and writing have been reviewed in recent years and updated. The mathematics curricula is slated for updating in the near future.

Kindred School District #2's curricular programs are standards-based. That is, the school district's skills, concepts, and processes—delivered to

students—are identified through "curriculum mapping" and aligned to State of North Dakota standards.

Kindred School District #2 has achieved and is currently achieving adequate yearly progress (AYP) in conformance with the No Child Left Behind federal statute.

4.9 Instructional Methodologies and Delivery Systems

The Project Consultants interviewed Kindred School District #2's Superintendent, Principals, and select teachers to ascertain the status of the organization's curricula and prevalence of the usage of modern-day instructional methodologies and delivery systems throughout the school organization.

The Project Consultants found that Kindred School District #2's teaching staff members utilized—to varying degrees—a variety of conventional and modern-day teaching/learning methodologies at all levels.

Predominantly, instruction takes place in a self-contained classroom setting (at elementary, middle, and high school levels) with individual and, in some instances, teams of teachers delivering, guiding, and/or collaborating on the delivery of instruction. Beyond lecture-based learning, teachers employ cooperative learning, project-based learning, technology-based learning, special education inclusion model, special education resource room model, interdisciplinary instructional delivery, applied learning, differentiated instruction, guided instruction, multi-age level grouping, and, to a lesser extent, others.

Kindred School District #2 high school students are afforded access to numerous advanced elective courses by way of interactive television through the Heart of the Valley Interactive Television Consortium.

4.10 Special Education Program

Kindred School District #2 provides a comprehensive array of special education programs and services through its membership in the Rural Cass County Multidistrict Special Education Unit. Member school districts in the Rural Cass County Multidistrict Special Education Unit include—in addition to Kindred School District #2—the following: Central Cass School District #17; Mapleton School District #7, and Northern Cass School District #97.

The headquarters for the Director of the Unit is in the Mapleton School, Mapleton, North Dakota.

The Project Consultants found that Kindred School District #2 delivered special education programs and services to 67 P-K-12 students in the following disability categories during the 2007-08 school year: MR (2 students); HI (2 students); SI (18 students); ED (4 students); OHI (5 students); SLD (26 students); AUT (5 students); and special education pre-school (5 students).

According to Kindred School District #2's special education staff roster for the 2007-08 school year, the school district employed 5.7 FTE teachers; 2.0 FTE interpreters; .2 social worker; .2 psychologists; .3 OT/PT teacher; and 4.5 student aides/ paraprofessionals.

The Project Consultants concluded that special education programs, services, staff, and students—as is the case with regular education programs, services, staff, and students—are increasingly becoming impacted (negatively) by facilities which are experiencing over-stressing and over-crowding.

The Project Consultants concluded that students qualifying for special education programs and services (and their parents) in Kindred School District #2 have access to a broad array of programming options—similar to those found in school districts of like-size throughout the State of North Dakota.

4.11 Technology

The Project Consultants received and reviewed Kindred School District #2's Technology Plan, 2007-10, Technology Plan Approval Notice from the North Dakota Educational Technology Council, and Kindred School District #2's equipment inventory.

Kindred School District #2's Technology Plan is aligned with the vision of the North Dakota State Educational Plan and the No Child Left Behind federal statute.

According to Kindred School District #2's Technology Plan, 2007-10, 2007-08 recommendations for additional hardware acquisitions included securing the Wireless Laptop Laboratory of 12-20 machines, 12 computers for the Kindergarten LMC, LCD projectors, digital video cameras, 12 multi-media computers for Laboratory 204, and additional computers for the Central

Office and coaching staff. 2008-09 hardware acquisitions included the replacement of 25-30 computers, SMART Boards or equivalent, additional LCD projectors, additional digital audio/visual equipment, and the replacement of 25 computers in Laboratory 156-B. 2009-10 hardware acquisitions included the replacement of 25-30 computers, along with the purchase of SMART Boards, additional LCD projectors, digital audio/visual equipment, and the replacement of 12-24 computers in Laboratory 204.

Kindred School District #2's technology budget totaled $89,700 in 2007-08, including $62,000 for hardware, $12,000 for software, and $7,000 for supplies.

Kindred School District #2 is a member of the Heart of the Valley ITV Consortium.

The school district employs standardized software on all computers.

The school employs both Apple and PC platforms and both stationary (3) and mobile wireless (1) laboratories. The school district intends to expand its wireless laboratory capability in the future.

The Project Consultants concluded that Kindred School District #2 must vastly increase its financial investment in state-of-the-art technology equipment and staff development in the future.

4.12 Strategic Plan

The Project Consultants observed that Kindred School District #2 does not have in place a multi-year strategic plan.

The Project Consultants recommend the school district institute a process which will result in the development of a multi-faceted, multi-year strategic plan, including the identification of goals, strengths, needs, priorities, strategies, and plans of action for future implementation.

4.13 Interview Perceptions: District Strengths, Needs, and Ratings

The Project Consultants conducted interviews with the Superintendent of Schools, School Board members, Principals, and other community patrons to secure perspectives about perceived strengths, needs, and priority ratings of Kindred School District #2.

The most frequently identified strengths of Kindred School District #2 among individuals interviewed were as follows: district size, resulting in an ability for all students to be involved and participate; teachers who care; small class sizes; quality education; small town atmosphere; good curriculum; financially well managed; good, caring staff; and others.

The most frequently identified needs/concerns of Kindred School District #2 among individuals interviewed were as follows: facilities; differing perceptions/attitudes/values among residents of the school district; safety and security; the need for more student opportunities; retention of quality staff; limited offerings; community segregation; select programs need improvement; and others.

Individuals interviewed by the Project Consultants were asked to rate select quality factors/characteristics of Kindred School District #2 on a rating scale of zero to ten (lowest to highest). Respondents' assessments—when averaged—yielded the following quality ratings of organizational characteristics:

- Quality of the school district: 8
- Quality of the School Board: 8
- Quality of the administrative staff: 8
- Quality of the teaching staff: 8
- Quality of the school district's communication with its publics: 6
- Quality of the school district's planning for the future: 7
- Oppressiveness of school taxes: 5

(The Project Consultants noted that respondents' perceptions of the oppressiveness of school taxes—compared to the reality of other North Dakota school districts' taxes—were significantly inaccurate).

4.14 Summary

Detailed below are highlights identified in examining Kindred School District #2's educational programs, services, staffing, and other indicators:

- The school district delivered instructional programs and services to an average of 51.4 students/grade level in grades K-6 in 2007-08.

- The school district operated 12 elementary class sections or 63.2% with enrollments of less than 20 students, while 7 elementary class sections or 36.8% enrolled 20-25 students/section.

- The school district operated no elementary class sections with enrollments of 26-29 students/section or 30 students or larger during the 2007-08 school year.

- The Project Consultants rated the school district's elementary class sections as staffed at a highly desirable, cost/effective level at Davenport and Kindred Elementary Schools.

- The school district's average class section size in grades K-6 during the 2007-08 school year was computed at 18.9 students/section.

- The school district operated 174 secondary school (grades 7-12) course sections during the 2007-08 school year. Of those sections, 118 or 67.8% enrolled less than 20 students, 51 course sections or 29.3% enrolled 20-25 students, 1 course section or .6% enrolled 26-29 students, and 4 course sections or 2.3% enrolled 30 students or more.

- The Project Consultants rated the school district's secondary school class section sizes as highly desirable and marginally cost/effective

with a comparatively large number and percentage of course sections enrolling less than 20 students and, as well, a comparatively small number and percentage of course sections enrolling 26-29 students or 30 students or larger.

- The school district operated 169 secondary school course sections or 97.1% with enrollments of 25 students/sections or less.

- The Project Consultants concluded that the school district's secondary class section sizes were balanced, marginally cost/effective, and highly appealing to parents.

- The school district's distribution of secondary class sections would be classified as more favorable than such distributions found in comparably-sized school districts and high schools in the Upper Midwest during the 2007-08 school year.

- The Project Consultants concluded that, in an effort to be service-oriented to and minimize course conflicts for students at the secondary school level, school administrators provided multiple sections of particular courses—across the master schedule—when, perhaps, a smaller number of course sections would have sufficed to (numerically) accommodate students.

- The school district's leadership has performed expertly in providing desirable class section sizes and—in many instances—multiple sections to enhance student choice and reduce scheduling conflicts.

The resultant byproduct of those student accommodations are somewhat lower and more marginally cost/ineffective class section sizes.

- The school district made available 56.6 credit course offerings during the 2007-08 school year.

- The school district's high school course offerings spanned 11 disciplines: agriculture; art; business education/computers; English; family and consumer science; mathematics; music; physical education and health; science; social studies; and world languages.

- The school district's high school students were afforded the broadest array of credit course offerings in the following disciplines: agriculture (8.3 credits); English (7.0); mathematics (6.0); business education/ computers (5.5); and social studies (5.5).

- The school district's high school students were offered the narrowest range of high school credit course offerings in the following disciplines in 2007-08: music (1.0 credits); art (1.5); physical education and health (2.0).

- The school district provided an array of course options for high school students to secure advanced electives and/or college credits through interactive learning by way of the school district's participation in the Heart of the Valley Interactive Television Consortium.

- The school district's breadth and scope of grade 9-12 credit course offerings in 2007-08 were somewhat less than comparable to offerings found in high schools with an average critical student mass of 200 students.

- One full-time (regular) secondary school teaching staff member or 5% was assigned 1-2 teaching preparations daily, while 19 full-time (regular) secondary school teaching staff members or 95.0% were assigned 3-4 teaching preparations daily.

- The Project Consultants concluded that the number and distribution of daily preparations assigned to full-time (regular) teaching staff members in the school district's secondary school for the 2007-08 school year were slightly more favorable to those which would be found in similarly-sized, comprehensive high schools.

- The school district employed 49.6 full-time equivalent licensed staff members in 1998-99 and 52.5 full-time equivalent licensed staff members in 2007-08, a net gain of +3.9 FTE licensed staff members or +5.8% over the nine year period of time.

- The Project Consultants concluded that the leadership of the school district would be cautioned to closely monitor the inter-related student enrollment and staffing trends to insure that, if enrollment decline should occur (reducing revenues), licensed staffing adjustments are commensurately considered (reducing expenditures).

- The school district furnishes (or contracts for the provision of) a broad and comprehensive array of instructional and support services for pre-school, school-aged, and adult populations that would be characteristic of North Dakota school districts and enrollments of similar or larger critical student masses than that which would be found in Kindred School District #2.

- The school district's organizational configuration is an unconventional one by modern-day standards.

- The Project Consultants concluded that the existing organizational configuration—implemented by Kindred School District #2—was designed to achieve student fit in the existing/available teaching/learning facilities.

- The Project Consultants rated the school district's organizational configuration as poor.

- The Project Consultants concluded that there is not substantial justification and/or logic for the long-term usage of Davenport Elementary School as a teaching/learning facility, serving the school district's students. The school is a half-century old, diminutive in size, marginal in quality, remotely-located from the school district's main staff and services, only partially served by administrative staffing, and distant in location as a service center for the school district's youngest and most vulnerable students.

- The Project Consultants do not view a future closure of Davenport Elementary School as having any significant impact on the growth or decline of the community's population.

- The Project Consultants found that the school district has in place a regularized curriculum review cycle that provides a mechanism for reviewing and renewing curricula and textbooks to insure instructional programming is contemporary (modern-day).

- The school district's curricular programs are standards-based.

- The school district has achieved and is currently achieving adequate yearly progress (AYP) in confirmation with the No Child Left Behind federal statute.

- The Project Consultants found that the school district's teaching staff members utilized—to varying degrees—a variety of conventional and modern-day teaching/learning methodologies at all levels.

- The school district provides a comprehensive array of special education programs and services through its membership in the Rural Cass County Multidistrict Special Education Unit.

- The school district's special education staff roster for the 2007-08 school year included 5.7 FTE teachers; 2.0 FTE interpreters; .2 social worker; .2 psychologist; .3 OT/PT teacher; and 4.5 student aides/ paraprofessionals.

- The Project Consultants concluded that special education programs, services, staff, and students—as is the case with regular education programs, services, staff, and students—are increasingly becoming impacted (negatively) by facilities which are experiencing over-stressing and over-crowding.

- The Project Consultants concluded that students qualifying for special education programs and services (and their parents) in the school district have access to a broad array of programming options—similar to those found in school districts of like-size throughout the State of North Dakota.

- The Project Consultants noted that respondents' perceptions of the oppressiveness of school taxes—compared to the reality of other North Dakota school districts' taxes—were significantly inaccurate.

CHAPTER V
SCHOOL FACILITIES

5.0 Introduction

Following the Project Consultants' examination of Kindred School District #2's district size, enrollment trends, finances, educational programs and services, staffing, and related issues, a context had been provided within which an assessment could be made of the condition of the school district's current facilities and the need for remodeling and/or expansion of those school facilities.

5.1 Importance of School Facilities

Both private and public sector organizations and their leadership realize that the environment in which a process occurs and/or product is manufactured is supremely important to the organization's productivity, performance, and accountability and the level of quality of the process or product. School facilities provide the environment within which the teaching/learning process unfolds and the environment within which students either will or will not acquire skills, concepts, processes, and attributes necessary to function with distinction in the highly-competitive global economy that will characterize the 21st Century.

Surprisingly, it is only within the past three to four decades that school districts have given significant credence to the truism that school district facilities enhance or detract from the quality of delivery of educational programs and services to students and the achievement of those students.

Prior to the 1970's and the onset of special education programs, gender equity in the delivery of curricular, extra-curricular, and co-curricular programs, handicapped accessibility, health and life safety issues, technology expansion, child-care, early childhood/family education programming, parenting education, Senior Citizen programming, multi-institutional collaboration, burgeoning recreational and enrichment programming, and a myriad of other programs and services, school facilities were simply designed to "house" instructional programs and services. In today's and tomorrow's information age, school facilities must do much more than "house" the needs of preschoolers, school-aged students, parents, and community patrons. Access to sophisticated laboratories, a range of co-educational programs, rapidly-changing technology, sophisticated media, child-care programming, early childhood opportunities, enhanced parent/patron involvement in the schools, business/educational partnerships, performance-based curricular design, multi-district telecommunication connectivity, co-location of governmental programs and services, expanded volunteerism, community-based and project-based learning, graduation standards' implementation, and much, much more virtually make it mandatory that school district facilities **not be designed** in the same manner as characterized the unsophisticated, lecture-based, inflexible structures that reflected delivery systems and methodologies between 1900-1960. Consequently, program and service changes and public expectations—as reflected above—must be taken into consideration in appraising and assessing school facilities and teaching/learning environments which will prepare students for the world of work in the 21st Century.

In part, Kindred School District #2's **Organizational Analysis Study** was focused on assessing the teaching/learning environments in which students either will or will not acquire the skills, concepts, processes, and attributes necessary to function with distinction in the highly-competitive global economy that will characterize the 21st Century; offering conclusions, alternatives, and recommendations to assist the School Board, Superintendent, administrative and teaching staffs, and community patrons strengthen their organization's teaching/learning environments; and, indeed, providing a framework within which the school district can be strengthened to attract prospective parents, patrons, and students to the school district and communities in the future.

5.2 Guidelines for School Facilities

Presented below in Table 16 are Selected Guidelines for School Facilities which provide representative benchmarks for school districts to use when undertaking new construction, renovation, and remodeling projects and/or comparative facility appraisals.

The Project Consultants used the Selected Guidelines for School Facilities—among other criteria/standards—in examining the status of Kindred School District #2's teaching/learning facilities.

Detailed in the table are square footage guidelines suggested for elementary, middle, and high school facilities, respectively, with enrollments of less than 500 students and 500-999 students, including—as well—in schools with swimming pool and/or auditorium additions.

Additionally, the table provides guidelines for school site acreage and (facility) square footage per student in modern-day elementary, middle, junior high, senior high, junior-senior high, and campus school settings.

TABLE 16
SELECTED GUIDELINES FOR SCHOOL FACILITIES

School Enrollment	Elementary SF	Middle Level SF	High School SF
Less than 500	125-155	170-200	200-225
500-999	110-135	160-190	190-220
For Pool Addition	10-12	10-12	10-12
For Auditorium Addition	10-12	10-12	10-12

Site	Acreage	Square Foot Per Student
Elementary	10	100 SF – 110 SF
Middle School	20	48 SF or 25/1200 SF
Junior High	25	36 SF or 25/900 SF
Senior High	35	150 – 200 SF depending upon grade organization and enrollment
Junior-Senior High	40	150-200 SF depending upon grade organization and enrollment
Campus (Several Schools)	40 – 60	32 SF or 25/800 SF
PLUS One acre for each 100 students of estimated capacity, including additions		

The Project Consultants referenced the Selected Guidelines for School Facilities in offering periodic commentary about the size adequacy of

classrooms and specialty spaces in Kindred School District #2's teaching/learning facilities.

5.3 Overview of the School District's Facilities

At the time of the conduct of the **Organizational Analysis Study,** Kindred School District #2 owned and operated two teaching/learning facilities: Davenport Elementary School and Kindred Elementary/Secondary School.

TABLE 17
KINDRED SCHOOL DISTRICT #2
OVERVIEW OF FACILITIES
2007-08

School	Dates	Type	Square Feet	Enrollment	Sq. Ft./ Student
Davenport Elementary	1957	K-1	16,000	109	146.8
Kindred Elementary/ Secondary	1922* 1947 1957 1962 1970 1992 2003 (R) 2006	2-12	97,500	558	174.7

*Fire destroyed (1970)

Table 17 provides the dates of original construction of and additions to each of the school district's teaching/learning facilities; the grade level

configuration of each building; facility square footages; 2007-08 enrollments; and 2007-08 square footages/student.

Davenport Elementary School is a K-1 teaching/learning facility, located in the community of Davenport. The facility was constructed in 1957 and has received no subsequent additions. The Davenport Elementary School structure provided 16,000 square feet of teaching/learning, office, and support spaces for the 2007-08 student population of 109, offering an acceptably accommodating space allocation of 146.8 square feet/student.

Kindred Elementary/Secondary School is located in the City of Kindred and houses the school district's grade 2-12 student populations. Originally constructed in 1922 (destroyed by fire on February 14, 1970), Kindred Elementary/Secondary School has received seven subsequent additions/ remodelings in 1947 (addition), 1957 (addition), 1962 (addition), 1970 (addition), 1992 (addition), 2003 (remodeling), and 2006 (addition). The elementary/ secondary school facility provided 97,500 square feet of teaching/learning, office, and support space in 2007-08 for 558 enrolled students. The average number of square feet/student available in 2007-08 at Kindred Elementary/Secondary School was a modest 174.7 square feet.

5.4 Facility Observations by the Project Consultants

The Project Consultants toured Kindred School District #2's school facilities to assess the **educational adequacy** of the facilities. **Educational adequacy** is a phrase employed to describe the capabilities of a school facility to enhance the delivery of modern-day programs, services, methodologies, delivery systems, and learning experiences that will ensure

students are well-positioned to perform with distinction in a highly competitive, global marketplace upon high school graduation or following further training in an institution of higher learning (e.g. technical institution, college, university, military, or other).

Except in newly constructed schools, most modern-day school facilities lack select components of **educational adequacy**, but in the main, they clearly exhibit a significant majority of the following design components and characteristics:

- Adequate size, including space for parking, playgrounds, athletics/recreational/community usage, transportation access, other.
- Meet health, life safety, and accessibility statutes and codes.
- Display modern-day electrical and mechanical systems.
- Display current technology, including voice, video, and data access.
- Provide adequate classroom and specialty room space per student.
- Are flexibly designed to accommodate multi-purpose functions.
- Accommodate modern-day teaching methodologies and delivery systems, including team teaching, project-based learning, applied learning, cooperative learning, community-based learning, inter-disciplinary curriculum delivery, performance-based assessment, co-

located programming, inclusion model, resource-based model, multi-age level grouping, technology-based learning, peer tutoring, and the like.

- Provide adequate conferencing space.

- Furnish variable teaching/learning spaces, including independent study, small group, and large group spaces.

- Offer specialty spaces for teacher planning, teaming, and curriculum design.

- Offer a centrally-located, spacious, multi-purpose media center as the "hub" of the school.

- Provide teacher office areas.

- Furnish adequate meeting spaces.

- Incorporate contemporary equipment, furniture, and fixtures.

- Encourage before and after school usage by the community, while maintaining the integrity (security) of the school district's properties.

- Facilitate usage of technology in the teaching/learning process.

- Other factors.

Among notations (including select educational inadequacies) identified by the Project Consultants in Kindred School District #2's teaching/learning facilities were the following:

Davenport Elementary School

- The school is conventional, small, not modern-day and has significant limitations.
- The school is marginally suitable for its current function as a K-1 facility but provides no space for expansion or diversification.
- The school is located on an adequate site for the function it performs.
- The school has select, deferred maintenance needs.
- The school's office is appropriately located for security purposes, though marginal by modern-day standards.
- The school's classrooms are adequate and adequately appointed by modern-day standards.
- The school's library/media center is under-sized by modern-day standards and marginal for the school population served.
- The school's gymnasium is good to excellent for the school population served, though there are deferred maintenance needs.

- The school's kindergarten classrooms are adequate.

- The school's cafeteria is adequate.

- The school lacks a computer laboratory.

- The school lacks a music space.

- The school lacks space to accommodate special education programming.

- The school lacks conferencing space.

Kindred Elementary/Secondary School

- The school is located on an inadequate site which has limited capabilities for future expansion.

- The school has no distinctive, clear, and/or recognizable main entrance.

- The school's location off of a major highway poses significant safety and security hazards.

- The school's entries do not provide for the safety and security of the students and staff and could easily be breached by intruders.

- The school's layout has lost much of its logic as a result of construction of multiple additions.

- The school's administrative offices are poorly located, insufficiently sized, not enhancing to facility security, and do not lend to the efficiency of operation (coordination of functions).

- The school's elementary classroom wing is insecure.

- The school's elementary classrooms range in quality and appointments from marginally adequate to modern-day (recently remodeled), though some are under-sized by modern-day standards.

- The school's special education (shared) resource room is basic and marginal.

- The school's elementary Principal office is woefully under-sized.

- The school's middle school classrooms are adequate by modern-day standards.

- The school's middle school science room is adequate.

- The school's secondary level, general purpose classrooms are adequate.

- The school's commons/cafeteria is adequate.

- The school's multi-purpose room is adequate (a divider separates the commons from the multi-purpose room).

- The school's wood shop (with an adjoining classroom) would appear under-sized and marginal by modern-day standards.

- The school's technology laboratory is adequate.

- The school's metal shop is adequate.

- The school's weight room is adequate.

- The school's choir room in under-sized, marginal, and undesirably located.

- The school's band room is spacious, poorly located, and not desirable by modern-day standards.

- The school's high school cafeteria is poorly situated for expansion, unappealing, and marginal.

- The school's high school special education offices are small though adequate.

- The school's elementary library/media center is small and inadequate.

- The school's secondary level library/media center—though much more appealing—is under-sized, has modest seating capacity, and is, at best, adequate by modern-day standards.

- The school's high school computer laboratory is good and well-appointed by modern-day standards.

- The school's art laboratory is under-sized, crowded, and marginal by modern-day standards.

- The school's family and consumer science laboratory is adequate to good, displays modern equipment, and accommodating storage.

- The school's secondary school (old addition) classrooms are basic, un-appointed, and adequate to under-sized.

- The school's business education laboratory is basic and under-sized by modern-day standards.

- The school's high school science lecture/laboratory is adequate.

- The school's high school gymnasium is spacious, has good seating, and is adequate to good.

- The school displays air quality issues.

- The school's teaching/learning spaces are not specifically designed to enhance multi-purpose functions.

- The school does not furnish variable teaching/learning spaces, including independent study, small group, and large group spaces.

- The school does not offer specialty spaces for teacher planning, teaming, and curriculum design.

- The school—having received multiple additions over multiple years—has not been constructed for future expandability. Many of the "core" or "hub" spaces are located in the building's interior and, hence, are not expandable as the school district's student population grows (as it most assuredly will).

5.5 Facility Condition Assessment

The Project Consultants engaged the services of ICS, Spring Lake Park, Minnesota, a firm which specializes in facility management/construction management, to examine Kindred School District #2's teaching/learning facilities and provide technical advisement to Roger Worner Associates, Inc. and the Superintendent and School Board of Kindred School District #2.

Among the more striking observations made by ICS personnel about the school district's facilities were the following: Kindred Elementary/ Secondary School: roofing will become an issue in the next 10 years; replacement of all exterior sealants within 3-5 years; original facility

windows will need replacement; need for select carpet replacement; need for systematic replacement of asbestos-laden floor tile; need for select replacement of ceiling tiles; high school student lockers will require future replacement; science areas require updates; steam and condensate piping issues; select buildings have no capability for providing ventilation to occupied spaces; pneumatic controls should be updated with major mechanical project; limited fire protection; additional electrical outlets needed; majority of lighting is T-12 and antiquated; metal-halide lighting should be replaced; only one-half of building is on clock system; technology issues; supervision issues; security issues; others. Davenport Elementary School: small/marginal parking lot; flashing issues; windows need complete replacement; carpet replacement needed; vinyl tile (asbestos); classroom casework displays signs of aging; small kitchen; residential appliances in kitchen; original fuel oil furnaces serve building; heating limited to electric radiation; no fire protection; antiquated (T-12) lighting; gymnasium lighting is metal-halide; no public address system; technology issues; others.

The Project Consultants did not view the exteriors of either of Kindred School District #2's teaching/learning facilities as effective tools for marketing the school district, its communities, or the area to discriminating, mobile parents who are seeking a location in which to purchase or build a home, reside, and enroll their child/children in a teaching/learning environment. Candidly, the interiors of both of Kindred School District #2's teaching/learning facilities do not market the school district, its communities, and the area much more positively (then the exteriors).

The Project Consultants concluded that Kindred School District #2's teaching/learning facilities would generally be rated no better than marginally adequate by modern-day standards and would not be considered significant assets for encouraging residential, commercial, and industrial growth and development in the geographic boundaries of the school district.

5.6 General Assessment of School District Facilities

The Project Consultants concluded that, long-term, Kindred School District #2 should construct, minimally, a new grade 6-12 or 7-12 middle level/high school or, maximally, a new grade P-K-12 elementary/middle level/high school.

The Project Consultants further concluded that there is little long-term value in the school district's continuing use of the grades K-1 Davenport Elementary School. The Davenport facility is aged (half-century), diminutive, isolated (in comparison with the rest of the school district), has only part-time (minimal) administrative presence, is not fire protected, and requires the school district's smallest and most vulnerable youth to be transported to a site which is removed from all other students to a setting which has available the least amount of support services. The Project Consultants do not intend this commentary to be considered as a slight to the residents of the Davenport community. The fact is that the long-term maintenance of the Davenport Elementary School facility is not a logical, cost/effective, effective, or efficient decision for Kindred School District #2.

5.7 Summary

The following are summary remarks on Kindred School District #2's teaching/learning facilities:

- Davenport Elementary School is a diminutive, cost/ineffective, marginally modern-day, teaching/learning facility.

- Kindred Elementary/Secondary School is a basic, adequate facility by period standards. The school has deferred maintenance, safety and security, site size limitations, and other qualitative issues and is increasingly over-crowded and over-stressed. Core spaces in the school are over-stressed and, as a result of multiple additions, remodelings, and adaptations, are poorly located for expansion.

- The Project Consultants do not recommend the long-term maintenance of Davenport Elementary School as a teaching/learning facility.

- The Project Consultants recommend Kindred School District #2 institute plans which will result in the future construction of either a new P-K-12 elementary/middle level/high school or a new grades 6-12 or 7-12 middle level/high school.

CHAPTER VI
CONCLUSIONS, ALTERNATIVES, AND RECOMMENDATIONS

6.0 Introduction

Superintendent of Schools Steven T. Hall and the School Board of Kindred School District #2 determined it was timely and necessary to commission the conduct of an **Organizational Analysis Study** to assess the status of the school enterprise and, further, to gather and analyze school district data, present findings, draw conclusions, identify alternatives, and prepare recommendations which would assist in short-term and long-term planning, enhance organizational cost/effectiveness, strengthen student marketshare, facilitate quality program and service delivery, improve teaching/learning environments, reduce future over-crowding of the school district's facilities, and strengthen communication with all sectors of the school district's communities.

Cited below are those questions which were prepared to guide the conduct of Kindred School District #2's **Organizational Analysis Study:**

- What is the current status of the school district, including its enrollment, enrollment trends, finances, programs, services, staffing, organizational configuration, facilities, and related issues?

- What conclusions may be drawn about the effectiveness, efficiency, and cost/effectiveness of the school district's operations?

- What alternatives are plausible for increasing the effectiveness, efficiency, and cost/effectiveness of the school district's operations?

- What recommendations do the Project Consultants suggest may be employed to increase the effectiveness, efficiency, and cost/effectiveness of the school district's operations?

6.1 Conclusions

Based on data gathered, analyzed, and presented in the previous four chapters of the **Organizational Analysis Study,** the Project Consultants offer the following conclusions to the School Board and Superintendent of Kindred School District #2:

District Size and Enrollment Trends

- **The school district enrolled 667 students in grades K-12 during the 2007-08 school year.**

- **By State of North Dakota standards, the school district would be classified as a large critical student mass organization.**

- **The school district's average grade level enrollment size during the 2007-08 school year was 51.3 students.**

- **The school district's enrollment by grade level in 2007-08 yielded good current and future potential for retaining highly cost/effective staffing and favorable ability to balance class section sizes.**

- **The school district presented itself, organizationally, as a stable enrollment school district with potential for future growth.**

- **Between 1996-97 and 2006-07, the school district's average daily membership increased from 656 students to 690 students, yielding a net gain of +34 students or +5.2% over the ten year span of time evaluated.**

- **The school district would be classified as a stable enrollment school district.**

- **The school district's administrators projected the organization's student enrollment would decrease from 690 students in 2006-07 to 666 students in 2011-12, a net loss of -24 students or -3.5%.**

- **The Project Consultants could find substantial reason to believe the organization's enrollment projections could be understated for the future if (a) the school district were to experience further increases in the "in-migration" of non-resident students through open enrollment, (b) the school district were to receive overtures from neighboring school districts to consider the possibility of organizational restructuring and/or consolidation, and (c) most likely, the school district were to experience new residential and commercial development/growth as a result of the organization's geographic location in the Fargo-Moorhead metropolitan area "growth corridor."**

- The Project Consultants are convinced the organization will grow, but the pace and magnitude of that growth will be dependent, largely, on the growth of the Fargo-Moorhead metropolitan area "growth corridor" development and the school district leadership's position on "posturing the organization for future growth" through addressing the current limitations and/or inadequacies of the organization's teaching/learning facilities.

- By State of North Dakota standards, the school district's non-public school and home school enrollments would be considered below-average for school districts of like-size.

- The Project Consultants concluded that there is every reason to believe the general population and student population of Cass County and Kindred School District #2 will realize substantial general population and student population increase over the course of the next 2-3 decades.

- The Project Consultants concluded that Kindred School District #2 would be well advised to plan for the remodeling of the current Kindred Elementary/Secondary School facility and the construction of a new school facility(ies) to reduce current facility over-stressing and accommodate the certain growth that will occur in the school district's general population and student population.

Finances

- The school district's General Fund revenue increased from $3,729,292 in 2001-02 to $4,664,630 in 2006-07, an increase of +$935,338 or +25.1%.

- The school district's General Fund expenditures increased from $3,669,562 in 2001-02 to $4,605,283 in 2006-07, a gain of +$935,721 or +25.5%.

- The school district's General Fund balance increased from $677,833 in 2001-02 to $893,030 in 2006-07, an increase of +$215,197 or +31.7%.

- The school district's General Fund balance of $893,030 at the conclusion of the 2006-07 school year amounted to a commendable 19.4% of the school district's General Fund expenditure budget of $4,605,283.

- The school district operated balanced General Fund budgets in five of the six years between 2001-02 and 2006-07, including the four most recently reported fiscal years.

- By every indicator, the school district displayed itself as a financially well-managed educational organization.

- The school district's increases in individual and collective Fund Group I cost centers over the eight year span of time from 1998-

99 through 2006-07 would be considered modest and prudent by comparison with the eight year cost growth in the average of all peer group State of North Dakota school districts and the average of all State of North Dakota school districts.

- The school district's leadership could be justifiably proud of having displayed sound, prudent fiscal management and conservative, restrained spending over the eight year span of time from 1998-99 through 2006-07.

- When compared to the average of all North Dakota peer group school districts and the average of all State of North Dakota school districts, Kindred School District #2 would be classified as a low-spending educational organization.

- The school district's average cost/pupil over the eight year span of time from 1998-99 through 2006-07 was substandard when compared to the average of all peer group school districts in the State of North Dakota and the average of all school districts in North Dakota.

- On a comparative basis, the school district has lost or will lose its qualitative and/or competitive standing in relationship to other North Dakota school districts if the organization's expenditure trend in the future mirrors that of the recent past.

- **The school district was ranked 154th of 154 high school districts in average cost/pupil expenditures for the 2006-07 organizational year.**

- **The school district's ending balance increased by +$325,273 or +57.3% over the eight year span of time from 1998-99 through 2006-07.**

- **The school district displayed a commendable ending balance at the conclusion of the 2006-07 organizational year.**

- **The taxable value of the school district grew at a substantial rate (an average of +8.5%/year) over the eight year span of time from 1999-00 through 2007-08.**

- **Over the eight year span of time from 1999-00 through 2007-08, Kindred School District #2's taxable value/pupil increased by +$8,823/pupil or +74.0%. During the same span of time, the taxable value/pupil in Cass County and the State of North Dakota, respectively, increased by +$11,036/pupil or +92.8% and +$10,290/pupil or +105.3%.**

- **The Project Consultants would speculate that, in part, the lesser growth in the taxable value/pupil in Kindred School District #2 might well be attributable to (a) a lesser/slower rate of residential and commercial development than in other sectors (e.g. Cass County) and (b) less appealing school district infrastructure (e.g.**

teaching/learning buildings) than in competitive enterprises (e.g. Fargo, West Fargo, Central Cass, Northern Cass).

- In 1998-99, the school district's total mill levy trailed that of the average of all school districts in the State of North Dakota by -18.28 mills or -8.5%. In 2007-08, the school district's total mill rate trailed the average of all school districts in the State of North Dakota by -30.14 mills or -13.8%.

- The school district has a modest level of bonded indebtedness for a jurisdiction with such substantial taxable property value and growth potential.

Educational Programs, Services, and Staffing

- The school district delivered instructional programs and services to an average of 51.4 students/grade level in grades K-6 in 2007-08.

- The school district operated 12 elementary class sections or 63.2% with enrollments of less than 20 students, while 7 elementary class sections or 36.8% enrolled 20-25 students/section.

- The Project Consultants rated the school district's elementary class sections as staffed at a highly desirable, cost/effective level at Davenport and Kindred Elementary Schools.

- **The school district's average class section size in grades K-6 during the 2007-08 school year was computed at 18.9 students/section.**

- **The school district operated 174 secondary school (grades 7-12) course sections during the 2007-08 school year. Of those sections, 118 or 67.8% enrolled less than 20 students, 51 course sections or 29.3% enrolled 20-25 students, 1 course section or .6% enrolled 26-29 students, and 4 course sections or 2.3% enrolled 30 students or more.**

- **The Project Consultants rated the school district's secondary school class section sizes as highly desirable and marginally cost/effective with a comparatively large number and percentage of course sections enrolling less than 20 students and, as well, a comparatively small number and percentage of course sections enrolling 26-29 students or 30 students or larger.**

- **The school district operated 169 secondary school course sections or 97.1% with enrollments of 25 students/sections or less.**

- **The Project Consultants concluded that the school district's secondary class section sizes were balanced, marginally cost/effective, and highly appealing to parents.**

- **The school district's distribution of secondary class sections would be classified as more favorable than such distributions**

found in comparably-sized school districts and high schools in the Upper Midwest during the 2007-08 school year.

- The Project Consultants concluded that, in an effort to be service-oriented to and minimize course conflicts for students at the secondary school level, school administrators provided multiple sections of particular courses—across the master schedule—when, perhaps, a smaller number of course sections would have sufficed to (numerically) accommodate students.

- The school district's leadership has performed expertly in providing desirable class section sizes and—in many instances—multiple sections to enhance student choice and reduce scheduling conflicts. The resultant byproduct of those student accommodations are somewhat lower and more marginally cost/ineffective class section sizes.

- The school district made available 56.6 credit course offerings during the 2007-08 school year.

- The school district's high school course offerings spanned 11 disciplines: agriculture; art; business education/computers; English; family and consumer science; mathematics; music; physical education and health; science; social studies; and world languages.

- The school district's high school students were afforded the broadest array of credit course offerings in the following disciplines: agriculture (8.3 credits); English (7.0); mathematics (6.0); business education/ computers (5.5); and social studies (5.5).

- The school district's high school students were offered the narrowest range of high school credit course offerings in the following disciplines in 2007-08: music (1.0 credits); art (1.5); physical education and health (2.0).

- The school district provided an array of course options for high school students to secure advanced electives and/or college credits through interactive learning by way of the school district's participation in the Heart of the Valley Interactive Television Consortium.

- The school district's breadth and scope of grade 9-12 credit course offerings in 2007-08 were somewhat less than comparable to offerings found in high schools with an average critical student mass of 200 students.

- The Project Consultants concluded that the number and distribution of daily preparations assigned to full-time (regular) teaching staff members in the school district's secondary school for the 2007-08 school year were slightly more favorable

to those which would be found in similarly-sized, comprehensive high schools.

- The school district employed 49.6 full-time equivalent licensed staff members in 1998-99 and 52.5 full-time equivalent licensed staff members in 2007-08, a net gain of +3.9 FTE licensed staff members or +5.8% over the nine year period of time.

- The Project Consultants concluded that the leadership of the school district would be cautioned to closely monitor the inter-related student enrollment and staffing trends to insure that, if enrollment decline should occur (reducing revenues), licensed staffing adjustments are commensurately considered (reducing expenditures).

- The school district furnishes (or contracts for the provision of) a broad and comprehensive array of instructional and support services for pre-school, school-aged, and adult populations that would be characteristic of North Dakota school districts and enrollments of similar or larger critical student masses than that which would be found in Kindred School District #2.

- The school district's organizational configuration is an unconventional one by modern-day standards.

- The Project Consultants concluded that the existing organizational configuration—implemented by Kindred School

District #2—was designed to achieve student fit in the existing/available teaching/learning facilities.

- The Project Consultants rated the school district's organizational configuration as poor.

- The Project Consultants concluded that there is not substantial justification and/or logic for the long-term usage of Davenport Elementary School as a teaching/learning facility, serving the school district's students. The school is a half-century old, diminutive in size, marginal in quality, remotely-located from the school district's main staff and services, only partially served by administrative staffing, and distant in location as a service center for the school district's youngest and most vulnerable students.

- The Project Consultants do not view a future closure of Davenport Elementary School as having any significant impact on the growth or decline of the community's population.

- The Project Consultants found that the school district has in place a regularized curriculum review cycle that provides a mechanism for reviewing and renewing curricula and textbooks to insure instructional programming is contemporary (modern-day).

- The school district's curricular programs are standards-based.

- **The school district has achieved and is currently achieving adequate yearly progress (AYP) in confirmation with the No Child Left Behind federal statute.**

- **The school district provides a comprehensive array of special education programs and services through its membership in the Rural Cass County Multidistrict Special Education Unit.**

- **The school district's special education staff roster for the 2007-08 school year included 5.7 FTE teachers; 2.0 FTE interpreters; .2 social worker; .2 psychologist; .3 OT/PT teacher; and 4.5 student aides/ paraprofessionals.**

- **The Project Consultants concluded that special education programs, services, staff, and students—as is the case with regular education programs, services, staff, and students—are increasingly becoming impacted (negatively) by facilities which are experiencing over-stressing and over-crowding.**

- **The Project Consultants concluded that students qualifying for special education programs and services (and their parents) in the school district have access to a broad array of programming options—similar to those found in school districts of like-size throughout the State of North Dakota.**

- **Interviewed parents and patrons rated the school district and its operations very positively.**

- **The Project Consultants noted that respondents' perceptions of the oppressiveness of school taxes—compared to the reality of other North Dakota school districts' taxes—were significantly inaccurate.**

School Facilities

- **Davenport Elementary School is a diminutive, cost/ineffective, marginally modern-day, teaching/learning facility.**

- **Kindred Elementary/Secondary School is a basic, adequate facility by period standards. The school has deferred maintenance, safety and security, site size limitations, and other qualitative issues and is increasingly over-crowded and over-stressed. Core spaces in the school are over-stressed and, as a result of multiple additions, remodelings, and adaptations, are poorly located for expansion.**

- **The Project Consultants do not recommend the long-term maintenance of Davenport Elementary School as a teaching/learning facility.**

- **The Project Consultants recommend Kindred School District #2 institute plans which will result in the future construction of either a new P-K-12 elementary/middle level/high school or a new grades 6-12 or 7-12 middle level/high school.**

- **The Project Consultants concluded the School Board and Superintendent would be well advised to institute a Facility Alternatives Study process which would lead to (a) a determination of a desirable organizational configuration for the school district, (b) a determination of the future usage of school district facilities, (c) a study of available school sites, resulting in the purchase of a preferred school site, and (d) the construction of a new school building (either K-12 or 7-12 or 6-12, depending upon future utilization of the current Kindred Elementary/Secondary School).**

6.2 Alternatives

The Project Consultants assessed that the leadership of Kindred School District #2 is faced with the realities that (a) Cass County has experienced continuous general population growth over the course of the past two decades; (b) the general population growth of Cass County will continue, unabated, over the course of the next 2-3 decades; (c) the communities/area of Kindred School District #2—located in Cass County—will experience substantial general population growth; and (d) Kindred School District #2 will experience substantial student enrollment growth in the future.

Kindred School District #2 is ill-prepared to accommodate virtually **any** growth in student population. Indeed, the school district's teaching/learning facilities—both of only marginal quality—are over-stressed and over-crowded by modern-day standards as is apparent in the school district's employment of an unconventional organizational configuration (K-1, 2-12)

and the virtual inability for the organization to provide additional, quality, teaching/learning spaces to adequately accommodate student enrollment growth in the future.

In order to address the certain general population and student enrollment growth that will occur in Cass County and Kindred School District #2 over the course of the next 2-3 decades, the Project Consultants identified three alternatives for the School Board and Superintendent to address the organization's short-term and long-term school facility needs. They are as follows:

- **Alternative 1: Maintain and, as required, expand through additions the school district's Davenport Elementary School and Kindred Elementary/Secondary School.**

  Advantages: least cost; least disruption. **Disadvantages:** current facilities are marginal; Davenport Elementary School is cost/ineffectively small, remotely located, and a half-century old; Kindred Elementary/Secondary School is situated on a site which will not accommodate significant expansion; the site location is poor; many components of the facility are marginal/inadequate; multiple additions have created a loss of logic that could only be corrected through major, costly renovations.

- **Alternative 2: Construct a new grade 6-12 or 7-12 middle level/high school on a new school site; convert the current Kindred Elementary/Secondary School to a P-K-5 or P-K-6**

elementary school and Community Center; demolish select space at the Kindred Elementary/Secondary School facility; close and re-purpose/sell Davenport Elementary School.

Advantages: less costly than Alternative 3; provides a quality teaching/learning environment for secondary school students; retains the most desirable teaching/learning spaces in the Kindred Elementary/Secondary School facility; eliminates the most undesirable (and costly to renovate) teaching/learning spaces in the Kindred Elementary/Secondary School facility; significantly enhances the school district's ability to market the educational organization to mobile families, businesses, and industries; enhances the safety and security of/for K-1 students and staff. **Disadvantages:** more costly than Alternative 1; less desirable than Alternative 3; introduces change, including the closing of Davenport Elementary School and attendant public relations concerns.

- **Alternative 3: Construct a new P-K-12 school facility with appropriate separation for elementary, middle, and high school students; close and re-purpose/sell Kindred Elementary/ Secondary School; close and re-purpose/sell Davenport Elementary School.**

Advantages: significantly enhances the school district's ability to market the educational organization to mobile families, businesses, and industries; enhances the quality of the teaching/learning environment for all students, P-K-12; enhances the safety and

security of all students and staff. **Disadvantages:** more costly than Alternatives 1 or 2; introduces the greatest change; suggests/requires closing of the school district's two, current, teaching/learning facilities.

6.3 Recommendations

The Project Consultants tender the following recommendations to the School Board and Superintendent of Kindred School District #2:

Recommendation 1

That the School Board and Superintendent create a Blue Ribbon/Strategic Planning Task Force to study the contents of Kindred School District #2's **Organizational Analysis Study** and, subsequently, create a school district Strategic Plan.

Recommendation 2

That the school district—as a part of the Strategic Planning process—determine a preferred, future organizational (grade level) and facility configuration to guide future school facility expansion/renovation/construction.

Recommendation 3

That the school district—as an outcome of the Strategic Planning process—institute a study to identify multiple, preferred tracts of land for potential purchase as a school site (or sites).

Recommendation 4

That the school district—as a part of the Strategic Planning process—engage the School Boards of neighboring school districts in discussion about interest in further collaboration/cooperation and/or consolidation in the future.

Recommendation 5

That the school district conduct a future school bond referendum to construct a new grade 6-12 or grade 7-12 Kindred Middle/High School on a newly acquired, expansive school site.

Recommendation 6

That the school district—upon completion of the construction of a new Kindred Middle/High School—convert the grade level structure of Kindred Elementary/Secondary School to a P-K-5 or P-K-6 Kindred Elementary School and close and re-purpose or sell Davenport Elementary School.

Recommendation 7

That the school district increase its General Fund expenditures to enhance program and service offerings and specialist staffing to strengthen the organization's marketability and competitiveness.

Recommendation 8

That the school district consider the employment of a part-time or full-time school administrator responsible for the coordination of curriculum, instruction, staff development, assessment, and accountability. This position shall be directly accountable to the Superintendent of Schools.

Recommendation 9

That the school district design and implement a multi-year plan for significantly increasing the organization's technology investment (including SMART boards) and strengthening staff members' technological preparedness through a focused staff development program.

Exhibit 2

KINDRED PUBLIC SCHOOL DISTRICT
TAXABLE VALUATION

	2004-05	2005-06	Change
CASS	$8,035,936	$8,849,708	10.13%
RICHLAND	$3,025,018	$3,148,452	4.08%
RANSOM	$106,496	$111,849	5.03%
TOTAL	$11,167,450	$12,110,009	8.44%

9.16.05

	2005-06	2006-07	Change
CASS	$8,849,708	$9,693,084	9.53%
RICHLAND	$3,148,452	$3,369,867	7.03%
RANSOM	$111,849	$115,715	3.46%
TOTAL	$12,110,009	$13,178,666	8.82%

10.16.06 $13,837,599

	2006-07	2007-08	Change
CASS	$9,693,084	$10,207,632	5.31%
RICHLAND	$3,369,867	$3,541,803	5.10%
RANSOM	$115,715	$117,741	1.75%
TOTAL	$13,178,666	$13,867,176	5.22%

10.16.07

	2007-08	2008-09	Change
CASS	$10,207,632	$10,557,321	3.43%
RICHLAND	$3,541,803	$3,700,609	4.48%
RANSOM	$117,741	$117,971	0.20%
TOTAL	$13,867,176	$14,375,901	3.67%

9.12.08

	2008-09	2009-10	Change
CASS	$10,557,321	$ 10,822,633	2.51%
RICHLAND	$3,700,609	$ 3,811,661	3.00%
RANSOM	$117,971	$ 124,655	5.67%
TOTAL	$14,375,901	$ 14,758,949	2.66%

12.03.09

	2009-10	2010-11	Change
CASS	$10,822,633	$ 11,331,501	4.70%
RICHLAND	$3,811,661	$ 3,957,903	3.84%
RANSOM	$124,655	$ 124,655	0.00%
TOTAL	$14,758,949	$ 15,414,059	4.44%

10.6.10

Exhibit 3

RESOLUTION #2010-26

REGARDING SALES, USE, AND GROSS RECEIPTS TAX FOR RED RIVER DIVERSION PROJECT AND OTHER FLOOD CONTROL MEASURES

WHEREAS, The Red River and its tributaries regularly exceed the flood stage in Cass County; and

WHEREAS, the frequent flooding on the Red River and its tributaries threatens the life and property of the citizens of Cass County; and

WHEREAS, the County of Cass desires to protect the lives and property of the citizens of Cass from the frequent flooding on the Red River and its tributaries; and

WHEREAS, the Army Corps of Engineers, has studied various options for reducing the amount of damage caused by the frequent flood stages in Cass County; and

WHEREAS, the Metro Flood Group, the Cities of Fargo and Moorhead, and the counties of Cass and Clay have adopted a locally preferred option for flood control; and

WHEREAS, the cost of the Red River Diversion will be borne by various entities, including Cass County and the citizens of Cass County; and

WHEREAS, the Cass County Board of Commissioners, under its charter, may on its own motion submit any question to the electorate for a vote of the people and the electorate must approve that action by a majority vote of the electors voting.

NOW, THEREFORE, BE IT RESOLVED, That the Cass County Board of Commissioners hereby elects to proceed with a vote of the electorate at the next regularly scheduled election whether a retail sales tax should be imposed and subject to limitations as follows;

1. Sales taxed shall be limited to those which are taxed by the State of North Dakota pursuant to Chapter 57-39.2 of the North Dakota Century Code.

2. The amount of the tax, shall not exceed one half of one percent of the sales, use and gross receipts, which are taxed by the State of North Dakota pursuant to Chapter 57-39.2 of the North Dakota Century Code, nor shall the tax exceed twelve dollars and fifty cents on any single purchase; provided, that a higher rate of tax may be imposed and collected on sales of less than one dollar and on sales of fractional dollar amounts and the bracket system for the application of the state sales tax set forth in Section 57-39.2-.08.2 of the North Dakota Century Code shall be adjusted to incorporate the additional county tax. The retail sales imposed shall be computed and collected in the same manner provided by law for the collection of the state sales tax.

3. The sales, use, and gross receipts tax, which is adopted by this Resolution and is imposed pursuant to the authority granted by the Cass County Home Rule Charter, shall extend for a period of 20 years from and after April 1, 2011, and end on March 31, 2031.

4. The proceeds of the sales, use, and gross receipts tax, which is imposed pursuant to the Cass County Home Rule Charter, shall be solely utilized for the Red River Diversion and other flood control purposes including the payment of special assessments or debt incurred for the Red River Diversion and other flood control measures

AND, BE IT FURTHER RESOLVED, The Cass County Board of Commissioners hereby certifies a ballot question for consideration by Cass County electors for en election to be held November 2, 2010.

FLOOD PROTECTION SALES, USE, AND GROSS RECEIPTS TAX PROPOSAL

Shall Article 9 of the Home Rule Charter of the County of Cass be amended to authorize collection of a one-half of one percent (1/2%) sales, use, and gross receipts tax as outlined in Resolution #2010-26 for a period of up to twenty consecutive years from and after April, 2011, to be used for the engineering, land purchase, construction, and maintenance of a Red River Diversion and other flood control measures or the payment of special assessments or debt incurred for a Red River Diversion and other flood control measures as authorized by the Cass County Commission, all as provided in the Notice of Proposed Home rule charter Amendment as published in THE FORUM on the 30th day of August 2010.

SHALL SUCH AMENDMENT BE APPROVED?

YES	0
NO	0

Dated at Fargo, North Dakota, this 2nd day of August, 2010.

APPROVED:

ss/Darrell Vanyo
Darrell Vanyo, Chairman
Cass County Board of Commissioners

ATTEST:

ss/Michael Montplaisir
Michael Montplaisir
Cass County Auditor

minnesota power / 30 west superior street / duluth, minnesota 55802-2093 / 218-355-2695 / www.mnpower.com

Christopher Fleege, P.E.
Vice President, Transmission and Distribution
Fax 218-720-2685
E-mail cfleege@mnpower.com

June 20, 2011

Mr. Aaron M. Snyder
U.S. Army Corps of Engineer, St. Paul District
180 E. 5th Street, Suite 700
St. Paul, Minnesota 55101-1678

RE: Fargo-Moorhead Metropolitan Area Flood Risk Management
Supplemental Draft Feasibility Report and Environmental Impact Statement

Dear Aaron:

Minnesota Power, an Allete Company, requests additional information from the US Army Corps of Engineers that defines project impacts due to the proposed Fargo-Moorhead Metropolitan Area Flood Risk Management project.

Minnesota Power owns and operates a direct current high-voltage transmission line that crosses the Red River in Section 1, T136N, R49W of Richland County, North Dakota and in Section 6, T136N, R48W of Wilkin County, Minnesota. Our line is an important element of the regional transmission system. From information available in the Supplemental Draft Feasibility Report and Environmental Impact Statement (SDEIS), it appears our transmission line will require relocation or modification to withstand the effects of elevated water levels. We have attached a map that shows the present location of the DC Line.

Figure 39 of the SDEIS shows increased water elevations from the project. Has the SDIS considered the potential for increased frequency of inundation due to ice-dams? In this type and other extreme events, what is the maximum water elevation our transmission line could experience? It appears structure modifications would be required for floating ice or debris and to accommodate degraded structure access. As an alternative, our transmission line could be re-routed. We believe this would be a Public Concern to be addressed.

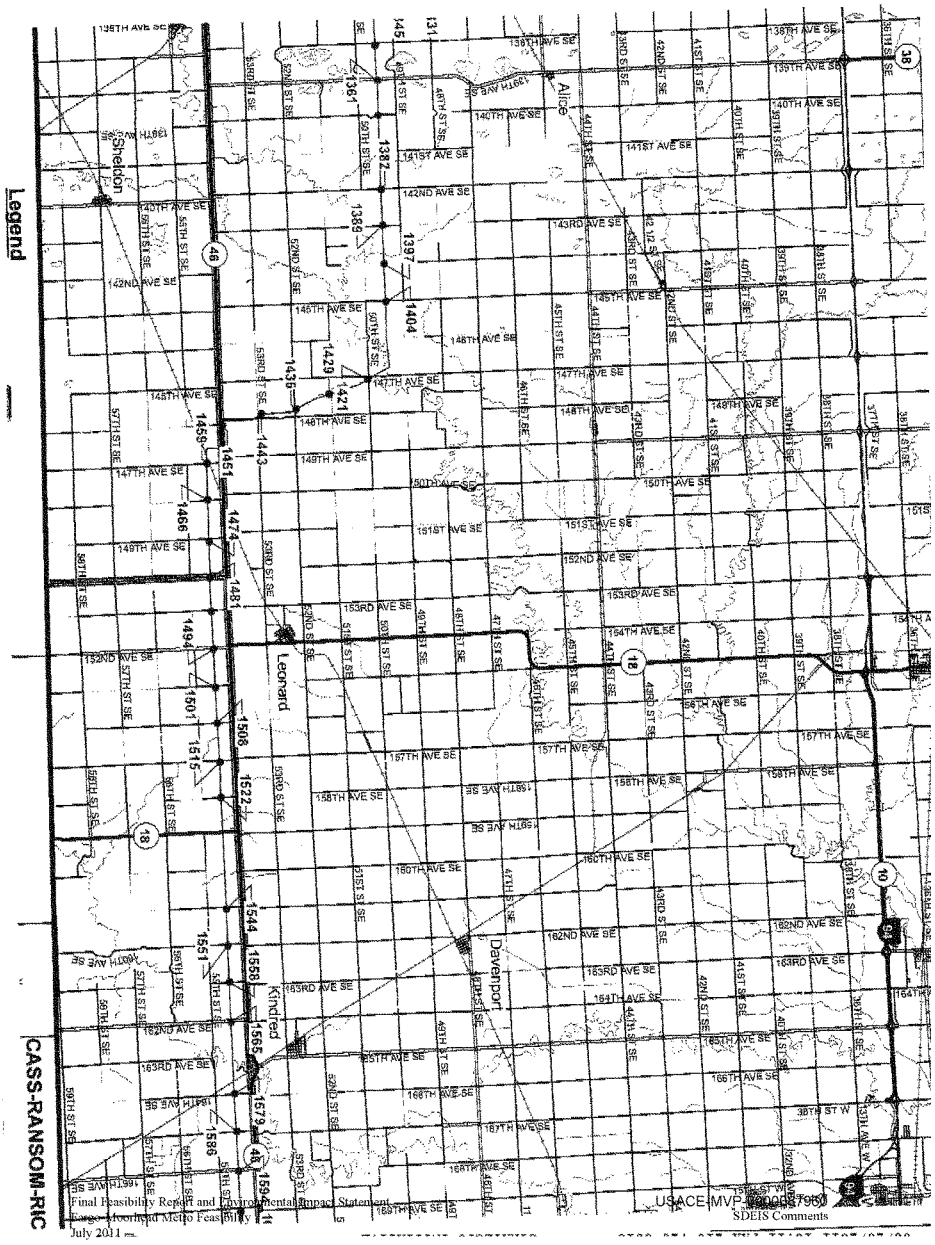
With information available in the SDEIS it is difficult to estimate costs from transmission line modification or relocation. These costs though will almost certainly be several million dollars. To help our engineering efforts, please send shapefiles that accurately illustrate inundation levels.

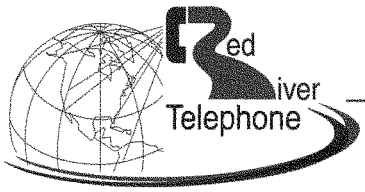
Sincerely,

Christopher E. Fleege
Vice President – Transmission and Distribution

Attachment: Cass-Ransom-Richland County North Dakota, DCND Line

c: file


Legend
CASS-RANSOM-RIC
Sheldon
Alice
Leonard
Davenport
Kindred
USACE-MVP
SDEIS Comments



510 Broadway • P.O. Box 136
Abercrombie, ND 58001

June 16, 2011

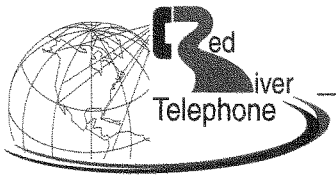
U.S. Army Corps of Engineers
St. Paul District
180 5th St. E, Suite 700
St. Paul, MN 55101-1678

Re: Proposed Cass County North Dakota Red River Diversion Plan

Please find enclosed a resolution adopted by the Board of Directors of Red River Rural Telephone Association opposing the proposed Cass County North Dakota Red River Diversion Plan as submitted by the United States Army Corps of Engineers.

Sincerely,

Jeffrey J. Olson
General Manager



510 Broadway • P.O. Box 136
Abercrombie, ND 58001

RESOLUTION

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF RED RIVER RURAL TELEPHONE ASSOCIATION AS FOLLOWS:

WHEREAS, Red River Rural Telephone Association is a Cooperative providing telecommunications services to customers in Richland County, North Dakota, and Wilkin and Clay counties of Minnesota; and

WHEREAS, Customers of the Cooperative have expressed concern over the proposed Cass County North Dakota Red River Diversion Plan as submitted by the United States Army Corps of Engineers; and

WHEREAS, Based on information obtained by the Cooperative, it appears that the Diversion Plan as submitted by the United States Army Corps of Engineers hearings will increase expenses of operation for the cooperative and thus increase the costs of utility services to member subscribers;and

WHEREAS, After due consideration of the Diversion Plan and the effects of increased flooding in Richland County, the Board of Directors of the Cooperative does unanimously conclude that the Red River Diversion Plan as submitted by the United States Army Corps of Engineers be vigorously opposed for the following reasons:

I. That based on the surveys conducted by the Corps of Engineers, the Corps has failed to spell out and quantify the adverse impacts upon Richland County such as:

A. Loss of tax base of residential and farmland values as a result of the diversion. That the loss of tax revenues will have to be made up by increasing taxes of all non-affected property owners in Richland County.

B. That the Northern Tier of Richland County has been a strong growth area for the County, which growth will be severely affected by land flooding as a result of the diversion.

C. That the Corps of Engineers has failed to take into account the increased costs to the citizens of Richland County for increased utility costs that will be incurred by the utility suppliers which provided electricity and telephone services in the northern tier of Richland County and other entities which will be affected by the proposed diversion project.

D. That the overland flooding and retaining of flood waters resulting from the diversion project will severely affect crop production in the northern tier of the County causing economic losses to its rural citizens and those businesses that rely on such agricultural producers.

E. That the full economic impact to Richland County and the effects that such will have on citizens, businesses, roads, electric utilities, personal property and public safety have not been factored into the project.

NOW THEREFORE BE IT RESOLVED that for the above reasons and others, That the Board of Directors of Red River Rural Telephone Association concludes that the Red River Diversion Project will be of absolutely no benefit to Richland County or its citizens and thus can only have negative impacts on the County.

BE IT FURTHER RESOLVED that copies of this Resolution be submitted to the United States Army Corps of Engineers, the Governor of the State of North Dakota, and all Representatives and Senators of this State.

Dated at Abercrombie, ND this16th day of June, 2011.

Harold Ford

Board Chairman, Red River Rural Telephone Assoc. Inc.

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron M. Snyder
180 E. 5th Street. Suite 700
St. Paul, Minnesota 55-100-1678

RE: Fargo Flood Diversion Project

Dear Mr. Snyder:

On behalf of Richland Public School District #44 ("District"), the following comments are submitted to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement ("SDEIS"), Dated April 2010, prepared by the U.S. Army corps of Engineers ("USACE"). To be clear, the District supports plans to protect the metro area of the Red River Valley from flooding. The District, however, cannot support the locally preferred flood retention plan that is being recommended by USACE. To do so would cause the District severe financial hardships, and extreme student population loss that would threaten the very purpose of the District. The District calls on USACE to re-evaluate its plans to destroy communities in North Dakota and to consider viable alternatives.

ECONOMIC EFFECTS

The Richland Public School is located in Northern Richland County. We have 222 square miles of property in our district. The proposed staging area and the land directly near the Wild Rice River will be affected by the LPP. A total of 19 sections in our school district will be adversely affected. In addition to these 19 sections, significant reaches of lower lands that will experience additional flood water resulting from the increase rate of entry water and the effects of a holding reservoir (dam).

The proposal would thus have a significant and unacceptable adverse impact on our tax base. Our School District has a total taxable evaluation of 6.9 million dollars. The total taxable valuation of the proposed staging area and the adversely impacted land along the Wild Rice taxable evaluation is 1.9 million dollars, or 17.3%. The consequent negative impact on our tax base is a consequence nowhere considered in the SDEIS.

We estimate that initially we will likely lose 58 students as a direct result of initial implementation of you plan, or 21% of our population. The loss of these students would equal 465,322 dollars in foundation aid from the state. We would also have a loss in Federal payments in the Title I program of 20,000 dollars. These dollar figures would force our district to make drastic financial adjustment to

maintain service within the area. We fear, as well, that the negative secondary impacts of these initial losses would lead to further losses, in terms of lost growth and further exoduses from the community.

The District is responsible for loans authorized to improve the buildings at both Colfax and Abercrombie. These loans are based on the current population and valuation in our district. The LPP will be forcing us to amortize these loans across a smaller tax base. If we lose 17.3% of our taxable valuation, that would mean that 83.7% of the population will need to carry a greater burden of the repayment. We also derive thirty percent of our funding from local taxation. In order to maintain this funding we will need to increase levies on the remaining property holders. The State caps our rate of taxation and requires us to obtain super majority vote to increase our levy, even though our levy would be going up only as a direct result of your project.

We believe that these negative impacts cannot be justified, but certainly, before you are in a position to make a final decision, they should have been carefully considered as part of the balancing process. If this is going to go forward, and we oppose that, the District needs a mitigation plan from state, local and federal leaders. The time is now for USACE and federal officials to reconsider this plan, or at a minimum, to include long term financial support to reduce the negative educational impact on children.

RICHLAND SCHOOL DISTRICT POTENTIAL GROWTH

The Richland School District is in a very unique position geographically. We are located 25 miles from Fargo and 25 miles from Wahpeton. Both metro areas provide jobs for many of our patrons. The Richland School District has a very good reputation as a provider of education to students. We have a number of academic offerings and have a climate that is conducive to learning. We graduate 95% of our students with 80% of each graduating class going on to a higher level of education. The success rate at the next level is near 80%. Parents choose our district and then find a home to live in. In the last 10 years our district has increased in houses by 50 plus homes. Sixty percent of our district's student population live between the Red River and Highway 29. This is due to the good roads and proximity to both Fargo and Wahpeton Jobs. The LPP will take the away the potential for growth in the staging area and along Wild Rice River, which is 20% of our area and at least 40% of our potential growth. At present we have three major development areas in the staging area. One in Christine, another along Highway 81, two miles north of Christine and the third along the Red River, two miles south of highway 46 and east of highway 81. All three areas would no longer be a potential growth area with the LPP.

The Richland School District was just approved for a building remodeling project from the state. The state looks at financial, existing population, and growth for means of approval of a building project. Our school would not be granted a building permit, if the LPP were in place.

RICHLAND DISTRICT AND NORTHERN RICHLAND WERE NOT PART OF THE PLANNING LPP.

The Richland School District-along with local Townships and city of Christine were not invited to any formal place at the table while USACE and local sponsors formulated and planned the flood protection plan. This plan placed the staging area and higher level of flooding along the Wild Rice River, which is a major growth area of our district. The Richland School District and the local governmental agencies are entitled to a formal voice by the USACE.

In the opinion of the Richland School District and the local governmental agencies, the plan that USACE is promoting is not a Locally Preferred Plan, but a plan that has been created by an agency that has be established to protect the Fargo proper without consideration for areas that are downstream and upstream. The local plan only protects one small area of the Red River Basin and adversely affects many other areas of the basin. Because the Richland District was denied any formal right to be involved in the decision making processes, the District requests that USACE strike reference in the SDEIS that the proposed plan was recommended by a "local" committee.

EXECUTIVE ORDER 11988

The Richland School District has in question how EO11988 is not in direct conflict with the LPP. The LPP is protecting many sections of development for the city of Fargo. These areas, according to the Cass County Commissioners, will produce growth for the city for the next sixty to one hundred years. The proximity of the diversion cannot be just a coincident and therefore violates the EO11988.

The developments in the Richland School District are also very important to the Northern Richland County area. The idea that the diversion will save an area for development and in the same plan destroy the possibility of growth in another area is very imperialistic. The Red River Basin is one economic region. The LPP only addresses a small portion of the Red River Basin and adversely affects many other regions, Richland School District, being one of the adversely affected regions. Should the USACE be looking at the entire Red River Basin and not just the LPP area?

PROTECTION PLANS

The Richland School District and the Townships of Northern Richland know that their are other alternatives that are present that could address the flooding concerns of the Red River Basin. USACE ignores the rest of the Red River Basin. The purpose of the SDEIS is only 'to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." SDEIS, (2.5) . The National Environmental Policy Act requires USACE to cast a wider area-to include the upstream and downstream communities outside of the Fargo-Moorhead. The entire SDEIS is very narrow, fails to address cooperation between the metro and rural communities, and fails to adequately consider alternatives to the proposed LPP retention project.

The Anderson 20% proposal, the Waffle plan, and the specific plan of Minnesota Congressman Collin Peterson all deserve a good look. A combination of many proposed plans may give the same results as the LPP without the major negative affects to surrounding communities.

CONCLUSION:

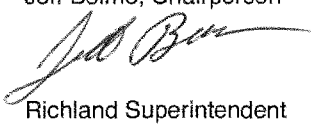
The Richland School District is opposed to the LPP retention project. Our district will become the area that will help protect the "Fargo-Moorhead' area without one ounce of benefit to our district. The thought that protecting Fargo-Moorhead at the cost of the surrounding rural areas does not make sense when one looks at the whole Red River Basin. Should we not be looking at controlling the flooding throughout the basin and not just the small area of Fargo-Moorhead.

The Red River Basin will be around for many more centuries and this diversion will only protect developments for the next sixty to one hundred years. This project is very short sighted when looking for a solution to the flooding problem. Communities outside of the diversion will be uprooted and destroyed. School districts that are viable and part of a community will be forced to combine or shut down. Tax revenue for schools and counties will be reduced and in some areas eliminated. The proposed LPP will address the Fargo-Moorhead area but it will not address the surrounding areas. The cost and plans for other areas of the Red River Basin have not been addressed by a plan or financially.

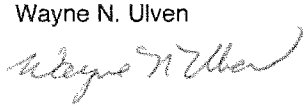
The Richland School District ask USACE to reconsider the LPP and take a good look at a Red River Basin plan that will help all residents of the Red River Basin.

Sincerely yours

Richland School Board
Jeff Bolme, Chairperson



Richland Superintendent
Wayne N. Ulven



CC: Governor Jack Dalrymple
U.S. Senator Kent Conrad
U.S. Senator John Hoeven
U.S. Representative Rick Berg
State Representative John Wall
State Representative Clark Williams
State Senator Larry Luick
Mayor Dennis Walacker
Richland County Commissioners

RINKE NOONAN
attorneys at law

June 15, 2011

Direct Dial: 320-656-3508
Email: JVonkorff@Rinkenoonan.com

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron M. Snyder
190 E. 5th Street, Suite 700
St. Paul, MN 55100-1678

Re: Fargo Flood Diversion Project
Our File No. 23316.001

Dear Mr. Snyder:

I have been asked to write on behalf of Richland Public School District #44 to express the strong exception to the so-called "locally preferred flood retention plan." Because the plan current inflicts devastating impacts on the local school district, without considering those impacts, without attempting to avoid or mitigate those impacts, we regard the SDEIS as legally deficient and legally flawed.

The plan would inflict severe and devastating impacts on the School District, and by extension on the entire community. A school district is the heart and soul of a rural community. It is the center of community activities; it is the meeting place for that community. It is the central core of the community's hopes for the future, because it addresses its children's education.

It is particularly problematic that this plan has gone forward without the representatives of the school district at the table. The result of that failure is that you have not begun to address the social and economic impacts on this community. The impact on a school district is not amenable to analysis by persons schooled in hydrology or environmental science. Indeed, the elimination of 20% of the student population inflicts an unimaginable and devastating impact upon a school district in ways that simply are not accounted for your environmental process. Those impacts are financial, but they are also educational.

When you significantly reduce the student count as your proposal does, it wreaks financial havoc and educational havoc on a school district. Each grade level suffers a loss in students, but the reductions do not get distributed equally to each grade level. Some grade levels can suffer

significant class size losses, and that dramatically increases the unit cost of delivering instruction for that grade level. Bus routes become less viable. Course offerings, especially at the high school level, become more difficult to manage. In addition, as Superintendent Ulven points out, the proposed plan undermines completely the District and Community efforts to promote growth.

This new plan essentially sacrifices a critical community asset, its public school district, without appropriate consideration. We see no evidence that this impact has been considered, nor do we see any attempt to avoid or mitigate this impact. You have chosen a water storage site completely without regard to the devastating impact that it will have on the community's most important asset, its public education system.

As the plan currently stands, it is not legally defensible. You are inflicting unaccounted for damage on public education without appropriately attempting to avoid that impact. We urge you to bring Richland to the table in a meaningful way and find a way to avoid destroying this fine school district.

Sincerely,

Gerald W. Von Korff
JVK/jvk

cc: Wayne Ulven, Superintendent, Richland Public School District #44

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-----Original Message-----
From: Delana Aziz [mailto:marydelana@msn.com]
Sent: Thursday, June 09, 2011 9:54 PM
To: Davidson, Mark D MVP
Subject:

I am commenting on the proposed Fargo/Moorhead Diversion Project. I live in Comstock, Mn, one of the small communities impacted by this project. The current plan calls for a dam just north of Comstock which will facilitate storing water. I have grave concerns about this alternative. My husband and I live in an old home built in 1890. It has historical significance because It was a bonanza farm. We have spent the past 17 years restoring our home, investing a lot of time and money. Comstock has never flooded. We are on the high side of the river and it seems unfair to me that we will pay the price for protecting Fargo. Everyone wants to see a solution for Fargo but it seems evident that rural communities do not matter to the decision makers in this process because you are willing to thrust the entire burden on us. I hope that before this is resolved you come up with a solution that is more equitable. The feeling out here is that only Fargo counts and this is the most extreme plan that could be devised to protect Fargo at all costs.

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

From: Joleen Backlund [mailto:joleenbacklund@yahoo.com]
Sent: Tuesday, May 24, 2011 3:35 PM
To: Coleman, Brett R MVP
Subject: F-M Diversion Project

May 24, 2011

Dear Mr. Coleman:

RE: Fargo-Moorhead Diversion Project

I am certain that you are receiving lots of correspondence opposed to the Fargo-Moorhead Diversion Project. We just received a letter from Pleasant Township asking us to write you to oppose the project. I decided to write, but this is not a letter of opposition. It always seems that those opposing something have a louder voice than those who agree with the proposed solution.

My husband and I live in Pleasant Township, Cass County, North Dakota along the Wild Rice River. In the past few years, we have had to move out of our home four times to wait for the Wild Rice River to crest and the water to subside so we could move back home. We can't stay in our home because the bridge on County Road 18 (East of our driveway) goes under and getting to our home from the West is impossible because County Road 18 washes out. Each time for 2 to 4 weeks, we move into hotels or with family to wait for the water to reside.

We consider ourselves fortunate because the house is built high enough so that no damage is done to the house. Each time after the water has subsided and we can get back in, we have mounds of black dirt washed up in our driveway and yard with lots of tree stumps, branches and garbage to clean up.

We're tired of having to move out to let the Spring flood run its course. We support the F-M Diversion Project and look forward to getting bought out so we don't have to deal with this anymore.

I know the majority of our neighbors are against the diversion project but the water has to go somewhere. If everybody keeps opposing every proposed plan, there never will be a solution. It makes me very sad that we may lose our beautiful home, but if sacrificing our home prevents other areas from being flooded, it is worth it.
Thank you. Take care.

Paul & Joleen Backlund
17226 52nd Street SE
Horace, ND 58047
(701) 588-4353

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Suite 700
St. Paul, Minnesota 55101-1678

Dear Aaron,

As farmers living in the proposed staging area of the diversion, we have several concerns about the project:

1. The cost of the diversion, and the maintenance of the same is cost prohibitive when people are already burdened with high taxes and rising living cost etc. in this present economy.
2. There has not been an acceptable environmental study done so far.
3. The impact of the Sheyenne River has not been studied or considered.
4. The danger of future major floods in Fargo Metropolitan area is unknown. As of 2011 past floods in this area have not been that devastating.

Please consider the advice of Colin Peterson and other well-informed people, and consider working for the whole Red River Basin which can be accomplished with water retention and small levees.

Thank you,
Lois M. Bergh

June 19th, 2011

U.S. Army Corp of Engineers, St. Paul District

Attn: Aaron Synder

180 Fifth Street East, Ste. 700

St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Study

Fargo-Moorhead Metropolitan Area Flood Risk Maanagement

Dear Project Manager:

I am the owner of the Knickerbocker in Hickson, ND. I am also a resident of the Bakke Development and have two children in the Kindred School District. I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have many concerns on the impact the project will have on my business, home, family, school, and community. I am requesting you complete further studies on the following:

1. Relocation of Business
2. Loss of Community
3. Purpose and Scope
4. Upstream Studies
5. Executive Order 11988
6. Funding of Project

Relocation of Business

The study does little if any to discuss businesses in the staging and storage area. Table 16, **Other Social Effects (OSE) Account** in Economic Vitality under the LPP states *"Significant impacts upstream in staging area and Storage Area 1— businesses would be relocated; agricultural use of land impacted; reduction of local tax base".* As I have stated above I own the Knickerbocker in Hickson, ND. The study claims to relocate businesses. I ask where would you relocate the

Knickerbocker? The Knickerbocker was built in 1972 and not only serves as the community bar but as place of socialization for the communities of Hickson, Bakke Development, Oxbow, Pleasant Township, and Comstock, MN. When this plan essentially destroys the Knickerbocker's entire customer base, how could it be relocated? The plan cannot assume that all of the displaced residents will relocate close to the Knickerbocker thus making it impossible to relocate. If relocation is not possible then how does mitigation take place for a business? There is no section of the study that explains this. How can you possibly make a business "whole" when infinite years of income are lost? We have put well over $50,000 in improvements in the business since 2003. These improvements were to benefit the business well into my retirement years.

Loss of Community

Based on your study, anything with over 3 feet of water is a buyout *"No habitable structures allowed"*. The communities of Hickson, Oxbow, Bakke Development, Pleasant Township, and Comstock, MN will all be destroyed by this plan. This will destroy the relationships my family has made with so many people from this area. These communities are unique in how blue collar workers can associate with others in a position of wealth as one person to the other without status in the way. It is a shame that there are hundreds of pages in the study related to fish and wildlife but not one page related to these communities. I believe the culture of this area was not studied. I would hate having to tell my children they have to find a new school, home, church, and worst of all new friends if this plan goes through. They would ask why? How would I answer that? That is an answer the Corp of Engineers and City of Fargo shouldn't put me in the position to answer.

Purpose and Scope

Page ES-1, **PURPOSE AND SCOPE** *"The purpose of the feasibility was to investigate flood issues in the Fargo-Moorhead Metropolitan Area, identify flood risk management measures that could be implemented, document findings and, if appropriate, recommend implementation of a federal project"*. Page ES-2, **LOCATION OF STUDY AREA** states *"The Fargo-Moorhead metropolitan area is located within the area from approximately 12 miles west to 5 miles east of the Red River and from 20 miles north to 20 miles south of Interstate Highway 94"*. As I have stated above I live in Bakke Development and own a business in Hickson which are approximately 13 miles south of Intrastate 94 (both within the boundaries of the area you were instructed to protect). It appears based on the results of the LPP, it is your recommendation to destroy Hickson, Bakke, Oxbow, Pleasant Township, Comstock and surrounding communities by flooding them. I hope it isn't the intention of the federal government to destroy these

communities that have never flooded. The study fails to take into consideration the social and economic interests of the southern part of the Metropolitan area. There are no members of our communities that were included in the decision making process. How can the federal government deem our homes, businesses, land, and communities expendable without giving us a seat at the decision making table?

Upstream Studies

There are plans out there that discuss upstream retention. It appears these plans have not been properly studied by the Corp of Engineers. You have been rushed on time to study viable alternative plans by the City of Fargo. I don't see how destroying communities should take precedence taking the time to study alternative solutions. Was there a study done to build a Wild Rice River Diversion? I have lived here for 11 years and witnessed the highest flood on record of 2009. Each year the Wild Rice River carries a significant volume of water to the Red River. Has the Wild Rice River even been studied on how the water will back up with the LPP? There was a new map out less than a month ago with new water levels south of Highway 46. This leads me to believe that it hasn't been studied. I believe there is a plan that would include Representative Collin Peterson of MN plan (of storage upstream on the Wild Rice and Bois De Sioux rivers of 500,000 acre feet) and a much smaller Wild Rice River Diversion. The Corp is directed to provide protection in the most cost effective manner. I believe the Corp needs to recalculate the cost benefit ratio to assure it was done correctly. There are other plans that will protect Fargo and not destroy other communities who have had no say in the decision making process of this study.

Executive Order 11988

This order is to avoid direct or indirect support of floodplain development. The diversion is protecting land that historically floods with 5 plus feet of water during flood events. The land just outside of the diversion (that has never flooded) will be flooded with 8 plus feet of water. This land outside of the diversion I'm referring to is already developed into the communities of Hickson, Bakke Development, and Oxbow. These communities are not in the floodplain. The children from these communities attend the Kindred School District. They make up approximately 23% of the students. The taxable value to the school in this area is a similar percentage. The diversion while protecting mostly undeveloped (floodplain) land is built right on the Kindred/Fargo school district lines. The diversion will destroy the developed (non-floodplain) land that is in the Kindred School District. There are roughly 5 miles of undeveloped (floodplain) land inside the diversion. Why couldn't the diversion be moved closer to Fargo? The answer

seems simple to me. Fargo appears to have found a way around **Executive Order 11988**. The diversion channel placement should be reevaluated giving our communities and the Kindred School District a say in the matter.

Funding of Project

We have asked the Corp, Cass County Representatives, and Fargo Representatives whether funding of this project has been determined. In a reply at a meeting in Kindred we were told that Moorhead had committed to 10%. The State of North Dakota had committed $300,000,000. Both of these numbers have been questioned recently. The City of Moorhead refused to sign a Joint Powers Agreement on June 13th with the City of Fargo. Moorhead has also suggested that maybe Cass County would be a more appropriate co-sponsor. State Representatives from North Dakota have also not appreciated not being completely informed on the possible upstream impacts. The funding for this project is clearly not in place. Does it make sense for the Corp of Engineers or the Federal Government to approve a project that has no funding in place? I also believe the 1.7 billion for the project has not been estimated properly. There needs to be better evaluations in the storage area.

Thank you for reviewing my comments and I hope the proper studies will be completed. A project with this price tag should not be rushed without considering all possibilities.

Sincerely,

Michael R. Bice

305 7th St.

Hickson, ND 58047

-----Original Message-----
From: Biewer, Dennis
Sent: Thursday, May 26, 2011 8:55 AM
To: 'Aaron.M.Snyder@usace.army.mil'
Cc: 'leah.rogne@mnsu.edu'; 'Jim Nyhof'
Subject: FW: Cemetery Questions (UNCLASSIFIED)

Good Morning Aaron.

Thank you for promptly responding. Per your request Leah is providing a list of cemeteries with legal descriptions. Will you let us know the expected costs for each cemetery as I don't believe they are included in the project.

-----Original Message-----
From: Rogne, Leah [mailto:leah.rogne@mnsu.edu]
Sent: Thursday, May 26, 2011 8:40 AM
To: Biewer, Dennis; Trana Rogne; 'nathan@auroragroupcorp.com'
Cc: Wayne Ulven
Subject: Re: Cemetery Questions (UNCLASSIFIED)

Hi, Dennis:

Here's a list of the ND registered cemeteries in Cass and Richland Counties.
The legal description should be enough for the Corps to identify which ones are in the impact area.

There are also other cemeteries not on this list and I will bring this up at the MnDak meeting on Monday to get others the group knows about on the list.

Thanks,
Leah

On 5/26/11 6:52 AM, "Biewer, Dennis" <dbiewer@gaic.com> wrote:

> Do you know anyone that could identify all the cemeteries and respond?

ND Dept of Health - Cemetery Listing

No.	Cemetery Name / Date	City	Section/Township/Range
	Cass		
85	Norman Congregation		E1/2 of 24-137-50
	10/10/1931 — Normanna twp. Norman Lutheran Congregation c/o Henry Transrud, Kindred		
86	Erie	Erie, ND	16-142-53
	10/10/1931 — Erie twp. 7-1-1968 Cledith Dows, pres.; Marjorie E. Conrad, secretary & sexton -- both Erie		
87	Salem Evangelical		13-137-55
	10/10/1931 — Pontiac twp. Evangelical Church 7-1-1968 Don Schroeder, pres.; W.F. Westphal, secretary; E.E. Utke, sexton -- all Enderlin		
88	Arthur	Arthur, ND	23-142-52
	9/25/1931 — Evangelical Lutheran St. John's congregation 7-1-1968 Frank Kuehn, pres.; Gale E. Hill, secretary; Robert E. Wiebusch, sexton -- all Arthur		
89	Tabor		SW corner SE1/4 of 11-138-54
	10/2/1931 — Eldred twp. Moravian Church of Embden, ND 7-1-1968 R.A. Gust, pres.; Mrs. Clarence Kresse, secretary; Clarence Kresse, sexton -- all Embden		
90	Alice Community Cemetery	Alice, ND	24-138-55
	10/8/1931 — The property is vested in the Diocese of Fargo but managed and supervised by St. Henry's Church, Alice, ND. 3-6-2006 formerly known as St. Henry's. Letter from Scott Hoselton, Diocese of Fargo, stated: "This property has been transferred to the Alice Community Cemetery Association, Inc., 13641 - 45th St. SE, Fingal, ND 58031-9561. It is no longer known as St. Henry's, but as the Alice Community Cemetery."		
91	Grandin	Grandin, ND	36-144-51
	9/30/1931 — application states the plat was filed with the register of deeds in Traill County.		
92	St. Leo's Church	Casselton, ND	35-140-52
	9/30/1931 — Organization is questioned to be '40 or 50 years ago' from the date registered. Property is vested in the Diocese of Fargo but managed and supervised by St. Leo's Church of Casselton. 7-1-1968 Clayton N. Runck pres.; Rev. Anthony R. Peschel, secretary; John C. Olwell, sexton -- all Casselton		
93	Addison Evangelical		SE corner of SE1/4 of 10-138-51
	9/23/1931 — 7-1-1968 contact: Rev. Ralph F. Dunn, Box 119, Casselton (pastor of United Methodist Church of Casselton. "From all surface appearance the cemetery appears to be basically abandoned."		
94	Christiania	Davenport, ND	NW corner NE1/4 of 26-137-51
	9/25/1931 — 16 rods E & W, 10 rods N & S Davenport twp. Christiania Evangelical Lutheran Church 7-1-1968 contact: M.L. Vangerud, Kindred		
95	Lower Wild Rice and Red River	Wild Rice, ND	6-137-48
	9/16/1931 — Pleasant twp. Lower Wild Rice and Red River Congregation, Inc. 7-1-1968 Elvin Egge, Horace, pres.; Ernest Olson, Wild Rice, secretary; Harold M. Anderson, Wild Rice, sexton		
96	St. John's Evangelical Lutheran		SE corner of SE1/4 of 10-138-54
	9/16/1931 — Eldred twp. 7-1-1968 Albert Erdman, Wheatland, pres.; Lloyd Waldahl, Embden, secretary; Edwin Grabou/Fred. L. Luther, Alice, sexton		
97	Kindred Cemetery Assn.		28-137-50
	9/21/1931 — Normanna twp. Directors of Kindred Cemetery Association, Kindred 7-1-1968 Edwin Overboe, pres.; Ralph L. Trom, secretary -- both Kindred		

ND Dept of Health - Cemetery Listing

No.	CemeteryName Date	City	Section/Township/Range
	Cass		
98	Davenport Village	Davenport, ND	35-138-51
	9/15/1931	Davenport Village Board 7-1-1968 contact: Council of city of Davenport	
99	Holy Cross Ceme. Improvement Assn.	Fargo, ND	25-140-49
	9/3/1931	formerly St. Mary's Cemetery Improvement Association 7-1-1968 Leo O'Day, Fargo, pres.; James V. Boulger, Fargo, sec-treas.; Rudolph Thompson, Wild Rice, superintendent Holy Cross Cemetery Improvement Assn., Box 1750, Fargo	
100	Casselton	Casselton, ND	35-140-52
	8/12/1931	Organized: "about 1884 I think"	
101	Watson Cemetery Assn.		34-138-53
	8/6/1931	Walburg twp. 7-1-1968 August Zaeske, pres.; John C. Jackson, secretary; Arthur T. Zaeske, sexton -- all Leonard	
102	Page	Page, ND	31-143-54
	8/6/1931	Page twp. 3-6-2006 Letter from Scott Hoselton, Diocese of Fargo, states: "Also in Cass County and listed as #102 is St. James' Cemetery. Cemetery listing #102 simply indicates Page. The location indicator of 31-143-54 is the same location for both St. James' and Page Cemetery as they were adjacent to one another. St. James' Cemetery has been transferred to The Page Cemetery Association, 14205 - 18th St. SE, Page, ND 58064-9781. As such, it should all be listed as Page Cemetery."	
655	Elmwood	Wheatland, ND	26-140-53
	10/29/1931	Wheatland Cemetery Association 7-1-1968 E.W. Rand, Ayr, pres.; Paul F. Sheldon, Wheatland, secretary & sexton	
656	St. Benedict	Wild Rice, ND	34-138-49
	10/26/1931	St. Benedict's Church 7-1-1968 Ernest DuBord, Horace, pres.; Anton Rutten, Wild Rice, secretary	
657	Buffalo Cemetery Assn.		SE1/4 of 19-140-54
	10/26/1931	7-1-1968 Cordon W. Coon, pres.; Charles C. Titus, secretary -- both Buffalo	
751	Pontiac Trinity Luth. Ceme. Assn.		SE corner SE1/4 of 24-137-55
	11/4/1931	Pontiac twp. 7-1-1968 Elmer Utke, pres.; Robert Geske, secretary; Clinton Liebenow, sexton -- all Enderlin	
821	North Pleasant Ceme. of the Norwegian Evang. Lutheran Church	Hickson, ND	27-137-49
	12/7/1931	7-1-1968 George Ramstad, pres.; Kenneth Sundet, secretary; Oliver Mathison, sexton -- all Hickson	
850	Goshen Moravian		NW1/4 of 5-138-52
	12/22/1931	Maple River twp. 2 miles north of Lynchburgh Goshen Moravian Congregation 7-1-1968 Ben Bautz, Durbin, sexton	
961	Springvale		NE1/4 NW1/4 NE1/4 of 25-140-49
	2/3/1932	Oliva Cooper and Verna Cooper, Fargo, ND Cemetery for sale--see Fargo Forum 11-30-1975	
965	Good Samaritan Home	Arthur, ND	13-142-52
	9/21/1931	Arthur twp. Evangelical Lutheran Good Samaritan Society 7-1-1968 contact: Dorothy Fowler, Arthur, administrator	

ND Dept of Health - Cemetery Listing

No.	Cemetery Name	City	Section/Township/Range
	Date		
	Cass		
983	Leonard		SW1/4 of 21-137-52
	2/29/1932	situated at center of south line of SW 1/4 Leonard twp. 7-1-1968 Mrs. Ed Powers, pres.; Ina Phipps, secretary; Earl Nesemeier, sexton -- all Leonard	
1026	Cass County Central	Ayr, ND	NE corner of 23-141-54
	6/24/1932	7-1-1968 contact: Elbert Rand, Ayr	
1055	West Prairie		32-137-51
	8/2/1933	Davenport twp. West Prairie Congregation 7-1-1968 Edwin Lunder, pres.; Lloyd Andvik, sexton -- both Kindred	
1090	Cass County Central (same as 1026)		Lot 1 of NE1/4 of 23-141-54
	7/9/1941	Ayr twp. In October 1940, Maude Leaver Bradford was the sexton and owner of this cemetery.	
1098	Fargo Hebrew Congregation	Fargo, ND	25-140-49
	3/30/1942	1-9-2001 Received "return to sender" letter sent to this congregation on January 2 asking them to clarify if this cemetery and Beth El Memorial Park are the same cemetery. 1-10-2001 Jerome Feder, from the Beth El Memorial Park (our #1180), called to say the two cemeteries are next to each other and the Fargo Hebrew Congregation cemetery is cared for by Steve Paper and Mike Geller.	
1111	Sunset Memorial Gardens, Inc.	Fargo, ND	36-139-49
	6/6/1952	PERPETUAL CARE	
1173	Mapleton	Mapleton, ND	6-139-50
	3/21/1960	7-1-1968 contact: city of Mapleton; James Farrell, Mapleton, sexton	
1174	Maple Sheyenne	Prosper, ND	SE1/4 SW1/4 of 13-140-50
	3/21/1960	Raymond twp. Organized: Pentecost Sunday 1881 Maple Sheyenne Lutheran Church 7-1-1968 Clyde Landblom, pres.; Charles Bowman, Harwood, secretary	
1178	Cass County	Fargo, ND	19-140-48
	3/28/1960	7-1-1968 Edward Piper, pres.; county auditor, secretary; C.J. Myers, superintendent at County Hospital, sexton	
1180	Beth El Memorial Park	Fargo, ND	25-140-49
	3/29/1960	1-10-2001 Jerome Feder called in response to the letters sent 1-2-01 to Temple Beth El and the Fargo Hebrew Congregation (our #1089) cemeteries asking if they were the same. He said they are next to each other but two separate cemeteries. He and Judge Myron Bright are tl caretakers of this cemetery.	
1188	Riverside	Fargo, ND	19-139-43
	4/1/1960	PERPETUAL CARE Barnes twp. Riverside Cemetery Association	
1189	Nora Lutheran	Gardner, ND	3-142-49
	4/5/1960	Wiser twp. Nora Evangelical Lutheran Congregation 7-1-1968 Norman Tollefsrud, Gardner, secretary	
1212	Hunter	Hunter, ND	23-143-52
	4/11/1960		

ND Dept of Health - Cemetery Listing

No.	CemeteryName Date		City	Section/Township/Range
	Cass			
1229	Argusville Union		Argusville, ND	2-141-50
	5/13/1960	Berlin twp. 2 1/2 west 1/2 mile north organized about 1880		
1240	Brink		Horace, ND	18-138-49
	6/15/1960	Stanley twp. Organized about 1880 Mrs. Louisa Marie Adsero, landowner 7-1-1968 Mrs. Adsero, pres.; Robert Brink, Horace, contact		
1309	Herby Evangelical Luth. Church		Prosper, ND	18-141-50
	1/12/1961	Berlin twp. 7-1-1968 Roy Blixt, Gardner, pres.; Wilmar Olson, Harwood, secretary; Keith Blixt, Gardner, sexton		
1371	Lower Maple River		Harwood, ND	1-140-50
	9/2/1965	Raymond twp. 7-1-1968 E.R. Borg, Harwood, pres.; Edwin Waa, Harwood, secretary & sexton		
1447	Hector Memorial			SW1/4 of 6-138-48
	1/24/1977	part of Government Lot 3 Fred abd Earlyne Hector, owners, R.R. 1, Fargo		
1448	Unnamed burial site (Jungnitsch)		Ayr, ND	SE1/4 of 22-142-55
	4/27/1977	Decendants of W.H. Jungnitsch, Ayr, ND Four bodies buried on this site between 1880 and 1892.		
1456	Bethel Moravian Church		Leonard, ND	3-137-52
	10/5/1978	Oct. 1978 Earl Roesler, Leonard, sexton		
1494	Oakwood		Harwood, ND	33-141-49
	11/16/1987			
1512	Historical		Fargo, ND	13-138-49
	7/11/1991	contact: George Lacher, Diocese of Fargo		
1577	Clemenson		Horace	30-138-49
	9/27/2004	J. Marie Smith Living Trust (private family) J. Marie Smith, 9 - 4th Avenue NW, Towner, 58788		
1588	Islamic Society of Fargo-Moorhead		Fargo	14-138-49
	8/1/2007	mosque sexton: Abdelfatah M Bashir, 1207 Elm Street South, Moorhead, MN 56560		
	Richland			
435	Wendt Mission Cemetery Association		Abercrombie, ND	8-135-48
	10/17/1931			
436	Freeman		McLeod, ND	NE corner SE1/4 of 17-134-52
	10/17/1931	Freeman twp. Freeman Cemetery Association		
437	Emanuel		Abercrombie, ND	4-134-48
	10/17/1931	Emanuel Church of Abercrombie 10-26-90 Sexton: Norman Ihland, Rt. 1, Box 16, Kent, MN 56552		

ND Dept of Health - Cemetery Listing

No.	Cemetery Name / Date	City	Section/Township/Range
	Richland		
438	Zion Church of the Evang. Assn. of North America 10/19/1931	Great Bend, ND	23-131-49
439	Gol 10/19/1931 Gol Norwegian Lutheran Church	Kindred, ND	SW corner NW1/4 of 7-136-50
440	St. John's 10/8/1931 Abercrombie twp. St. John's Congregation		32-134-48
441	The Barrie 10/8/1931 Barrie twp. Barrie Cemetery Association		28-136-51
442	Hillside 8/12/1931 Brightwood twp. 6-16-2009 The man who has mowed this cemetery for years is no longer able to do so. A Wahpeton law firm plans to establish a trust fund assist in the upkeep.	Hankinson, ND	23-130-50
443	Greenview 8/8/1931 Greenview Cemetery Association		NW corner NE1/4 of 26-133-50
444	Fairmount 9/9/1931 Fairmount twp.		6-129-47
445	Moore's (private) 9/28/1931 PRIVATE Center twp.		SE corner of 9-132-48
446	Richland 9/28/1931 Eagle twp. Richland Lutheran Church		11-135-49
447	Peace Evangelical Lutheran 9/28/1931	Barney, ND	7-132-50
448	Eagle 9/28/1931 Eagle twp. Eagle Cemetery Association	Christine, ND	NW corner SW1/4 NW1/4 of 18-136-48
449	St. John's Catholic Church 9/24/1931 The property is vested in the Diocese of Fargo but managed and supervised by St. John's Catholic Church.	Wyndmere, ND	part of SW1/4 of 8-132-51
450	Catholic 9/24/1931 Grant twp. The property is vested in the Diocese of Fargo but managed and supervised by St. John's Catholic Church.	Lidgerwood, ND	part of NW1/4 of 14-130-52
451	St. Anthony's Catholic 9/24/1931 St. Anthony's Cemetery Association	Mooreton, ND	12-132-50
452	Sts. Peter & Paul (aka Calvary) 9/24/1931 The property is vested in the Diocese of Fargo but managed and supervised by Sts. Peter & Paul Church.	Mantador, ND	8-131-50

ND Dept of Health - Cemetery Listing

No.	Cemetery Name / Date	City	Section/Township/Range
	Richland		
453	South Pleasant		22-136-49
	9/23/1931 Walcott twp. South Pleasant Church		
454	Zion	Walcott, ND	27-135-50
	10/1/1931 Colfax twp. The Zion Congregation of the Dakota Conference of the Evangelical Association.		
455	Homestead Lutheran		11-133-51
	9/30/1931 7 miles NE of Wyndmere 10-16-1975 All graves removed from 2 acres (SE 2 acres of NE 1/4) of cemetery and was returned to farmland--remainder of cemetery still exists.		
456	Riverside	Wahpeton, ND	17-132-47
	9/26/1931 Center twp. Riverside Cemetery Association		
457	Fairview	Wahpeton, ND	6-132-47
	10/1/1931 PERPETUAL CARE in June 2000 (says organized 5-10-1939)		
458	Anderson's		NE1/4 of 30-133-52
	10/3/1931 Norwegian Lutheran Church		
459	Evangelical Christian Church		19-136-48
	10/1/1931 Eagle twp. Evangelical Christian Church Cemetery Association		
460	Immanuel Evangelical Lutheran	Hankinson, ND	12-130-50
	10/6/1931		
461	Viking Evangelical Lutheran		NW corner NE1/4 of 34-135-51
	10/5/1931 Viking twp.		
462	Trinity Evangelical Lutheran	Gread Bend, ND	22-131-49
	10/5/1931 Brandenburg twp.		
463	Walcott Lutheran		2-135-50
	10/5/1931 Colfax twp.		
464	Elk Creek		SW corner SE1/4 of 13-132-52
	10/5/1931 PERPETUAL CARE Wyndmere twp. Originally called Wyndmere Cemetery		
465	Calvary	Wahpeton, ND	7-132-47
	9/10/1931 Center twp. Calvary Cemetery Improvement Association		
466	St. John's Evangelical Lutheran		15-131-48
	9/10/1931 Summit twp.		
467	Calvary	Fairmount, ND	NE corner of 17-130-47
	8/3/1931 St. Anthony's Church of Fairmount		

ND Dept of Health - Cemetery Listing

No.	Cemetery Name / Date	City	Section/Township/Range
	Richland		
468	Gol-Aal	Wyndmere, ND	21-134-51
	9/1/1931 Garborg twp. 10-1/2 miles NE of Wyndmere Gol-Aal Lutheran Congregation		
469	Christine Lutheran Church		26-136-49
	8/31/1931 Eagle twp.		
470	Bohemian National		17-132-47
	8/25/1931 Center twp. Bohemian National Cemetery Association		
714	Helendale		21-136-52
	10/28/1931 Helendale twp. Helendale congregation		
715	Perhus Cemetery Association	Kindred, ND	4-136-50
	10/31/1931 PERPETUAL CARE Plot was recorded 1-29-1892		
716	Emmanuel Evangelical	Hankinson, ND	23-130-50
	10/26/1931 Brightwood twp.		
735	Bethany		NW corner NE1/4 of 24-134-49
	11/4/1931 Bethany Norwegian Lutheran Church		
777	Immanuel Evangelical Lutheran		6-129-51
	11/20/1931 Duerr twp.		
778	Evangelical Lutheran Holy Cross	Lidgerwood, ND	NE1/4 of 13-130-52
	11/20/1931		
779	Dexter Congregational		NW1/4 of 22-131-52
	11/10/1931 Dexter twp.		
825	St. Paul's	Mooreton, ND	8-132-49
	12/3/1931 Mooreton twp. St. Paul's Lutheran Church		
832	Calvary	Hankinson, ND	23-130-50
	12/1/1931 Brightwood twp. (same land description as #716) St. Philip's Church of Hankinson		
857	Richland County Poor Farm Cemetery Assn.		17-132-47
	12/21/1931 Center twp. Officers of the Richland County Commissioners		
915	Storns Evangelical Lutheran Church		NW corner SW1/4 of 22-134-50
	12/28/1931 Nansen twp. 10-26-1990: Sexton: Darrell Overby, Box 61, Colfax, ND 58018		
920	St. John's Evangelical	Lidgerwood, ND	23-130-52
	12/28/1931 8-5-87 letter from Fred Stege indicates the real estate is held in the name of "St. John's Evangelical and Reformed Church of Lidgerwood", ND corporation. 10/26/90 Sexton: Palmer Tverdahl, Rt. 1, Box 72, Wahpeton 58075.		

ND Dept of Health - Cemetery Listing

No.	CemeteryName / Date	City	Section/Township/Range
	Richland		
954	Vaar Frelsers (aka Our Savior's Lutheran) 1/22/1932 Colfax twp.		32-135-49
966	Normanna 2/1/1932 Normanna Evangelical Lutheran Congregation	McLeod, ND	NW1/4 SE1/4 of 31-135-51
971	Faith Lutheran 2/23/1932 formerly Evangelic Lutheran Church of the Wild Rice Cemetery.	Dwight, ND	SW1/4 NW1/4 of 28-133-48
981	Zion Lutheran Church 3/1/1932 Sheyenne twp.	Leonard, ND	SW corner NW1/4 of 3-135-52
1005	St. John's Evangelical Lutheran 5/5/1932 Belford twp.	Hankinson, ND	23-131-50
1125	Porta Coeli (Gate of Heaven) 12/27/1957 Carmelite Nuns of the Diocese of Fargo, Wahpeton, ND ? Date ? Name changed to Janus Coeli (Door of Heaven)	Wahpeton, ND	34-133-48
1131	St. Francis 2/25/1938 Brightwood twp. (same land description as #1453)	Hankinson, ND	24-130-50
1177	Hemnes 3/28/1960 Eagle twp. Organized: "might be 1871" Congregation dissolved.	Christine, ND	1-136-49
1355	Janus Coeli (Door of Heaven) 9/24/1963 same as #1125, they just changed their name	Wahpeton, ND	34-133-48
1453	Sisters of St. Francis 8/4/1978 (same land description as #1131) Wipperman's Addition, Lots 5 and 6--the old cemetery is located on lot 2 Sisters of St. Francis of the Immaculate Heart of Mary	Hankinson, ND	24-130-50
5055	Smith Cemetery pre-1992: According to Duane Kragness, attorney, Wahpeton, two bodies are buried on the farmstead with room for three more (10x10 plot It is called the Smith Cemetery; however, the landowner does not want to register it as a cemetery at this time.		20-135-48

***If the cemetery number is 5000 or greater it is not a registered cemetery but is considered a "known" cemetery**

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

I am a resident of the Bakke Development, President for the Members of the Bakke Association and a Supervisor for Pleasant Township, Cass County, North Dakota. I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have many concerns about the impact of the project on my home, family and community. I am requesting that you complete further study on the following:

1. Purpose and Scope
2. Loss of Township Base
3. Relocation of Developments
4. Upstream Studies
5. Funding of Project

Purpose and Scope

Page ES-1 of the Supplemental Draft Feasibility Report and Environmental Impact Statement **PURPOSE AND SCOPE** *"The purpose of the feasibility was to investigate flood issues in the Fargo-Moorhead Metropolitan Area, identify flood risk management measures that could be implemented, document findings and, if appropriate, recommend implementation of a federal project"*. Page ES-2, **LOCATION OF STUDY AREA** it states *"The Fargo-Moorhead metropolitan area is located within the area from approximately 12 miles west to 5 miles east of the Red River and from 20 miles north to 20 miles south of Interstate Highway 94"*. As I have stated above I live in the Bakke Development which is approximately 13 miles south of Highway 94 (7 miles within the boundaries of the area you are instructed to protect). Based on the results of the LPP, it is your recommendation to flood Hickson, Bakke, Oxbow and surrounding areas. I don't believe it's the intent of the federal government to destroy communities, especially areas that have never flooded such as Bakke. By failing to recommend a project that takes into consideration the viability and social and economic interests of the southern part of the Metropolitan area and to include representatives of that area in the decision making process, you have failed to follow the intent of the study.

Loss of Township Base

If you would study any of the financials of the Townships located in North Dakota, you would realize they are barely covering expenses. They do not have money to fix roads or bridges (if you want to talk about saving lives), yet you want to wipe out tax base that would make things even worse. Developments such as Bakke and Hickson have over $13M of assessed values that provide income to cover township expenses. By removing this tax base you are breaking the township. I don't believe it is the intent of the government to remove tax base. The loss of tax base to rural Cass and Clay Counties, to Richland and Wilkin County, and to other governmental entitities impacted by staging must be included in the project costs. These costs have not been included.

Relocation of Developments

Based on your studies, anything over 3 feet is a buyout *"No habitable structures allowed"*. This means you are going to destroy the relationships that my family and I have built with so many people. Nobody from the Corps of Engineers has given us any solutions to keeping our developments together. Based on the area of destruction and failing to communicate, it is obvious that it is not possible to relocate our communities and make us "whole". Relationships cannot be replaced by the Diversion Sponsors. Your Mitigation Concept states that you are going to work with Oxbow, Bakke, Hickson and Comstock to develop a plan. Nobody from this area has been contacted to give any guidance and we have been left in a stall position, which could last for years, as our property is unmarketable. If my family wanted to move from this area I have been given opportunities. In the last 2 years I have declined two large promotions in Lawrence, Kansas and Cincinnati, Ohio because I we didn't want to lose the friendships that have been created. Based on your studies, my family and hundreds of others are being mandated to sacrifice everything we have achieved in past years.

Upstream Studies

From your response to an email you stated *"the Corp analyzed the possibility of upstream retention, but the analysis did not indicate a high level of probability that retention would have a direct enough of an impact of flood risk reduction to justify that as a solution"*. You also stated *"federal participation was unlikely"*. Based on your response it appears that you do not feel adequate time is available to complete a thorough study as it appears much easier to destroy communities rather than find alternatives. Representative Collin Peterson of MN believes that he can request farm bill funds of $50M per year over the next 10 years to store water. He has suggested that he can find 500,000 acre feet of storage upstream on the Wild Rice and Bois De Sioux and other feeder channels into the Red River. The Red River Basin Commission has suggested areas in Minnesota, South Dakota and North Dakota to store water. As I am currently involved in a farm partnership in Southern Richland County, I am aware of farmers that would be willing to discuss alternatives of storing water. I suggest that you review your cost benefit numbers to assure they have been calculated correctly. As you stated to me at a meeting in April, it is the responsibility of the Corp to provide protection in the most cost effective manner. I guess that would be the Minnesota plan. Clearly, the Corps has not done adequate studies of alternatives that do not produce benefits at the expense of upstream communities who have had no say in the decision making process.

Funding of Project

We have asked the Corp, Cass County Representatives and Fargo Representatives whether funding of the project has been determined. In reply we have been told the City of Moorhead has committed to 10%. This is simply a false statement that has mislead the residents affected by the project. The truth was finally revealed on June 13th when the City of Moorhead refused to sign a Joint Powers Agreement with the City of Fargo. A representative of Moorhead has recently suggested that Fargo find a substitute sponsor in North Dakota, unfortunately for them I understand it has to be a Minnesota sponsor. The impression created at the Kindred public meeting on May 24 was that the local funding was already committed, and this is clearly not the case.

Thank you for reviewing my comments and I hope that further studies will be considered.

Sincerely,

Dennis J. Biewer

Dennis J. Biewer
518 Plum Tree Road
Hickson, ND 58047

June 12, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth St East, Ste 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Mr. Snyder:

I am writing with concerns about the LPP the USACE has presented. I manage C-W Valley Co-op which is a locally owned farmers co-operative with facilities at Comstock and Wolverton, Minnesota. There are many questions left unanswered that I feel have not been addressed. At Comstock we have a grain handling facility that will need to be protected or relocated, what is the process for that? I have received many different answers from staff from the Army Corp of Engineers- from relocating the structures which would be almost impossible, to a buyout at depreciated values. This is a very viable business which consists of some structures that certainly will be depreciated down to almost no value which is not acceptable to our patrons. If the decision is made to ring dike Comstock, what is the effect on ground water? Our facilities have grain conveying equipment that sit 12-15 feet in the ground. Are we going to have issues with water seeping into these because of high water tables caused by the water staging?

C-W Valley Co-op also has an agronomy center, bulk fuel facility and retail fuel station west of Comstock on the corner of Hwy 75 and County Road 2. At this location we handle chemical, seed, and petroleum products. Will this be relocated or protected and if protected how will it be protected and will access be provided so we can service our patrons south of the most affected staging area?

I do not believe the impact of the LPP has fully been studied or released. What is the impact on the upstream area when the control structure on the Wolverton Coulee has been activated. Also who has control of that structure, at what point will it be activated and for what duration.

I also do not believe the impact on the farming community has fully been addressed. This will change farming practices and impact production on at least 34,000 acres. You state that this land can still be farmed, but it will be with terrific financial risk of the producer. These farmers will no longer be able to prepare their land in the fall which makes the time in which to get the crop planted in the spring much shorter with more to accomplish in that short period of time, if they can get in at all. The later the crops are planted means a lower production yield, which means less income for the farms, less product for the agribusinesses to handle and less money to be spent in the economy. Has the impact study taken this into consideration and what are the expected impacts? In the last report it was stated that this water staging would have occurred during the summer three out of the last six years, flooding farm acres and destroying the crops. The producer's crop insurance will not cover this loss, how can the USACE and the Local Sponsors expect the producers to assume this loss. The loss on just 21,000 acres of crop could easily be $20,000,000 or more and this would have happened 3 out of the last 6 years. I do not remember Fargo flooding excessively during any of these summer events. The impact of this

situation will not only financially ruin the farmers but also every business that relies on the farmer, including businesses in Fargo.

I also live in the Bakke Subdivision, everyone that lives in the upstream impact area has already been negatively impacted by this study. Property values have declined drastically, most sales are nonexistent. There has not been any confirmation as to mitigation for the people affected. What is the mitigation plan and when are the values of our properties set? I have asked members of USACE and have not received a consistant answer. The people that are doing the sacrificing should be told upfront what to expect, there is getting to be very little trust in this process.

I am also president of the Kindred School District, the impact the LPP proposal will have on the District, our students and patrons is immense. The possibility of losing 125 students as well as 25 percent of our tax base will cause severe hardship for the district. The staging and retention areas of the LPP greatly reduce the habitable area of the District and eliminates our largest growth area. The loss of income from tax base as well as the loss of students will cause the district to reduce staff which will be loss of jobs. The patrons of the Kindred School District planned for the futures of the students and passed a bond issue in May of 2010 for the construction of a new school which is currently under construction. What will be done for the Kindred School District students and patrons to mitigate its losses?

It is hard to convince me that this plan is for the protection of Fargo/Moorhead, it is more about protecting the growth of Fargo to the south which is a natural waterway during a flood event. With all of the water issues in the tri state area I think this plan is too localized and a broader plan should be looked at.

Curt Bjertness
20 Elm St
Hickson, ND 58047

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan

Area Flood Management

Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan

(North Dakota Diversion with storage and staging) for flood control in the Red River Valley

I am a Trustee for the Bolme cemetery and we have not had standing water on graves from

previous floods however, with the increase in the level of flooding that is being proposed it would be very possible that grave sites will have standing water on them for a period of time. Please place the cost of protecting our cemetery in your proposed diversion budget.The cemetery is located 5 miles south of Christine ND in the NW ¼ of sec 20 135 48 Richland co. and we have 2 graves sites. This water will have emotional, psychological, and ethical effect on the members associated with this cemetery.

Jeff Bolme

17540 co rd 28

Colfax ND 58018

From: Mark W. Borud [mailto:mborud@mdf.coop]
Sent: Wednesday, June 15, 2011 3:47 PM
To: Coleman, Brett R MVP
Subject: RE: FMM Project - (UNCLASSIFIED)

Mr. Coleman,

I was wondering if you ever did any more investigation in regards to whether or not my home would be on a buyout list or not? Any information if any that you could offer would be greatly appreciated. We are on the verge of beginning a major remodel project and would definitely hold off on project if we knew that it may be all for not! Thanks so much for any help,

Kind Regards,

Mark

Classification: UNCLASSIFIED
Caveats: NONE

6/15/2011

US Army Corps of Engineers. St. Paul District
Att: Aaron Synder
180 Fifth Street East, Ste. 700
St Paul , MN 55101-1678

I am writing in regards to the Fargo "LLP" Diversion Project. I live in the buy out area and attended area meetings for the project and was disappointed in the responses to the people's questions.
For instance, regarding the overland flooding from the Sheyenne River that needs to cross Hwy Co. #17 to drain west in order to drain and with the purposed levee blocking that drainage, the answer was "that will come in the design phase. I suppose there will have to be a drain dug so that water can get to the diversion."
The question concerning the 9 cemeteries in the buy out area (that no one on the panel seemed to knew about) was answered, "If they had water on them before we wouldn't do anything, but if they didn't I guess they would have to be moved." The most common answer to most all other questions was, "This is the best plan to protect the Fargo-Moorhead area." These answers are not adequate. What has the Corp been doing if there still has to be a design phase? How can the price tag for the project be even close to correct, when they weren't even aware of cemeteries in the area. What else are they not aware of or not considering? How convenient that the northern most line follows the Kindred School District Line thus protecting the Fargo School District completely! How can this area ever be fully compensated for the losses of family homes, farms, livelihoods, churches and school district, etc.? We are marked with a big "X" now and the area will be left stagnant for at least 10 years if this is passed. It is not only our area that will be affected, anyone south, west, east and north of the project will also feel the wrath of this enormous project. It is not a diversion but in all reality a Dam.
I just heard that Moorhead is now considering backing out of the partnership as they will not be able to fund just their portion of 10% if the state doesn't help them. How can Fargo fund a 2 Billion Dollar Project with only $767,000.00 from the Federal Government (who happens to be broke). I realize that something needs to be done but don't think this is the right answer to the problem. There are too many unanswered questions. Railroading this through is a mistake. There has to be a better solution!

Sincerely,

Patricia Boyer
17105 52nd St SE
Horace , ND 58047

From: Arden Breimeier [mailto:abreimeier@kwh.com]
Sent: Monday, June 20, 2011 11:03 AM
To: Snyder, Aaron M MVP
Subject: Comments

Aaron Snyder

USACE

Mr. Snyder,

As we discussed last week, please formally submit the following questions as part of the current SDEIS comment process:

Question 1: Let's assume for a moment that there is a cost overrun on the project, say $500mm. This isn't due to inflation but instead to unexpected complications building the river structures, raising I29, etc. How does the cost share work in an event like this? Does the project-cost split between sponsor and Corps apply throughout or is there a different formula used to divide the added cost? Is this a local obligation or a shared obligation between Federal and local?

Question 2: With regard to the higher flood plain numbers that the Corps is using as part of the cost/benefit justification, do these higher numbers apply only to Fargo proper and areas south or to the whole valley region? If the Corps is successful in convincing FEMA that these numbers are accurate for Fargo, won't the resulting effect be to raise the flood elevation for the valley at large?

Question 3: By starting the project on the north end and working south, is the Corps foregoing incremental benefit for the entire duration of construction? If the project started from the south and worked north, couldn't Fargo benefit from whatever control the early stages of the dam diversion's construction can provide

Question 4: With the imposition of upstream staging and the Corps' subsequent ability to reduce the size of the proposed channel from 35K to 20K, what is the project's projected avoided cost?

Question 5: The current diversion alignment/path was developed with the purpose of moving excess water around Fargo and sending it downstream: no upstream staging as part of the plan. Had it originally been designed with upstream staging in mind, how would the alignment/path of the diversion differ from the proposed LPP?

Question 6: How many approved Corps projects are pending and at what outstanding appropriation (funding) requirement? Assuming that this project is authorized and that Federal funding will be forthcoming, when could we realistically expect the project to begin construction in light of any Corps backlog?

Thank you, Aaron.

Arden Breimeier

City of Oxbow

EideBailly

CPAs & BUSINESS ADVISORS

June 17, 2011

US Army Corps of Engineers
Att: Mr. Aaron Snyder
180 5th Street E Suite 700
St. Paul, MN 55101-1678

RE: Orton & Sandra Brodshaug
PO Box 367
Kindred, ND 58051

Mr. Snyder:

This letter is to inform you of Mr. Brodshaug's adverse opinion of the Fargo Diversion and the disruption of value to land he owns in Hickson, North Dakota. Mr. Brodshaug would like to go on record as opposing the Fargo Diversion because of the following reason:

> Mr. Brodshaug owns fourteen residential lots in Hickson, North Dakota which are made up of railroad property adjacent to the Oxbow Country Club. These lots have Fargo sewage service to them for which the costs have already been paid. Mr. Brodshaug had intended to sell these lots to prospective families wanting to live in the Oxbow area, and attend the Kindred school district. The results of having the Fargo Diversion would render these lots unusable and reduce the value to $0.

Thank you for your time and consideration.

Sincerely,

EIDE BAILLY LLP

Steven J. Troyer, CPA
Partner

pc: Orton & Sandra Brodshaug

mkj

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

We are opposed to the Fargo Dam/Diversion. It is such a narrow minded plan that if it wasn't so serious most people would shrug it off with a laugh. This project will TAKE people's homes and livelihoods without the blink of an eye. Sure, we are promised compensation (and some people are wearing rose colored glasses if they think it will be a fair compensation). But my issue is that our house, property and livelihoods are not for sale. When we looked for property on which to build our new house eight years ago, we took the topography and history of the land into consideration. We built high… on land that has historically been dry. We know that the river rises in the spring. When we wanted to build our new house, we knew where the flood prone areas were; where to stay away from. So our reward for picking a high and dry location is to have Fargo take it to put water on it. And we are supposed to just give it up. Fargo is not rescuing us from a property that floods. They are creating a property that will certainly flood. Fargo is TAKING our home so that they can push water uphill. That doesn't make much sense at all. We are at an elevation of 925 feet. Fargo is 905 in several places we checked into and maybe even lower in some places. If this Dam fails or breaches for any reason, where do you think that water is going to flow? Hint…it is not south.

While there has been much development in our neck of the woods (Northern Richland County) and new folks moving in, there are many families that have been here for generations. Why do these people have to toss aside their history? To you it may only be a plot of land and some dirt, a house, and some out buildings. But to the people who have lived here, it is roots. It is a stable environment. A home. A way of life. Why on earth would the project people think that the homes in Fargo are so much more important? Is Fargo prepared to compensate the people fairly for taking away their careers, their livelihoods, their retirement? It's pretty tough to relocate farmland. You may be able to "trade" acre for acre, but can you guarantee the quality? Are the local sponsors prepared to compensate what would be a normal income each year for every farmer displaced?

I have heard people say that the needs of many outweigh the few. Let's run with that theory. There are many, many more people involved here than Fargo, The flooding reaches out to the entire Red River Basin. Why aren't these people's needs being considered? Instead of protecting Fargo only, protect the Basin from South Dakota to Canada. Wouldn't that be more responsible? It was said at one of the meetings, that if people to the west of the dam/diversion want to stay dry, they will have to build their own diversion. So now we are just creating a catacomb of diversions, pushing the problem

further upstream of every river that enters the Red River Basin. That seems extremely irresponsible.

Many of our family and friends are buried in a cemetery that will be affected. I don't know about you and your relationships, but the thought of moving mine from their FINAL resting place to somewhere else is extremely upsetting. This also not addressed in the LPP. Many of these graves are very old. Are the local sponsors prepared to find the families of those affected? Are they going to pay for cemetery re-location?

We also own a business out here. Foss Johnson Oil, maybe you heard of it. But then I bet not. The study hasn't actually gone out here to see who will, in reality not just on paper, be damaged or destroyed. We are simply a dot on a computer generated map. We are on the Wild Rice River. But the Wild Rice hasn't really been taken into consideration in the project. Not one person on the Metro Flood Study Group has approached us as to how much we are going to be affected. Plain and simple.... We are community driven. When the community is gone, so is a large portion of our business. Is Fargo going to compensate us for that? Are we expected to move into Fargo? Will we be made whole by automatically be given a customer base? I think not. We have put 20+ years into expanding and maintaining this business. Again, not one cent from Fargo. It is not theirs to take.

This Project has so many costs that haven't even been considered. The residents of Fargo have no idea how much they are going to have to pay for this Dam. They deserve a right to know. This has been withheld from them. The rest of North Dakota has the right to know that their money will protect only Fargo. And when the water does come and flood northern Richland County, Fargo has said that they will not be responsible for the damage costs. It will then become a "local issue". Neither Richland County nor Eagle Township has the extra money lying around to fix roads and bridges. Taxes will have to go up. That is not exactly a drawing card for new residents. If the roads and bridges are in disrepair, how do people commute? What if there are emergency services needed? Will Fargo be there to console the family that just lost a building, home, or God forbid a family member simply because the road to their ring-diked home was under water?

All alternatives need to be seriously looked into. Fargo has been successful in each and every flood to date. Improvements are being made each year. We realize that it is getting to be a tiring fight. But it is a fight the entire valley is involved in. Once this dam is built, there is no going back. If this turns into a failure, where is the money going to come from to fix it? This project is too big to rush into.

Tom and Penny Cirks
5515 174 Ave SE
Christine, ND

May 26, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

I live within the area that will be flooded to save Fargo. I would like to know how this will affect my property values. We keep hearing about the Fargo residents who don't want a permanent flood wall or clay levee built in their back yards because it will affect their property values (and they want to be reimbursed if they are built). Well, what about my property values? How will my property value be assessed? We have just found out that our homes will be depreciated. So the likelihood that any of us will be able to relocate anywhere else is very slim. I certainly don't want to end up living in some slum lord's apartment in Fargo. I like my home just as much as those living in Fargo do. Plus, those living in Fargo are getting a $10,000 moving expense. Those of us living in rural Cass County are not given this opportunity.

What about the farm land that this will be flooding? How do you intend to pay the farmers for loss of their crops due to late planting or total loss in a summer flood? Crop insurance cannot be obtained for damage caused by a man-made project. How will the farmers be paid to relocate their farmsteads (some of which are massive in size)? The farmers and those living in rural Cass County are being told that their grain bins and large shops are worth nothing. Yet when there is a buyout, they are told they cannot move the shops then Fargo turns around and sells the shops to someone else at a very good price.

Has a study been done on the impact this project will have on those communities further upstream from Fargo (Christine, Colfax, Abercrombie, Wolverton)? This will certainly have an impact on these communities.

There are at least 9 cemeteries that will need to be relocated within this area? Who is going to pay for moving these graves and where will they be moved to? The cost per grave is approximately $3,000.

I am willing to take my share of water in a spring flood, but I am not willing to take on all of Fargo's water. I know Fargo needs flood protection, but this is not the solution.

I would greatly appreciate an answer to my questions.

Sincerely,

Marjorie Cossette
17132, 50th St. SE
Horace, ND 58047

cc: Chris Fritz, Honorable Wesley Belter, Honorable Vonnie Pietsch, Honorable Gary Lee, Honorable Jack Dalrymple, Honorable Rick Berg, Honorable Kent Conrad, Honorable John Hoeven

May God have mercy on your soul for ruining so many people's lives. I am a firm believer in what goes around comes around. And payback can be a bitch.

June 17, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Synder
180 Fifth Street East. Ste 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement
Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and Staging) for flood control in the Red River Valley.

I am a resident of the city of Christine, business owner in the city of Christine, residential developer in the city of Christine, volunteer fire Dept. member, gaming board member, and was recently appointed as mayor of Christine.

I feel that the current LLP plan will have a negative impact on the city of Christine from the standpoint of future growth. The city in the last few years has been planning for future growth by adding rural water and also in 1997 the city upgraded its lagoon system to be able to have future growth of 20 to 30 new homes in the city of Christine. We recently also built a brand new community center in the city.

Within the last 6 months I have been approached by a number of people wanting to move to Christine but they have put a hold on it due to the Diversion and what impact it is going to have on the city of Christine.

A number of residents in Christine have made it clear to me, as mayor, that the long term effect of being in the staging area would greatly destroy their property values and our city.

Your decision to move ahead with the current diversion plans will destroy our community, greatly impact school districts and the lives and livelihoods of many of our local neighbors. They are "human beings" not just numbers as they so frequently seem to be referenced.

Sincerely,

Jim and Theresa DesRoches
309 4th St.
Christine, ND 58015

U.S. Army Corps of Engineers

Attn: Aaron Snyder

180 Fifth Street East, Ste. 700

St Paul, MN 55101-1678

RE: Supplemental Draft Environment Impact Statement, Fargo- Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

I now – still – live on a farmstead which was first settled in the 1870's. I must add that we at one time knew personally the family who established this particular place after the huge flood of 1897. All settlers in this area selected the highest and driest place to establish their dream farms. Although we have seen many floods during the years, our ancestors proved to be very wise since our home and the homes of our neighbors placed on the high spots of 1897 have remained dry throughout all the floods we've had since 1939.

We are sincerely worried that the Corps. has not taken into account the fact that during spring flooding when the rivers are high, ice floes will damn up low or narrow areas (bridges and sharp turns in the river), break away and move down the stream at a record breaking speed, which will move everything in its path. Can the Fargo diversion take all that pressure without breaking? I have seen chickenhouses and barns going down the river at a ridiculous speed when this has happened on the Wild Rice.

Of greater concern to me is the ice floes piling up against the Fargo diversion with all the water rising and creating a more severe flooding to the area.

Sincerely,

Hartley Ellingson

5605 171 Ave SE

Christine, ND 58015

June 10, 2011

US Army Corps of Engineers, St Paul District
attn: Aaron Snyder
180 5th St. E - Ste 700
St. Paul, Mn. 55101-1678

Corp Leader of Project:

I oppose the Fargo diversion plan as proposed. I wrote a letter to the Fargo Forum expressing my concerns, and I will enclose a copy of that letter to the Editor. Those concerns are very real - this proposal is too extreme. No one wants Fargo flooded, but to destroy all this land, wreck all these homes, put the area under this stress is just way above the need. Fargo has stopped flooding with sandbagging. Is there not something in between sandbagging and protection of Fargo in case of a 500 year flood? Of course there is. Even the Corp's 1st plan is not this extreme.

My other questions/concerns are the following:

① Why isn't Lois Pederson's plan given more recognition? (Representative from Moorhead)

(2) If it goes through as proposed, what compensation will be received for added water on our farm land? (Our farm land is 1 mile S of Hickson on the Red River – a farm that has never had water come in to the farm house.) The land area is about 200 acres and of course we anticipate that the land value will be decreased by this diversion. Is there a compensation built into the plan for land destroyed in the years of flooding? And who is responsible for paying for that compensation?

(3) What compensation will be provided for moving bodies from cemeteries?

(4) What compensation will be given Hickson Lutheran Church for either moving it or destroying it?

(5) What compensation will be given Kindred High School for loss of revenue?

(6) Are all these costs figured into your $1.7 billion (or more)? If not, who pays the difference?

When I heard the longest of 500 year flood protection, I subtracted, 2011 (yrs) - 500 yrs is 1511 (a time before the Puritans/Pilgrims came to America.) Really, we need 500 year protection.

Think of all the changes made in the last 100 years. Will not a new technology come along that could help Fargo without destroying so much? I'm sure this current proposal is not the only possibility. Why is "Board Fonts not used in Fargo?

The current proposal & the Fargo diversion is too costly, too extreme, and too inhumane. I urge you to reconsider.

Sincerely,

Susan C. Ebert
11635 Fintown St NW
Coon Rapids, Mn
55448

763-755-8065

Dear Editor:

Do I understand this diversion project correctly? To save Fargo from a possible flood of once in every 500 years, I should accept that the best way to help Fargo is to wipe out 33,000 acres of the "bread basket of the world" farm land, flood several communities including the elimination of my hometown of Hickson, wipe out the Oxbow and the Bakke editions, eliminate my home church of Hickson Lutheran (that has a history of 139 years), flood my home farm on the Red River that was high enough so that the house never flooded (and that house was built in 1890), watch as all houses and farms in a huge radius are bought out and destroyed, and handicap my high school (Kindred) by eliminating almost 25% of their population and tax base. And someone can call this solution for the "greater good." This idea seems very extreme. Is this really the best solution?

When I asked my Cousin Jon why did we hear little of this until March 31, and why the rush, he said that the federal government allows for these projects every 10 years and if we do not get a proposal submitted soon, we may have to wait. We need to wait. Changes of this magnitude need much more study.

So, please, Fargo residents, encourage your officials to study this matter much more closely and much more completely. The financial cost is very high - $2 billion. And the humanitarian cost is way greater than that. There must be a better way that emphasizes the spirit of cooperation and kindness that I associate with my home state. Please don't make the expression, How Fargo of You, take on a whole new meaning.

Susan Evert
11635 Flintwood St NW
Coon Rapids, Minnesota 55448
I grew up on a farm in the Hickson, North Dakota community

May 7, 2011

U.S Army Corps of Engineers, St Paul District
Attn. Aaron Snyder
180 Fifth Street East. Ste 700
St.Paul Mn. 55101

Dear Project Manager:

I am writing you this letter in opposition to the April 2011 North Dakota Diversion for flood control in the Red River Valley.

I grew up on the family farm approx one mile south of Hickson and Oxbow. Our home was right on the Red River and has been there since the 1890's. Never once has it flooded and never had water in the basement. To take farms and and homes so that the community of Fargo does not have to fight the flood seems like too great a sacrifice for the communites of Comstock, Hickson, Oxbow and surrounding farmsteads and acreage.

I am not against protection for Fargo, but why at the expense of so many others who have not had flooding problems in the past. Granted land floods in the spring with natural runoff etc but to place a dike so water will be up to five feet deep in areas south of the diversion is not good common sense.

The community of Fargo does a great job of fighting the flood and has numerous buyouts of homes that were prone to flooding. Why cannot something like was done in Grand Forks with levees along the river in the community of Fargo be looked at as a feasible solution.

I have farmed the land and have had ditching done to help with the flowing of water, but not at expense of other area farmers. We would work together to see that no one had to be negatively affected by the water. Granted everyone did not always agree but to have a solution that you are suggesting is mind boggling and is way too detrimental to those on the wrong side of the dike.

Land values will no longer be what they are and any homes in the area cannot be sold. How can you put a price on something that is not for sale.??? How can you put a value on a school district that is growing and now will be a place that families will not move to because of the diversion??

Will my family be compensated after I am gone for the 24 acres that developers have asked to buy for development near the River because the land has never flooded.??? There are no developers knocking at our doors any longer but they still want the land North of the dike.

It seems to me on all the reading and information that is out there that the Corps

Is doing everything for the city of Fargo at the expense of communities and homes that have not been prone to the severe flooding that they now will have to deal with in the coming years.

Common sense and a sense of right and wrong should make you think twice. If the land needed a 27 foot ditch in the middle of the prairie don't you think that some responsibility falls on the city of Fargo and those that have built in the flood plain???

Do what is right and try to come up with a different plan that does not so adversely affect so many communities and homes in our area. The price is too high not only in dollars, but also in the damage that it does to communities, schools, peoples' lives, and their way of life. You can do better!!!

Sincerely

Chuck Evert

Chuck Evert
23168 Oak Leaf Lane
Battle Lake, Mn 56515
Cell 218-770-0137

June 10, 2011

U.S. Army Corps of Engineers
Mr. Snyder,

I am against the Fargo Flood Diversion Plan.

It is Cruel and Callous of Fargo to destroy towns and farm land and housing communities to save Fargo. They should save themselves by diking or move to higher ground.

Yours Truly
Ruth Ewert
1201 - 2nd Ave N. apt. 606
Fargo, ND 58102

June 14, 2011 pg 1 of 3

Aaron Snyder
USACE St Paul District
180 5th St E Suite 700
St Paul, MN 55101-1678

Dear Sir

We are writing you in opposition to the diversion Plan for the FM area.

Seven years ago we decided to move to the Fargo area to be closer to our family in our retirement years. Our housing requirements were to be within 15 miles of Fargo; be able to build a shop on our property and it had to be in an area that hadn't flooded in over 100 years. We found our home in the Bakke Addition.

Now the Corps (aka God?) has decided to flood our area (under about 8 feet of water) and we are supposedly going to be bought out. At what value? Appraised value? How our property is worthless to anyone as we are "in limbo" for how many years? We can't sell our place and move until the Corps (God?) decides what we can do and when. What do you think the price of any land or home in the Fargo area will be when there are hundreds of displaced people looking for property? Tell us we aren't going to pay a dearly inflated price. Who pays for the cost of moving? What about special assessments owed? What if we have already paid off our special assessments so we would have less to pay in our retirement years? Do we get this considered in our valuation?

Page 2 of 3

What's going to happen when Devils Lake overflows and comes down the Sheyenne unimpeded? Don't try to tell us the Corps has it under control. Look at the lack of proactive control on the cities of Minot + Bismarck recently.

We heard on the radio that this diversion will be the only diversion in existence to cross 5 rivers. Remember when they built Mt Fargo in South Fargo? Remember the big problems with the soil?? Good luck!

We're also questioning why Grand Forks (who get all of the water going through Fargo, plus much more) didn't need a retention area like the Corps has planned for Fargo?

What about the cemeteries, churches, community buildings, school districts, club houses, farms in this fertile valley area, etc. Has the impact on the people been studied anywhere as thoroughly as the impact on the fish seems to have been studied? According to our newspaper that's the reason it is now 20K. Retaining communities of people isn't a top priority to the Corps.

We would like answers to all our questions, but don't insult our intelligence by sending us a form letter, which would tell us immediately that you could care less about our questions and probably didn't even read our letter.

Sincerely,

Royce Granlund
Noreen Granlund
313 7th St
Hickson, ND 58047-5128

701-588-9286

I writing a comment regarding the Fargo Diversion. I live upstream of the diversion and am opposed to it because of the severe consequences it will have on my neighbors, ~~and~~ community and school district. I don't think the full impact this is going to have on people upstream or downstream has been fully studied. a project of this size can not go forward because of this. It has been rushed through with no study done to the damage it will do.

Monte Dylland
6450 172 Ave SE
Colfax, ND 58018
701-372-3835

I read every article printed about this diversion and I think it's really bad. It has been rejected three! Just for Fargo's sake - it is monstrous 5' aqueducts to raise I-29 eight ft. and a huge cost! planning for 500 yrs! Unreal. Any property outside of it will be worthless & or maybe it is more. I can't believe, intelligent men, could conceive with something so monstrous for all the cities area, churches, cemetaries, schools, all ~~dis~~ disregarded. Hope + pray it will not be approved. So many things can be done to protect Fargo with much less money.

Phyllis Gyllard
6450 - 173 Ave. S. E.
Colfax, N. D. 58018

We are opposed to the present plan concerning the Fargo Diversion.

Carla Gylland
Pamela Gylland

Colfax, ND
6475 172 Ave SE 58018

-----Original Message-----
From: Hall, Richard P. [mailto:rph@rdotc.com]
Sent: Tuesday, May 24, 2011 3:31 PM
To: Coleman, Brett R MVP
Subject:

Mr. Coleman,
My name is Rick Hall and I live at 566 Sunset Drive Oxbow, ND 58047 I am writing this to let you know that I oppose the proposed diversion project in the Fargo ND / Moorhead MN area as it will affect my living conditions in the City of Oxbow which to my understanding would be indundated with water as a result of the proposed diversion.
This will cause my wife and I to have to relocate after 35 years of the lifestyle that we loved and the neighborhood that we enjoyed. We would be offered a buy out of some sort that in my estimation wouldn't come close to the value of our property, golf course membership and lifestyle.
We believe that there is an alternative route that could be looked at if the timetable wasn't so rigid and there are large acres of undeveloped land that could contain this project and not ruin the lives of our residents.
I would like to have something in writing to explain what our options are as home owners and what to expect from the time table of this diversion which has left our residents in Limbo as far as being able to sell or relocate as a result of people not interested in our location and membership to our Private Club which in my estimation could go bankrupt over the information flying around about our demise!

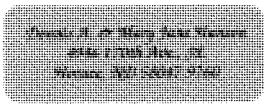
Rick Hall
RDO Truck Center
3401 38th St S
Fargo, ND 58104
1-800-342-4643

06/01/11
ATTN: AARON SNYDER PM-B
SAINT PAUL DISTRICT
US ARMY CORPS OF ENGINEERS
180 EAST FIFTH STREET –SUITE 700
SAINT PAUL, MN 55101

HELLO AARON, I AM SENDING A COMMENT SHEET ON THE PROPOSED FARGO DIVERSION PROJECT. MY HUSBAND MIKE AND I ARE IN THE BUYOUT AREA OF THE DIVERSION PROJECT AND AFTER SITTING THROUGH THE PUBLIC MEETING @ THE FARGO CIVIC CENTER WE SPOKE WITH SEVERAL PEOPLE AND IT SEEMS LIKE A LOT OF ANXIETY IS FROM HOMEOWNERS LIKE US WHO WISH TO SELL THEIR PROPERTY AND BECAUSE OF THE DIVERSION PROJECT HAVE BEEN UNABLE TO SELL. SEVERAL PEOPLE WE SPOKE WITH WERE GETTING CLOSE TO RETIREMENT AND NOW BECAUSE OF THE PROJECT WOULD NOT BE ABLE TO SELL THEIR PROPERTY (IF THE DIVERSION IS BUILT) AND WOULD NOT GET BOUGHT OUT UNTIL THE LAST PHASE OF THE DIVERSION WHICH COULD PUT THEM AT ANOTHER 10+ YEARS. HOW ABOUT PUTTING IN AN OPTION FOR HOMEOWNERS WHERE FROM THE TIME THE FM DIVERSION IS PUT INTO PLACE BY CONGRESS AND THE FUNDING IS APPROVED THAT THOSE WISHING TO LEAVE AT ANY POINT IN THE DIVERSION PROJECT WOULD GET BOUGHT OUT AND THOSE WISHING TO STAY UNTIL END COULD STAY? THIS WAY THE PROPERTIES WOULD BE GRADUALLY PURCHASED AND BUILDINGS ETC MOVED AS THEY GET PURCHASED. THIS WOULD ALLEVIATE THE LARGE BUYOUT AT THE END AND HELP THOSE WHO ARE READY TO RETIRE, HAVE TO MOVE DUE TO HEALTH REASONS, ETC.. ETC…JUST TRYING TO COME UP WITH SOME SOLUTIONS..

SINCERELY,
CAROLYN HANDLOS
AT THE BOTTOM OF LAKE AGASSIZ

CAROLYN AND MIKE HANDLOS
803 140TH AVE S
MOORHEAD, MN 56560
PHONE# 218-585-4646, E-MAIL: staccatoserenade@hotmail.com



June 15, 2011

Dear Aaron M. Snyder, USACE:

We are writing this letter to state our opposition to the proposed Fargo Diversion Dam Project. This proposal will cause too much disruption of lives and destruction of land, roads, schools and churches in such a vast area. The proposed map shows our home and property, that we have owned and lived on for the past thirty-seven years will be devastated by flood water. Never in the past has it ever been flooded!

Sincerely,

Dennis A. Hanson

and

Mary J. Hanson

6-9-2011

I am writing regarding the proposed Red River Diversion in ND. I cannot understand how this diversion, that adversely affects so many and costs such a tremendous amount, can even be considered. For the homeowners and landowners in the affected areas, this amounts to forced relocation. It has been stated by Fargo officials (Dr Mahoney) that many city residents had to accept buyouts even though they didn't want to leave their homes. The big difference is that no one in the city was forced to leave. Another difference is that the city homes have flooded ~ therefore the buyouts. The homes in the proposed staging area have not flooded but are being forced into buyouts. It is frustrating that no one listens to our concerns. We present our views but it seems to fall on deaf ears. No matter what we present, we are told "we are sticking with our plan". We need to also consider the overland flooding from the Sheyenne River. The water from the Sheyenne stacks up just west of Co 17. It has to break through roads to follow its natural flow to the Wild Rice River. With a levee on the east side of Co 17, where will this water go? How long will homes be surrounded by overland flooding? Our school district will be very adversely affected by this plan. With a decline in students, there will be a huge decline in school tax dollars. Also much valuable farmland will be deemed useless. Does no one really care as long as they are not affected?! Does the state of North Dakota, with its declining population, really want to do this to so many of its residents?! Please consider this: Would you do this to your own parents?

dshejtmanek@hotmail.com
701-428-3430

Sandy Hejtmanek
5327 170th Ave SE
Kindred, ND 58051

(PS. A real hand written letter has to be worth a few points, right??)

June 20, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:

I am writing to you in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I believe the process to develop a flood protection plan for the Fargo Moorhead Metropolitan area has grown beyond the point of its original intent. Political issues spawned by resistance to the National Economic Development Plan proposed and preferred by the United States Army Corps of Engineers(USACE), caused project planners to bypass the prescribed planning process for the best alternative for flood control. More significantly, planning objectives were modified to make the less desirable environmental choice, but local political choice, appear to comply with Executive Order 11988. The NED proposal provides the original purpose of flood protection for the communities of Fargo and Moorhead with the largest economic return for the Federal government and the least encouragement for development in the base flood plain.

Implementation of Executive Order 11988 on Flood Plain Management (ER1165-2-26) in part 6 states, "the Executive Order has an objective the avoidance, to the extent possible, of long-and short-term adverse impacts associated with the occupancy and modification of the base flood plain and the avoidance of direct and indirect support of development in the base flood plain wherever there is a practicable alternative. Under the order, the Corps is required to provide leadership and take action to: a: Avoid development in the base flood plain unless it is the only practicable alternative;"

Data is not available in the SDEIS for a comparison between the NED plan the Locally Preferred Plan, but data comparing the Federal Comparable Plan with the LPP indicates an additional 25,000 acres is removed from the floodplain and made available for development than the FCP. Corps officials cite technical reasons for the LPP not violating 11988, but those reasons need to be examined.

Both the NED and FCP plans originally placed the diversion on the Minnesota side of the Red. These plans diverted water only from the Red River and re-introduced the flows north of Moorhead. A tie-back levy south of Fargo was designed to keep overland flooding from affecting the south portion of the city. The Sheyenne Diversion provides a significant amount of protection on the west side of the metropolitan area. Areas north of the Sheyenne Diversion suffer from overland flooding caused by the confluence of the Sheyenne, Maple, and Rush rivers where they flow into the Red. Figure 25 on Page 60 of

the SDEIS shows those areas identified as economic areas where non-structural measures could be utilized to deal with overland flooding. The Minnesota Diversion alternatives were considered adequate to meet the original purpose and scope of the study.

Despite the fact that most of the local entities originally preferred the Minnesota alignment, political pressure from Minnesota residents made it appear difficult to get the required Congressional support for authorization. The North Dakota 35K diversion became the plan of choice. The problem, was that the LPP took additional land out of the floodplain in areas that were neither platted, nor scheduled for development because of their likelihood to flood in the spring. The LPP became a plan in search of technical reasons to avoid EO 11988.

The technical reasons that emerged appear to be protection for people outside the diversion by allowing the Sheyenne and Maple rivers to flow into the channel. The water level inside the diversion would be low enough to allow the surrounding land to drain even though the channel was in operation. Another benefit would be that Fargo and West Fargo could develop to the north behind the diversion channel. A third benefit would be that existing structures north of 19th Ave N would have protection from overflow flooding without non-structural protection. Figure 111 on page 301 of the SDEIS also shows areas of Fargo, west of I-29 and north of Main Ave to be inundated with the FCP under 500 year flood conditions. Figure 119 shows that area to be protected under the LPP, 500 year flood. We can discuss these issues one at a time.

The Sheyenne river is already diverted around the city of West Fargo. Figures 110 and 111 on pages 300 and 301 show significant protection for the west side of the city under the FCP in both 100 year and 500 year floods. That area is largely protected by the West Fargo Diversion. The area north of the West Fargo Diversion remains under water in the FCP plan. However, it is likely much of the land outside the diversion would remain under water even with the LPP. Figure 28, page 70 of the SDEIS, shows the channel profile of the LPP. The surface level of the existing ground appears to be substantially below the water level in the LPP channel for 50 year, 100 year, and 500 year floods for the final 13 miles of the channel. This would make it impossible for water to drain off the fields west of the diversion as planned. The predominant protection would be the current floodplain inside the diversion.

The converse argument is that if the area outside the diversion actually did drain into the channel, it would take more land out of the floodplain. The original purpose and scope as indicated by the choice of the Minnesota 40K as the NED, was to protect the platted communities of Fargo and Moorhead. If the goal is to provide additional protected floodplain area, it could be limitless until the diversion was moved far enough west to hit the elevated beaches of Lake Agassiz.

The technical benefit of allowing Fargo and West Fargo to develop into the unplatted area north of 19th Ave, runs counter to EO 11988. It is true that the land north of West Fargo would help compensate the city for the East Alignment of the channel, but that too runs against the directive of EO 11988.

As for protecting existing structures north of Fargo in the area around Harwood, Figure 25 on page 60, clearly indicates that non-structural measures for that area are practical or they wouldn't have been included in the FCP and probably in the NED

A shortcoming of the FCP is that it allows backflows of water in the area west of I-29, and north of Main Avenue in a 500 year flood. An examination of the LPP under a 500 year flood in Figure 119 on page 311, shows the above area protected by the diversion. However, Hector Airport is inundated. It is unlikely that the transportation hub would be allowed to flood in any circumstance. It is expected that dikes would be constructed as part of the LPP project to protect the airport. It is also reasonable to expect roads could be raised inside the diversion under the FCP to protect areas south of 19th Ave North.

The LPP unquestionably protects more area from flooding. But it does it at the cost of removing 25,000 more acres from the floodplain. The population density of the additional protected area does not justify bypassing the directives of EO 11988. Additional goals have been added to the project to make it appear to comply with the Order. Political expediency and floodplain development is the benefit of the LPP over the FCP and NED, not protection of existing residential structures and property.

I urge the USACE, along with FEMA and the EPA to scrutinize the application of Executive Order 11988 to this project, and determine the NED or FCP to be the only viable options.

Sincerely,

Craig Hertsgaard
5530 165th Ave SE
Kindred, ND 58051
hertsfarm@juno.com

cc:

Dave Kyner, Floodplain Management Specialist, North Dakota
FEMA
Building 710
Denver Federal Center
P.O. Box 25267
Denver, CO 80225-0267

Mike Gaydosh
Assistant Regional Administrator
US EPA, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

5865 – 173 Ave.SE

Christine, ND 5015

June 14, 2011

U.S. Army Corp of Engineers, St. Paul District

ATTN: Aaron Synder

180 fifth Street East, Ste. 700

St. Paul, MN 55101-1678

Dear Mr. Synder:

As chairman of Eagle township, supervisors, located in northern Richland County, the area you intend to use as a holding pad for the Fargo dam/diversion, I have some questions that I do not believe were brought up at the informational meetings I attended.

Most residences of the area were marked out by ancestors of the people that live here. They had the sense to do this after the flood of 1887 so all these farms and residences never have seen water before. Who will be responsible to raise the roads in the area so people who live here will have access to fire and sheriff departments, medical assistance as needed, or are we just going to be out of luck?

Secondly, there are several old cemeteries that date back to the 1800's. These are the ancestors who settled the area. What happens to these? Do they get moved? Who pays for this and where do you move them? A hill in South Dakota?

Thirdly, this project will hurt the assessed value of land and residences, taxes will have to be lowered or dismissed because of buy outs. Where am I to get monies to keep up with the infrastructure of my township? Do I have to cut services or will I get reimbursement from the dam/diversion every year to make up for the difference in loss of revenue?

Fourthly, the people that have to be relocated, they live in this county because they prefer it to the city life. Where are they to go. Small farmsteads are few and far between and to replace these after getting them just the way you want them to be told now you have to move someplace else and more than likely they will not be fairly compensated for this. Do you think this is the best option for this project. It is like if you are not in the chosen land to be protected you are out of luck. There will have to be sacrifices, but we are making all of them. The losses will be ours and no one else's.

I strongly oppose this project as it affects too many people in the wrong way. Life is good here and you are going to mess with people's lives for years and generations to come. I hope to get some answers to these questions so I can inform my fellow township people what they are up against in the years to come.

Sincerely,

James Hohertz, Eagle Township

5865 – 173 Ave SE

Christine, ND 58015

June 13, 2011

U.S. Army Corps of Engineers, St. Paul District

Attention: Aaron M. Snyder

180 5th St. E, Suite 700

St. Paul, MN 55101-1678

Dear Mr. Snyder:

I have few questions, but several comments to make about the proposed FM Dam/diversion. I vehemently oppose this project; not only from the standpoint of the dimension and price this project is taking on, but the human cost and devastation it will bring to the south valley. At this point no alternative options have been brought forth or even seriously researched; no input has been entertained from those of us who will be impacted the most. We will not be dismissed. We will be heard.

The Corps reports that the sponsors have worked closely with the other local entities to develop a consensus on the path forward. NOT TRUE. Richland and Wilkin Counties were not involved in the planning. The new project is quite different than the original and needs more public input and participation from ALL affected by the plan, including the citizens of Fargo. There will be additional impacts outside the Staging areas. These impacts need to be considered. Too much is being done too quickly.

Reports from the Resource Agency Team state thousands of residents would need to be relocated, hundreds of homes and farm structures would be removed and farm operations relocated. TO WHERE? Where do we go? Where do we go with our sections of wheat and sugar beets? Where do I go that I can take my chickens or the neighbor his goats? You are asking us to leave our neighbors, our support structure within our neighborhoods. Leave our churches and schools. We can't sell our homes. Do we make changes or upgrades to our homes only to

lose them anyway? Who pays us for that? This property is our retirement, the legacy we leave our children. How will we and they be compensated for that? Where in your plan is this addressed?

Our roads in the "staging" areas would be underwater. Who pays for repairs and maintenance, and how do we get emergency services during the staging? Where is that addressed specifically in your planning?

Your report also states Kindred School district would be impacted short term. When people leave an area they pretty much take their tax base with them. How does that translate into short term anything? The area cannot be developed. No new families will be moving in. Has the corps taken a good look at how this project will impact the other school districts in this area, Richland 44?

Does Richland County know fully what the impacts outside the designated staging area are? Do you know?

I see the District has determined the selected plan is in the public's best interest. What authority do you have to make that statement when you haven't considered the "public" in your plan? Who is your public?? You don't know what is in "our best interest." Do the citizens of Fargo truly know what this project will cost them??? Do they really want the south valley to be turned into a buffalo commons?

It is also my belief that any legitimate project would not be done in secret and without the expressed knowledge of the people it affects most. It would also not be ramrodded and passed along as quickly as it possibly could without the full impacts being known and considered. What is the hurry? Are you afraid to shine a light on a project you know to be incredibly flawed? No alternatives to this project have been entertained. No input from those most seriously impacted has been garnered. The city of Fargo is asking more from us than they are willing to give themselves.

Sincerely,

Linda Hohertz

Citizen Christine, ND

June 12, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Synder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

Dear Project Manager:

I am writing to you in opposition to the April 2011 Locally Preferred Plan (ND 20K Diversion with storage and staging) for flood control in the Red River Valley. This plan presents many concerns regarding negative effects on the residents, farmers, and economy of the region.

This plan appears to be developed exclusively for the benefit of a small portion of the region and does not include benefits for, nor does it consider the economic impacts to not only the local region but to the whole Red River valley.

While many alternatives were examined early on, there is no clear evidence that the current plan was studied comprehensively, and especially not studied in conjunction with the current proposal. For example, while upstream storage as proposed by the Red River Basin Coalition was studied when the plan was the ND35 plan, there is no reason to infer and no evidence that this was examined again when the plan was changed recently to be a ND20K. What would the affect on the downstream impacts be with RRBC plus the 20K plan? It's true that as section 3.4.6.2 states 1.6' of reduction doesn't solve Fargo-Moorhead's problem as a standalone item. But, if the impact of the 35K at Climax was Climax 25.4", it is safe to assume that a 18" reduction has a pretty good chance of reducing that impact to zero, as 20K/35K*25.4 = 14.51", which is well below 18". Since there already is a portion of this reduction in place (North Ottowa project by Campbell, MN 18000af), then it is reasonable to consider that this plan may work as part of the solution, with an added benefit of a much smaller cost. Representative Colin Peterson is in favor of this plan and it already has 18,000af of the 20 percent plan implemented and another similar part due this year near Barnesville MN. The Wahepton daily news (6/7/2011) reports that Mayor Cliff Barth has proposed a serious of storage areas that would replace the designs storage at a lower cost. Has this storage been included in the hydrology and the plan?

Section 1.5.2.4 states that FEMA is studying recent events and is likely to raise the flood plain by 1 foot to just over 39 feet, not the 42 proposed by this study. Section 2.3.1 and Appendix A are ignoring historical data in order to calculate a much higher flood plain and risk, namely to achieve a flood plain of 42. This higher flood plain allows the project's cost benefit ratio to rise from the initial value of about .97 to the current projected value of over 2.0. Raising this flood plain by using the heavily weighted recent events is a violation of statistical correctness. (e.g. The last three tosses of a coin, while they may be heads, doesn't change the .50 probability of the coin landing either head or tails, it still is .50) This calculation does just that. It raises the weight of the recent events in order to justify a new higher flood

level and cost/benefit. All the historical data for flooding in the valley needs to be considered when determining the flood plain, as it appears FEMA is doing when arriving at the much lower number.

Additionally, this raising of the flood plain will affect the entire valley, and will result in losses by those living from the start of the Red River Valley to the Canadian border. It should not be taken lightly--and should be considered in both the study costs and takings. The most obvious impact is the loss of ability to expand and grow. Both Fargo and Grand Forks will now be losing many areas to grow as all new flood plain added by this cannot be developed. Existing structures will also have to now buy flood insurance when they didn't before--for the whole valley (if the ND35 could cause a rise to the Canadian border, it is safe to assume that it's so flat that raising the flood plain in Fargo by several feet would impact the whole area as well).

Finally, the cost benefits ratio is based on annual costs if no action plan is over $194.8 million. This number has remained constant since early in the project (see the presentations from June 2010), yet local governments in Cass County, Fargo and Moorhead have performed extensive mitigation which provides protection to a much greater flood level. Moorhead's sandbagging efforts for 2011 were reduced by 50% by local buyouts and mitigations. (In-Forum article dated 2/20/2011). Still, the no action plan reflects the same values as it did in the June 2010. If the amount of effort to protect to 42 is reduced by half, it is safe to say that "some" reduction on the damages is warranted, yet none is shown. Fargo had a similar but smaller reduction in sand bags needed. Since the Corps charter requires the plan to be comprehensive and in the context of other efforts, both completed and planned I would expect that the cost benefit numbers would reflect the mitigations already done and include the plans announced by both regional cities to protect to 42.5 (Fargo Forum dated 5/17/2011) with no sandbagging. This would reduce the cost of the no action plan and would potentially reduce the need for a project as large as planned.

When will the numbers be recalculated to match the current and future plans of the metro region, as a whole?

Section 3.7.2 describes the newly added storage area of having an upper elevation limit of 922, and section 3.7.2 says that this level will be achieved in a 1% event. This means that the spillway will be activated at any level over 1%. This implies that the water at this point will now be flowing across the land into the Sheyenne and flooding areas that would not be impacted without the dam and spillway. Additionally, this tie back structure (west arm of the dam) doesn't include any structures to take the overland that crosses east during a flooding event on the Sheyenne. During these events water has crossed to the east and into the Wild Rice freely on all east/west roads, but will be impeded by the CTY 17 spillway. This results in significant impacts to local business and farming and will result in areas being flooded that weren't before. These costs, wetlands analysis and mitigations must be included in the plan before an accurate accounting of the project can be made.

This section also describes how the water will flow into the diversion channel and will mitigate the downstream impacts by drawing off the flow during the event. This will be extremely hard to perform, as this requires the use of water flow and events beyond the accuracy of weather and flood forecasts. Weather is the biggest wild card in predicting the speed, duration and peak of any flood, and recent results have shown forecasts off by at least several feet. Given this inability to forecast the peak and the rise, there is little certitude that downstream impacts can be managed with this structure.

Finally, these control structures will exacerbate the risk of ice dams impacting flooding. Forcing all the flow into the narrow control structures / drops in the dam structure will cause ice flows to converge on the control structures. Once there the control structures will be rendered ineffective and will result in catastrophic flooding upstream and downstream of the dam. Once the control structures and drops are plugged by ice sheets, the storage will fill uncontrolled, and will result in the spillway being activated long before the calculated peak and will put downstream communities as well as upstream communities at risk of catastrophic flooding both inside and outside the study area.

The study floods whole cities, communities and disrupts social sites. During recent public events, it was asked what the impacts to graveyards and churches and communities would be. A clear answer was not known at that time. It was apparent that the scope and number of sites to be impacted was not fully understood or costed.

Local leaders from Richland County, Wilkin County, and both of these county commissions, plus the community of Kindred, ND and both the Kindred School Districts and Richland County School District 44 oppose the current plan due to its negative impacts. There is not broad support for the project in the area, in fact both Moorhead and West Fargo (plan sponsors) have expressed reservations about the plan, its location and costs.

Thank you for the opportunity to comment on this project. This project is of unprecedented size and scope in the valley, and smaller diversions like the Wahpeton diversion have been shown to impact those living downstream of it, and it is only several miles long, inferring this will have worse negative effects. This plan is an order of magnitude larger and will result in complex operational challenges that will impact the valley in inconceivable ways.

Finally, the study is incomplete at this time, there are admissions of impacts outside the study area and the study needs to be continued until impacts are known, lest the local sponsors be overrun with costs for mitigation and plan alterations.

Sincerely,

June 16, 2011

Aaron Snyder
USACE – St. Paul District
180 5th St. East, Suite 700
St. Paul, MN 55101-1678

Comments to the Supplemental Draft Feasibility Report and Environmental Impact Statement. Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Mr. Snyder,

IMPACT STUDIES COMPLETED TO THE SOUTH DAKOTA BORDER AND TO LAKE TRAVERSE IN MINNESOTA:

It is with such disappointment that the USACE has presented another draft EIS statement with no impact studies of all the area that will be impacted such as all of Richland County and a large portion of Wilkin County.

My understanding was that the Undersecretary of the Army stated to you and others working on this project, that she wanted to be assured that all impact studies were completed to not have a situation like the one that involved downstream impacts. Oops, impacts all the way to the Canadian Border. Can I be assured that you have done an impact study to the South Dakota Border in North Dakota and to Lake Traverse in Minnesota? I have not seen the result of these impacts yet and hoped the USACE would be transparent and release this information since it affects so many lives.

USACE COMMITED TO NO DISCRIMINATION BUT DOES NOT ALLOW THOSE AFFECTED BY THE PROPOSED PROJECT TO PARTICIPATE:

I expected the USACE to be all inclusive and include the public and especially the ones affected negatively from the project in a transparent decision making process. When I attend the USACE public meetings and questions are asked, it seems the answers about the issues are not in this document, such as the question concerning when the diversion would become operational. At one public meeting the answer to that question was the diversion will be built starting at the north end and the diversion will be operational as the segments are finished. At the latest USACE public meeting it was stated that the only water in the diversion channel will be from what naturally drains in or rainfall until the entire diversion is completed. Also very recently I read in The Forum that the diversion channel

will be reduced to 20,000 cfs and the USACE would like more flood water to flow through Fargo.

I would like to have all the notes or recordings of these public meetings published for the public to read. The comments from the USACE at public meetings are not the same as in this draft EIS.

At a meeting with the Richland County Commissioners in April or May, the USACE representatives and some from the FM Metro group met with the commissioners as the Richland County Commissioners were surprised that the USACE or the FM Metro group would not have met with them before to inform them of the impacts to Richland County from the plan changes in the diversion project. The commissioners stated they were opposed to this plan. When those from the USACE and the FM Metro reported to the entire FM Metro group on May 12th, they stated that all Richland County wanted was information and the commissioners said they felt they had enough information. When those from the USACE and Metro group were asked if there was any opposition they stated no. That was totally incorrect information.

WHAT EVER HAPPENED TO THE GOLDEN RULE?? DO UNTO OTHERS AS THEY WOULD DO UNTO YOU?

I cannot perceive anything like this happening in our country must less to the Red River Basin of the North. To wipe out a city and other communities, flood farmland, reduce through the destruction of these cities and communities the enrollment and funding for the Kindred School District and the Richland 44 School District as well as other school districts in MN. The Kindred School District just passed a $14 million bond and Richland 44 passed a $1.5 million bond. There can be no impacts to the downstream or upstream from this diversion. There are alternatives that will protect Fargo and not have impacts up or downstream. They seem to almost smack the USACE and the FM Metro in the face, but they will not consider them and they are using their opinion not FACTS! Retention is not the entire solution but even if the retention reduces the flooding by 50%, and in my opinion, which is just as accurate as yours, this will happen. Why are the USACE and the FM Metro afraid to get the retention facts first?? Start using the Golden Rule.

RETENTION, PART OF THE SOLUTION-BUILD FIRST:

Those who put down building dams, big or small, are not very aware of the history of this country. These dams from the Hoover Dam to the smallest dam were built because local communities saw the importance of water

supply, hydro-electric power, flood control, irrigation, etc to help their communities survive. Criticism of those dams, some built over 100 years ago, seems unwarranted as they have proven their worth. When the pioneers settled in our country they did their best to feed the people and build communities with schools, businesses and other needed amenities for their community. They utilized the river for the benefit for what was best for their communities. Mistakes were made by building homes and other structures where the river space was intruded on. These mistakes were made 100 years ago, what is our excuse now for building in flood plains and intruding on the river's space again? It also seemed the fish, animals and the environment did well even with the dams.

Today with the advanced engineering available, safer dams can be built with fish passage, improve the landscape of the rivers that now look like the grand canyon to a beautiful environment again. If we could just have the USACE and the MN DNR assist us to achieve safe dams and environmental friendly atmosphere for fish, animals, vegetation and trees rather than just waving the red flag and saying no. Would you note that we cannot store water for over a week or ten days by USACE and DNR environmental rules or we will kill the vegetation and trees and destroy the habitat. Have you noticed that with 2 months of flood waters in the Red River Basin of the North that the trees, vegetation, animals all seem to survive and do well? Only the human being suffers. Just think how much better an environment we could create with safe and environmental improvements with flood control structures that had fish passage and creating a better habitat with all of the knowledge we have now. Let's get rid of the out of date rules and move forward to enhance our environment and also protect the human being.

In a news release the Mayor of Jamestown, ND stated that without the reservoir above Jamestown their city would have been wiped out. In another news release it is stated that without the Maple River Dam in ND, Casselton and Mapleton, ND would have had far more damages. I wonder if some of the many cities protected by dams and reservoirs would still be there if those dams had not been built to protect the cities.

FUNDING FOR OPERATION AND MAINTENANCE OF DAMS AND LEVEES:

Most of the dams and levees that fail are from lack of funding for repairs and maintenance. The focus is to get the structure built whether dams or levees and no funding is mandated to secure the safety of the structure.
The USACE is horribly underfunded by the U.S. Congress. It is a battle every step of the way to get the funding for the project. They will secure funding for the study then the political battle is on for congress to

appropriate the funds needed in a timely manner to complete the next phase. The USACE seems to get the criticism but they are hired to complete a project within the boundaries of the defined plan. Changes are made as the study goes along. Has the tragic stress caused to those who are told they will have impacts and their communities could be bought out or sentenced to live inside of a dike with no outside transportation for a month or six weeks been considered? Those affected by the impacts do not want money thrown at them, they want the USACE and the local sponsor to have the concern for their neighbors to make every effort to not impact their lives with the diversion. The stress to the public caused by the impacts is beyond comprehension and not necessary. Before a project is underway the design should have been completed with no impacts before the plan was even released to the sponsors or public. If this could not be done, go back to the drawing board. A division of the United States Army in our country should not ever cause such stress and fear to our country's residents.

ALTERNATIVES TO DIVERSIONS:

When you look at the pictures of how the landscape will change with all the huge structures on each of the 5 rivers plus aqueducts, huge ditch, raising roads and interstates, bridges, etc. this huge monster does not belong or fit in the landscape of our rural areas. The public outside Fargo, and many who reside in Fargo do not support this project. My understanding for any project that the public support is crucial . This diversion project is not supported by the general public. Please stop this diversion project, begin retention and take this nightmare away from the Red River Basin of the North.

Respectfully submitted,

Diane Ista
412 Daisy Lane
Ada, MN 56510
218-784-7542
djista@loretel.net

June 16, 2011

Aaron Snyder
USACE – St. Paul District
180 5th St. East, Suite 700
St. Paul, MN 55101-1678

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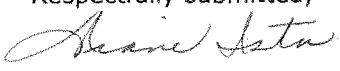
Respectfully submitted,



Diane Ista
412 Daisy Lane
Ada, MN 56510
218-784-7542
djista@loretel.net

-----Original Message-----
From: Janie Johnson [mailto:janie1961@yahoo.com]
Sent: Friday, June 03, 2011 2:52 PM
To: Snyder, Aaron M MVP
Subject: Richland county farmer

Hello Aaron,
I just received your latest report.
I am wondering what the chances of a 500 year flood are. I am wondering why we need to study more than a 100 year flood event. Do we really have to worry about a 500 year event to the extent that you are wiping out the whole area south of Fargo/Moorhead to do so? Have you even considered the impact of losing all the prime agricultural land and homes and businesses, churches, cemetaries schools and communities, or are you only concerned with Fargo/ Moorhead? Do you even care at all? I would like to feel that my US Army Corp of Engineers has my best interests at heart. I do not feel that at all. Somehow I don't matter because I don't live in the city limits of Fargo. We are all US citizens. I am feeling like a unwanted unnecessary bother, unequal to a Fargo citizen. This is not my ND at work and not my country either. I feel like the native Americans must have felt when the government decided to "settle" the west; pushed out with no consideration or compensation. Where is my reservation, Aaron, where are you placing me? How am I supposed to make a living? My retirement is in my land and my home which will be worthless. I am so disappointed in your short sightedness and lack of fairness.
By the way,I was here in the "non flood event" of 1997 you mentioned. Trust me, it was an event and we all prevailed. We can fix this without eliminating a whole community. My husband and I are 4th generation farmers in Richland county. We want to remain as such.
Sincerely
Janie Johnson

US Army Corps of Engineers, ST Paul Dist 6-14-11
Attn: Aaron Snyder
180 5th St E Ste. 700
St Paul MN ~~540~~ 55101

Dear Project manager:

I am writing in opposition to the April 2011 Locally Prefered Plan (NO Diversion with storage and staging) for flood control in the Red River Valley. I am the [redacted] President of for the South Pleasant cemetary and we have not had standing water on graves from previous floods, however, with the increase in the level of flooding that is being proposed it would most definately have standing water for a long period of time. Please add the cost of protecting our cemetary in your diversion budget. The cemetary is located 2½ miles West of Christine ND. We have approx 100 grave sites. This water will have emotional, psychological and ethical impacts on many communities associated with our cemetary.

Sincerely,

Larry Johnson

USACE-MVP-0000087988
SDEIS Comments

Larry Johnson, 17005 57 ST SE Christine, ND 58015

DEIR Amery Lore personal & US Congressmen

The Fargo Diversion Project is Not the Solution for flood protection IN The Red River Valley Thes project only protects ONE Town Fargo-Moorehead - It ~~takes out~~ Causes ~~5 to Towns~~ a burden to several towns & elimates towns of Oxbow - Hickson & Bakke Addition - It puts a Big strain ON the Kindred School District - The Richland School, Serval Townships will see a decrease IN Tax Value. 6,000 Acres of Prime farm land will disapear - ~~###~~ Thats prime farm Land Nation wde - we would Lose 4-5 farmers if this would be built. Take out Generations of farm familys. Disrupt Gravesites put ~~A~~N on due hardships on 147 Landowners that would see Little or No Benifits from this - 2nd pt The Cost of his project Stanted out at 1.2 Billon dollars at present It has rose to 1.7 Billon And this are just Estimates. We Know from any project ther are Over Runs from the final Cost we could see this Number double IN size by the End - Also this is a Cost of 3 Billon dollars a year IN Mantace Cost. When our Emancy Nation wde is at Jepardy Do we want the Bankrupt ~~of~~ more ow about or State or

Our County as well. The Bigget fear is we start building this Monster of a project run out of Money and we have an unfished project like the Garrison Diviun project in our State Also, we would lose All that Money that we put in a project with No Benefits to anybody Lost Money & a Big hole in the Grond. I know our project Managers say this Cant happen but it did and history has a way of repeating It self. In Closing why Not Abloish the plan when we still have Outher Options that wont Cost As much do more Good for all the people. Come up with a plan at works for the majority of all people wher just a few. Work Togather * them Agaist each outher If that the very least Deley this project One more year to fix the upstream problems you created by trying to get a 0 Impact down stream you owe us at least

Marty Johnson
7806 112 Ave SO
Horace NDak
58047

U.S. Army Corp of Engineers, St. Paul District

Attn: Aaron Snyder

180 Fifth Street East, Ste. 700

St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

My opposition is based on three points.

Point 1) Richland and Wilken County Commissions and other upstream officials were not included in the decision-making process. This is crucial to me since I live in the city of Christine(Richland County) and we are part of the staging for the dam. Since the dam and diversion are in Cass County and would protect Fargo, this was paramount that our county, the staging area, would be included in planning.

Point 2) Effects on the school districts of Kindred and Richland 44. It has been reported that Richland 44 could loose over 20% of its tax base and up to 20% of its students because of the dam and diversion due to relocation of families. We have a fantastic school system! Our students excel in education, music, sports, and FFA. I would be very disappointed if the school system would need to be shut down because of the loss of students and tax base. Students from the two districts are exceptional leaders in the community and state.

Point 3) I believe that the Corp has not done an exhaustive study of the surrounding area as to the long term effects of the dam and diversion. This is important as one looks at the releases from Garrison Dam into the Missouri River on towns, communities, and states that are being flooded by the lack of long-term foresight by the Corp.

Alternatives need to be more thoroughly investigated that would address flooding basin wide.

Thank you.

Sincerely,

James Kirsch

James Kirsch

102 Park Avenue

Christine, ND 58015

-----Original Message-----
From: jakopp@aol.com [mailto:jakopp@aol.com]
Sent: Wednesday, May 25, 2011 2:40 PM
To: Snyder, Aaron M MVP
Subject: APPRAISALS

Good Afternoon Mr. Snyder:

I have an appraisal question: appraisals would be prior to the start of the project date - how is that date determined?

Also, could you please send me the figures that show what the Corps would be responsible for - what the city of Fargo would be responsible for etc? (Fargo Diversion/Dam project).

Or tell me where I can find these figures in writing.

Thank You.

June Kopp
jakopp@aol.com

U.S.Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT FARGO-MOORHEAD METROPOLITAN AREA FLOOD RISK MANAGEMENT

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

I am not going to get technical sighting statistics – instead I am just going to write the obvious. This Fargo Diversion/Dam will take the richest producing soil in Richland County out of production. Local elevators will have to be closed down, due to less or no grains coming in – can we afford to lose anymore elevators? What about farmers that hold sugarbeet, corn, sunflower,wheat, soybean and barley contracts with railroads to move their grain out?

The Richland School district will lose students that are presently here, let alone new families with children who were considering moving here until they find out about the diversion/dam.

Richland County will lose their tax base – how will they be able to maintain roads, bridges, etc., the economy is tight now and they are struggling.

I feel Fargo residents should be made aware they will be living inside a diversion and a dam – which I consider this to be a "fish" bowl. When a catastrophe happens where will residents go – you took all the high ground?

We do not reside on a generation to generation farmstead, however, thirty-eight years ago we purchased this place doing our history – depending on retiring here – **it has never flooded.** In fact this farmstead never flooded in the late 1800's – farmers took boats and scouted out the high ground.

At the Kindred meeting, May 2011, the Corp of Engineers presented a "new" addition to the Fargo Diversion/Dam – Recreation which will average annual benefits of $5,130,000.00. This only added salt to an open wound. It would include 44 miles of trails – Fargo already has over 90 miles of scenic paths, "trees and shrubs", and places to fish. Once again, the dollar amount means more to Fargo than the upstream people who by the way contribute to Fargo's economic growth – shopping, employment, entertainment and dining.

Supplemental Draft Environmental Impact Statement
Fargo-Moorhead Metropolitan Area Flood Risk Management
Comments
Page Two

We are **NOT** structures – we are people that live in houses which for many of us have become our homes. Please reconsider this plan – I am not against Fargo having flood protection, but their must be other solutions.

Sincerely,

June Kopp
Northern Richland County Resident

-----Original Message-----
From: jakopp@aol.com [mailto:jakopp@aol.com]
Sent: Wednesday, May 04, 2011 9:08 PM
To: Snyder, Aaron M MVP
Subject: TECHNICAL QUESTION - FARGO DIVERSION

Hi Aaron:

Well you and your partners did so well yesterday, here comes another one - what is the elevation of the dike from the beginning to the end?

Appreciate your help.

Thanks.

June
jakopp@aol.com

-----Original Message-----
From: jakopp@aol.com [mailto:jakopp@aol.com]
Sent: Wednesday, May 04, 2011 10:02 AM
To: Snyder, Aaron M MVP
Subject: DIVERSION QUESTION

Good Morning Aaron:

I have a technical question for you: where the channel enters the Red River on the North end (the exit) at ground level what is the width of the channel and what is the width at the bottom of the channel?

Also, what is the depth of the channel from ground level to bottom of channel?

Thank you.

June

jakopp@aol.com
701-588-4600

Sun Jun 12 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East
Suite 700
St. Paul MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement
Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with Storage and staging) for flood control in the Red River Valley.

I oppose this project because it adversely affects the communities of Hickson-Bakke-Oxbow, Kindred, Walcott, Colfax, and Abercrombie. If this project will be allowed to proceed, this area (much of it) would be a desert. Residents living here that have helped Fargo residents fight the flood in 2009, 2010, and 2011 would have to relocate. Many of these folks work in Fargo. Why remove their homes

and destroy their farms? Since when did the Fargo diversion become the Fargo Dam?

At least two churches and many cemeteries would need to be relocated.

Flood out the 18 hole Oxbow Country Club?

This area (proposed to be 33,000 acres) is Prime farmland. Many homesteads along the Red River, and Wild Rice River South of Fargo and Moorhead are some of the oldest in the Red River Valley. These places have not experienced flooding, since the original homesteads were built, because they knew where to build. Why start now?

What is in the best public interest, when elected officials from Richland and Wilkin Counties were not involved in this plan? Like I said earlier, when did the Fargo Diversion Project turn into the Fargo Dam Project?

3

This morning at church, I spoke with Marshall City Engineer Glenn Olson about the "Fargo Dam". He was shocked to hear about this — he thought that it was a diversion project. He could not believe that prime farmland in the Red River Valley (33,000 acres), as well as destroying the communities of Oxbow, Hickson, Comstock, and Christine was possible.

Olson mentioned that the Corps should come to Marshall MN and see the diversion around the city of Marshall, and how it successfully mitigates excess water without destroying towns and flooding massive amounts of farmland.

As a resident of Marshall, I am charged $29.44/month for wastewater usage per cubic ft. This is billed to me by Marshall Municipal Utilities. No farmers evicted from their land... no serious flood problems in Marshall.... We have peace of mind here in Marshall with a diversion that works!

4

You are welcome to visit the Marshall Diversion in action!

We all would like to see a solution to the flooding issues in Fargo, but not the massive 2 billion in expense that this proposed dam that would cause major harm to thousands of rural residents. These residents were willing and able to drive to Fargo and help fill sandbags and save the city. Now, why cause harm to their towns and communities?

In summary:

This Fargo Dam project would wipe out the communities of Oxbow, Hickson, & Comstock. These folks willingly assisted with sandbagging in Fargo in 2009, 2010 & 2011. Why turn around and flood these folks out?

The Kindred School District would lose 23% of its tax base due to the project. Has someone calculated the effect on Richland School District #44?

5

When did the Fargo Diversion turn into the Fargo Dam? Why spend 2 billion dollars or more when a diversion around the city makes more sense - also in terms of dollars and cents!

Come to Marshall MN and see its diversion in action!

In my life, I have had the opportunity to play golf at Oxbow Country Club, and serve in the Kindred High School Brass Ensemble. The ensemble continued for a twenty year period (1981 to 2001) in which we played at 12 different cemeteries on Memorial Day. Christiania cemetery is located in the proposed flooded area - Why flood out and ruin a beautiful cemetery and a beautiful 18 hole golf course at Oxbow?

Sincerely,

Brian Kruse

Brian Kruse
Kindred High School 1986 Graduate
1991 North Dakota State University Graduate
Current Marshall MN Resident
Phone (507) 537-9690

George and Karen Kruse
4999 168th Avenue SE
Kindred, ND 58051-9628
June 17, 2011

U. S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

Dear Project Manager,

We are writing in opposition to the April 2011 Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

We oppose this project because it is so large and potentially destructive. We live between Horace and Kindred. We have witnessed extreme flooding of the Sheyenne River to Hwy 17 for the past several years. Now the Diversion will come to the east of us on Highway 17 in the form of a dam with spillways one mile from our farmland. That means there could be flooding on both sides of Hwy 17 and will impact us when water comes west. What is a diversion to save Fargo doing in our community??

I could hardly believe that such an immense project was not presented to the entire community before completion. I learned about the plan at the local meetings.

A plan that scrapes entire communities off the map like Bakke Addition, Oxbow and Hickson is unacceptable. These are upscale communities where bankers, doctors and other professionals enjoy a grand life style. They are a big part of the work force in Fargo. The price tag for moving these communities is beyond calculation! Then, 33,390 acres of farmland would be destroyed with no price yet decided. We in the Valley can't afford to lose more farmland for the sake of saving Fargo from higher waters. Fargo has done a great job of flood protection by themselves. I do not oppose a better way for Fargo to reduce flooding but not on the backs of the people upstream!

We are watching a new high school being built at Kindred at this moment. This is an event of the century for our city. If the Diversion is built, 23% of the school district's tax base would be eliminated due to loss of Oxbow/Hickson students who would be moved out of the area. Churches and businesses would also suffer loses.

I believe it is a criminal act for the city of Fargo to want a Diversion far enough up stream to protect the vacant land south of Fargo so development for Fargo can take

place. How can the destruction of land, homes and displacement of people lead to Fargo's economic growth?

We are in a wet cycle with the weather at the moment. It will change soon as we now see in the southern parts of the United States. Many of us remember the dry years in the 1970's and 1930's. If it takes ten years to build this diversion, we could all see the dirt blowing, and people begging for rain. This area could become the laughing stock of the country! This project is far too large, too destructive and too expensive.

Sincerely,

George Kruse Karen Kruse

George and Karen Kruse

June 20th, 2011

U.S. Army Corp of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Study
Fargo-Moorhead Metropolitan Area Flood Risk Management

Classification: UNCLASSIFIED

Caveats: UNCALCULATED LOSS OF LIFE;
VIOLATION OF EO-11988;
UNCALCULATED IMPACTS;
UNCALCULATED OUTCOMES;
INCORRECT SDEIS DATA

Dear Project Manager:

Regarding the April 2011 SDEIS:

The USACE has been negligent in pursuing "duty of care" for United States citizens.

The USACE has been negligent in providing "equal protection" for United States citizens in the proposed current and future undisclosed project area(s).

United States citizens all possess a fundamental and constitutional guarantee that we are afforded "substantive due process" in a fair legal proceeding **before** the government takes away life, liberty or property, which specifically fails regarding the Fargo Dam and Diversion relating to this SDEIS due to the design phase commencing prior to Congressional approval.

The USACE has failed in its "due diligence" in pursuing the aforementioned and has publicly conveyed that Fargo is the project sponsor and are the primary beneficiary of the project.

Regarding Uncalculated Loss of Life:

The April 2011 SDEIS refers to potential "loss of life" if temporary emergency measures fail. The USACE is aware of the "plasticity" of the materials that will be used in the project's construction; however, there is negligence in providing a corollary for "loss of life" if a USACE designed permanent structure fails. Specifically, what would the "loss of life probability" be, based on the failure of the Fargo Dam and Diversion at full capacity? Wherein, the majority of Fargo would be in a basin surrounded by water, with severely impeded evacuation options. (REFER TO: Lower 9th Ward in New Orleans during Hurricane Katrina and recent levee failures in Hamburg, Iowa and Vicksburg, Mississippi).

Regarding Violation of EO-11988;

Fargo (project's sponsor) has enjoyed decades of negligent city planning and irresponsible water displacement and will both directly and indirectly benefit by the assistance of the USACE in violating EO-11988. 100 percent of the lowest land that falls inside the currently proposed project has historically flooded during every flood event. The April 2011 USACE SDEIS will foster significant adverse effects and incompatible development in the flood plains. Fargo's expansion will be artificially induced into areas of the flood plain which were previously too dangerous to build upon, which could also lead to exponential loss of life and property during future flood events if Fargo Dam and Diversion were to experience a breach.

Surrounding communities upstream, to the west, and downstream of the proposed Fargo Dam and Diversion will bear an undue burden of social and economic losses including, but not limited to, substantial losses relating to the Kindred and Richland Colfax school systems, destruction of numerous generational "base farm" operations, churches, and the communities of Hickson, Oxbow, Bakke subdivision, Davenport, Mapleton and Prosper, North Dakota and potentially Christine, North Dakota and Comstock, Minnesota.

Regarding Uncalculated Impacts:

The April 2011 SDEIS does not contain a Bird Strike Assessment for Hector International Airport.

- The probability for "bird strikes" along Hector International Airport's southern approach flight path could be increased due to an increase of migratory birds being drawn to the proposed manmade lake south of Fargo, North Dakota. This places a high concentration of Fargo's population, 8 schools, hospitals and clinics and several businesses in a "risk zone" of "bird strikes"; and aircraft impact crash sites and debris.

Other uncalculated risks and costs that have been brought to the attention of the USACE during public meetings but are not included in the April 2011 SDEIS include but are not limited to:

- meteorological changes induced by the proposed staging area;
- increased flood risks to communities east of the project area (the potential for water to be reintroduced into the Ottertail Water Shed that feeds the staging area at the proposed Fargo Dam and Diversion);
- effects of a catastrophic release from Bald Hill Dam, Tolna Coulee or Devils Lake on the currently proposed project;
- relocation of displaced population;
- loss of community cohesion and short/long term social impacts;
- non-accurate property valuation and cost differential to be "made whole" for takings under eminent domain and increased market prices due to mass induced relocation;
- loss of agricultural production both inside and outside the proposed staging area;
- increased agricultural production costs relating to longer transport distances from farm headquarters;
- carbon footprint impact study relating to longer farm transport distances;

- carbon footprint impact study relating to the destruction of trees in the staging area;
- failure to delineate damage assessments for late planting, non-planting or loss of crops in the staging area where all peril insurance would not cover losses;
- damages to infrastructure: roads, bridges, electrical distribution, wired communications;
- safety and stability hazards relating to the raising of I-29;
- location of compatible detour route alternatives to I-29;
- probability risk of levee, dam and diversion failure and related losses to life and property;
- relocation of cemeteries;
- alternatives that preserve communities, school districts, tax base and land values;
- effects of the Cass 17 tie back dike on the Sheyenne River and community of Davenport, North Dakota;
- effects of the Minnesota side tie back dikes on the community of Comstock, Minnesota;
- access to Kindred, North Dakota during a major flood event.

Regarding Uncalculated Outcomes and Incorrect Data:

The April 2011 SDEIS does not accurately represent the necessary and escalating cost estimates associated to the Fargo Dam and Diversion (Fargo – Moorhead Metropolitan Area Flood Risk Management).

Incorrect and/or Incomplete Data:

- Land and Damages
- Compensation for Tax Base Loss to impacted School Districts
- Relocations
- Construction
- Volatility of Fuel Costs
- Annual Maintenance Costs
- Per Household Tax Impacts

This places taxpayers in an unnecessary and precarious financial position of liability for a project that has not been fully assessed or disclosed. Accurate Annual Maintenance Costs are imperative because the entire project's security relies on proper maintenance.

The SDEIS does not indicate who will have oversight of Fargo to ensure that Fargo assigns individuals qualified to perform inspections and maintenance for a project of this significance and 36mile length.

The SDEIS does not indicate who will have oversight of Fargo to ensure that Fargo only operates the Fargo Dam and Diversion during events exceeding 1 percent (100 year) events.

Summary and Proposal:

The scope of the April 2011 SDEIS is inadequate.

Further study is necessary of all tributaries upstream of Fargo,

Moorhead and West Fargo area.

A basin wide comprehensive solution is necessary to protect the population that resides within the Red River Valley.

The USACE must provide a comprehensive three diversion alternative in conjunction with the Red River Basin Commissions' 20 percent reduction plan and EERC Waffle Plan to adequately address water issues and threats in the Red River Valley.

Diversion 1: Divert water from the Sheyenne River west of Kindred, Davenport, Mapleton, Prosper and Argusville, North Dakota and introduce that diversion into the Red River north of Georgetown, Minnesota.

Diversion 2: Divert water from the Wild Rice into the current West Fargo Diversion.

Diversion 3: Divert water into the originally proposed Minnesota diversion.

Respectfully submitted,

Marcus E. Larson 513
7th St Hickson, ND
58047
701-588-4412
218-790-2025

June 20th, 2011

U.S. Army Corp of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Study
Fargo-Moorhead Metropolitan Area Flood Risk Management

Classification: UNCLASSIFIED

Caveats: Mosquito-Borne Diseases;
Disturbance of Bald Eagles;
Impacts to Water Cranes;

Dear Project Manager:

The April 2011 SDEIS has additional deficiencies relating to the environment and subsequent impacts relating the proposed Fargo Dam and Diversion and water staging areas.

As follows:

The April 2011 SDEIS does not contain a cost and risk assessment report for Mosquito-Borne Diseases. Mosquito-Borne Diseases pose a sufficient threat to communities in the Red River Valley. The proposed Fargo Dam and Diversion would create and massive unnatural breeding site and induce unprecedented egg to larval to pupa to adult life cycles (4-7 days) that include, but are not limited to:

Equine Encephalitis
West Nile Virus
La Crosse Encephalitis
St. Louis Encephalitis Virus

The April 2011 SDEIS does not contain an assessment report reflecting the nesting and feeding habitat of Bald Eagles located in the Hickson, ND and Comstock, MN area. The April 2011 SDEIS eludes to National Bald Eagle Management Guidelines, however, neglects to address affects caused by the proposed staging area.

The April 2011 SDEIS does not contain an assessment report reflecting the migratory habitat and feeding habitat of of Water Crane's located in the Richland Country, Hickson, ND and Comstock, MN area(s). The SDEIS eludes to the diversion channel, however, neglects to address affects caused by the proposed staging area.

Respectfully submitted,

Marcus Larson
513 7th St
Hickson, ND 58047
701-588-4412
218-790-2025

USACE & Metro Flood Committee - Masters of Ambiguity

The USACE (United States Army Corps of Engineers) utilizes one of the largest arsenals of policy rhetoric, single word sound bites and propaganda that are deployed whenever public sentiment turns against the Fargo Dam and Diversion, which is destined to become one of the most ill-conceived proposed projects of the USACE's history.

It didn't take long for the Metro Flood Committee to pick up on the USACE's lead in saying one thing and meaning another. In all reality, the Metro Flood Committee stands for the Fargo Flood Committee and has included neighboring cities to share Fargo's cost and blame when the Fargo Dam and Diversion fails either economically or physically.

From the outset, Fargo has tried to place positive spin on its willful and aggressive expansion by utilizing the motto "we're all in this together." However, the truth behind that motto is that Fargo has enjoyed decades of negligent city planning and irresponsible water displacement and will benefit at the social and economic expense of residents in surrounding communities upstream , to the west, and downstream of the proposed Fargo Dam and Diversion.

If the basis of Executive Order 11988 is to avoid direct or indirect support of floodplain development, why is Fargo being allowed to develop low land that historically floods and displace that water with a Dam and Diversion onto higher land that has not historically flooded since North Dakota became a state? The USACE would like people to believe it is for "technical reasons." In reality, it is to directly and indirectly support Fargo's growth while denying West Fargo the same civic opportunity because Fargo is the project's sponsor.

Tim Mahoney has been pressed several times on what Fargo, as the primary beneficiary, has sacrificed for the Fargo Dam and Diversion. Mahoney is quick to point out that Fargo has done buyouts on over 400 homes, but has neglected to add where the core of those buyout victims actually relocated. During the May 24th public input meeting in Kindred, Tim Mahoney tried to sell his part of a "legacy" in saving Fargo's future in front of the very people that are viewed as expendable for the greater good of the Fargo Dam and Diversion. Yet in reality, Mahoney and the Fargo Metro Flood Committee will not go down in history as heroes. Their legacy will be that of defining Fargo's borders and ending Fargo's growth and expansion in an attempt to develop land that has naturally flooded during every significant flood in Fargo's history.

Which is worse, mandatory flood insurance or being financially oppressed by a project that has a 99 percent chance of "not being utilized," in any given year, for its intended purpose? Of course, that's based on a moving target. The 2009 flood levels were downgraded to a 50 year flood event. So what happened to the 1997 or 1969 floods? If historical events can so easily be changed to fit the current agendas, will the Fargo Dam and Diversion be utilized for smaller events that become sensationalized by fears in the moment? Or...was this done in order to exaggerate the impact of a 100 year flood by comparison and increase unrealistic fears of a 500 year flood in order to rally support for a project that could not offer any protection until 2021?

This all comes down to Fargo not wanting to lose its tax base according to Tim Mahoney during the Moorhead public input meeting May 25th, 2011. Could this be another example of Fargo's desire to continue its irresponsible expansion and water displacement at the expense of others?

Take the egregious ambiguity of "public input meetings," the false sense of security that a person's input really matters. While the meetings do provide a sense of empowerment through the opportunity of allowing input from residents, it's terribly appalling to think that a filled Kindred arena of concerns falls on deaf ears because no "official" notes were being taken for input and consideration.

The USACE employs the terms *models, modeling* or *sophisticated models* and *technical aspects*

along with *probability* to foster fear and a willingness to set rational thought aside to pursue irrational impacts. As self proclaimed experts, the USACE has too many failures to earn the public's trust or be viewed as experts. The USACE failed in New Orleans, failed to anticipate the downstream impact of the Wahpeton - Breckenridge diversion and failed to look at the overall Red River Valley to accommodate future water flows via Grand Forks and subsequent impacts to Canada. They also failed to adequately lower water levels at Lake Traverse, Bald Hill, Fort Peck and Sacajawea in anticipation of spring flooding 2011. It makes it difficult to believe the USACE can successfully predict or control the largest project they've ever undertaken, given the recent levee failures in Hamburg, Iowa and Vicksburg, Mississippi. The current Fargo Dam and Diversion is being designed with imperfect computer models. What genuine assurances can the USACE offer that they aren't spread too thin, when they can't adequately handle the current projects under their direction due to vitally overlooked details and likely impacts that are absent within their designs and river modeling?

It is particularly unsettling that the USACE includes a 200 to 594 person "loss of life" probability on Page 89 of the April 2011 Main Report if temporary flood measures fail, yet is negligent in providing a probability corollary on the loss of life if the proposed Fargo Dam and Diversion fails. All flood control techniques are based on assumptions, but the term probability is utilized instead, which somehow makes the assumption seem more factual. The assumption that a flood event can be controlled is precarious. This assumption can induce growth in areas of the flood plain which were previously too dangerous to build that could lead to exponential loss of life and property, especially given the purported 200,000 lives that would be at risk behind the single largest unproven project the USACE has ever undertaken. To put it into perspective: if the Fargo Dam and Diversion were to fail at full capacity, the majority of Fargo would be in a basin and could experience flooding similar to the lower 9th Ward in New Orleans during Hurricane Katrina.

There is one ambignity that rises to the top of all others and is one of the most integral components in the Fargo Dam and Diversion project, that of being "made whole" under the takings power of eminent domain. If a private individual attempted to use the process of eminent domain to acquire the property of another it would be deemed illegal. However, the entire Fargo Dam and Diversion relies on the act of coerced confiscation for the benefit of Fargo. Fargo has this absurd notion that property owners have some sort of civic duty to surrender their land to the Fargo Dam and Diversion project, and any contrary position is viewed as shameful. Aside from the ethical issues of violating the foundation of all rights we possess, property rights and our right to freedom is what defines us as Americans. Thomas Jefferson stated the issue very simply when he drafted the Declaration of Independence: "Lives, Liberties, and Estates, which I call by the general Name, *Property*."

To the average person, being "made whole" doesn't sound unreasonable. It would appear that a person's financial situation won't change; however, there would be the inconveniences of relocating. According to the USACE's real estate acquisitions representatives, the ambiguity of being "made whole" means that property owners, especially farmers, will not be fairly compensated because their buildings will be depreciated. Displaced property owners will have to shoulder undue financial burdens to replace what they currently possess.

How can one be "made whole" when a property owner is offered a devalued amount for the property being taken and expected to pay an inflated market price when everyone is trying to relocate at the same time? How can one be "made whole" when they are forced to increase their commute time and out of pocket costs while simultaneously losing time for family and community?

Being "made whole" makes a nice headline, but in reality it is merely an attempt to distract people who are unaware of the impacts and rally support against the victims of the Fargo Dam and Diversion.

Obviously, as a victim of the proposed Fargo Dam and Diversion, my heart goes out to every property owner that will be displaced or affected by unnatural flooding. However, my heart also goes out to all the taxpayers inside the Fargo Dam and Diversion who don't realize the coming substantial tax assessments on top of current property taxes and assessments that will be necessary to fund the project. There are undetermined buyout costs. The already outdated estimate of 273 million could easily triple adding additional costs to the mounting 1.7 billion dollar project. That does not include the economic impact of raising the flood plain requiring uncalculated properties ontside the study area to obtain flood insurance. Add to that, the annual impacts to farmers for losses and annual escalating operational costs to ensure vigilant inspection and proper maintenance - all costs that are to be shouldered by those who benefit directly from the project. Isn't it ironic that North Dakota's self proclaimed "10+ billion economic engine" is fast becoming a long term major financial liability to the region and state of North Dakota and Minnesota? Why should North Dakota taxpayers outside the Fargo area fund nearly 300 million of Fargo's Dam and Diversion when record flooding impacts are being felt throughout the entire state? Why should Minnesota taxpayers be burdened with an undetermined and escalating amount when they are experiencing major budget issues?

The USACE and Fargo - Metro Flood Committee don't want the real long term cost and impacts to be known. This is why the current Locally Preferred Plan, which would be months in the making, was not rolled out until after the ambiguous November tax vote. It is unfortunate that we did not take the lead of Fargo City Commissioner Dave Piepkorn (Oct 14, 2010 INFORUM) when he stated that he wouldn't vote for the sales tax because of what he called "really vague ballot language. It's got a lot of wording in there that gives them a lot of latitude, and I'm not comfortable with that."

The USACE has a duty to explore viable upstream alternatives to avoid adverse effect caused by the proposed Fargo Dam and Diversion. Yet, during the May 25th, 2011 public input meeting in Moorhead, Aaron Snyder (USACE project manager) stuck his head in the sand and conveyed that the USACE would not be considering any other alternatives. Why not? It appears that the USACE is less concerned with the source of the water and more interested in creating a band-aid remedy at the source of impact. Ironically, the Red River Basin Commission and White Rock Dam upstream alternatives would be significantly cheaper and could be implemented more quickly. The upside would be the saving of several communities, schools and farms along with relief from excessive taxation that will be associated with the Fargo Dam and Diversion.

It would be interesting to see what Fargo's response would be if downstream residents banded together as a sponsor and requested that the USACE design a Dam and Diversion that would place 8-12ft of water onto the city of Fargo, forcing Fargo residents and businesses into takings under eminent domain for the greater good of downstream communities all the way to the Canadian border.

Marcus Larson
Bakke Resident

513 7th St
Hickson, ND 58047
701-588-4412
218-790-2025

Aaron Snyder
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street – Suite 700
Saint Paul, MN 55101

Mr. Snyder,

My name is Glen Libbrecht and I'm writing this letter to voice my opposition to the proposed North Dakota Red River diversion project.

As a rural Cass County resident, landowner and farmer, I will be directly affected by the ND flood diversion project. My farmland lies directly outside the Sheyenne River diversion channel, which acts like a dam when full and turns my land into a holding pond until the channel water recedes. This same problem will also happen with the Red River diversion on a much larger scale and has not been addressed at all. Thousands of acres of prime Red River Valley farmland will not only be taken to build this project, but will be flooded as a result of this diking effect. There is little or any mention of the loss of the thousands of acres of valuable farmland and the lost economic crop production from these acres. Instead we hear about the recreational benefits this project will create with trails, trees, benches and fishing structures. I would like to know how there can be an average annual benefit of $5.1 million from recreation.

I feel that Fargo has brought this flooding problem on itself by allowing development to occur too close to the Red River. Therefore Fargo should solve their flood problem by continuing the process of building levees through the city and they are now doing. That work, along with upstream retention as studied by the Red River Basin Commission, will help mitigate flooding for Fargo without affecting so many rural residents and the loss of valuable farmland. Fargo needs protection from floodwaters and we all do, but this diversion project is definitely not the answer.

Sincerely,

Glen Libbrecht
3302 Main Ave W
West Fargo, ND 58078

U.S Army Corps of Engineers, St. Paul Dist.
Attn: Aaron Snyder
180 Fifth St. East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Env. Impact Statement.
Fargo, Mhd. Metro Area.
Flood Risk Management

Dear Project Manager:

I am writing in opposition to the April 2011 locally Preferred Plan (LPP) diversion with storage & staging for flood control in the Red River Valley.

This project is being pushed through without proper research of the impacts it will have on the people & property now, and long term. Not all the counties & local boards have been heard.

Meanwhile peoples lives are on hold while under threat of this project.

Sincerely,

Kenneth Lindsay

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

To: Project Manager

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I understand that Fargo needs help in protecting its city, but to the extent that the U.S Army Corps of Engineers and its sponsoring commissions are asking other towns and its people to take on Fargo's water problem is beyond comprehension.

The staging area is stated to be 33,390 acres, and the Corp acknowledges that there will be impacts outside of this area. If the Corp has not determined this cost or possible impacts how can you proceed with a project not knowing the possible outcomes and still say this is the best plan when not all is know. I also have a problem with this many acres being affected since my job is directly tied to agriculture and these acres since I work at the local elevator in Kindred. Will I have a job if the elevator doesn't have any grain to handle due to persistent flooding of these acres? How do you account for and pay for this?

Is this project more about flood protection for Fargo or for expansion of the city? Dr. Mahoney talks about how Fargo has given up 400 or so houses that were built by the river at 36 or 37 feet. How high is the level around Davies high school? They are still issuing building permits at these same levels banking on the diversion aren't they?

What about the rural water systems? Have the systems been accounted for as to how to protect them and account for the cost?

Fargo is a vital part of North Dakota's economy but that does not give it the right to destroy other communities and school districts just to promote its own new school (Davies) and expansions areas. Kindred and Richland should not have to lose out, and its remaining citizens should not have to pay the higher taxes it will require to maintain itself without due compensation. In my mind that does not mean that just because a tax statement says a piece of property is worth $200,000 that is all a person should get. Where can you replace your home and friendships for the same money that has been established based on what a tax statement says? It can't be done!!

I ask that the Corp take a step back and look for other alternatives to Fargo's water problems. We all know there are other things that can be done to minimize the problems. Please listen to others and well.

Thanks for your time
Doug Lingen
416 Plum Tree Road
Hickson, ND 58047

From: Luecke, John <John.Luecke@ndsu.edu>
To: Coleman, Brett R MVP
Cc: pleasanttownship@aol.com <pleasanttownship@aol.com>
Sent: Mon May 30 15:22:49 2011
Subject: FM Diversion Project

Dear Sir,

I am writing this because I and my family are at a lose as to what else to do. I will try to be brief. I and my wife have worked our whole lives to build up an Agricultural Research business. We did extensive research and paid a premium price for land out of the flood plain to build our home and continue our research business. We moved out of Fargo to our research farm on the Cass Richland County line about 2 years ago. We were confident flood waters would not affect our land or home so we were able to assure our customers that we would be able to complete their research projects regardless of the flood conditions. Our research has paid off and our business has not been affected by the recent flooding of the Red or Wild Rice Rivers. Our entire life savings is invested in this business. We did our homework to protect that investment. It is inconceivable to us that there is a diversion project being planned that will ruin that business. My whole business in run on that 80 acres that will be under water in a bad flood year. I am not like a farmer who may lose a portion of his land to flood water but have other land that is not flooded. This is the only land I have and thus my entire business. My customers are not going to be willing to chance losing a years research in the event a flood puts my land and farm 1-3 feet under water in the spring. I feel like I did what I could to protect myself against this areas flood waters. I wonder how many homes or businesses in Fargo that built within a half mile of the river put any thought into that. Sure, I could sell out and start over somewhere else. Who do you think will be willing to buy my land, home and business at a price anywhere close to the premium price I had to pay for it? Furthermore, I just don't get the financial logic behind the diversion project. Even if it cost 20 million dollars to fight the flood each year, how many years would you have to have a flood like last year to get to 1 billion dollars. Fifty straight years of floods just to get to 1 billion and we all know that the project will be at least 2 billion dollars before it is finished. That would be 100 years of flood fighting to reach 2 billion dollars. This makes sense to people?? Fargo has done a great job of keeping the water out of the city and will continue to make improvements in their flood fighting without having to spend a couple billion dollars on a project the may help Fargo but is going to cause huge problems for another huge group of people. I just don't get it.

Thanks for reading. I know I am a small voice and can't do a thing about what is going to happen but at least I can say I tried to tell

someone how this will ruin our business and investment.

John and Kathy Jo Luecke
KayJay Ag Services, Inc.
5351 South County Road 81
Horace, ND 58047

US Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

Subject: Comments on Supplemental Draft Environmental Impact Statement (SDEIS), Fargo-Moorhead Metropolitan Area Flood Risk Management

From Carman Lynnes, PE

I am submitting comments as a negatively affected individual who has farm land and a farming operation that is part of the Kindred School District:

THE VIABILITY OF THE KINDRED SCHOOL DISTRICT WILL BE DESTROYED WITH THE PROJECT AS PROPOSED

The impact on the district will be devastating with the reduction of tax base associated with the permanent lose of a considerable area of prime farm land. The homes in Oxbow and their associated value could theoretically be reestablished within the district, but the farm land that would be acquired within the project is lost forever. The city of Fargo would have to compensate the Kindred School District with the Present Value of the stream of lost tax payments for the next 100-250 years, for a degree of fairness to be achieved. By law, I don't believe this is going to happen so the project rings hollow with a lack of fairness to those negatively affected. It is also not plausible that the home equities and other properties within the district would recover to the pre-project level within a short time frame. It is reasonable to expect this process to play out over several decades. My opinion is that the this project as currently envisioned, will destroy the Kindred School District which is currently building a 15 million facility in Kindred ND.

DAMS DON'T ALWAYS WORK AS PLANNED

Unfortunately, dams, particularly in ND, have encouraged development in the floodplain and they do not in my opinion result in a reduction of average annual damages. They work affectively most of the time but when Mother Nature delivers its significant rain &/or snowmelt events there is an increased potential for major damage. These events all too often occur when the project is at with maximum storage capacity. Baldhill Dam at Valley city was hailed as the project that would end all flooding along the lower reaches of the Sheyenne River. We know differently today. The Garrison Dam on the Missouri river has resulted in extensive development in the floodplain in Bismarck. Now the resivoir is full and the Corps knows the potential for a major disaster exists. This condition exists all the way to the mouth at the Mississippi.

Staging is verbiage for storage behind a dam. It sounds pretty good, but unfortunately,

is subject to the same disastrous shortcomings as any other dam on a river. It should be anticipated that maximum in-flow events will occur simultaneous with the storage at capacity. The probability of this occurring is inversely proportional to the size of the storage project. In this regard I believe that the proposal to provide storage or staging as an element of design of the SDEIS is not well conceived. I do not believe that the incremental costs associated with this element of the plan have been adequately evaluated nor are they justifiable relative to the potential benefits of the added feature.

NEGATIVE IMPACTS OF TRIBUTARIES TO THE WEST OF THE PROJECT HAVE NOT BEEN EVALUATED IN THE SDEIS

Historically the Sheyenne River at Kindred tops its normal banks and runs overland to the east and into coulees that are tributary to the Wild Rice and the other tributaries west of the project. The overland flows mitigate potential damages to the West of the proposed project. The South to North Levee at Cass County RD 17 will eliminate this passage and will result in additional flood damage to agricultural land and residents between the project and west to Kindred, Horace, and other communities further North.. The Corps has not evaluated the impacts of flooding in these areas and has not considered the costs associated with the negative impact. This reality cannot be ignored. It is not acceptable to design a project on the Red River and then ignore incremental negative impacts on agricultural, residential and commercial property associated with tributaries that are impacted. I know that this is complicated, but it is essential that all project impacts be identified and reflected in the cost. The areas negatively affected will make certain that the incremental damages will be the responsibility of the Fargo, Moorehead & local sponsoring organization. The Corps needs to inform them of these additional liabilities associated with the project.

STABILITY OF LARGE CONCRETE BRIDGES AND AQUEDUCTS

The Corps has acknowledged that the diversion is being built on relatively unstable soils in many locations and made reference to design changes in the elevation to assure stability of the profile of the channel. They also make note of the fact that the Fargo-Moorehead Diversion will be the first such structure to cross significant tributaries where the tributary flow must be accommodated through the use of aqueducts. I don't have the data to say that this will or will not be a problem, but as an engineer I can recognize a potential problem associated with heavy concrete structures in slippery unstable soil. A heavy bridge structure on South university drive in Fargo which crosses Rose coulee was recently found to be sinking and will have to be repaired and supported to the tune of $500,000.

This needs to be addressed by the Corps. If the structures have to be anchored to bed rock to prevent them from sinking or slipping, there will be significant costs associated with that design feature. These added costs that would increase the funds required from the local sponsors.

THE LOCALLY PREFERRED PLAN (LLP) IS ASSOCIATED WITH LOCALLY NON-PREFERRED COSTS.

The local sponsors in the Fargo Moorhead area who were responsible for picking the LLP over the Nationally Preferred Economic Plan have been caught in a typical "want" and "need" conundrum. They desperately need relief from the cost and disruption of the reoccurring flood threat. However, they have chosen a potentially non viable alternative because they wanted to enhance future development in areas contiguous to what they envision as the preferred area for future development. It is the typical vision that drives development of the floodplain. This is in it self a problem, but the more pressing issue is the social and economic costs associated with that decision.

Carman Lynnes
President, Lynnes Farms Inc
15480 59th Street SE
Leonard, ND 58052

June 10, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management.

Dear Project Manager:
We are writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control for the Fargo/Moorhead metro area. We feel strongly that important issues have not been adequately addressed, and need to be, before proceeding with this outrageously expensive flood control plan that adversely affects at least 54,000 acres including communities, businesses, farms, churches, cemeteries and school districts south of Fargo. Below are a few examples:

- Who will pay for agricultural impacts because of late planting and summer floods (losses which cannot be covered by crop insurance if caused by a man-made structure)?
- What about the instability of the soils on which the massive diversion structures and bridges would be placed? The Rose Coulee bridge needs $500,000 in repairs only 2 years after it was built due to slipping soils 27 feet below the surface. What about the 19 bridges planned for the diversion? How do we know the same thing won't happen? Who will be responsible for these additional costs and what might they amount to?
- What about the impact of simultaneous flooding on the Sheyenne west of the Horace Road (something the Corps has acknowledged it hasn't studied)? This would make the overland flooding problems south and west of the diversion worse than they are now.
- What about the devastating impact of the Corps policy to pay depreciated value for farm buildings taken in the 54,000 acre area affected by flooding/staging for the diversion? This would mean farmers would get little to nothing for their grain bins and other necessary farm structures. How could they possibly afford to begin farming somewhere else?
- How are school districts that lose 20% of their valuation and students to survive and why are these costs not taken into account in the project?
- There are at least 9 cemeteries within the staging area to the south of the diversion/dam. Who will be responsible for the $3,000-$4,000 cost per grave to move them? Living family members? How will they be found? If the graves are not moved, will they just be flooded and lost? Is that even legal?

These and many other questions have not been addressed adequately by the local sponsors or the Corps.
All costs of ongoing operation and annual maintenance are the responsibility of the local sponsors, now estimated to be $3.6 million per year, more than the current annual cost of flood protection. That doesn't make economic sense.

The solution should be river basin-wide and involve multiple strategies to achieve the highest level of protection for the area that is economically reasonable, socially and environmentally acceptable. A good example of an alternative is Charlie Anderson and Collin Peterson's retention plan for the Red River Basin, which has a cost of only $1.7 billion, compared to the cost of this current dam/diversion plan which will surely exceed $3.5 billion.

With concerned regards,

Cherie Mathison

Rodney and Cherie Mathison
5298 174 ½ Ave. SE
Hickson, ND 58047

Rodney A. Mathison

6-13-11

U S Corps of Engineers
Attn: Aaron Snyder
180 50th Street East. Ste. 700
St Paul, Mn.

RE Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Management.

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan, North Dakota Diversion with storage and staging for flood control in the Red River Valley.

I am a trustee for Hennes Cemetery, which has never been flooded with water on graves since the first burial in 1872. Please place the cost of protecting the cemetery in the proposed diversion budget.

The cemetery is located in far Northeast Richland County, along Red River.

There are 57 grave sites and 11 unknown grave sites.

This is the oldest Lutheran Cemetery in the valley and is being considered as a Historical Site.

The diversion will have an emotional and historical effect on many Norwegian Families who come from Norway to trace their ancestry.

Oliver Mathison
Hemnes Cemetery, Trustee
2219 - 26th Ave S.
Fargo, ND 58103-5432

6-14-11

U.S. Army Corps of Engineers, St Paul Distict

Attn: Aaron Snyder

180 Fifth Street East, Ste 700

St Paul, MN 55101-1678

RE: Supplement Draft Environmental Impact State, Fargo-Moorhead Metropolitan Aare Flood Management

Dear Project Manager:

I am writing in opposition to the April 2001 Locally Preferred Plan (North Dakota Diversion with storage and staging for flood control in the Red River Valley. I am a member of Hickson Lutheran Church, Hickson, ND. This building has never had any problems with flood waters.

Please place the cost of protecting our church in your proposed diversion budget.

Thank you.

Nancy Mathison

2379 20½ Ave S.

Fargo, ND 58103

US Army Corps of Engineers, St. Paul District
Attention: Aaron M. Snyder
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

June 14, 2011

RE: FARGO-MOORHEAD METROPOLITAIN AREA FLOOD RISK MANAGEMENT PROJECT
(Supplemental Draft Feasibility Report and Environmental Impact Statement)

Dear Mr. Snyder:

I wish to strongly protest the conclusion of the above referred project as it pertains to southern Cass and northern Richland Counties of North Dakota.

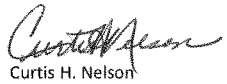
1.) The flood control proposal takes control and in many instance eliminates family farm operations that that have existed well over 100 years. This includes our family farm located one mile north and two miles east of Christine. Proper planning by my parents in locating their building site have prevented flooding of of the buildings since their beginning. The building site is adjacent to the Red River. This farm could become non-functional or eliminated without the privilege of any input under this plan. This effectively means taking someone else's problem and arbitrarily giving it to us and our community. How does democracy function in a situation like this when a whole community is destroyed without their input.

2.) I have been involved in agricultural Banking over 40 years. It is very difficult—nearly impossible to find replacement farms. How can you project the long term costs of transportation and farm reestablishment? The bitterness and distrust this issue has created is substantially increased by the fact they had little or no involvement in the planning process and are left with many questions.

3). There are many future concerns and expenses that the Cities of Fargo and Moorhead must be responsible for. How much of these responsibilities can these Cities reasonable assume with so many unanswered questions? It is essential that more research be done to get better answers on such subjects as roads and bridges, safety of levees and dikes, tax revenues for roads, schools and other public entities. How do you develop and retain tax revenues when the area can't be developed. What happens to market values of affected and adjacent properties. There are many other concerns too numerous to list. In general, I wonders how you can you ask so many people to give up their homes, farms, businesses and hopes for the future when so few facts have been obtained and shared with the people involved. Take time to get these facts, share them with all the people involved and allow us input. If your plan is sound it should stand this test. We are entitled to this process.

Thank you for your consideration.

Sincerely yours,



Curtis H. Nelson
1200 Albion Ave
Fairmont, MN 56031

Christine Family Farm Owner
Eagle twp—Richland County

Tel. (701) 235-6809

802 South Drive S.
Fargo, North Dakota 58103-4934

June 15, 2011

Aaron Snyder PM-B
Saint Paul District
U.S. Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, Minnesota 55101

RE: FARGO-MOORHEAD METROPOLITAN AREA FLOOD RISK MANAGEMENT PROJECT
(Supplemental Draft Feasibility Report and Environmental Impact Statement)

Dear Project Manager Snyder:

I am a Fargo homeowner and owner of farmland located along the Red River just northeast of Christine, North Dakota. The farmland has been in my family for well over 100 years and has not yet been severely impacted by flooding. I hope it stays that way!

Upon attending the public meetings in Fargo and Kindred, North Dakota, I have a much improved understanding of the scope and implications of the above proposed project. Thank you for your role in making the meetings informative and worthwhile!

Most people agree something needs to be done about the past and potential future flood problems in the Red River Basin. However, I do not feel the solution should be mainly focused in protecting Fargo-Moorhead with such devastating impact on those properties lying downstream and upstream of Fargo-Moorhead. I am thus currently opposed to the proposed project under its present configuration.

Upstream storage/retention needs further study and same should be confirmed by those qualified to do so who are not likely to profit/benefit from the results of such studies. I suggest further study since I wonder if the wide-spread use of tile drainage on the farmlands south of Fargo-Moorhead could play a significant role in gaining added water storage/retention below the ground surface along with pond storage areas and tributary dams above the ground. Minnesota Congressman Collin Peterson's idea of using funds under the existing federal farm bill might be utilized more fully and effectively by including tile drainage subsidies to farmland owners.

Mr. Kurt Krueger, of Rothsay, Minnesota, who is President of the Minnesota Soybean Growers Association, recently wrote that "Tile drainage allows water to infiltrate the soil, taking advantage of the soil's natural filtering power before it is discharged. Water that is drained through the tile proved to reduce the impact of methyl mercury, a severe water-quality impairment." And, "Tile drainage also reduces soil erosion, sometimes by 50 percent. Farm Fields that do not have drainage can become saturated, causing excess rainwater to run off, carrying soil and nutrients with it." Krueger further writes that "Drainage enables the soil to absorb more

water. When crops take up the water they need, the excess is disposed efficiently through the tile, rather than having it run over the top of the field and potentially into the water." (See photocopy of Krueger's writing attached)

I realize the ground freezes during the winter and the depth of the perma-frost varies. Also, there is no crop before planting with roots to take up moisture when the snow-melt and spring thaw takes place. Flooding usually takes place because of heavy snow accumulations during the winter. Deep snow coverage does result in an insulation effect that probably reduces the depth of the perma-frost and when the heat from the earth below the perma-frost combined with the warm air temperatures occurring above ground during the spring thaw takes place, the existing perma-frost does not take as long to go away. In that case, the filtration process of the remaining moisture can come into play drawing the water down through the soil towards the drainage tile and helps to slow the speed of the spring run-off. I am not sure my viewpoint is correct but I do feel it maybe should be taken into consideration.

For an engineer like you, a huge and complex project like this maybe comes along only once, if that, in a lifetime of work. I can appreciate how this proposed project can be very exciting and could be the highlight of the project manager's career if it comes to pass.

Thank you for your time and attention in trying to achieve a successful end result for all concerned with this proposed project!

Cordially yours,

Donald C. Nelson

Donald C. Nelson

Encl

pc W/Encl: U.S. Rep. Collin Peterson, 2211 Rayburn HOB, Washington, D.C. 20515

U.S. Sen. Kent Conrad, 530 Hart - Senate Office Bldg., U.S. Senate, Washington, D.C. 20510-3403

U.S. Sen. John Hoeven, 120 Russell - Senate Office Bldg., U.S. Senate, Washington, D.C. 20510

U.S. Rep. Rick Berg, 323 Cannon - HOB, Washington, D.C. 20515

North Dakota Govenor Jack Dalrymple, Capitol Building, Bismarck, N.D. 58505

YOUR OPINION May 27, 2011
Fargo, ND "The Forum"

Tile drainage eases flooding and benefits water quality

By Kurt Krueger

There is no question that everyone who uses the land – farmers, homeowners, industry and local cities and towns – all have a responsibility to protect our land and water for future generations.

Even though sediment in water comes from many sources, I believe farmers are doing the most of any segment of land users to minimize soil erosion. The majority of Minnesota farmers are responsible environmentalists who practice sustainable farming. But we are continually trying to do more, as we work with our Natural Resources Conservation Service and local soil and water conservation districts to make sure we are using all the best practices available to minimize the amount of soil that runs off farm fields and potentially into surface waters.

It is ironic that agricultural drainage seems to have become such a lightning rod for critics of farmers, when drainage is actually a proven practice for environmental protection. Critics of farmers couldn't be more wrong about drainage.

Research from our own University of Minnesota and many other experts proves that tile drainage not only allows us to raise more food on less land, but it also improves water quality, prevents soil erosion and reduces flooding.

Tile drainage allows water to infiltrate the soil, taking advantage of the soil's natural filtering power before it is discharged. Water that is drained through tile is proved to reduce the impact of methyl mercury, a severe water-quality impairment.

Tile drainage also reduces soil erosion, sometimes by as much as 50 percent. Farm fields that do not have drainage can become saturated, causing excess rainwater to run off, carrying soil and nutrients with it. Drainage enables the soil to absorb more water. When the crops take up the water they need, the excess is disposed efficiently through the tile, rather than having it run over the top of the field and potentially into the water.

When you drive across Minnesota today, you see very few fields that are plowed with the soil completely bare. We are using minimum tillage today, which keeps residue from the previous crop on the surface, preventing erosion and providing a better habitat for wildlife. If we didn't use drainage, we wouldn't be able to use this conservation tillage because the soil would not dry out fast enough in the spring.

Tile drainage also reduces flooding because it reduces the water table. This allows the soil to hold much more water when it rains. Researchers have learned that water flows can be reduced as much as 30 percent through tile drainage.

Those are some of the reasons Minnesota farmers use tile drainage and why the Minnesota Soybean Growers Association supports it so strongly.

I encourage all Minnesotans to do their part in protecting our valuable land and water resources. It starts with getting our facts right.

Krueger, Rothsay, Minn., is president of the Minnesota Soybean Growers Association.

TO: US Army Corp of Engineers, St Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St Paul, MN 55101-1678

FROM: Timothy Ness
4320 Country Shores SW
Alexandria, MN 56308

SUBJECT: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager,

I am writing to strongly oppose the April 2011 Locally Preferred Plan (North Dakota Diversion with storage near Comstock + Wolverton) for flood control.

As an engineer myself, I'd suggest you look at storing more water on the Ottertail River near the Orwell Reservoir and Bois de Sioux River near Mud Lake Reservoir. That way you'd protect Breckenridge + Wahpeton from floods in addition to Fargo/Moorhead.

The farmland near Comstock + Wolverton is the best in the world and should not be flooded. The Ness [illegible] is there (for 130 years) and should not be submerged

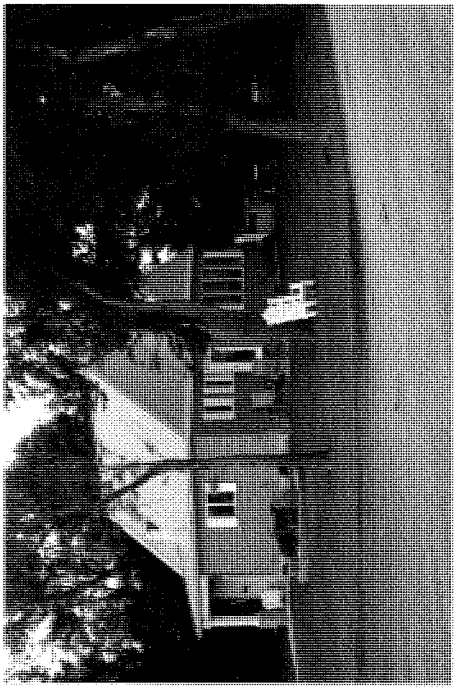
page 2

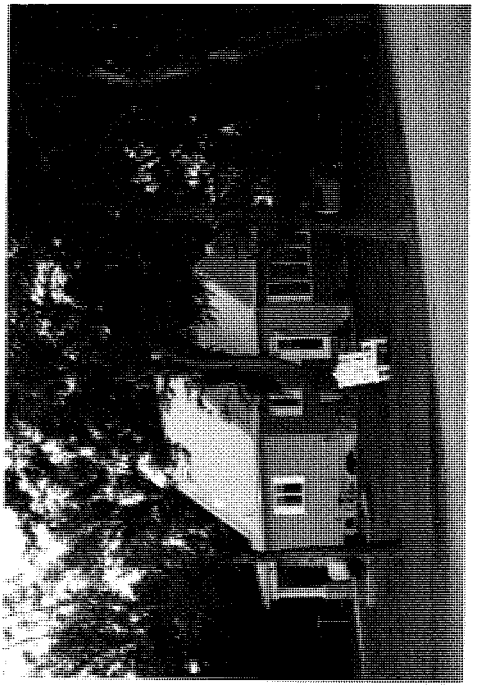
Please consider other plans instead of taking prime farmland out of production and destroying the communities of Comstock and Wolverton. Storing and controlling water further upstream on the Ottertail & Bois de Sioux stabilizes the water level for all towns on the Red, and that should be your primary goal.

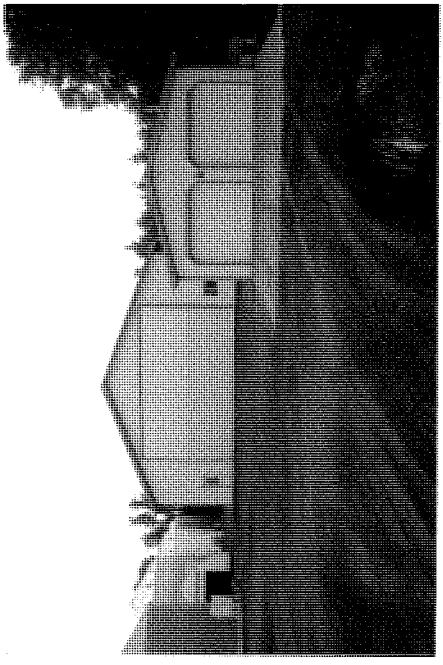
Sincerely,

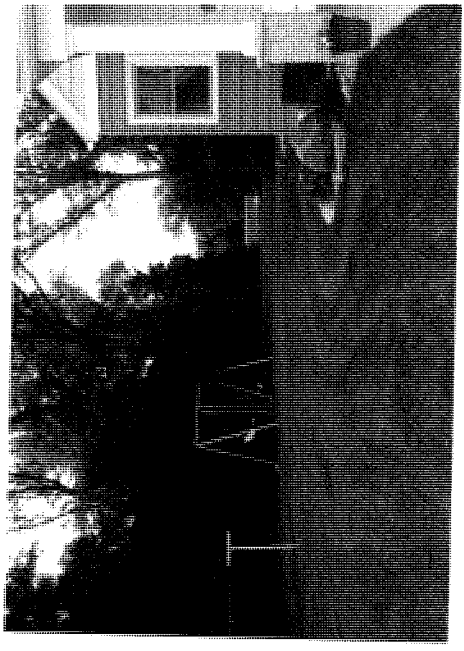
Timothy (& Becky) Ness

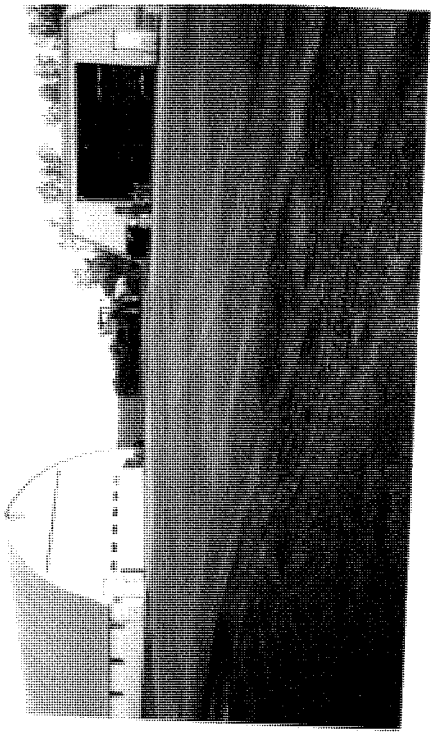
TIMOTHY J. NESS











June 13, 2011

US Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

Dear Project Manager:

I am writing this letter to express my great concern with the proposed Fargo Diversion and the holding area to the south. Our farm is along the Wild Rice River one mile north of HWY 46 along the Wild Rice River and can not be ring- diked more to compensate for the additional 5 feet of water. How do you plan to relocate our farm? There are just not other vacant farms in this area. It is not like having your house bought out and buying another one. Our farm has been in the family for over 100 years and this plan is going to destroy it. My husband and I would love for you and some of the other Metro Study Group to come out and look at our farm and tell us why it should be destroyed. I asked you at the Kindred meeting how you are going to relocate these farms and you had no answer – do you have any now? Also how will we be compensated? We have many grain bins that are depreciated out, but serve the same purpose as a new one – grain bins don't wear out. We have a heated shop and many large storage buildings for our machinery. It is a huge cost to replace all of these. Also, there is our fuel storage that will need to be taken care of. We flood along the Wild Rice River, but have always taken care of ourselves, without any county, state or Federal funds. Now you want to destroy everything we have worked for all of these years. My husband and I will be retiring in a few years, but we have a 41 year old son who works with us in our farming corporation and his 6 year old son who loves farming. What are your answers to them? I hope you realize we are talking of millions of dollars to relocate these farms in the holding area. Can you honestly say that the city and county have enough funds to cover all of these buyouts? It would be quite an embarrassment if you build the diversion and there is not money for the buyouts. My understanding is you cannot run this diversion until all of the mitigation has taken place. Is this true?

Also my father-in-law is buried in a cemetery right across the river from our farm and this cemetery has never flooded. Where are you going to relocate everyone there?

Another one of my concerns is the $35,000,000 you have in your proposal for recreation. What is the purpose of that and where is the $5,000,000 coming from that it is supposed to generate. Will the people of Fargo will love to come and sit on one of those many park benches and look to the south and see what they have destroyed? We want Fargo protected too, but not at the expense of destroying so many farms and rich farmland. Fargo can be protected without all of that expense and destruction.

We also have land along the Sheyenne River. What are you going to do with all the water that will be held back when you build up the Horace Road? The water naturally

flows to the Wild Rice and Red Rivers. This usually occurs long after our river has gone down. Who is going to compensate those families when they are flooded out? What is your plan if this extra water being held back floods Kindred and Davenport? Who will be responsible?

I often wonder if you sleep well at night when your Corps is proposing a 2 billion dollar project (and we all know it will be a higher figure than that when and if this project is completed) when the funding is not secured. Now it seems the city of Moorhead is not totally on board anymore because of funding issues. It even seems there is some rumbling in the North Dakota legislature that they do not all like the project as proposed with the holding area to the south. Many are not happy with all of the property being destroyed in Cass and Richland counties. There is also no commitment yet from the state of Minnesota and we know that they have lots of budget problems. Will there be any money committed there? Are Fargo and Cass County ready to pick up the entire shortfall if needed?

To me it seems Fargo is better off right now than Devils Lake, Bismarck/Mandan and Minot. Yet you want to spend 2 billion dollars to protect Fargo and its growth to the south on undeveloped property and yet destroy the whole southeastern part of Cass County. How do you justify that? This diversion/dam also affects a big part of the Kindred School district, Richland School district and Pleasant Township. Who is going to compensate them? Many people do not believe that it was a coincidence that this diversion falls right on the southern edge of the Fargo School district. My husband and I both have college degrees and that statement is a little hard to believe. Why is the Fargo School district not impacted at all? Also, why is the holding area that is inside the diversion mostly on Kindred School district property? Why was no one south of this proposed diversion ever consulted on these impacts before all of these decisions were made?

What are farmers to do when planting crops in this holding area? We spend thousands of dollars in Federal Crop Insurance to protect all of our crop inputs, which come close to 1 million dollars for our farm and many others. We have been told that crop insurance will not apply when the flood is caused by a man made structure. Would you spend that kind of money knowing you might not be protected in a disaster? There are just so many questions that do not have answers.

I am enclosing several pictures of our farm to show you what will be destroyed.

We await answers to all of these questions. Your response can be directed to my address listed below.

Sincerely,

Sandra Nipstad

Sandra Nipstad
5281 172nd Ave SE
Hickson, ND 58047

Cc: The Honorable John Hoeven
The Honorable Kent Conrad
Governor Jack Dalrymple
The Honorable Rick Berg

June 16, 2011

U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I am trustee for Lium Cemetery and we have never had standing water on graves from previous floods however, with the increase in the level of flooding that is being proposed it would be very possible that our cemetery will have water standing on graves for a period of time. Please place the cost of protecting our cemetery in your proposed diversion budget. This cemetery is located between highway 46 and the Christine, ND exit and also between I-29 and the Wild Rice River. We have approximately 140 grave sites that would be affected. This water will have emotional, psychological, and ethical effect on many community members associated with this cemetery.

Not only will this "family" Cemetery be affected but so will the farm which I have lived on most of my life be affected as well. I look out my front window and see the Cemetery family members are buried specifically my father who passed away at a young age and also who was very near and dear to my heart. He has been gone fourteen years (to this day) and there has not been too many days I don't glance towards the Cemetery or take a horse ride down there for a sense of peace.

Take my farm and Cemetery away from me....you might as well take me to.

Kathy Olson
5705 171 Ave SE
Christine ND 58015
701-799-2624

June 15, 2011

U S Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East Suite 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Statement
Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control of the Fargo-Moorhead Metro area in the Red River Valley. While I agree that the Fargo Moorhead Metro Area needs flood protection I do not agree with the current plan as it takes upstream land that does not currently flood so that further development can be done in the floodplain which is in conflict with E.O. 11988 and is also morally wrong.

I live outside of the city of Christine, North Dakota which is 128 years old and does not flood at this time but would have to be protected by a dike as it would be impacted by flooding in the staging area of the Diversion/Dam. I am the fourth generation of my family to own my property. It will also have to be protected by a dike as it is on the edge of the proposed staging area. I am very concerned about what impact there will be on the flow of the Wild Rice River as that is the river that can effect my land when it goes out of its banks. As Terry Williams said at the meeting in Wahpeton with the Richland and Wilkin County Commissioners "The red line is an arbitrary line and we're not totally sure where the water will go during a flood event but this is our best guess". Comments like those give no comfort when you have lived in an area for all of your life and through personal experience have come to know what to expect of the rivers during floods. As the Fargo-Moorhead/Cass-Clay County Metro group is endorsing a plan that will only protect parts of Cass and Clay Counties then they should also work to have a plan that will only adversely impact Cass and Clay Counties. If that is not their intention, then a more comprehensive plan that will provide protection to the greater Red River Valley should be devised and endorsed.

Upstream communities were not asked to participate in the planning process but are now going to be impacted by water. This impact is crossing county lines so that Richland County and Wilkin County will be staging water and losing a substantial part of their tax base in order to provide protection for parts of Cass County and Clay County. There is already a negative effect on property values as potential sales of properties have dissolved when the prospective buyers have learned of the proposed diversion and the impacts that could have on the area. This is not only affecting the counties but the school districts of Kindred and Richland 44 that are both within the effected areas both in terms of tax revenue and the reduced student population which also affects state aid to the school districts.

While there will be flowage easements on farmland, the land owners will bear the brunt of the decreased value of their farmland. These easements will limit their marketability when the time comes to sell. It will be harder for buyers to get a mortgage on the property which will limit the number of prospective buyers and the amount they will be willing or able to pay for the property. Are the forced reductions in property values included in the costs of the project as that is a cost that should not be borne by the property owners just because they have the misfortune of owning property in an area that will have water forced upon it? I have a small amount of farm land and I am concerned about whether or not we will be able to attract a farmer to rent the land. I am also concerned about what will happen to the rental value of my land. If Richland County has a decreased tax base then the tax burden will be that much heavier on the remaining properties. If the rental income is lower then it will be that much harder to make the tax payments. My husband and I hope to be able to live on our farmyard for many more years but if that is not possible then we are concerned about the lowered value of the property and the problems we will have in attracting a buyer. Fargo-Moorhead will reap all of the benefits if this project, as currently designed, goes forward but the area to the south of them will bear the brunt of the impacts. Have these impacts been included in the cost of the project so that the area that will reap the benefits will also bear the costs?

I am also on the board of the Christine Cemetery and have family members that over many years have been buried at a number of the cemeteries in the area. These people were all placed in what was supposed to be their final resting place. As this is one of the areas of the state that has been settled the longest there are some very old graves here which do not have vaults to protect them during extended periods of flooding. What will be done to protect those graves? Has that cost been included in the proposal? It has been learned that it would cost $3,000 - $4,000 per grave to move it to a location that will be safe from the flood waters. Before that can be done, family members have to be located to give their approval to any move. Where will the cemeteries be moved to and how will plots that have been purchased already but not yet utilized be handled in this process? In the event of a spring flood event it is entirely possible that the cemeteries will either still be under water or not yet dried enough to be visited over Memorial Day. Will these cemeteries now be closed to any further burials? If still open for future burials, then are the costs of delayed burials included in the local cost of the project as that should not be borne by people who are not causing the delay. Will the churches in the proposed staging area be moved? Has there been a thorough study on the cultural effects of the destruction of communities which includes the churches and cemeteries?

This plan will be destructive in so many ways. It will have awful impacts on the communities that are Upstream of the Diversion/Dam. There are many families in this area that are multi-generational and that are related by marriage through the years. The taking of any group in this area will affect the entire population because of the generational ties that exist. The proposed destruction of this area by flood waters so that the Fargo-Moorhead area can be protected for future development is wrong. If this project were simply about protecting Fargo-Moorhead then the Diversion/Dam would be moved further north to protect them. With the line that has been established this project is for the future development of the metropolitan area and that is going against Executive Order 11988.

I am concerned that the US Army Corps of Engineers has not taken into consideration all of the negative economic factors of decreased crop production, higher farming costs due to greater distances between farm bases and the land, decreased tax base for Richland and Wilkin Counties, decreased tax base and student population for Kindred and Richland 44 School Districts as well as other factors. You have focused too much energy on trying to come up with economic benefits while not fully evaluating and including the economic costs. Depreciation of land values and home values outside any diversion is a concern for all land and property owners. It should also be a concern for local governments. Area townships and county revenues will be reduced significantly due to the loss of thousands of taxable acres and homes. Local communities will also lose business revenue due to the loss of farm income on those thousands of acres which will affect banks, retailers, seed companies, car and equipment dealerships, utilities and many other local businesses. This effect will be a permanent loss year after year, as compared to the few days every few years that businesses may have to close their doors due to flood concerns. There are other alternatives possible that should be explored to help mitigate these negative consequences.

This rush to design the biggest project ever done by the Corps should be slowed down so that everyone can feel assured that all alternatives have been fully explored and the best possible and most economically feasible solution that benefits the entire region can be designed and implemented.

I hope to hear from you soon about the concerns that I have expressed about the proposed North Dakota Diversion/Dam and that you are able to see my point of view. Please take the time to fully consider some of the concerns that I and others are expressing. There are other alternatives that will provide protection to a greater portion of the Red River Valley.

Sincerely,

Patricia and Alan Otto
17210 58th Street SE
Christine, ND 58015

Attention Aaron Snyder:
RE: Supplemental Draft Environmental Impact Statement, Fargo Moorhead Metropolitan Area Flood Risk Management

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley.

I am located in the Richland County. My great-grandfather staked this area after the year of 1897 flood. My family built many homes in this area due to high ground and would never have to worry about flooding in this area. WE HAVE NEVER FLOODED HERE. My son is the 5th generation. Now because of Fargo having problems with water, Fargo wants to put a diversion (DAM) here to prevent flooding in Fargo. The Red River is the only river that flows north and now you're trying to prevent the natural flow of the river. That is not how Mother Nature works. How many times do you people have to see incidents in the nation? Look what the Garrison Dam did to Devils Lake and now Bismarck, Minot, the Mississippi in Minnesota, Missouri, Ohio and other states. Open your eyes, this plan will not work. Look what the West Fargo diversion did to Harwood this year, but we heard nothing. There are people in Fargo that have other ideas and you are REFUSING to listen to them. A large percentage of people in Fargo, West Fargo, and other towns in the area are not for this project and have NO IDEA on what's involved here. If they did they would not want this project either. It's not right for you to keep this from people. I can't imagine what's not being said, but I do know there is plenty. What happens if the project isn't finished? Are we going to be another Devils Lake? The cost to the Fargo people alone will drive people out of Fargo. Do you realize the cost of this project and it's only going to continue to go up. Where is this money going to come from? The economy is in very short supply of money right now and people CANNOT continue to pay this. Families are struggling now, so let's raise their taxes to pay for this diversion (DAM). Would the grounds even hold this structure? The soil is known for being unstable. The grounds shift here all the time. I believe it will cost more than 3.5 million dollars to maintain simply because of the clay in this area. Once it's completed, if completed. I would say 10 years from now it would probably be at least a 1/3 higher. There are a lot more states in far worst shape than we are. If someone would have told me a few years ago that we could flood, I would never have believed them. I feel I'm in a nightmare. I find it very hard to believe that people can be moved so easily.

How are you going to pay for all these homes, cemeteries, churches that we have belonged to for many years, many were baptized in these churches. No matter what you say you are going to pay us, it does not justify the means. How do you compensate for the land, people, animals, trees, nature and etc? There is NO money to compensate that. MONEY CAN'T buy everything like you people feel. In fact I would say it would be quite a bit less. How do you sleep at night? Do you justify it by saying you're saving FARGO. There are no more people in Fargo that you are saving than there is out here. I believe it is less populated in Fargo. You say your saving 200,000 thousand people. That is a false statement. I have yet to see 200,000 thousand people go under water in Fargo. If that was the case you would not have had the population that you have now in Fargo. Only a small portion of people have flooding problems and instead of telling them to go else where you continue to let them stay there. They should have never been allowed to build by the river in the first place, especially since 1997, yet you continue to let them be there. They love living by the river until the flood waters come up and then they expect everyone's help including the government. People have to start taking responsibilities for their actions. Help them once then they should be on their own if they still want to remain there. You should not continue to help them. Its funny how you can help people over and over again in these areas, but you can't let the people stay in their homes that are high and dry, have never had flooding issues, and paid attention to where they were building. I feel we are being punished for making the right choices and the people who choose to remain where they are, flood after flood, and are being rewarded for it. When we had the 1997 flood south of Fargo, the building south of Fargo should have been stopped. Instead south of Fargo has probably tripled. I was born and raised in Fargo. Oxbow was a slew. Even when I was a young girl I couldn't believe they were allowed to build there; yet they were and did.

Have you taken into account the power lines that power a large portion of Minneapolis? Are those power lines able to go under water and if so what is the cost for making sure they will continue to supply electricity to other states. What about the ice jams that could and will occur? Are you going to be here to prevent that? Do you have that in your budget of □1.8 billion? I doubt it. You project managers have eliminated so much from the proposal. The buying homes, raising of bridges, highways, cemeteries being moved, churches being moved, schools moved and above ALL THE LAND. How do you move a school to another location? There is no price for the land, This area is the Red River Valley with the rich black soil, found no where else in the world. We should be proud of living in this area, but yet you□re ready to put it under water and all the nature that goes with it. You said you would have a park, fishing and all these great additions around the diversion, DAM, but that will be man-made. We still have the wild prairie rose out here in the ditches, which is the State Flower of North Dakota. Some of the trees out here are over 100 years old. How are you going to save the prairie rose and trees? Are you going to dig everyone of them up and move them elsewhere? I sure would like to see you move the soil to another area. I know that□s what the farmers would want. On the edge of Richland County, we have a cemetery that has some Civil War Soldiers; babies and young children who were buried there due to the hardships of the times. The cemetery has bodies there that date back to the middle of the 1800□s. There□s also the Wolverton Cemetery, North and South Pleasant Cemetery, Christine Cemetery just to name a few. These people that are buried in these cemeteries chose to be buried there. Have you thought about the money and all the people you are going to have to contact to get approval to move them and the cost of moving them? Not to mention the fact, their will be people opposed and probably a percent ready to sue.

I know there is a better way to solve the problem we have here in Eastern North Dakota. I would like you to give other people a chance to come forward and give you a plan. We have a lot of smart people right here in the eastern part of North Dakota. Open your eyes. You□re the ones that are to be doing what□s best for all the area, not just Fargo. We need to work together in this. I feel there is only a hand full of people involved in this project. The majority of Fargo people have no idea what□s going on, because of that I KNOW this is not a good thing, or you would be more open about this in Fargo. They have a right to know. You better be open to all ideas that come to you and not so closed minded thinking your ideas are the best ideas. This is too expensive of a project to have only the one idea. I KNOW we can figure something out that will help all of us here in Eastern North Dakota and for a lot less money. You□re not being fair to the majority of the people in Fargo or to us. The main reason I feel you want this, is so you can continue to develop south because there is no where else you can go.

Sincerely,

Wanda Patrick , Northern Richland County

Thursday, June 16, 2011

Attn: Aaron Snyder

US Army Corps of Engineers
St. Paul District
190 Fifth Street East
St. Paul, MN 55101-1638

Subject: Discussion points regarding my opposition to the proposed **SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT,** Fargo-Moorhead Metro Area Flood Risk Management.

Dear US Army Corps of Engineers Representative:

This letter outlines several points I would like you to consider when evaluating the feasibility and proposed success of the **SDEIS** Fargo-Moorhead Metro Area Flood Risk Management Project. I strongly oppose this Project and outline my reasons in the following paragraphs.

First Point

The projected cost of the Project is greatly understated.

At the meeting in May 2011 in Kindred, ND, there was no projected number around the amount of revenue lost in the agricultural industry and the metropolitan area of Fargo and surrounding communities. This Project will hurt Fargo economically as further outlined below. Additionally, officials that have spoken with us have spent little time talking about why continued flood fighting efforts are no longer a viable option when they have had great success in the past. I do not understand how continued flood fighting efforts could cost more than this Project over time. I also wonder how much research has been done on the ebb and flow of weather patterns in our region as regards the flooding. For example, during my entire childhood growing up at the very address listed in this letter, Fargo never flooded in the 1980's. Could it be we are just going through a particularly wet phase in the region and it will level out again? Fargo/Moorhead has not had to fight flooding EVERY year in a long-term way.

The lack of attention to the cost of continued flood fighting efforts when needed versus the cost of the proposed Project is further supported with Comments 7 and 15 in Appendix A of the "Final Panel Comments on the Fargo-Moorhead DFR/EIS" paper, pages 12 and 22, respectively[1].

Second Point

Standing water on property equals flooded property, no matter how you spin it.

The regional representative of the Corps stated at the same meeting in Kindred in May 2011 that one foot and under of water on property is not considered flooding. This is a ridiculous statement. A person with 12 inches or less of water in his/her basement is not going to consider the home "not flooded" and continually liveable in this state. Nor can you drive a vehicle in that much standing water. Additionally,

[1]US Army Corps of Engineers. *Appendix A: Final Panel Comments on the Fargo-Moorhead DFR/EIS*, pages 12, 20. May 2010. http://www.usace.army.mil/CECW/PlanningCOP/Documents/peer/fargo-moorhead.pdf

the majority of the land they purpose to flood is farm land. You cannot drive a 500 HP tractor on a field with even a 1/8 inch of water on it.

Third Point

Flooded land cannot contribute to the US food supply.

If you count the land with 12 or less inches of water on it, the estimated amount of land that will be under water now grows to closer to 8 to 10 times more acres than the Corps has predicted on the ND side alone. When you consider that amount of land now under water you are affecting more people than just Fargo. If you determine that one individual can live off of only .75 acres (to produce vegetables, small grains, and so on) of land for a year, you compromise the USA food supply. With food prices climbing each year and predictions of serious food shortages in the next 20 to 30 years, I don't understand how this Project can be good for the nation as whole (as the Corps presumes is its main goal). Urban development and works surrounding urban development is destroying about one million acres of farmland a year in the USA. This is good farmland. Urban areas are developed close to the harvest area for access to the produce for transportation purposes. Now Fargo is not only trying to develop it, but they are trying to flood it out. I have heard several comments that Fargo is not an agriculturally-based city. This statement gives me pause when you consider that Fargo would not be here if it was not for the agriculture community that surrounds the entire city.

Fourth Point

Fargo *is* an agriculturally-based community.

- You can drive in any direction from downtown Fargo and in 10 miles be in prime farm land.
- The total amount of agriculture based shops in town alone is more abundant then people think. If you take that many shops out of business, what would be the impact on Fargo's economy? Fargo may not notice a $2 to $6 million dollar company closing do to the lack of agriculture business for that company; however, if you take 30 to 70 companies and close them down or reduce their gross product by 50 to 70 percent you are starting to take a sizable amount of revenue out of the Fargo community—and out of the state.

Fifth Point

Cost of modifying roadways is not adequately addressed in terms of true projected costs.

If you consider the miles of roads that would have to be raised to accommodate north, south, east, and west interstates, state highways, and railroads. The projected cost grows substantially. It is not clear how Fargo is going to get supplies in and out of the metropolitan area when all roads in and out of Fargo are under water. Fargo is the lowest area in the region. Completing this Project will flood the majority of the high ground, giving Fargo no access out except by boat, and because Fargo wants to continue developing south, the fact they want to divert the water south—in the opposite direction it is supposed to flow and to the higher ground—makes little sense.

The predictions of projected flood levels of the Red River are just that, predictions. Consider what is currently going on with the Missouri River in Bismarck, ND area. No one individual or government entity can predict what will happen in 5 years, let alone 75 to 100 years. The current water works issues in Bismarck are manmade problems. The south region of Bismarck was developed in large part because of

the Garrison Dam trying to control a large body of water (that area flooded for years); however, unlike Fargo, Bismarck is out of the flood plain and can continue developing out of the flood plain to higher ground—the very option Fargo is eliminating with the proposed Project.

The Interstates would need to be raised before the Project could begin, so they are still available at all times for emergency purposes, their original purpose. Why has this cost not been figured properly into the projected cost of the Project? We have been told that State Highway 81 would not be raised along with most other roads in the region south of Fargo. If this is true and there was a national emergency and military restricted access to the interstate, what would be Fargo's access?

Sixth Point

The panel officials are unequipped to give answers about who is financially responsible to land/home owners in the affected region that will flood (including the area that would be 12 or less inches under water—as I have established above that that area is actually flooded land as well).

These cost estimates also need to be included in the feasibility report. The Project would change the natural flow of water through the area I live in, so who is responsible for rezoning, creating new flood projections for this area, and classifying what is in the new flood plain. And WHERE is the water anticipated to stop, that is, where is the land dry (and not under 12 inches to 1 inch of water)? And how will values of properties be assessed when we have already lost so much value due to the announcement of this purposed Project. Should this Project be approved despite mine and others strong opposition, I would expect fair market value for my property prior to knowledge of the proposed Project hitting the media, and therefore, housing market.

Seventh Point

From what I have gleaned, the cost of changes to power lines has not been considered in the cost projections for the Project.

Power lines in the affected area upstream of the Project area in Richland County are not local power lines. The lines feed the Minneapolis area. These lines were not designed to sit in standing water for long periods of time, as I have been informed. Who is financially responsible for those lines if they topple over? Who will reimburse the power company for fixing them? And the city of Minneapolis for loss of power (Wages paid for repair, house outages, commercial outages, and other loss of revenue)?

Eighth Point

The Fargo Deputy Mayor has said that Fargo has been working toward improvements concerning problems in the Fargo area that contribute to the negative financial impact of flooding to government agencies, citizens, and so on in the region.

This statement seems untruthful when you consider that they continue to develop land in known flood zones along the Red River. In the flood of 1997, the area between Mills Fleet Farm and the town of Hickson, ND was either under water, surrounded by water, or fighting water. The region then determined to allow building on it soon after. The Deputy Mayor stated that Fargo has bought out 400 homes already as regards the still unapproved Project.

What I want to know is how many homes and business have been allowed to build in only the last 14 years on the very land they now may need to buy out? And WHY was that land zoned for building in the first place? Fargo needs to start taking responsibility for where they develop and addressing those issues before pawning the problem off on people that live out of the city.

Final Point

Are Fargo residents aware of the amount they may need to pay in specials (property tax assessments) if the Project is approved?

How many residents will actually be able to afford such specials (I've heard as much as $20K - 30K per property)? How many may move because they were not informed of this hidden cost? How many may not move to Fargo because they can't afford that sort of an assessment, especially in a market where many may have already lost a lot of value in an existing home?

Thank you for taking the time to read this letter. I appreciate your attention to this matter. I urge the Corps to consider all aspects of this project and ensure that each aspect has been given a thorough analysis before moving forward. I believe that once a complete environmental, economic, and engineering analysis is completed, you will agree that this project does not serve the best interests of either the region or the country and that more economical solutions are possible and preferred. I highly recommend the Corps recommend continued flood fighting and that Fargo/Moorhead be urged to find creative solutions to easing the burden and strain it places on them annually (which could be temporary due to shifting weather patterns).

Kind Regards,

Chad E. Patrick

To: US Army Corp of Engineers
From: Michael O. Peet

- The proposed diversion (LLP) is a reckless, highly inconsiderate and extremely extravagant concept/idea!!

- I would propose that houses near the Red River in Fargo/Moorhead be bought out and that more dikes be built there! Houses should never have been built so close to the river in Fargo.

- The LLP would be the permanent ruination of valuable farmland up stream of Fargo/Moorhead and would cause displacement of ever so many of the farmers who have been farming this land for many generations.

Michael O. Peet
6-16-11

John J. Ready
15115 S. 70th St.
Sabin, MN 56580
(h) 218.585.4218
(c) 701.361.8014

Aaron M. Snyder
ASACE, St. Paul District
180 5th Street East
Suite 700
St. Paul, MN 55101-1678

June 17, 2011

Dear Aaron,

As a land owner in the proposed 'staging/dam/reservoir' area upstream, I'm taking this civil liberty to express my concerns and reservations.

Let's start with the origins of this proposition. It's came at us from far, far, left field.

No input from the proposed affected communities and individuals were involved in the planning, design, or location decision process, nor does it seem like we will be.

The paramount concern is Fargo and its futuristic development area, specifically the *flood plain.*

Your one-time payment (flowage easements), for indefinite losses, places too many risks on the victims, as the variables are countless. Crop losses should be paid by those *benefiting* ***as*** they occur. Because, how do any of us know what the future costs to produce a crop and the value of it will be?

Will the storing of water slow down the drainage in our legal ditch-systems, therefore, affecting the drainage outside of the staging area?

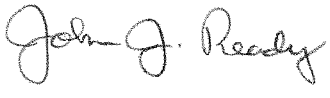
What about the loss of social and community options? Some have based their lives on the geography out here. How are family and friends replaced?

The proposed plan is too extreme and destructive to the upstream people's interests. If the entire community works together, surely there is plan that would protect Fargo without the negative impacts upstream.

Fargo needs to be a good neighbor and not just think of its own interests; better areas with less population and impact(s) can be found to store water in the Red River basin.

Sincerely,

John J. Ready



June 13, 2011

Dear Mr. Snyder,

As a resident of Pleasant Township I strongly oppose the FM Diversion Project. It will greatly effect farm production, which feeds many people in our country.

It will also have a huge effect on the school district, Kindred Public School, which is in the process of building a new school for all the students we have. It will also have an effect on the roads in our township.

The most important reason I appose the FM Diversion Project is it will take our home away, which we have worked hard to pay for.

The Army Corps of Engineers took my home and family farm when I was growing up to build the Garrison Dam. At the age of 70 ½ in January I was finally able to retire and now you want to flood my home again and take it away.

You want to flood out people who have never been flooded before. Your plan needs to be for what is best for everyone in the Red River Basin.

There needs to be more research done on the project, so the whole Red River Basin will be taken into consideration, which would be the best for the state.

Again I strongly oppose the FM Diversion Project.

Sincerely,

Gary L. Redlin

Gary Redlin

June 13, 2011

Dear Mr. Snyder,

As a resident of Pleasant Township I strongly oppose the FM Diversion Project. It will greatly effect farm production, which feeds many people in our country.

It will also have a huge effect on the school district, Kindred Public School, which is in the process of building a new school for all the students we have. It will also have an effect on the roads in our township.

The most important reason I appose the FM Diversion Project is it will take our home away, which we have worked hard to pay for.

The Army Corps of Engineers took my husband's home and family farm when he was growing up to build the Garrison Dam. At the age of 70 ½ in January he was finally able to retire and now you want to flood his home again and take it away.

You want to flood out people who have never been flooded before. Your plan needs to be for what is best for everyone in the Red River Basin.

There needs to be more research done on the project, so the whole Red River Basin will be taken into consideration, which would be the best for the state.

Again I strongly oppose the FM Diversion Project.

Sincerely,

Patricia Redlin

Patricia Redlin

From: National Wildlife Federation Action Fund [mailto:info@nwa.org]
On Behalf Of James Roberts
Sent: Sunday, June 19, 2011 11:45 AM
To: Snyder, Aaron M MVP
Subject: Restore wetlands for flood control in the Red River basin

Jun 19, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I am an avid birdwatcher and waterfowl are among many of my favorites.
There has been an alarming loss of seasonal wetlands that these waterfowl depend on. I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions that would provide far more benefit to wildlife.

Please develop an alternate plan that evaluates the use of wetland and grassland restoration as the primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

I believe the Corps has been guilty in the past of developing huge and expensive projects that damage the environment, and I know the Corps has been trying to do better. Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. James Roberts
215 S Ellis St
Palouse, WA 99161-8700

Classification: UNCLASSIFIED
Caveats: NONE

Wesley Robertsdahl
320 Leinden St
Kindred, N.D.
58051

U S Army Corps
Aaron Snyder.

I am sec-treas of the North Pleasant Cemetery, located near Wickham, N.D. According to your diversion plans, the N.P. Cemetery will be buried under water. It has never been flooded by water from the Red River or the Wild Rice River which is 1/2 mile away. I have brothers, mother and dad, grandparents and great-grandparents buried there. Some graves go back to the 1870's.

The Corps has no idea what emotional and monetary cost this puts on all of us.

Please slow this project down, so it can be done the proper way.

Thank you for your time.

North Pleasant Cemetery
Wesley Robertsdahl
Sec - Treas

From: Trana Rogne [mailto:tranarogne@gmail.com]
Sent: Wednesday, May 11, 2011 5:38 PM
To: bwimmer@cityoffargo.com
Subject: Flood control

I appreciate this opportunity to submit this letter to the Fargo Moorhead Metro Study Group.

As a citizen of North Dakota, a Richland county resident and member of the MnDak Upstream Coalition, I would like to comment on the process used to develop the Supplemental Draft Environmental Impact Statement April 2011.

We all know Fargo/Moorhead and the Red River Basin is in need of flood protection. The SDEIS in its current form does not provide the needed protection. It only protects the smaller Fargo/Moorhead Metro area. It negatively impacts the larger valley community.

This current plan has been crafted by the main beneficiaries of the plan without the involvement of the other local communities who will be impacted. This may not have been the initial intention, but the plan has become much more than a diversion to divert flood water around the metro area. It has become more of a dam in its function. With the realization of the negative downstream and negative upstream impacts, the plan has become extremely problematic for the impacted citizens and the general public.

At some point the involvement of all parties should have been implemented, and not by just informing them of impacts.

We the members of the communities that will have our homes and livelihoods destroyed will continue to work with parties who will cooperate to achieve a long term solution to all our problems with excessive water in the valley. We will continue to oppose this currently crafted SDEIS until it is reconfigured with input from and consideration of all local groups impacted. We believe a long term solution for the entire Red River Basin should be the goal.

Sincerely
Trana Rogne
5477 Co Rd #1

Kindred ND

701-367-8911

June 20, 2011

TO:
U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

FROM:
Leah Rogne, Ph.D.
Associate Professor
Department of Sociology and Corrections
113 Armstrong Hall
Minnesota State University, Mankato
Mankato, MN 56001

RE:
Supplemental Draft Environmental Impact Statement (SDEIS), Fargo-Moorhead Metropolitan Area Flood Risk Management

I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have multiple concerns, outlined in detail below.

1. Planning Process/Public Involvement: A Broader, More Inclusive Process Is Needed
2. Loss of Agricultural Production: Impact Not In Benefit/Cost Ratio
3. Crop Insurance: Impact on Property Values Not Taken Into Account
4. Drain Tile: Costs Not Currently in Project
5. Loss to Tax Base: Impact Not Taken into Account in Benefit/Cost Ratio
6. Social and Cultural Impacts: Data in SDEIS Entirely Inadequate
7. Cost of Relocations and Acquisitions Vastly Underestimated
8. Unstable Soils Threaten Viability of the Project
9. Coincidental Tributary Floods Not Modeled and Costs Not in Project
10. Definition of the Staging Area Is Misleading: More Land Is Affected
11. Future Project Modification: Too Many Costs Left to Future Planning
12. Ice Dams: Cost of Remedies Not in the Project
13. Other Social Effects Not Adequately Assessed
14. Risk of Project Failure and Loss of Life Not Taken Into Account As Costs
15. Health and Safety Issues Not Adequately Addressed
16. Local Liability and Responsibilities Place Local Sponsors at Great Risk
17. Trade-Offs Process Is Critical
18. Controversy Is Significant, Persistent, and Threatens Implementability of Project
19. Determining the Public Interest: A New Process Is Required to Bring Parties Together

1. Planning Process/Public Involvement: A Broader, More Inclusive Process Needed

The FM Metro Flood Control Study lacks a fair and comprehensive planning and public involvement process. Without a process that gives a wider public a role in decision-making, the determination that the project is "in the public interest" is highly inappropriate.

The pace with which this project is being propelled forward does a disservice to the region's residents and taxpayers who hope for flood protection and especially to those currently paying for this wholly inadequate planning process. The course of action that has been followed by the local sponsors has served to undermine public trust by members of a wider community that has been left out of the process. Therefore, without a process for effective public dialogue, controversy will continue to build, and opposing camps will solidify their positions, rather than come together to work for consensus.

Because the recent addition of upstream staging imposes a radical change and a permanent negative impact on communities south of Fargo-Moorhead, there needs to be an extended study review process that involves significant participation in decision making by citizens negatively affected by the project and by county commissioners, water board members, and township officers from Richland and Wilkin Counties, as well as township officers from the rural Cass townships negatively impacted. Only with a process that provides meaningful input into decision-making for these constituencies could a reasonable recommendation be made about what plan is truly "locally preferred."

Even though Cass County Commissioner Darrell Vanyo, a key member of the Metro Study Group, has stated that over 90 percent of the people speaking at the public participation meetings are against the project, the Metro Study Group has not responded to any of the concerns raised by citizens at any of the public meetings. That is because there simply is no system set up to require the Metro Study Group to interact meaningfully with others. The entire Metro Study Group does not attend the public meetings. No notes or recordings are made of the public meetings, and members of the Metro Study Group (the "local decision makers") are not informed of the issues raised. Therefore, their "decisions" are not fully informed.

For these reasons, the actions of the Metro Study Group cannot be taken to represent the wide range of citizens affected by this project, and their role representing what local people want is illegitimate. Allowing the local sponsors to appoint themselves as the local decision makers without input from all those affected violates the democratic process through which decisions, especially those of this magnitude, should be made.

In Section 6.3 of the SDEIS the Corps states: "The sponsors [Fargo and Moorhead] have worked closely with the other local entities to develop a consensus on the path forward . . ." The local entities involved, however, are only those already part of the self-appointed Study Group, not the entities that represent much of the wide area affected by the project with staging: Richland and Wilkin Counties.

The Corps SDEIS states in Section 4.3.2.2: "Among the three alternatives, the LPP would permanently remove the most land from agricultural production. Although it is anticipated

that much of the land in the storage and staging areas could continue to be farmed, flood risk would be increased, and building of structures to support farming would be limited in those areas. These changes could reduce the agricultural output and tax base of the local communities. This reduction could limit the services provided by the municipalities to its residents."

In its haste to meet an arbitrary timeline, the Corps of Engineers has failed to spell out and quantify these adverse impacts, leaving these and many other questions to be addressed in the "design phase." Concerns raised about these issues at public meetings have not been addressed at the Metro Study Group meetings. The decision of these "local decision makers" to move forward without interacting with this information is inappropriate.

Richland County was not included as a Resource Agency Team (Section 6.2) and was not part of the meetings in March 2011 when it was already known that the staging area included parts of Richland County. The Richland County Commission was not on the mailing list for the April 2011 Supplemental Draft EIS, even though the Corps had finally told Richland County there would be effects in the county. The Richland County elected officials were instead expected to drive to Minnesota and check out the SDEIS from the public library in Breckinridge. This disregard for the interests of an impacted governmental entity is stunning and unacceptable.

To move forward on a project that negatively impacts economic activity in Richland County, southern Cass County in North Dakota and rural Clay and Wilkin Counties in Minnesota and that requires "several hundred or thousands" of residents to be permanently relocated without true dialogue among all those affected is unacceptable.

While it is appropriate that the local sponsors (who will be paying the local cost share) have a key voice in the decision-making, it is not appropriate that they are the only ones to guide the process forward. The North Dakota and Minnesota taxpayers who will be asked to contribute to the local share and the taxpayers of counties and townships negatively affected need to have a real voice at the table. Guardians of the federal tax dollar also have an interest in knowing their money will be well spent.

A balanced advisory committee should be appointed to represent all those affected by the project. This advisory committee would work together to evaluate fully the true impacts and costs of the project and to evaluate fully all reasonable alternatives. There is precedent for such an advisory committee in Corps planning procedures. A Citizens Advisory Committee was appointed by the Lake Agassiz Regional Council in the mid-1970s to address flooding on the Sheyenne River and to review the proposal for the Kindred Dam. A balanced committee representing those who would benefit from the project and those who would be negatively impacted was appointed and met frequently over the course of several years until a consensus was obtained. All parties were able to question Corps planners, and all were able to engage in the give and take necessary to create a reasonable, acceptable, and economically feasible plan. The process resulted in the building of the Sheyenne (West Fargo) Diversion.

While District Engineer Michael Price has pointed out in Section 8 (Recommendations), page 370, of the SDEIS that his recommendation "reflects the information available at this time and current departmental politics governing formulation of individual projects," the high degree of controversy surrounding this particular project warrants an added level of scrutiny to the issue of substantive public involvement. A process such as I have outlined above could help bring credibility to the process and help assure that the ultimate recommendation truly is "in the public interest."

2. Loss of Agricultural Production: Impact Not in Benefit/Cost Ratio

Section 4.3.2.2 in Appendix D (Other Social Effects) states that the LPP would "permanently remove the most land from agricultural production" and that implementation of the storage and staging areas would "reduce the agricultural output." Further, in Section 5.2.3.2.7 (Farmland/Food Supply) the report states that crop production losses may occur on as much as 20,000 acres if the staging area is used in the spring and that crop losses could occur during a summer flood (which has occurred four times in the last 36 years). Since they are manmade, these losses cannot be compensated through federal crop insurance. So, the local sponsors (Fargo and Moorhead) would have to pay. The costs of losses of agricultural output and the impact on food supply need to be in the project costs.

3. Crop Insurance: Impact on Property Values Not Taken Into Account

Late planting reduces yields. While farmers can get crop insurance for delayed planting, losses from a manmade project cannot be compensated. Losses from summer floods (which are often total losses) that are caused by a manmade project do not qualify for crop insurance. While Corps officials have said that it would have to be proven that the loss was actually caused by the diversion project, this would be reasoning after the fact. Land subject to staging from the diversion would be devalued for sale or rental since competing land without this risk would be more desirable.

4. Drain Tile: Costs Not Currently in the Project

In Section 5.2.3.2.7 the Corps suggests that drain tile could be a solution to late planting of crops, but the cost of installing drain tile on tens of thousands of acres is not currently part of the project. These costs would be local costs, not federal, and should be spelled out in cost projections before the project moves forward.

5. Loss to Tax Base: Impact Not Taken into Account in Benefit/Cost Ratio

As the Corps indicates in Section 4.3.2.2, the storage and staging area will negatively impact the "tax base of the local communities. This reduction could limit the services provided by the municipalities to its residents." The Corps asserts that these impacts would be "short term," but they provide no documentation that they would short term. The impacts would certainly be long term since the area will be denuded of people. The permanent effects on the tax base in at least three school districts in North Dakota and Minnesota need to be taken into account. The districts have commitments that will need to be paid, and the local sponsors will need to have those costs fully spelled out in the projected costs.

Valuation of land for tax purposes is based upon the soil type with modifiers depending on conditions such as whether the soil tends to be wet, tree coverage, etc. These modifiers

could be applied to the valuation of the land affected by periodic flooding from staging because of the diversion.

Wet fields from spring flooding would delay planting and affect crop yield, and summer floods would be even more devastating; both conditions may contribute to reduced valuation of the land for tax purposes. This would result in a reduction in taxes to the counties and to the school districts.

Since crop insurance does not cover losses from flooding from a manmade event, landowners whose land is impacted by staging will not be able to guarantee that their renters will not experience uncompensated crop losses from delayed planting or a total loss from a summer flood. Therefore, they will likely receive lower rent for their land. Their land will not be competitive with land not subject to these impacts. Therefore, landowners whose income has been reduced are likely to ask for a reduction in valuation. This needs to be factored into the benefit/cost ratio.

6. Social and Cultural Impacts: Data in SDEIS Are Entirely Inadequate

The project has failed to provide even the most cursory examination of the social impacts of the staging area, treating these issues only in generalities and with speculation. The Corps has presented no data to support their claims related to social effects. There have been no data collected: no focus groups, no interviews, no observations, no social network analysis, and no basic community studies to assess the nature of the social and economic ties among the thousands of North Dakota and Minnesota residents who would be displaced by the project.

There are particular characteristics of the staging area that must be fully studied and understood before a decision to eliminate the human population would be made. This plan eliminates the rural villages/cities/subdivisions of Hickson, Oxbow, and Bakke as well as a rural community that is at the intersection of the communities of Comstock, Christine, Kindred, Walcott, and Colfax. These intersecting networks magnify the social and economic impact to a region that is far wider than the borders of the designated staging area. It is a rural area that, after decades of declining social and economic infrastructure in other parts of rural America, has established a level of social and economic health, viability, and equilibrium. The removal of "hundreds or thousands" of residents and the relocation of farm operations threaten the health of all those communities, not just those inside the staging area. No project as radical as this one should move forward without community studies that assess the impact of the proposed changes.

The plan includes an assessment of cultural resources only for the area affected by the diversion channel itself. There is no consideration whatsoever of cultural resources for the 54,000 acre area affected by storage or staging upstream. There may be many potential historical sites in this area since it was one of the first occupied by European settlers in the early 1870s, but the project has failed to do any assessment of the cultural resources in this area.

Members of the French community at St. Benedict were the first European settlers in this part of the valley. Some of that land would be taken for the storage area and some would be in the staging area. Early Norwegian settlers used Ft. Abercrombie as a portal to the southern Red River Valley, and a number of historic and unregistered cemeteries exist, several especially vulnerable to increased flood levels caused by staging.

One particular area of interest is located in and around the old site of Lithia, Eagle North Township, T-136-N, R48-49W, Section 1. This was the site of the bonanza farm of William T. Montgomery, African-American bonanza farmer and businessman, and this site would be affected by staging. This resource needs to be thoroughly evaluated and recognized. Montgomery was the son of Ben Montgomery, the manager of Jefferson Davis's brother's plantation and the first Black man to hold office in Mississippi. (Attached is information on this historic North Dakota entrepreneur.)

Rendering the cemeteries unsuitable as memorials to the dead due to flooding, sedimentation, and access is a social/cultural issue that must be addressed. The costs of preserving these resources, and, if necessary, moving the cemeteries need to be in the project costs before the project moves forward.

7. Costs of Relocation and Acquisitions Vastly Underestimated

Corps officials have said that farmers would get only the depreciated value of their farm buildings, and this is clearly unacceptable. This would put many farmers out of business. The valuation of the property needs to be recalculated to reflect the real costs so that local sponsors, who will be responsible for these costs, can make an informed decision about this investment.

8. Unstable Soils Threaten Viability of the Project

I do not see an adequate analysis of the issues related to the unstable Red River Valley soils.

In Section 3.6.2 (Revised Cross Section for North Dakota Diversion) the SDEIS states: "The cross section of the North Dakota diversion as described in section 3.5.4.1 was modified to account for weak soils that were identified as part of the soil investigations. This resulted in the depth of the channel being raised three feet, to a maximum depth of approximately 29 feet. The channel bottom widths remained unchanged. Side slopes on the excavation were modified to be 1V on 10H up to a 10 foot high 50 foot wide bench then 1V on 7H to the top of the channel."

In Attachment I-15 page 23 of the SDEIS outside reviewer Julian DiGialleonardo stated in May 2010, "The level of geotechnical analysis and evaluation is not sufficient to support an accurate feasibility cost estimate for the North Dakota Alternative." He noted that of 85 borings taken for levee alternatives, only 9 were taken for the North Dakota Alternative. DiGialleonardo also remarked on "inconsistencies between the Fargo-Moorhead DFR/EIS and the Geotechnical Appendix I." Finally, he stated "it appears that the geotechnical analysis for both Diversion Alternatives was not developed completely and/or was not accurately incorporated into the project cost estimates." The report suggests on page 24 of this section a plan to address these issues, but I do not see the results anywhere in the

SDEIS. This, combined with the fact that Project Director Brett Coleman stated May 26, 2011 in Fargo that borings are to be done in July of this year and results will not be available for six months, leads me to believe that these data are not yet available. A timetable for authorization by the end of this year seems inappropriate considering the lack of these crucial data.

According to the Fargo *Forum* (May 24, 2011) shifting soils 27 feet below beneath the approaches to the new bridge over Rose Coulee in South Fargo will necessitate a $500,000 repair project. If this bridge is at risk only two years after being completed, how can we be confident that the engineering for the 19 bridges, two aqueducts, three drop structures, and other huge structural components is adequate so that the project won't require very expensive remediation shortly after completion?

Considering the long history of building challenges on Red River Valley soils and the cost of remediation after the fact, the Corps has a responsibility to do exhaustive analysis and to spell out fully all these costs before the project moves toward authorization.

9. Coincidental Tributary Flooding Not Modeled and Costs Not in Project

According to the SDEIS the effect of coincidental floods on tributaries has not been modeled, though there would be impacts (SDEIS 3.7.3.2).

This is a major flaw in the report and shows a lack of consideration for region-wide flooding issues. When asked what would be done about water from the Sheyenne River that would be blocked by the new Highway 17 levee, Corps officials said they would create a ditch to bring it north to the diversion. No plans have been shown about where this would be, how much it would cost, or how it would deal with the fact that there is a stretch of high ground just south of Horace. These plans need to be shared with the public and landowners who would lose property for the ditch, and the costs to deal with this issue need to be considered in the benefit/cost ratio.

In the summer flood of 1975 the Wild Rice River had already experienced major flooding when, on June 28, a rain of at least 15 inches occurred in the Sandhills area of the Sheyenne River upstream from Kindred. The combination of flooding from the Wild Rice, saturated soils from heavy rains that had already occurred earlier in June, and the breakouts from the Sheyenne River following this event caused widespread damage in northern Richland and southern Cass Counties. If the staging area were being used when such an event occurred on the Sheyenne, the effects on homes, land, roads, bridges, and safety access would be magnified. Clearly, tributary effects need to be modeled. and plans to address these effects need to be in the project costs.

10. Definition of the Staging Area Is Misleading: More Land Is Affected

While the designated staging area only includes 33,390 acres of land, there is a large area not in the official staging area that expands the impact area to over 54,000 acres. Artificially designating only a portion of the area impacted as the "staging area" creates the illusion that the impacted area is less than it really is. This misleads the public into thinking the impacts are limited to the area inside the "red lines" on the map.

The report says that there may be "takings" outside the staging area, but no analysis of this has yet been made. These issues need to be more fully explored and the costs accounted for before moving forward with the project.

11. Future Project Modification: Too Many Costs Left to Future Planning

Section 5.5.4 of the SDEIS states that "future monitoring will verify the impact conclusions reached during the feasibility study and evaluate the effectiveness of mitigation." This would be done by the non-federal sponsors and agency partners. Richland County was not included as an agency partner, so Richland County's interests are not represented in the monitoring process. Richland and Wilkin County representatives need to be made agency partners so that they are involved in the monitoring and evaluation process.

I am not satisfied with the discussion in this section of future modifications. The process and funding sources are vague and uncertain, leaving open the possibility that funding might never be found for needed modifications. This leaves the public with a project with problems that might not ever be fully mitigated. The haste in which this project is being moved forward in order to get into the Water Resources Act presently moving through Congress contributes to many issues being left to later stages. The goal of getting a project into a Water Resources Act by the end of 2010 was cited then as a reason to move forward quickly with planning. The same argument is being made this year. This is not a valid reason for rushing any aspect of project planning. All these issues need to be fully explored before moving toward authorization and funding.

12. Ice Dams: Costs of Remedies Not in the Project

In a section on issues relate to ice, the report speculates about a series of poles, piers, or ice booms to break up ice dams (Structural Appendix J-16). There doesn't seem to have been enough consideration of this problem and what will be the cost of measures to control this problem.

13. Other Social Effects Not Adequately Assessed

Appendix D includes Richland and Wilkin Counties on a map as the study area, but the narrative seems to be focused largely on Oxbow, not on the wider staging area. The report acknowledges that there will be significant adverse social effects in the upstream area, but states this may be lessened by "certain types of mitigation measures, such as relocating the town and all of its residents as a whole" (Appendix D, 4.4, p. 56). This indicates they are focusing mainly on Oxbow, not on the entire staging area. This is an example of what appears to be a hastily prepared document that did not fully examine all the ramifications of adding staging to the plan. Why was time not taken to deal with the issues related to the entire area, not just Oxbow?

Most of the discussion of social effects and cultural resources deals only with the diversion channel itself, as though many parts of the document were not updated after staging was added. How can we be confident of the accuracy of the document when we see this the type of error in the SDEIS? When one of the local sponsors, the City of Moorhead, has expressed its dismay at changes in the project that were not apparent to them (moving from a 35K to

a 20K cfs channel), is it any wonder that people question whether the SDEIS was thorough, accurate, and adequate and the involvement process highly questionable?

14. Risk of Project Failure and Loss of Life Not Taken Into Account

An overtopping or breach of the tieback levee, storage area levee, or failure of a control structure in an extreme event would be "catastrophic" (Section 3.10.3 SDEIS). Ice or debris could affect the flow through the control gates. The Corps has not done a loss of life analysis for this but did include as a benefit of the project the protection from the loss of nearly 600 lives in a catastrophic flood event (arguing that local people historically do not evacuate in case of a flood). So, since no one will exercise caution or reason in case of an extreme flood, it is apparently OK to include the protection from loss of life from failure to evacuate as a benefit of the project. Why is the potential loss of life from a catastrophic failure of the project not included in the costs of the project as well?

In addition, the projection of 600 lives seems out of line with reality considering the fact that the 1927 Mississippi flood, the worst flood in United States history, only resulted in 246 deaths.

15. Health and Safety Issues Not Adequately Addressed

Residents whose homes would otherwise be able to remain in the staging area (that is, homes that could be ring diked) may be forced out because it would not be possible to reach their homes with emergency vehicles during the staging period. This may magnify the number of homes faced with a buy-out and raise project costs. All this needs to be spelled out clearly in the project costs before moving ahead.

16. Local Liability and Responsibility Places Local Sponsors at Great Risk

In Section 8.0 (Recommendations), the report states that cities of Fargo and Moorhead (the local sponsors) must agree to "hold and save the United States free of all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project . . . " except for damages from U.S fault or negligence.

There are so many unknowns in the project that the local sponsors (as well as the federal government) should be very concerned to make sure that as much as possible is spelled out and addressed before moving forward.

The issue of unstable soils (addressed elsewhere in my comments) should raise red flags for the local entities that will be liable for the cost of repairs.

17. Trade-Offs Process Is Critical

In Section 3.8.4.2 of the SDEIS the Corps states "trade-offs are not clear cut." They state further (Section 3.8.4.2 page 103) that acceptability is not entirely a technical question: "Trade-offs related to local acceptability and cost are primarily non-federal political considerations that cannot be resolved with a technical analysis."

The trade-off the Corps is talking about in this section of the report is apparently among the diversion alternatives. This kind of trade-off analysis related to "non-federal political

considerations" needs to be done in relation to other alternatives or combinations of alternatives, such as upstream retention and nonstructural measures to reduce flood damages. When there are large social impacts such as the forced relocation of thousands of people and permanent adverse impact on rural communities, the people negatively affected by the project need to have a voice in the "trade-off" discussions. These people have been excluded from the process (especially Richland and Wilkin Counties), and they must be given a voice before this project can be expected to be in the "public interest."

18. Controversy Is Significant, Persistent, and Threatens Implementality

According to Section 3.4.2 of the SDEIS, controversy and effects on community cohesion are one of the Corps' criteria for "acceptability" of a plan. There is a high level of controversy related to this plan, so "acceptability" is very much in question.

In Section 5.3 the Corps acknowledges controversy related to the location of adverse impacts but states that owners of agricultural land would be compensated at fair market value. Financial compensation does not eliminate controversy nor satisfy community members. This will continue to be hugely controversial, and the exclusion of involvement by negatively affected communities in the planning process has created an atmosphere of bitterness and distrust. Richland and Wilkin Counties have gone on record against the plan, as have the township officers of Richland County.

19. Determining the Public Interest: A New Process Is Required to Bring Parties Together

According to SDEIS Section 8.0, the District Engineer has "determined that the tentatively selected plan is in the public interest." How can the public interest have been determined when crucial parts of the public affected by the plan and their elected representatives (including Richland and Wilkin Counties) were not included in the process or even sent a copy of the report when it was done? This exclusion of communities and entities other than the beneficiaries of the plan makes the process illegitimate. If this way of determining the "public interest" is standard federal policy, that policy is deeply flawed.

It is crucial to bring opponents and proponents into a face-to-face process to educate one another, build mutual trust, and create a consensus on moving forward with reasonable basin-wide flood protection measures that are publicly acceptable and implementable.

Attachment

William T. Montgomery, North Dakota's Black Bonanza Farmer

Sherman, William C. and Playford V. Thorson. 1986. *Plains Folk: North Dakota's Ethnic History*. Fargo, North Dakota: North Dakota Institution for Regional Studies.

"While some black farmers came to North Dakota as homesteaders, others came to the prairies with a bit of wealth and acquired agricultural properties. In several cases blacks worked as laborers until they had accumulated enough money to pay the price of a farm.

"Of special distinction was William T. Montgomery, a black gentleman who came to the state with a considerable amount of capital and can, perhaps, be considered a "bonanza farmer." The *Fargo Argus* of Sunday, October 19, 1890, refers to him as a "selfmade man" who "lives in Fargo most of the time, but has a large farm on the Fargo and Southern Division of the Chicago, Milwaukee and St. Paul Railroad." Montgomery's farm was, indeed, a large one by contemporary standards, over one thousand acres of prime Red River Valley Land.

"No ordinary individual, Montgomery was born a slave, joined the Northern Navy, and served as a steward under Admiral Banks in the Red River Expedition. His brother, Isaiah, was the only black member of the State Constitutional Convention in post-war Mississippi. William Montgomery himself was elected treasurer of Warren County, Mississippi, in 1881 and by that time was recognized as a highly successful cotton grower.

"After coming to the Red River Valley with some close friends who decided to locate in the Dakotas in 1884, Montgomery purchased his land in 1885. Historian Hiram Drache says he developed his farm, built his own elevator near the railroad, and went into partnerships with local businessmen. Following a loss in the grain futures market, Montgomery eventually sold his farm and joined some Fargoans in a land investment in Canada in the 1890s. He returned to Mississippi later in life. When he last visited Fargo after World War I, he was nearly blind. Today, a large farmstead and traces of an old elevator, twenty miles south of Fargo, compose the last remnants of the small town of Lithia, once called Montgomery for William Montgomery" (p. 284).

McBride, Earnest. 2006. "Black and Tan Party Rule in Mississippi, 1868-1875." Retrieved May 29, 2011 (http://www.bjmjr.net/mcbride/black_tan.htm)

"Cardozo struck up an alliance with Peter Crosby, Furlong's black chief deputy, I. D. Shadd, a state representative and future Speaker of the Mississippi House, and Warren County Constable William T. Montgomery, the older son of wealthy black plantation owner Ben Montgomery, the first black man to hold public office in Mississippi. Their plan was to marshal as many of their black and white allies in the Black and Tan Republican bloc as possible to demand that black men be elected to at least half of the top political offices in the state. At the local level, they developed a strategy to get black men elected to the top county offices wherever they had an obvious majority of the population."

June 15th 2011

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street –Suite 700
Saint Paul, Minnesota 55101

Dear Sir:

This letter is in regards to the purposed Fargo diversion and the devastation on the land owners impacted. We own land in Cass County, Section 27; Township 13; Range 49 E ½ of East ½ Sec 27. We understand that this land is in the purposed staging area for Fargo flood control impacted by the design under consideration.

We understand the desire for flood control and the need to impact the least number of people possible. Under the current proposal several impacts have not been provided for. The value of our land will be decreased tremendously and we expect compensation equivalent to the land value prior to this proposal if construction is permitted to go forward. With the lack of insurability for crop loss with federal crop we cannot expect in the future any renters of farm land to rent our land for its current annual value. We foresee a decrease in annual rental income unless stipulations are put in place to assure those farmers renting land fair and justifiable crop insurance coverage as with any other disaster.

We understand the importance of the job at hand, and only ask that just and fair consideration be given anyone impacted. At this time there seems to be little definable terms under which any proposal can be seriously evaluated. Please make public all options under consideration, and give complete study to the alternatives. As you move forward it is our hope that you give attention to not only those helped in the process, but consider all of us impacted negatively for the rest of our lives, and the lives of our children.

Sincerely,

Gerald Roise LuAnn Roise

Gerald & LuAnn Roise; ie "The Roise Trust"
2512 1st Ave SW
Minot, ND 58701

701-839-4306

6-15-11
Colfax, ND

Mr. Aaron Snyder,

I Live in northern Richland Co., Though I May not be directly affected where I Live by the diversion Many of My neighbors will be along With school districts, Churches, Cemeterys & Towns. I am not against helping Fargo/Moorhead with Their flood issues but There has To be a better solution Then The heavily preferred plan.

Representative Belter gave you some good advice at The Meeting in Kindred To slow down and Take a breath of fresh air. Mr. Snyder, The Corps Needs To exhaustively seek out every possible Solution To The flooding problem With more emphasis on retention That would benefit The entire Red River Basin.

Sincerly,
Robert L. Rostad
M035 63 ST SE
Colfax, ND 58018

Us Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 fifth Street East, Ste. 700
St. Paul, MN. 55101-1678

Date: 6/15/11

Dear Mr. Snyder,

My name is Mike Rufer and I and my family live on a farmstead near Christine, which is within the 33,390 acre staging area of the Fargo-Moorhead Metropolitan Flood Risk Management project.

We moved here from Fargo in 1998. Our family enjoys where we live. Our kids go to school in Colfax at Richland 44. We attend church in Christine. We have made many friends since we moved here. The people of the area have made us feel right at home. This is home.

We have had contact with the sons and daughters, grandsons and granddaughters of the people who homesteaded this land. They have told us the farmstead has never been flooded. Since we've lived here there has been three major floods, we experienced no flooding to any of the structures, at no time in the past 108 years has any of the structures been flooded.

This plan would change that and put my property in jeopardy during major flood events.

I am writing to you today to let you know I oppose the diversion plan which is identified as the April 2011 Locally Preferred Plan, (LPP), (North Dakota diversion with storage and staging), for flood control in the Red River valley

I have attended numerous Flood/Diversion meetings, put on by local groups which have been put together to oppose the diversion, and the Corps meetings to inform those concerned, and have formed my own opinion. This plan comes at too high a cost, both emotionally, through the loss of community, and monetarily, $1.8 Billion and climbing! Too many lives will be forever changed for me to accept that this is the right thing to do. There has to be a better solution which benefits all, not just Fargo/Moorhead.

I understand that with whatever solution to flood control is put in place, someone will be not like the outcome, but in my opinion this project is too self-serving for Fargo/Moorhead. I feel the most equitable solution is one which would benefit the entire Red River Valley basin.

I realize that to do that Fargo will not get the 500 year protection they want, but is it fair to protect a group solely based on where they live, and at the expense of others?

The people, who live in Fargo/Moorhead, and the Red River Valley for that matter, should know the risks associated with their choice of where they are living. It would seem to me a more equitable solution would be one which benefits all in the Red River Valley, understanding that if the 500 year event ever happens, we all are in it together and share the same risks.

I have heard the arguments and seen the data on upstream storage and diking. It would seem to me that if all concerned aggressively pursued both measures, using a significant portion of the funding proposed to be spent protecting only Fargo/Moorhead, it would provide a measure of protection for all in the basin, and all would have some relief/protection during major flood events.

This being said I think all concerned should abandon the diversion plan, focus on storage/retention and diking, which would help all in the Red River Valley. If Mother Nature ever dealt us the flood of five centuries, with the before mention mitigation measures in place, for all, basin wide, all affected would be in a better position to fight the fight and protect their property.

Please take this into consideration, and/or other measures, which benefit all in the Red River Valley, not just Fargo/Moorhead.

Sincerely,

From: brenda sauvageau <bren.sauvag@hotmail.com>
To: Coleman, Brett R MVP
Sent: Wed Jun 01 22:07:01 2011
Subject: fargo diversion

Fargo Dam and Diversion

The idea of losing our home is implausibly distressing to all of our family. Our immediate family has lived here for nearly a quarter of a century. When our ancestors came to America from France they settled in on the land that we subsist on today.

We reside in a home which we moved onto our land eight years ago. Our daughter has lived with us here her whole life. If this diversion is passed it will affect her opportunities for schooling and education.

My daughter's great grandfather and grandfather have lived and retired on this land his whole life. It is extremely possible that we will not be able to do the same.

For years the value of our farmstead has increased, but because of plans to make our home the bottom of a lake, our home has become virtually worthless. Because of the diversion we can not sell now, nor want to move, and can not make improvements.

This will change retirement opportunities and at a higher cost. We can't make any further home improvements because we don't know what our future holds. We have already made numerous home and land improvements to increase our home value.

This will ruin our family and our livelihood. It will only divide our family and cause more stress. Please don't let this happen.

Sincerely,

Brenda Sauvageau

From: gene sauvageau [mailto:gene.sauvag@hotmail.com]
Sent: Tuesday, May 17, 2011 10:25 AM
To: Snyder, Aaron M MVP
Subject: Dam & Diversion comments
Importance: High

The Fargo Dam & Diversion Project is bad for hundreds of people and many surrounding communities' on the Red River Basin. Water detention is a much better system for every body and the land and "Fargo"

My farmstead value is worthless right now, No improvements from now on would pay off. My life is on hold until whenever, nobody knows. The future was looking very good for us but Fargo will take it for there future and leave us with so called current value (witch is very low right now).A Very Very nice home by Oxbow had a buyer with the money and refused to buy it because of what Fargo wants to with the area.

This prime rural development now will be Fargo future Parks and Golf course development because of the holding ponds plans.

I bought this Farmstead 23 years ago this far out of Fargo knowing that by the time I would need to go to a retirement home the value of this place would take care of me and my family, now I have nothing and some Fargo planned investor will be sitting good,

Where can I move to now, all farmsteads in a 30 mile radius will be untouchable for us now because all other farmstead south of Fargo will have to move also. I would not be able to afford extra cost of fuel, cars, time, to move that far out now.

The family heritage will be lost also. Because the family has lived within a few miles radius for many generation's, back to 18th century.

Moving in a new home, converting a barn into a modern shop, planting hundreds of trees and some of them for hardwood harvesting can not just be replaced.

June 15, 2011

to whom it may concern:

This diversion/dam is a total disaster to us. I was born a half of a mile from my present home, it is my home, my living and my retirement. By destroying my home and my livelihood, you are totaly destroying me and my family.

This now is my home, but my dad and grandparents also lived here. Also one mile north of us our son and his family are living, that makes four generations beings destroyed by this group of selfish Fargo people talking diversion. There is a large number of these people that don't even know what we are talking about when the diversion comes up in a conversation at a church, a bar or anywhere else people gather.

By destroying this land, you are destroying this land, you are destroying a large number of acres of prime farm land. Many people are living in this area that are making a good and happy living here. We are very proud of our [illegible] and

producing our crops.

I'm sure if you get your thoughts together, there is another way to help Fargo.

Sincerely
Marcellin & Barbara Sauvageau
and family

4608 124 Ave. S.
Horace, N.D. 58047-9764

email
jdoreen@i29.net

P.S. One more after thought, this will do a lot of damage to the Kindred School District, because many families will have to move out of the area.

June 14, 2011

U.S. Army Corps of Engineers, St. Paul District
Attention: Aaron M. Snyder
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

RE: Fargo-Moorhead Metropolitan Area Flood Risk Management Project (SDEIS)

Dear Mr. Snyder:

Even though my wife Linda and I do not live in the Fargo-Moorhead area, we have a number of concerns about this project and how it might impact us. Linda inherited a farm located in Richland County, near Christine, when her mother passed away. The farmland is highly productive and has been in her family for generations. Currently, the land is being rented out and provides us with a supplemental income. Following are the concerns we have:

- One major concern we have is the financial impact this project would likely have on us by removing farmland from production (5.2.3.1.9) and the subsequent decline in market values (5.2.3.2.1).
- Also of concern is where the "staging area" truly ends A map published on May 6th, shows the staging area would end at Highway 46 and not effect property to the south. Yet the Corps acknowledges impacts outside the staging area (3.13.1.2) that could extend as far south as Abercrombie.
- It seems the project is being pushed ahead too quickly, with incomplete analysis and lack of input from all affected. The Corps states the project has a consensus on the path forward (6.3), yet Richland and Wilkin Counties were excluded from the planning process and not included on the Resource Agency Team (6.2).
- The project appears to lack fairness. Residents in and around the staging area are being asked to make sacrifices so that future residential and commercial development in the southern F-M metropolitan area can proceed and be protected from flooding. Providing protection for current residents was dropped from consideration and not a part of this project.

We understand the project has many complex issues associated with it and that it will be difficult to find solutions pleasing to everyone. We are however, asking the Corps to apply standards of fairness and be thorough in their analysis—not simply pushing the project through for the sake of expediency.

Sincerely,

Dennis Schneekloth
14683 Dominica Ct.
Apple Valley, MN 55124

June 15, 2011

Dear US Army Corps of Engineering,

Please do not let the current Fargo diversion plan become reality. You need to start over and find a better way to help divert Fargo's water problems within their own city limits instead of the current plan to destroy neighboring communities south of Fargo as well as not helping communities surrounding of Fargo. This year alone shows that our area of the United States is in a true wet cycle. Many towns all over North Dakota are in flood stages - Bismarck, Minot and Devils Lake to name a few. We need to work together for a North Dakota solution, not just "save Fargo". I have no problem helping Fargo in a time of need, however I do not support Fargo acting like a bully by aiming to destroying peoples' lives and homes outside of Fargo city limits. Both Grand Forks and Wahpeton were able to find a way within city limits, and I believe that you can find a way with permanent dikes and smaller diversions - NOT A DAM placed 20 miles south of Fargo sitting on land that is currently high in elevation. Not to mention, the land is excellent farmland.

How is it possible that the state of North Dakota or Congress can support the city of Fargo's plan to destroy Oxbow, the Bakke edition, the Kindred school district, churches, cemeteries, farmers, and other cities outside of the "study" area such as Richland County? Who decided what was included in the "study area" and why was it not a larger scope?

How can Fargo North Dakota support a diversion that will force non-Fargo residents out of their houses, some of those that do not even live on the river banks? How can you even begin to compensate these people for their land and home? People living there are happy and chose to live outside of Fargo for a reason. Have you driven south of Fargo? It is beautiful and thriving and it angers me to think that you have already disregarded the people living there year round to save Fargo for 2 weeks out of the year! Look at Bismarck today - they are flooding and are now stuck with tons of excess water for months! Fargo is lucky that the crest comes and goes quickly.

Who is going to pay for the diversion? The cost to build is outrageous and unnecessary use of the peoples' funds. I believe the true cost of this plan is going to far exceed the 1.7 billion current estimate. In the end, Fargo will be better off fighting the flood on a case by case basis. I am a West Fargo resident and have been paying to support the West Fargo diversion. I help pay for the West Fargo diversion (happy to do so) and I do not believe I should help pay for this excessive and un-neighborly proposed Fargo diversion. Does Fargo think they'll get the whole state to help pay for this diversion? Does the Fargo diversion jeopardize the current West Fargo diversion? I am also currently paying the Cass County tax for flood protection as well as the people living in Oxbow and communities in jeopardy. I am appalled by the way you have put

these people in limbo, essentially making their homes of no value at this time. It's a Cass County tax, not a Fargo tax, so all residents must be considered.

I do not know all the exact details of the proposed Fargo Dam, and would like an answer to this question. Are you saving empty land on the south side of Fargo for future economic development? I hope not, as it does not make sense to "save land" while at the same time kick people out from their homes and farmstead (outside of Fargo) where they have live the past 30 to 100 years. Is this even legal to do? Besides, what future development can be expected once the final cost is figured out in the billions and Fargo needs to raise taxes and assessments to pay for the construction and on-going maintenance? I heard the maintenance is already estimated at 3 million or more per year? Again, who is going to be paying for this? Do the residents and businesses of Fargo even know how much is it going to cost to build and maintain and pay taxes for?

Earlier this week Moorhead made the news as they may back out of the diversion plan. I am glad they are realizing this project is getting out of hand and going to cost way too much money, not to mention the forcing of many families living outside of Fargo city limits out of their homes. I hope you can realize that too.

Please put a stop to the current proposed Fargo diversion plan. Give the people back their lives in Oxbow, Kindred, and all others affected in surrounding communities. Go back to the drawing board to find a better way for NORTH DAKOTA.

Sincerely, Betsy Schulz

June 20, 2011

To: U.S. Army Corps of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth St. E., Ste. 700
St. Paul, MN 55101-1678

Re: Comment on Supplemental Draft Feasibility Report and Environmental Impact Statement

Fargo-Moorhead Metropolitan Area Flood Risk Management April 2011

From: Fred Schumacher

Retired Red River Valley farmer

A. OVERVIEW

The present Locally Preferred Plan (LPP) delineated in the SDEIS is deeply flawed in concept and process. As presently constituted, it is much more a flood plain development plan than a flood abatement plan. The LPP places itself squarely in the middle of a long standing "turf" conflict among the individual communities of the F-M metro area, choosing sides by shifting water flows around to benefit primarily one community, the city of Fargo, to the detriment of others.

The plan is a tautology. By creating a levee system that functions as a dry dam to store water in the Red River Valley itself, it attempts to solve the problem of flooding in the valley by flooding the valley. If in 1975, when the Kindred Dam was resurrected, a person had proposed putting a flood control dam across the Red River Valley, he would have been laughed out of the room. The concept is just as unreasonable today as it was then.

B. THE PLAN VIOLATES EXECUTIVE ORDER 11988

The LPP operates counter to Executive Order 11988 on flood plain management, which "...requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development." (http://www.fema.gov/plan/ehp/ehplaws/eo11988.shtm) The key documentation to corroborate this claim are the floodplain maps on pages 293-296 of the SDEIS. The LPP uses the diversion as a functional ring dike to enclose the floodplain south and north of Fargo high ground, opening up these regions to development.

That Fargo land developers are the primary movers of the LPP is open knowledge. The logic can be seen in the PowerPoint demonstration endorsed by former North Dakota Governor Ed Schaefer that can be seen at www.youtube.com <http://www.youtube.com/> ./watch?v=ahiw314d8jc, especially at 1:30 into sequence, when the high ground of Moorhead is

derided and the lower area to the west of Fargo is promoted as a flood pool with "retention opportunity."

There is no shortage of flood-free land capable of being developed in the Fargo-Moorhead area; however, most of it lies to the east in Minnesota. As another chapter in the decades long conflict between Fargo and West Fargo over annexation of undeveloped land, Fargo sited the new Ronald Davies High School in the floodplain and is now having trouble meeting property tax assessments without additional development in this floodable area that would be protected by the LPP. It is not the task of the Corps to cure self-inflicted wounds.

C. THE NORTHERN PACIFIC RAILROAD AND EARLY FARGO

The plan ignores centuries-old historical knowledge. Fargo-Moorhead developed because that was the site chosen by the Northern Pacific Railroad for its crossing of the Red River. In 1871, NP land agent Thomas H. Canfield and surveyor George B. Wright scouted out a crossing. Noting that "there was a tradition among the Indians (corroborated by Hudson Bay Company employees to Canfield) that the Red River overflowed its banks.... Canfield and Wright spent some time that spring going up and down the river searching for high embankments upon which to build a railroad bridge... (and) decided that Moorhead was the highest point as far as they could determine..." ("History of NP railroad crossing at Fargo" http://www.fargo-history.com/early/beginnings.htm)

The Northern Pacific sited their crossing nearly perfectly. Canfield and Wright had found the highest ground over a space of some 50 miles. Up until the 1970s, Fargo developed in its characteristic sideways T-shape in order to stay on the high ground, high ground which the NP tracks bisected. Canfield expected Moorhead to dominate, since Moorhead is higher than Fargo, in fact, most of it is above the 500-year floodplain; however, that would have meant running counter to powerful conditions that favored the development of cities on the west side of a dividing north/south river as portals to a rolling frontier expanding from east to west. This is true from Winnipeg to St. Louis and Omaha, with Bismarck being the exception that proves the rule.

D. EARLY SETTLERS OBSERVED FLOODS AND AVOIDED LOW LAND

Although the Red River Valley appears uniformly flat to the unpracticed eye, it is actually full of perturbations, which early settlers to the valley observed during flood periods. They used that knowledge to site their homes above flood waters, homes that would be removed for the LPP's flood pool. These pioneer homes, which have never flooded, would be sacrificed for the development of Fargo's floodplain, a clear violation of Executive Order 11988. The knowledge that Canfield and early pioneers discovered was lost by modern real estate developers, who expect a government bailout for their mistakes.

E. THE LPP IS A NON-COHESIVE PLAN

The LPP is not a coherent, unified plan but a series of *ad hoc* adjustments and compromises to deal with problems as they arise during the design phase. Many of these adjustments are not detailed but are shuffled off into the nebulous "contingency" area, which is rapidly filling up. These running adjustments concatenate so that the need to avoid the Brenna soils requires making the diversion channel shallower, reducing its capacity from 35,000 cfs to 20,000 cfs,

which in turn requires expanding the flood pool upstream, which in turn requires a ditch on the west side of the Highway 17 tie-back levee to move Sheyenne River breakout flows which can no longer take their natural course to the Wild Rice River, and so on and so on.

The LPP uses complexity as a problem solving tool, attempting to do something not done before: the crossing of five rivers with a diversion on a flat plain, the construction of two river carrying aqueducts, and all on extremely weak and plastic soils. As 15th century Franciscan philosopher William of Ockham warned, *"non sunt multiplicanda entia praeter necessitatem"* (entities are not multiplied beyond necessity). Ockham recognized that the greater the number of "if... then" statements, all of which need to be valid for the entire argument to be so, the greater the chance for failure. The complexity of this project is a harbinger of project failure.

E. THE CORPS HAS FAILED AT COMMUNITY INVOLVEMENT

The community involvement process in LPP planning has been abysmal, with the larger community impacted by the plan essentially blocked out of the planning process. This is a massive shift from the behavior of the Corps during the Kindred Dam/Sheyenne River Diversion project of late 1970s and early 1980s. Although the community involvement component of that project got off to a shaky start, it ultimately became a model for a how to do a planning process properly, with all parties involved in a dialogue with each other and the Corps during monthly meetings over a period of six years until consensus was reached.

As the General Reevaluation and Environmental Impact Statement for Flood Control and Related Purposes, Sheyenne River, North Dakota, Rev. January, 1984 states on page EIS-30, section 6.12: "During the public involvement program, many public views were expressed that had a major influence on the study and that were considered in the decision making process." That is, the Corps did not simply hold public participation meetings but actively encouraged the affected communities to be an integral part of the process.

F. LACK OF TRUST AND TRANSPARENCY

Community liaison in the LPP planning process has been so poor that even members of the city council of Moorhead, one of the primary sponsors of the project, were quoted in a June 15, 2011 Fargo Forum article, "Moorhead officials miffed at corps' diversion changes," at feeling left out of the planning process. "It feels like we're an afterthought," said Council Member Brenda Elmer. The article goes on to state that Councilor Mark Hintermeyer said that change from a 35K cfs to a 20K cfs diversion, "should have been highlighted, as it did not register with him during a meeting he attended." "This (capacity change) is a big deal," The lack of a "heads-up" Hintermeyer said, "sets the framework for a lack of trust and transparency, in my point of view." The council then tabled action on a joint powers agreement with Fargo. This is a stunning development that bodes poorly for the LPP.

G. SHORT PLANNING PROCESS TIMELINE UNDERMINES PUBLIC REVIEW

The planning process is being artificially accelerated to meet an artificial deadline: the effort to have the LPP authorized by Congress in the 2011 omnibus water projects bill. This plan is in no way ready for this stage. For a project whose success is absolutely dependent on solid geotechnical knowledge of soils notorious for their low load carrying capacity, additional soil

borings, necessary for the engineering of levees and aqueducts, won't be begun until July and data analysis will not be available until early 2012. In the light of the long history of soil failures underneath structures in the Fargo area, it is not a stretch to say that without this geotechnical information, there is no project. That the Corps does not have sufficient geotechnical knowledge to go forward with the LPP is also the analysis of Julian Digialleonardo, manager of the Independent External Peer Review being conducted by Battelle for the Corp. and detailed in Appendix I-15 Reviews.

The speeding up of the process also has a negative effect on the ability of elected officials and lay people to understand and comment on the plan. The volume and complexity of the documentation that the planning process can now produce and reproduce can easily overwhelm most people, even technical experts. I spent four hours one day downloading the SDEIS and Appendices and still did not finish the process. Changes in the documentation are made with no indication of where they are, unlike in the legislative process, where original wordage is struck out and new language added in italics. Forty-five days is not enough time to study the gigabytes of data available, and thirty days is totally inadequate for commenting on the final report. Based on observed behavior, it is clear to me that most local decision makers have not read the SDEIS, let alone the Appendices, and yet endorsements of the project have been made on the flimsiest of knowledge.

H. TRIBUTARY EFFECTS UNMODELED

At the same time that the process is being forced ahead, extremely crucial hydrological modeling of interacting flows of the Red River Diversion, Sheyenne River, Sheyenne River breakouts, diversion overflows, Maple and Rush Rivers and legal drains and overland sheet flooding has not been done. The simple statement from the Corps that there will be "effects" is completely inadequate. The area to the west of West Fargo could easily turn into a lake. Combined with the flood pool created by the dry dam tie-back levees, Fargo could end up being an island surrounded by "Lake Fargo." That this modeling was not completed before release of the DEIS is unconscionable.

I. FLAWS IN BENEFIT/COST ANALYSIS

There are serious flaws in the benefit/cost analysis. Part of the problem lies with the protocols the Corps is forced to use, but much of it is commonly seen in benefit/cost analyses: minimizing of negative effects, exaggeration of recreation benefits, unrealistic death projections. There is a lesson that can be learned from the work of 14th century philosopher Ibn Khaldun, who is considered the father of sociology and scientific history. Khaldun developed methodologies for testing the veracity of stories. One test was that if a claim is made about something in the past, could it be replicated today? We can reverse this and apply it to the Corps projections for flood death potentials if no project is built. Since the worst American flood on record is that of the Mississippi River in 1927, which resulted in 246 deaths, are the higher projects for Fargo-Moorhead reasonable? No. It fails the test. Have the present Sheyenne River Diversions created recreational opportunities? No. The $35 million annual recreation benefit fails the test. Has the Fargo-Moorhead area experienced $193 million in annual unprotected flood losses? No, again.

The greatest flaw, however, is the lack of inclusion of annual agricultural losses resulting from the diversion/dry dam plan. This is a procedural issue that will require making changes at the federal level. Farm land is different from manufacture and service where replacement of an operator's infrastructure can be accomplished without displacing another operator. Compensating a farmer for his opportunity cost does not account for the annual loss of production from the land being taken for a project, since in farming, loss of land results in displacement of another farmer. The land slated for removal from production, either permanently or temporarily, is not just any land, but is Prime, Class 1, Red River Valley farmland. It cannot be recreated somewhere else out of nothing. There is a medical dictum: "First do no harm." This also applies to flood control. The LPP breaks this rule and is thus unacceptable.

J. NORTH DAKOTA'S ECONOMIC ENGINE

Fargo is often touted as the economic engine of North Dakota. This is untrue. The economic engine that drives North Dakota's economy is agriculture, mining, and energy production. These industries create new wealth every year and form the basis of an economy. This wealth is then recycled by places like Fargo and multiplied. Without agriculture, Fargo would have had no reason to exist, especially since it is located in the center of the continent, far from the coastal regions that contain the majority of America's population and commerce. That losses of annual agricultural production resulting from the LPP are not included in the planning process makes the SDEIS an incomplete document.

K. DELAYED PLANTING AND FEDERAL CROP INSURANCE

As a retired farmer, I have years of experience of the two frantic farming seasons of the year: Spring planting and Fall harvest. A three week delay in onset of spring's work, as is projected for the plan's flood pool, would be devastating. On the Northern Plains, the opportunity window is narrow, and while other crops can be substituted as the season goes on, there is a limit. We have a joke in farming: buckwheat can be planted up into the first week of July, but two bushels of buckwheat is more than the market can bear. Farm program agencies recognize this reality and adjust compensation for damages based on it.

That the DEIS planning process did not recognize that federal crop insurance does not provide coverage for man-caused damages is an indication of a basic lack of knowledge of agriculture. That the problem is facilely set aside by announcing that drain tile could be installed to mitigate the problem begs the question of who installs the tile and who pays for it. That the Corps could seriously entertain the idea that depreciated value only would be paid for farm structures to be moved or replaced, as a result of the project, shows a disconnect from reality. That damage to the grid of farm to market roads is minimized by stating that water will rise and fall slowly and cause no damage shows a lack of on-the-ground experience. One of the officers of Walcott Township, where I farmed, told me that the township is having serious problems keeping gravel on the roads, since the waterlogged state of clay-base roads is "swallowing up the gravel." This has ominous implications both for the roads in the flood pool and for the Corps' plan to rip-rap the bottom of the diversion channel where Brenna class soils become exposed. The waterlogged Brenna soils will let gravity do its work and also swallow the higher density rock.

L. AQUEDUCT SOILS PROBLEMS

The engineering problems the Brenna soil horizon presents will also create serious engineering difficulties for the two aqueducts. These aqueducts, unlike a building, will be receiving both static and dynamic loads from the moving water. Cofferdams will, of course, extend down to the glacial till which will carry the static load. But if the Brenna is expected to carry the shear load exerted on the cofferdam columns, I think failure can be expected. I don't see how these aqueducts can be safely built without going all the way down to bedrock and allowing the till to absorb the shear load. This will greatly increase cost. I have concluded, however, that the aqueducts will not be able to function as planned and that they will have to be deleted from the project.

M. CLIMATE CHANGE MODELS NEEDED

Although it is fashionable these day to denigrate climate change as real, people who work in the realm of reality cannot ignore the changes that are occuring. The Corps' precipitation projections were calculated without taking into account climate change. These projections need to be reworked by taking into account NOAA and NASA climate models. Evidence is growing stronger daily that the Tropical Convergence Zone is moving north, with implications for changes in precipitation regimes all the way to the study region. This indicates the potential for more frequent floods, which would impact the staging and storage areas, resulting in greater crop losses resulting from the project. It also means that a realistic and implementable flood reduction solution for the Fargo-Moorhead area is even more essential.

N. LOCAL COST SHARE IS UNAFFORDABLE

The longer the Corps and local sponsor bind themselves to an unviable solution, the longer it will be until Fargo-Moorhead sees some form of permanent relief. Opponents of the project are not opposed to flood protection for the metro area. It is that the form of protection must be affordable and not do additional harm to the rest of the region. This project, they argue, has nearly reached $2 billion in cost, with less than $800 million to be federally funded. This is a huge outlay for a comparatively small population. In addition to up front costs, maintenance and damage indemnity costs must be borne by the local sponsors. Projected annual maintenance costs already exceed the amount spent for temporary flood protection during serious floods. Damage to farm land caused by the operation of the project will have to be paid by the local sponsors, since the losses will not be covered by federal crop insurance. This puts the local sponsors under economic duress, and is a primary reason the City of Moorhead appears to be on the cusp of pulling out of the project as a local sponsor.

The low taxation rate of North Dakota is often touted as a primary reason for the continued development of Fargo. However, the cost of this project will seriously strain the ability of Fargo to generate the necessary funds. Property taxes are already high and will need to go much higher. The half percent county sales tax that was passed will only generate enough funds for maintenance of the project. As Fargo residents realize the cost of what they are tying themselves into, opposition to the project from inside Fargo will grow, as will opposition in rural Cass County, which will be negatively impacted by the project. The Corps has not aided local sponsors in developing methods for raising the funds required. This should be a part of project planning.

O. LACK OF COORDINATION WITH BASIN-WIDE PLANNING

There is a lack of coordination with the Red River Basin Commission's small, upstream retention dam project. The Corps has dismissed this effort as being insufficient to solve Red River mainstem flooding problems. What has not been recognized is the potential for these dry dams to act as the water equivalent of pollution credits or carbon trading. A project which would help one area, but increase stages downstream, a common occurance in a shallow bowl like the Red River Valley, could pay for upstream retention which would compensate for mainstem projects, retaining constant or lower stages downstream. This is an promising, untried concept that requires further investigation.

The continuing rise of Devils Lake is sure to impact the SDEIS study region. Models need to be developed for the impact of Devils Lake outflows into the Sheyenne River on flooding conditions in the study area.

P. POLITICAL FACTORS

Political factors have changed significantly since project planning began, making authorization and funding of any flood control project in the area much more difficult. The North Dakota Triumvirate of Sen. Kent Conrad, Sen. Byron Dorgan, and Rep. Earl Pomeroy no longer exists. Four years ago, the LPP would have been authorized and funded without much problem. Today that is no longer the case. Sen. Conrad is leaving the Senate and is primarily concerned with tackling the federal deficit in his final year in Congress. Sen. John Hoeven is a freshman senator in the Senate Minority and is politically weak in Washington. Rep. Rick Berg would have to carry this project, since he is a member of the majority party in the House, however, he has voted for drastically cutting the federal budget, including public infrastructure spending, and has already indicated he may run for the Senate to replace Conrad. This leaves Berg in a very weak position.

North Dakota Governor Jack Dalrymple is a scion of a powerful Cass County family which has had a great impact on North Dakota's agricultural history. He has shown lukewarm support for the project. Dalrymple may very well be concerned by the LPP's damage to agricultural production.

Catastrophic flooding by the Missouri and Mississippi Rivers this year will also impact the federal pecking order for flood relief funding. The LPP's high cost in relationship to the small population it serves will put it at a disadvantage in Congress. Realistically, it will stand little chance of funding when competing against the needs of regions with much greater population and flood damage.

Q. CONCLUSIONS

The plan outlined in SDEIS-April 2011 is not politically, socially, or economically implementable. The project does not address the present problem of Fargo-Moorhead flooding so much as it clears the way for future development in the flood plain. This is directly counter to Executive Order 11988, which prohibits federal funds being used to help develop a flood plain. The plan is extremely complex, in a region with supercritical geotechnical problems that put elements of the project at great risk of catastrophic failure. In the real world, the plan would damage more

than it saves. With the loss of seniority that North Dakota's Congressional delegation once had, the difficulty of getting this project authorized has risen by an order of magnitude, and the possibility of federal funding has decreased by two orders of magnitude. A diversion as a central element of F-M Metro flood relief is dead, both in North Dakota, where it is not doable, and in Minnesota, where opposition presented by arguably the most powerful politician in North Dakota and Minnesota, Rep. Colin Peterson, and the threat of extended litigation makes the idea of implementation a fantasy.

R. RECOMMENDATIONS

The first priority is process, not product. This project can no longer proceed without credible, local representation having the authority to dialogue with the Corps and drive the direction of planning. The Metro Flood Study Group is of much too limited scope to be a credible local partner. Establishment of a Citizens Advisory Committee, chosen in an open and transparent process by an independent entity and composed of members representing the entire region, is a first priority. For the Kindred Dam/Sheyenne Diversion project, this task was undertaken by the Lake Agassiz Regional Council.

Something has changed during the intervening years. The community connections the Corps was once able to develop are no longer being cultivated. This change has had a negative effect on the planning process. Facilitation of meaningful dialogue between proponents and opponents is necessary for the development of community-wide consensus and the success of any project.

With the diversion/dry dam out of the picture, a cohesive plan needs to be developed out of the possible. Moorhead has already taken steps on its own initiative to remove vulnerable structures from the natural floodway. Fargo has done some of this work also, but it needs to be expanded. Moorhead has the advantage of being on higher ground; however, the original T-shaped Fargo town site is also high ground. Broadening the floodway, moving any permanent levees or floodwalls farther back from the river and leaving the floodway to serve as a public park through most of the year is doable.

For the existing problem areas of Fargo which were developed in the floodplain, a system of ring dikes could be emplaced. The DEIS is critical of ring dikes as not solving all of the problem, but they do not need to solve everything. They are simply a component where they are most applicable.

Higher stages downstream, which could be caused by the more efficient flow of floodwater down the Red River floodway, could be mitigated by upland retention of water behind dry dams. Again, these dams do not have to solve the entire problem; they only need to reduce inflows sufficiently so that no stage increases occur north of Fargo-Moorhead.

Future development should be encouraged in naturally flood free regions of the F-M Metro area. For too long, the independent cities that make up the F-M Metro have vied with each other over development, with Fargo frequently taking the role of bully to get its own way. It may be time for these cities to merge, as the cities in the Winnipeg Metro area did some decades ago and form a unified government to provide city services more efficiently and do development planning more logically. Perhaps the state legislatures of North Dakota and Minnesota could

take action to facilitate such action. Non-structural solutions to flooding may end up being the most effective mechanisms we have.

Fred Schumacher
12104 Red Oak Ct. S.
Burnsville, MN 55337
952 938-2633

fredschum@gmail.com

-----Original Message-----
From: June Skarie [mailto:cntryflwrs@live.com]
Sent: Sunday, June 19, 2011 6:14 PM
To: Snyder, Aaron M MVP
Subject: Fargo Flood Diversion Project

June 19, 2011

US Army Corps of Engineers, St. Paul District

Attn: Aaron Snyder PM-B

180 Fifth Street East, Ste. 700

St. Paul, MN 55101-167

Dear Project Manager.

I am writing to say, I am against this Fargo Flood diversion plan.

My husband and I have lived on this farm for 41 years, it is completely paid for.

We took early retirement so that we could enjoy the next 30 years in the peace

and quiet of country life.

If this Dam is put in place, we would be under 10ft. of water.

Obviously we would have to move. How are we supposed to start all over again?

Some have been living on the same land for 3 - 4 or more generations.

They were born, lived, died and are buried here. Now they would have to be

dug up and moved, to where? The areas country Churches will be removed.

The Kindred school will lose a sizable tax base and a lot of students.

All the little towns, south, southwest and southeast of Fargo, will be flooded out.

And not just on the North Dakota Side, the areas south and southeast

of Moorhead

Minnesota will also be flooded out.

Cass and Clay county are not the only counties that will be affected

Richland County in North Dakota and Wilkin County in Minnesota will also

suffer from flooding, in places that have not been flooded before.

How can you justify destroying our way of life, and the lives of over 400 families with

this Fargo Flood diversion plan.

Please consider the impact on the residents, land, and the wetlands.

June Skarie - rural Cass county resident.

Classification: UNCLASSIFIED
Caveats: NONE

June 18th, 2011

U.S. Army Corp of Engineers, St. Paul District
Attn: Aaron Snyder
180 Fifth Street East, Ste. 700
St. Paul, MN 55101-1678

RE: Supplemental Draft Environmental Impact Study
Fargo-Moorhead Metropolitan Area Flood Risk Management

Dear Project Manager:

My great grandparents homesteaded near Christine, ND in 1871 and I live on that homestead today. There has never been flooding on this land during that 140 years. That is the reason that I write to you today. While I agree that the Fargo-Moorhead metro area needs flood protection, I am opposed to the present plan which clearly violates E.O.11988. The plan effectively takes higher upstream land that has never been flooded and floods it, ensuring that there would be zero development there indefinitely. Why is Fargo allowed to violate this executive order? Do they hold a higher status than those communities upstream from them? The project manager said that no other alternatives will be considered. Surely there must be other options that work for the greater good of all.

It seems that downstream impacts have been studied, but why have there been no impact studies conducted for the upstream areas? No one knows the impact of water that will be coming from Devil's Lake. Most probably, the Sheyenne River will always be full as a result. In addition, any heavy rain will create overland flooding, overflowing the Wild Rice and Red Rivers. The water will back up further upstream than the staging areas. Have there been impact studies done regarding the Wild Rice or Otter Tail Rivers? The lakes that drain into the Otter Tail River are all full. Several lakes are sandbagging under current situations because of high water table levels. What happens when some of the land locked lakes get drained out to end up in the Otter Tail River, which drains into the Red River?

At the Richland County Meeting, Terry Williams said "The red staging line is an arbitrary line and that we're not totally sure where the water will go during a flood event, but this is our best guess." Comments like that are not reassuring.

Why did the Corp know of the upstream plan but didn't announce it until after the vote for the extra sales tax to help with flood protection? I am of the belief that it is because the tax would not have been passed. When I asked a Corp person at the Marriot Hotel meeting in Moorhead about why the diversion was right on the Fargo-Kindred School District line, he thought there were politics involved regarding planning for Fargo's 60 years of development. Without that line being where the diversion is planned, Fargo could not develop to the South because the land is lower and has always held water in every major flood we have had. So Fargo wants to build a diversion so they can develop on land that has always flooded in flood years. What happens if the diversion would fail? Fargo would be flooded out.

Why weren't Richland County, Wilkin County and other communities involved with decision making when it came to flood control for Fargo-Moorhead when it was going to affect them? The proposed area of 60 year's development will come at other's expense. Areas outside of the diversion will have their economic development come to an end forever. Much of Wilken and Richland County's tax base

comes from the Northern portion of the county. The present plan will negatively impact the Kindred School District in Cass County and the Richland 44 School District in Richland County.

This plan will also flood thousands of acres of the most valuable farmland in the world. Who would want to take a chance on farming that land when there is no crop insurance offered to cover man made flooding? Farmer's are rightfully concerned about being paid depreciation value for buildings that will be flooded. There would be compensation offered to build ring dikes around farmsteads affected by three feet or less of flooding, but after heavy rains or snow melts, this water will need to be pumped out of the ring dikes.

Additional concerns are many: What will be done with cemeteries? How will emergency vehicles get to people's homes during flooding? How will people that receive their prescriptions by mail get them? Who will pay for washed out roads and bridges? If homes and other buildings need to be relocated, who pays for that? Who pays for river bank erosions that threaten buildings? What will happen to people once their property values plummet? Is the cost of damage to the control structure included in project costs, such as ice jams, logs, etc (Fort Peck is reporting stabbility dangers to their project structures)? Why did the Corp ask Fargo to see if the control gate could be opened a little more to let more fish through, lessening impacts on Fish (this seems to put fish above humans located upstream)? How will the Corp rebuild it's credibility related to information given to the public (Moorhead is already having second thoughts)? Why are so many upstream cost items not included in the project costs (cost will be well over 1.7billion dollars before it is done)? Why were the concerns voiced at the two Kindred meetings not recorded if the Corp was looking for community input and concerns? For those people who live in the upstream areas and who have never needed to purchase flood insurance for their homes, will they now need to buy it and who will pay for those costs? Why was the 2009 flood down graded to a 50 year flood event after the diversion plan was being drawn up, other than to exaggerate the impact and build support for the diversion? With the record the Corp has of managing the release of water from the Fort Peck, Garrison and Bald Hill Dams, why would unprecedented amounts of money be spent on a project like this that has never been done anywhere in the world?

I don't think it is unreasonable for everyone involved in this project to slow down and consider other alternatives that will work and help the whole length of the Red River Basin from Northern South Dakota to Canada. A plan that would not impact communities, schools, churches, farmland, infrastructures, businesses, homes and families. I realize that Fargo-Moorhead needs flood protection, but so does the whole Red River Basin. Let's all work together to find a solution that will not impact so many people. The costs on this project are only going to keep increasing with all the unknown factors that the Corp has not addressed or studied. Representative Collin Peterson is working on getting funding for retention, starting in South Dakota and continuing all the way to Canada. It would result in retention combined with diversion with no upstream storage or dams.

Thank you for your time. A reply to my questions would be greatly appreciated.

Sincerely,

Allan Swenson
17450 56th Street SE
Christine, ND 58015
alma3846@gmail.com
(701) 998-2369

June 15, '11

To Whom It May Concern:

It is really a tragedy for my family and I to know that our heritage will be at the bottom of a lake, should you go forward with building this ddm for the Fargo - Moorhead community. I am 50 years old now, and was born in Moorhead. We never had water in our house / basement in all our years there. My grandparents farmed along the Red River and their old house still stands and is inhabited by one of my brothers, owned by another brother. He works in Comstock & Worcester, my dads old stomping grounds. Our family graveyard is near Worcester.

C

I am thankful that I took alot of pictures of the headstones that mark the graves of these brave ancestors who were also wise farmers. Where is the wisdom of the builders these days? Why construct in areas that aren't already naturally protected from flood waters?

This dam will cost millions I suppose, but is it worth the cost? To lives forever uprooted, and nature diverted. I am against this proposal.

Sincerely
Crystal D (Moos) Thompson

C

From: National Wildlife Federation Action Fund [mailto:info@nwa.org]
On Behalf Of Charles Toll
Sent: Friday, June 17, 2011 12:14 AM
To: Snyder, Aaron M MVP
Subject: A cheaper and easier flood control option in the Red River basin

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to consider Florida before moving ahead with the proposed channel to divert Red River flows around Fargo and Moorhead.

Here in Florida, we are now restoring wetlands and savannahs as a major flood management tool--in the process retaining critically needed fresh water supplies. Restoring wetlands benefits wildlife while protecting communities from flooding. It is not only a less expensive solution but one that benefits all who love to hunt--or even just observe nature recreationally.

Before investing time, money and effort in an environmentally destructive project, explore the potential for wetland restoration and other non-structural water retention systems to solve your problems.

Sincerely,

Mr. Charles Toll
665 Wall St
Vero Beach, FL 32960-5144

Classification: UNCLASSIFIED
Caveats: NONE

Aaron M. Snyder
USACE St. Paul District
180 5th St. East. Suite 700
St. Paul, MN 55101-1678

to whom it may concern:

The Corps first plan (Corp EIS) was made for a diversion; without studying the impacts on the down stream.
We live 35 miles North of Fargo on the banks of the Red River. We know (from going through several floods) the diversion would increase the depth of the water and bring it much faster than the River can handle it. We've had a ring dike since 1979 (and keep adding to the height) The Corps's Environmental Impact Study (Corp EIS) is their second effort. We do not believe it is acceptable to wipe out a town, thousands of acres of farmland and disrupt School Districts, to protect one entity.
We believe water retention in the natural Valleys, (before the runoff hits the river) would help slow down the runoff and perhaps slow down and even stop the erosion of the river banks; which is now happening. The banks are eroding and falling in at this time. A diversion would only speed up this process.

Sincerely,
Paul & Rita Viker

Rita & Paul Viker
2563 110th St
Halstad, MN 56548

June 13, 2011

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East 5th Street – Suite 700
Saint Paul, MN 55101

Subject: Question for the Red River Flood Feasibility Study
Public Comment Period

I have several questions relating to the Feasibility Study affecting those of us that live south of the proposed Fargo Dam:

1. Why is it based on a 500 year flood, when we have not had a 50 year flood event?
2. If you flood the area south of the Fargo Dam, have you figured in the cost of abandoning and relocating the local utilities (how much is it?); Cass Rural Water system, the Oxbow and Bakke Addition sewer system, the Cass County Electric services and what is the lost income to Cass Rural Water and Cass County Electric from the lost clients? I would like the cost break down for each of the businesses and the sewer system.
3. At a price tag of 2 billion dollars, what is the projected funding shortfall after the federal government, Minnesota, and North Dakota commit their funds?
4. A) How much will the Cass County and Fargo sales tax each generate per year/project? B) How much after the State, Federal, and sales tax revenue is generated – will the project be short of funding per year and to the end of the project?
5. How much are the Counties, City of Fargo, City of Moorhead, and City of West Fargo going to need to assess home owners per lot and farmers per acre to cover the money shortfall for the funding shortfall?
6. What will be the assessment for the project maintenance fees and what will be the cost to Cass County residents, West Fargo, Fargo, and Moorhead property owners?
7. What will be the economic cost to the region from taking all the land out of production that will be flooded? A) Value of the crops not planted per year, B) economic impact of the lost crop value to the region.
8. Have you completed the environmental impact studies involving the impact of the stored water on the herbicides and pesticides used in the area: A) Will the stored water leach the current and historical used farm chemicals out of the soil and into the ponded water, B) will the farm chemicals then migrate down into the area aquifers including the Moorhead aquifer, Fargo aquifer, and the West Fargo aquifer, C) will these chemicals impact the drinking water of cities located down stream.

9. Has the Corps collected soil and water samples from the site of the former grain elevator in Hickson to determine if historically used pesticides are present and could be leached from the soil into the ponded water and transferred down into local aquifers.
10. Specifically have you looked at the impact to some of the following farm chemicals: Accent, Atrazine, Callisto, Cadet, Distinct, Ladis, Resolve, Resource, Status, Steadfast, Betamix, Betanex, Buccaneer 5, Clopyr-Ag, Ethotron, Nortron Sc Powermax, Select Max, Upbeet, Acumen, Amplify, Basagran, Extra Credit 5, Buccaneer Plus, Cadet, Firstrate, Flexstar, Glystar Plus, Ignite, Pwermax, Raptor, Reflex, Resource, Rezult, Select Max, Arrow, Axial, Brox M, Bromac Adv, Bumper, Everest 2.0, Express, Harmonygt xp, Harmony extra, Headline, Huskie, MCP Ester, Proline, Puma, Rimfire Max, Starane, Stratego, Widematch, Wolfack 5, Wolverine, Agritin, Gem, Inspire, Headline, Proline, Prosaro Sc, Quadris, Stratego, Topspin, Asana XL, Aztec, Cobalt, Counter LNL 15 & 20, Pilot, Force, Govern, Hero, Leverage 2.7 & 3.6, Lorsban, Malathion, Mustang Max, Proaxis, Silencer, Tempo Sc Ultra, Demon, 2,4D Amine, Avail, Beyond, Curtail, Defoamer, Flags, Foam, Outlook, Establish, Prowl H2O, Tremor, Valor, Medal, Verdict, these are just currently used farm chemicals. How about farm chemicals used 20, 30, 40, 50 years ago including arsenic.

Thank you for answering the above questions.

Mark Waltz
309 Plum Tree Road
Hickson, ND 58047

Sheyenne Delta Aquifer.—The Sheyenne Delta Aquifer is a surface aquifer that consists of two sand bodies separated by about 20 feet of silt. It is located in southern Cass County and extends into northern Richland County. In Cass County this aquifer is as much as 100 feet thick. Water from this aquifer contains abundant calcium and magnesium bicarbonate and is very hard. Total dissolved solids content is commonly more than 500 ppm. This water also has a high iron content, ranging between 0.3 and 7.2 ppm.

No large-scale development of this aquifer has been attempted. Small amounts of water are withdrawn by domestic and stock wells. The storage capacity of this aquifer has been estimated to be about 409,000 acre feet with potential well yields of 250 to 400 gpm. Because of the great extent and thickness of water-bearing sand, this aquifer is second only to the Page Aquifer for potential development (Klausing, 1968).

West Fargo Aquifer.—The West Fargo Aquifer is a buried sand and gravel deposit that contains some interbedded silt and clay. It ranges in thickness from 0 to 140 feet. The depth to the top of the aquifer ranges from 60 to 260 feet. It contains sodium chloride or sodium bicarbonate and is hard to very hard. Total dissolved solids range from 377 to 1562 ppm and average iron content is 0.57 ppm (Klausing, 1968).

The West Fargo Aquifer has been used primarily for industrial and municipal needs near South West Fargo. Consumption in 1965 was about 470 million gallons of water. Estimated storage of this aquifer is about 972,000 acre feet. Further development of this aquifer is possible. However, this aquifer is being slowly dewatered, so future production wells should be located to cause minimum drawdown.

Moorhead Aquifer.—The Moorhead Aquifer is a partly buried sand and gravel aquifer that, in places, is as much as 120 feet thick. Where it is buried, it is overlain by a few feet of silt and clay. Water from this aquifer contains calcium bicarbonate or calcium sulfate. It is very hard. Total dissolved solids concentration exceeds 500 ppm, and the iron content is greater than 0.5 ppm.

Prior to 1962, water from this aquifer was used to supply the city of Moorhead, but it is now only used for this purpose during periods of low flow in the Red River, which is the primary source for Moorhead's water. The water supply for the towns of Sabin and Glyndon and for some individual domestic and agricultural water users is from this aquifer. Capacity of this aquifer is sufficient for large-scale development. Individual wells may yield as much as 350 gpm under sustained pumping.

Fargo Aquifer.—The Fargo Aquifer is a buried sand and gravel aquifer that ranges in thickness from 0 to about 160 feet. The top of the aquifer is about 130 feet below the land surface. Water from this source is hard and contains much sodium bicarbonate. Measured concentration of total dissolved solids ranges between 750 and 1129 ppm. Iron concentration is about 0.4 ppm.

Storage in the aquifer has been estimated at about 86,000 acre-feet, and wells with yields of as much as 1000 gpm could be developed. However, such excessive pumping rates will result in considerable drawdown. Prior to 1956, water from this aquifer was used to supplement Fargo's municipal supply. Only the Cass-Clay Creamery uses it now. This aquifer has a high potential for future development both for domestic and industrial uses.

Type II Aquifers

Type II aquifers, which are shown in light green on map 3, consist of aquifers that will produce moderate amounts of water, are sensitive to short-term climatically controlled water-level fluctuations, or are uncertain water supplies because of internal variation or local absence. The Kragnes Aquifer, Ridges Aquifer, and Bantel Aquifer are type II aquifers.

Kragnes Aquifer.—The Kragnes Aquifer is a vaguely defined buried sand and gravel deposit that appears to be about 30 feet thick (Maclay and others, 1969). It is overlain by about 200 feet of till and clay. Water from this aquifer contains sodium bicarbonate and is

material consists largely of interbedded silt, shale, sand, and sandstone. The water from this unit contains sodium sulfate and is very hard. Sodium chloride is also present in some places and the water varies from soft to very hard. Total dissolved solids have been measured between 2680 and 4060 ppm.

The high degree of mineralization of the water from this source has limited its use mostly to watering stock. Where other water has not been easily available, it has also been used for domestic purposes.

Where desalinization is economically feasible, this aquifer can supply adequate quantities of water for municipal and industrial uses. Individual wells can be pumped at rates of 100 gpm for extended periods.

Groundwater Pollution

In this section, the aquifers are grouped on the basis of their susceptibility to surface pollution. Four classes of groundwater pollution susceptibility are shown on map 4.

Areas in which little to no danger of groundwater pollution exists are unmarked. This area includes several aquifers that are shown on map 3 but that are so deeply buried that pollution, except by improperly cased wells, is considered improbable.

Areas that are not themselves considered to be aquifers, but because of their high permeability and topographic position serve as conduits by which groundwater is recharged, are shown in yellow. This unit includes all areas of sand and gravel shown on map 2 that are not included on map 3 as aquifers. Improper disposal of wastes in these areas may result in groundwater pollution that will not be recognized until some time in the future.

Areas in which aquifer material, shown in map 3, occurs near the land surface but is overlain by a few feet to a few tens of feet of low-permeability till, clay or silt, are shown in light orange on map 4. The Page, Bantel, Ridges, and Moorhead Aquifers are included in this unit. Any surface disposal of wastes in these areas may result in pollution of the groundwater resource. In some areas, where the local direction of groundwater flow is away from the aquifer, well managed waste-disposal facilities may be possible. However, improper disposal of waste will nearly everywhere result in pollution.

Areas in which aquifer material shown in map 3 occurs at the land surface are shown in red on map 4. This unit includes the Sheyenne Delta, Tower City, Hillsboro, Moorhead, and Undifferentiated Surface Sand and Gravel Aquifers. In these areas, surface disposal of waste should be attempted only if absolutely unavoidable and then with extreme caution. Extensive engineering procedures will be needed to minimize the degree and rate of groundwater pollution.

Agricultural Resources

The agricultural resources of Cass and Clay Counties are very important to the economic health and growth of the area. The suitability of the soils for raising crops in a given area must be taken into account in planning for the use of that land. Map 5 is a map of the agricultural suitability of soils in the two-county area. Five units of agricultural quality are shown: excellent to good, good to medium, medium to fair, fair to poor, and poor to unsuitable (Patterson and others, 1968). *The General Soil Map of Cass County* (North Dakota State Agricultural Experiment Station, 1963) and reconnaissance soil map of Clay County (Nikiforoff, and others, 1939) were used to construct this map. The agricultural quality rating of each unit is based on the following criteria.

> The quality ratings for cropland assume dryland (nonirrigated) farming and are based principally on the estimated production of small grains, primarily hard red spring wheat; the area rating is weighted average for the various soils in an

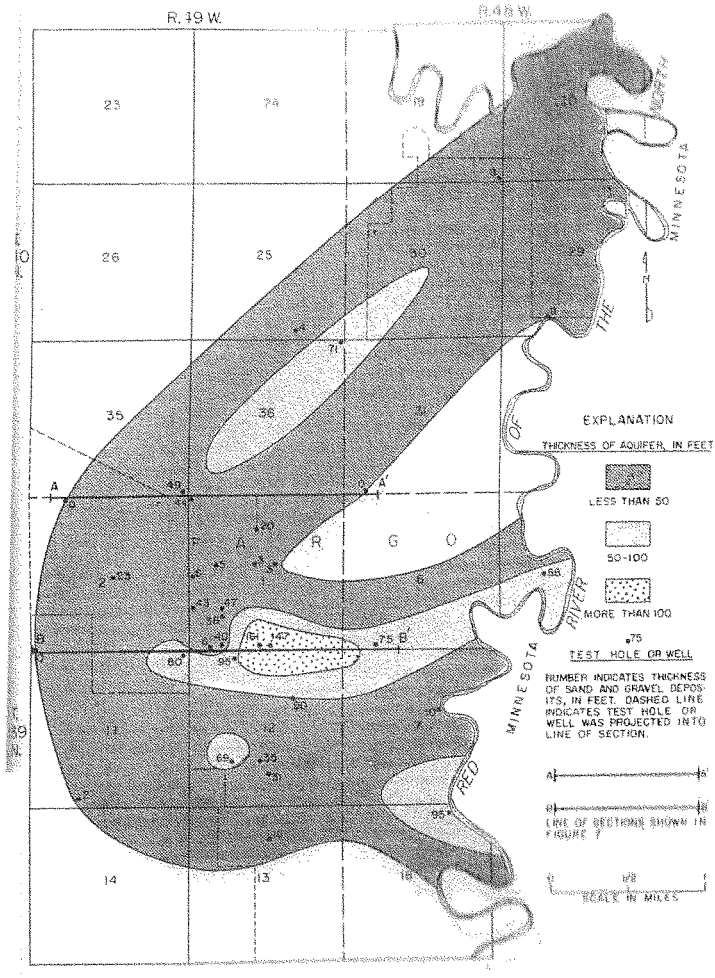


FIGURE 6. Location and thickness of Fargo aquifer, eastern Cass County.

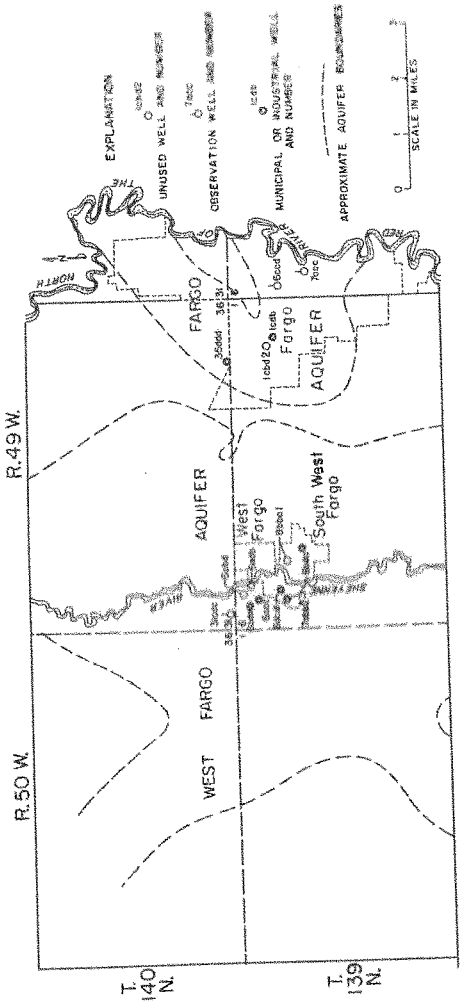


FIGURE 8. Location of key wells in the Fargo and West Fargo aquifers, eastern Cass County.

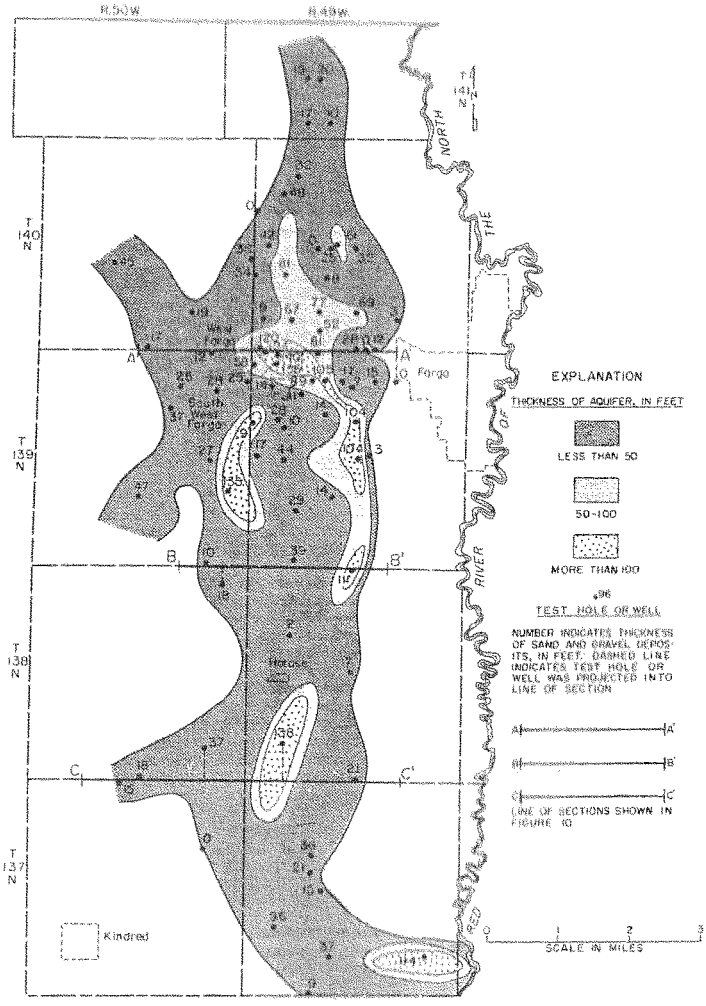


FIGURE 9. Location and thickness of West Fargo aquifer, eastern Cass County.

Richard & Judy Willem

16587-3rd St. S.

Moorhead, MN 56560

218-585-4132

rjwillem1@aol.com

May, 24, 2011

Dear Mr Snyder,

My husband and I live less than one mile south of Oxbow on the Minnesota side of the Red River on my husband's family farm. Our home is only about 7 years old. The house and that of my father-in-law are high, overlooking the river. This farm, that has been in the family for 4 generations has never flooded. When we chose the location of our home, we purposely checked to make sure we were high and not on a flood plane. This is our retirement home. We have 2 sources of heat; a ground source heat pump and an outdoor wood stove that heats our basement floor. We just finished the siding and added a deck. We have brought in fruit trees. Now our home and farm that have never flooded are going to be sacrificed for homes that do flood? This makes no sense. We did it right.

1. Why is our home and property not as important as the homes in Fargo and Moorhead?

1

We planned to finish our basement this summer. I am retirement age. I do not want to live the rest of my life with my home in limbo. If it takes 12 years before we are bought out, I don't want to be moving at that time of my life. I designed our home. I do not want to give it up.

2. Do we finish our basement?

3. Will the government pay to have our house moved?

4. Will they replace our heating systems and move our fruit trees?

5. We have sheds full of stuff. What happens to all that?

I am not afraid of a natural flood. I am not afraid of a diversion because that is basically a big ditch. I am afraid of the holding pond.

6. Why can't the diversion be built with many smaller holding ponds that use up only farmland?

7. Why can't the diversion also have a series of locks that can control the flow?

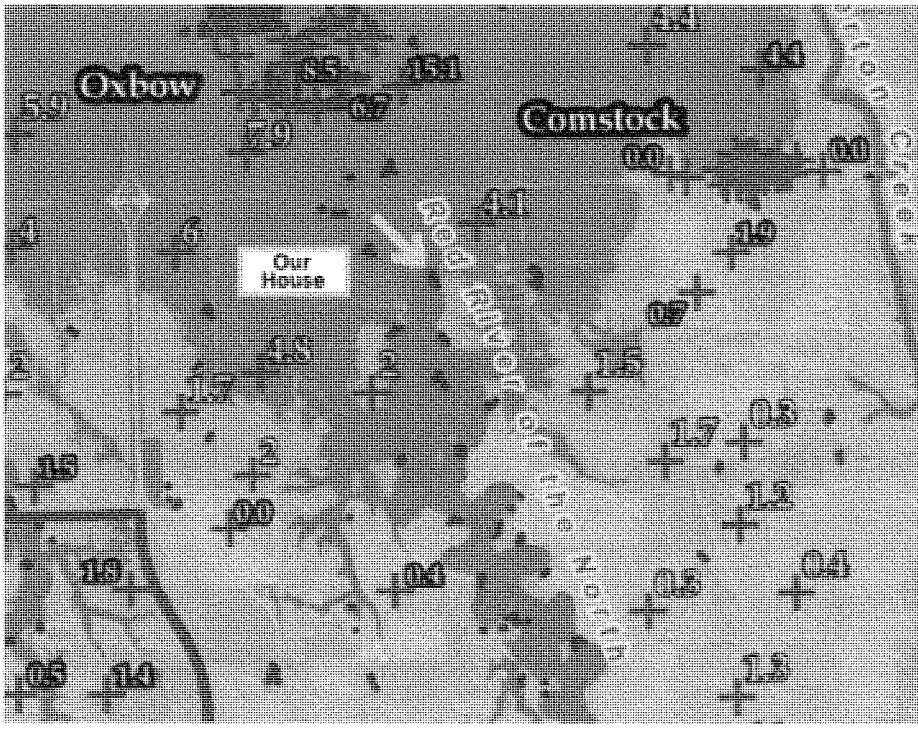
Respectfully,

Judy Willem

May 26, 2011

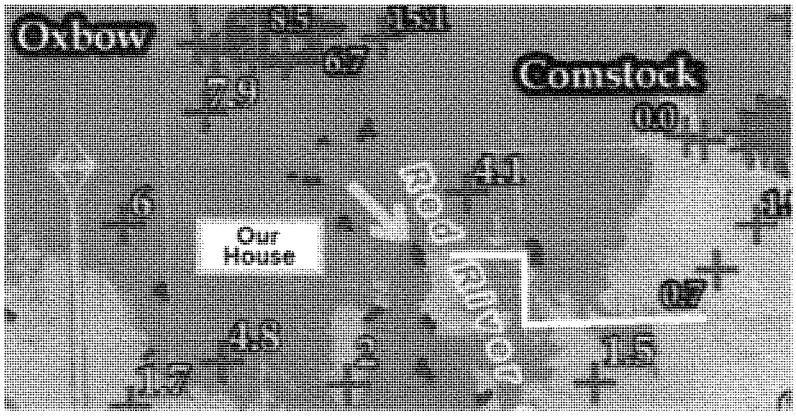
Dear Mr Snyder,

I just want you to know that the enclosed letter from May 24 was how I felt 2 days ago. I sent it to you by email. Since then my husband and I have attended two of your meetings, the fiery one in Kindred and the one in Moorhead. We never asked any questions on the floor, but we listened and learned a lot. Most of it is still above my head, even though everybody at the front table did an excellent job of presenting the plan.



I always thought we were south of Oxbow, but now I see we are more southeast. As you can see, even though our house is in the middle of

the staging area, we are actually on a part of the map that is green, all though it is hard to see it here. And it looks like we would have a way in and out of our property, perhaps by heightening lower spots of the road.



So our hope is that we may qualify for a permanent ring dike. That would suit me just fine. It could include my father-in-law's house too. Now I feel better about finishing our basement. We never planned an elaborate basement, just functional.

Another thing that put my mind at ease was learning that the event of a 100 or 500 year flood will probably be a rare occurence. It isn't like our property will be sitting in water all the time. I had previously envisioned living in the middle of a man-made lake. From what you say, my father-in-law's land can still be farmed.

I do have other questions now; Seeing the fact that we may be located in the middle of the storage area surrounded by a ring dike, will that alter the resale value of our house and property? Or will the benefits of being protected by the ring dike out weigh the liability of sitting in the middle of the storge area?

Another question: Like many farms that hide their junked vehicles in

the trees, we have that, plus much more junk than the typical farm. The junk and scrap metal probably started to pile up over a hundred years ago. I could never mention this at the meetings because my husband is very sensitive about his family's junk. My father-in-law has narcalepsy so he sleeps most of the time and never had the waking hours to maintain the farm. When we move onto the property the job of cleaning up the farm was too overwhelming for us to tackle. My question is whether that junk, many old vehicles and scrap metal, will have to be cleaned up? In my mind, that would be a good thing, but what I think isn't motivating enough to get the job done.

Thank you,

Judy Willem

COMMENTS OF WILKIN COUNTY, MINNESOTA,
BOARD OF COMMISSIONERS
REGARDING THE U. S. ARMY CORPS OF ENGINEERS
SUPPLEMENTAL DRAFT FEASIBILITY REPORT AND
ENVIRONMENTAL IMPACT STATEMENT
FARGO-MOORHEAD METROPOLITAN AREA FLOOD MANAGEMENT
Dated April, 2011

The Wilkin County Board of Commissioners is committed to a basin-wide solution to the historical flooding throughout the Red River Valley of the North. The Wilkin County Board of Commissioners incorporates and joins in the comments set forth by the City of Hendrum in response to the U. S. Army Corps of Engineers Fargo-Moorhead Metropolitan Area Flood Risk Management Report dated May, 2010.

Wilkin County firmly believes that water retention is the preferable alternative for a basin-wide solution. The current Army Corps feasibility study provides isolated benefits to single communities while causing devastating and irreversible harm to areas outside of the Fargo-Moorhead metropolitan area.

Wilkin County initiated the creation of the Bois de Sioux Watershed District for the sole purpose of establishing water retention as a priority in water management. Due to a lack of Federal interest, funding the construction of the water retention areas has been limited to the North Ottowa Project. However, the Bois de Sioux Watershed has developed a flow reduction strategy. A copy of that study is attached for reference. The Wilkin County Board believes that the Army Corps study minimizes the positive valley-wide benefits of water retention.

The proposed project will create a permanent negative economic impact in Wilkin County. Wilkin County relies heavily on agriculture as an economic driving force for its tax base. Approximately 90 percent of the tax base in Wilkin County is agricultural land. Any reduction in the value of taxable land has an immediate adverse affect on the school districts, townships and county tax base. Wilkin County does not believe that adequate consideration has been given to a permanent loss of revenue due to the impact to the school districts, townships and county. Beyond the agricultural land tax loss, there will be a tax base loss for the elimination of farm sites, buildings, grain bins and commercial properties, resulting in a permanent tax shift throughout Wilkin County. An additional tax burden would be borne by all property owners within the school districts, townships and county. This shift in tax burden will not only be occurring in Wilkin County, but in other impacted school districts, townships and counties.

A loss in production of agricultural land, loss of population and a decrease in available housing all have a permanent economic loss to the community as a whole. The Corps proposal advocates the positive economic advantages to the Fargo-Moorhead metropolitan area. However, the report disregards the permanent and long term economic loss outside the

metropolitan area, in particular local businesses associated with agriculture, i.e. elevators, fertilizer plants, railroads, farm implement dealers, etc.

The proposed plan includes a designated area believed to be a limited area of impact. However, the Army Corps plan does not recognize that in addition to natural drainage, there are ditch systems that are an integral part of the production of crops within the Red River Valley. The establishment of ditch systems began in the early 1900's. Those systems were established and maintained following strict statutory rules. The current Fargo-Moorhead plan ignores all statutory laws involving the rules and regulations impacting the existing ditch systems, future maintenance of ditch systems and determination of benefits and damages within those systems. As an example, each ditch system must have an adequate outlet. The current Fargo-Moorhead plan disregards this basic premise and, in fact, simply does not recognize the existence of any ditch systems and consequences to those ditch systems in reference to benefits and/or damages.

The current proposal simply eliminates government entities. The plan refers to the acquisitions of buildings, commercial properties, homesteads and residences. In reality, the plan eliminates citizens within geographical areas, therefore eliminating government entities. This would be contrary to public policy and state law.

The last concern is that the plan is based on political pressure and short term, quickly designed plans. There are natural geographical limitations involving the growth and expansion of the City of Fargo. Those natural and geographical limitations include flood prone areas within known flood plains. Aside from political pressure, there would not appear to be any established public policy that would favor the expansion and construction of development in flood prone areas at the expense of counties, cities, townships, school districts, farm sites and agricultural land that have never experienced flooding and who are not likely to consider flooding in the future.

The Wilkin County Board of Commissioners unanimously opposes the existing plan as ill conceived and contrary to a basin-wide solution to a problem that should jointly be solved.

Sincerely,

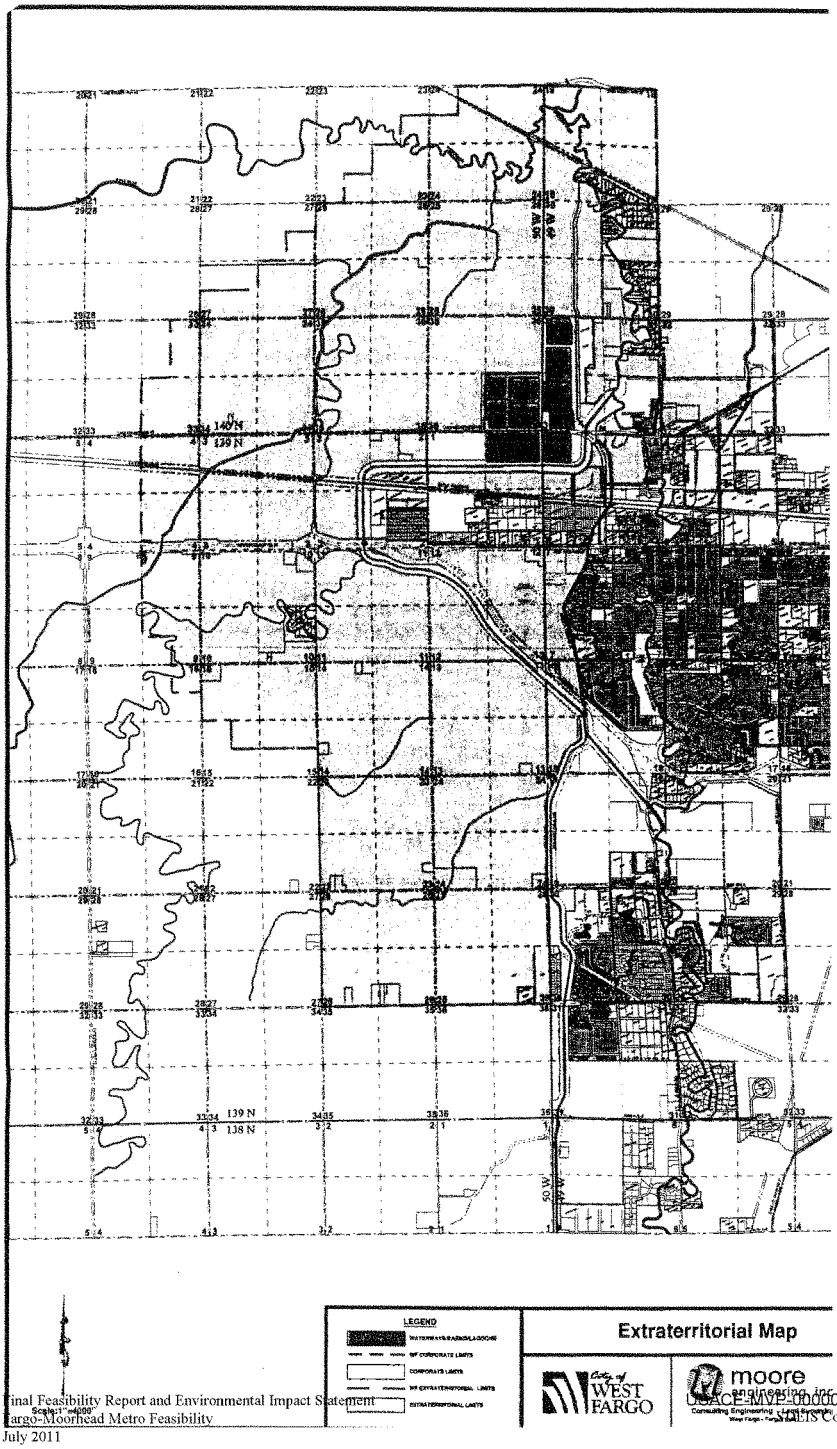
Neal Folstad, Chairman
Wilkin County Board

Robert Perry
County Commissioner

Lyle Hovland
County Commissioner

Stephanie Miranowski
County Commissioner

John Blauluss
County Commissioner


LEGEND
Extraterritorial Map
City of WEST FARGO
moore engineering, inc.
140 N
139 N
138 N
36 W

US ARMY CORPS OF ENGINEERS
SAINT PAUL DISTRICT
180 East Fifth Street - Suite 700

ATTENTION; Aaron Snyder PM-B

RE: Water Retention Plan --LPP for Fargo Moorehead

I am a land owner in both Cass county and Richland county, North Dakota.

While I am not a resident of North Dakota at this time, I would be affected by this plan, as most of my income is generated by the farming of the lands.

There must be some better alternative plans, to help the city of Fargo with this enormous problem.

I do not agree with the flooding of small towns, communities, farmsteads, farm buildings, churches and graveyards.

I voice my opposition to this plan.

From,

Lois M. Mathison

Mailing address is:

P.O.Box 527
Lake Hughes,
CA. 93532-0527

(1)

Aron M. Snyder. 6-25-11

My name is Jo Pederson I live 5 Miles North of Halstad M.N. on the Red River in the Flood Plain. My farm is located here.

In 1997 flood yr I lost my house and Every thing. We had 9'- flood water Going through our yard. Lost my farm well also, tried to Drill a new Well, it was unfit to use. had to Drill a total of 3 wells 240' each tremendous cost.

We wanted to move off the farm, went to tax assessor at Court House in ada, I had (2) two workers With me. Assessor told us he would Raise My real Estate tax 3 times of what they were at Flood Yr - 1997 - which would have been around $30.00 pr acre at that time.

I could Not Survive on that as I was renting farm - at the time. I had my farm land Rented out at the time no help from fema at that time he told us that our Damage Made to high for us Didn't get a red cent from fema.

From then on We worked with the Water shed Board in ada - Minn and they agreed if we Lifted our Sewer to Just above Road in our Yard - had to elevate

(2)

that paid for the 500 yr flood plain.
We - started hauling clay in yard to Elevate a home
above the 500 yr flood Plain, so we did,
Now my floor of my house is 11' above the
field at edge of yard, We have spent ~~for~~ over
$100,000 dollars recovering from the 97 flood to ~~Recover~~
spend more Money Every spring + Summer.
We do Not Need any more flood Waters in the
Summers & springs
We get - 4 to 5' Drift Dirt on our home
land from floods, Have to get Bulldozers in
to Push flood Dirt so we can Plow our crops

I don't realize stand if no one understands
that the red river can not take all this Water
as it did 100+ yrs ago - in them Days they had
steam ship that hauled Grain to Canada on the red
River. the river used to be over 30' deep
going by my farm ~~now~~ Now we see trees & logs
laying in the river at Mid Summer - the river is full
of trees & silt, there is no channel to take all
this Summer ~~rain~~ rain & spring run off.
Pushing homes - formulas & city is just adding to the River
Problem

(3)

I hope this will take an impact on the note is happening to the Red River reading. The Red River channel can not take all this water. Some thing has to be done to hold all this water, the Red River can't take it all at one time. We have to have a retention system set up.

Yours for
Jo Pederson
1802 - 290TH AVE
HALSTAD, MINN
56548

NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

June 20, 2011

Mr. Aaron M. Snyder, Chief
Project Management and Development Branch
180 East 5th Street, Suite 700
St. Paul, MN 55101-1678

Dear Mr. Snyder:

We have completed our review of the Supplemental Draft Feasibility Report and Environmental Impact Statement on the Fargo-Moorhead Metropolitan Area Flood Risk Management.

The recommended ND 20,000 cfs diversion channel with upstream staging and storage and associated features does not adequately address groundwater. Specifically, shallow groundwater in the area is known to have high concentrations of nitrate-N, total dissolved solids, and trace metals. During non flood events, groundwater will seep into the diversion channel. This could result in exceedance of numeric criteria established for the protection of aquatic life. An evaluation of all natural and manmade water inputs to the diversion should be conducted.

Throughout the Draft Supplemental F-M Metro Feasibility Report and EIS (report), the Corps of Engineers does an adequate job of identifying expected impacts of the project on aquatic communities (e.g., fish and macroinvertebrates) and associated habitats, riparian forests, and wetlands. The report also identifies a number of aquatic habitat mitigation measures which can be implemented immediately to offset these impacts. These mitigation measures include full stream restoration, stream improvement through the reestablishment of riparian buffers, and fish passage. For known and future impacts the Department encourages fish passage and full stream restoration as close to the project area as possible. Further, since the locally preferred alternative is a 20,000 cfs diversion channel on the North Dakota side, the Department encourages as much mitigation in North Dakota as practicable.

The report also recognizes that there may be future unforeseen impacts of the project on aquatic communities or that expected impacts are underestimated. To account for these unforeseen impacts the report identifies an adaptive management approach predicated on ongoing, pre- and post-project monitoring. The Department accepts this approach as a reasonable means of dealing with the uncertainties of a project this large and complex. However, to assure that this approach is successful, the Department recommends that an Adaptive Management Team (team) be established as soon as the Feasibility Report and EIS are finalized and the project is authorized. The Department also recommends that this team be formalized to ensure its long-term survival and functionality.

For this adaptive management approach to be effective, a long-term commitment to funding for monitoring, assessment and mitigation is also necessary. To ensure funding is available, the

Department recommends that the Corps of Engineers and the project's sponsors continue to include funding for monitoring throughout the construction and operational phases of the project. Further, if additional impacts are identified by the Adaptive Management Team, funding should be made available by the Corps of Engineers and/or the project sponsors for additional mitigation.

Thank you for the opportunity to comment. Should you have any questions, feel free to contact Mr. Mike Sauer at 701.328.5237.

Sincerely,

L. David Glatt, Chief
Environmental Health Section

LDG:MS:cc

Wild Rice Watershed District

11 5th Ave East · Ada MN 56510 · Phone (218) 784-5501 · Fax (218) 784-2459 · www.wildricewatershed.org

June 20, 2011

Mr. Aaron Snyder
U.S. Army Corps of Engineers
180 E. 5th Street Suite 700 St.
Paul, MN 55101

Dear Mr. Snyder:

RE: Review Comments, Supplemental Draft Feasibility Report and Environmental Impact Statement (EIS), Fargo Moorhead Metropolitan Area Flood Risk Management

The Wild Rice Watershed District encompasses an area of approximately 2080 square miles. It includes the drainage basin of the Wild Rice River and its South Branch, which is a direct tributary to the Red River of the North in northwestern Minnesota. The District also includes the watershed of the Marsh River and other small contiguous areas directly tributary to the Red River of the North. The Wild Rice Watershed District comprises portions of Norman, Mahnomen, Clay, Clearwater, Becker, and Polk Counties in Minnesota.

The WRWD would like to provide the following comment on the Supplemental Draft Feasibility Report and Environmental Impact Statement for Fargo-Moorhead Metropolitan Area Flood Risk Management prepared by the U.S. Army Corps of Engineers (USAGE).

The WRWD feels that unless plans for the proposed diversion project incorporate sufficient measures to completely mitigate any associated downstream stage and discharge increases, the burden of those impacts will be imposed on others. It is our hope that the project sponsors will recognize their share of responsibility to the basin by adequately assessing the project's storage; stage and discharge impacts and incorporating within the project sufficient measures to completely mitigate their effects.

The WRWD is a willing and able partner to help the project succeed as it is an important protection measure for the Fargo-Moorhead communities and the residents of the basin. However the WRWD would find it difficult to support a project that passes the flood burden downstream when there are potentially reasonable and practical storage options to eliminate those downstream impacts while providing necessary protection to the Fargo-Moorhead communities. We believe that the EIS needs to better assess the integration of additional flood water storage and to better assess the downstream impacts to public and private infrastructure and downstream communities.

We appreciate the opportunity to provide these comments on the draft EIS. If you have any questions please do not hesitate to contact us.

WILD RICE WATERSHED DISTRICT

Greg Holmvik
Chairman

RESOLUTION NO. 12119-69/2011

A RESOLUTION SUPPORTING THE CREATION OF RETENTION AREAS IN LIEU OF THE ARMY CORPS OF ENGINEERS PROPOSED FLOOD PLAN FOR CLAY COUNTY, MINNESOTA; CITY OF MOORHEAD, MINNESOTA, CASS COUNTY, NORTH DAKOTA; AND CITY OF FARGO, NORTH DAKOTA.

WHEREAS, the City of Breckenridge has historically encountered the threat of annual flooding and is in the final stages of a Congressionally approved flood protection project.

AND WHEREAS, the City of Breckenridge has continuously promoted and advocated for retention as a priority in reducing the flood threat, not only to the City of Breckenridge, but to the entire Red River Basin.

NOW THEREFORE, Be It Resolved by the City Council of the City of Breckenridge, Minnesota:

1. That the City encourages the development and construction of retention areas that provide a basin wide benefit as a cost effective and equitable solution to the on going Red River Valley Basin flooding.

2. That the Army Corps of Engineers proceed with a basin wide approach for water retention as supported by previous studies indicating that retention is not only feasible, but far more economically viable than the current proposed Clay County, Minnesota; City of Moorhead, Minnesota; Cass County, North Dakota; and City of Fargo, North Dakota, flood plan.

Adopted this 6th day of June, 2011.

Clifford W. Barth

CLIFFORD W. BARTH, Mayor

ATTEST:

Beverly R.C. Wilson

BEVERLY R.C. WILSON, City Clerk-Treasurer

Flow Reduction Strategy in the Bois de Sioux Watershed

Introduction

Flooding has been a persistent problem in the Red River Basin. In the past, flood damage reduction strategies have often focused on protecting localized areas. Examples of these are urban levees, diversion channels, agricultural dikes and farmstead ring dikes. The Red River Basin Commission is developing a strategy that would reduce flood damages throughout the basin by reducing the flood volume enough to reduce peak flows along the entire length of the Red River by 20%. This strategy is known as the "Flow Reduction Strategy". Flow would be reduced primarily by storing floodwater within the contributing watersheds. The amount of flow reduction required was estimated by the Basin Commission using a Mike 11 model of the 1997 spring flood.

The study reported herein was done by the Bois de Sioux Watershed District at the request of, and with funding assistance from, the Red River Basin Commission. The goal of the study was to identify, if possible, storage sites within the Bois de Sioux Watershed with the cumulative capacity to provide the Bois de Sioux's allocated portion of the required Red River flow reduction.

The confluence of Bois de Sioux River and Ottertail Rivers forms the headwaters of the Red River. As shown on the map in Figure 1, the Bois de Sioux drainage basin includes lands in Minnesota, North Dakota, and South Dakota with a total area of 1,936 square miles. A little over 2/3 or 1,414 square miles of this drainage area is in Minnesota and is organized as the Bois de Sioux Watershed District.

Background

At the headwaters of the Bois de Sioux River is the Lake Traverse Project that was constructed by the US Army Corps of Engineers in 1942. It includes two reservoirs, Lake Traverse and Mud Lake. These reservoirs are controlled by Reservation Dam and White Rock Dam, respectively. They are operated for recreation and flood control. During spring floods the project can hold up to about 2.3" of runoff, about 160,000 AF, before water is released. An additional 1.7" of un-gated storage is provided between the flood stage that the operating plan calls for opening the gates and the top of the dam. The drainage area for this project is 1,298 square miles of which about ¾ is from the Minnesota side of the basin, 961 square miles.

The only other existing flood control reservoir is the North Ottawa Project. This project is located in the Rabbit River Basin. It was placed in service after the 1997 flood. Therefore, it is included with the other proposed sites in this study. This project provides 16,000 AF of gated storage which is equivalent to 4.1" of runoff and 2000 AF of un-gated storage below the emergency spillway which is equivalent to an additional 0.5" of runoff control.

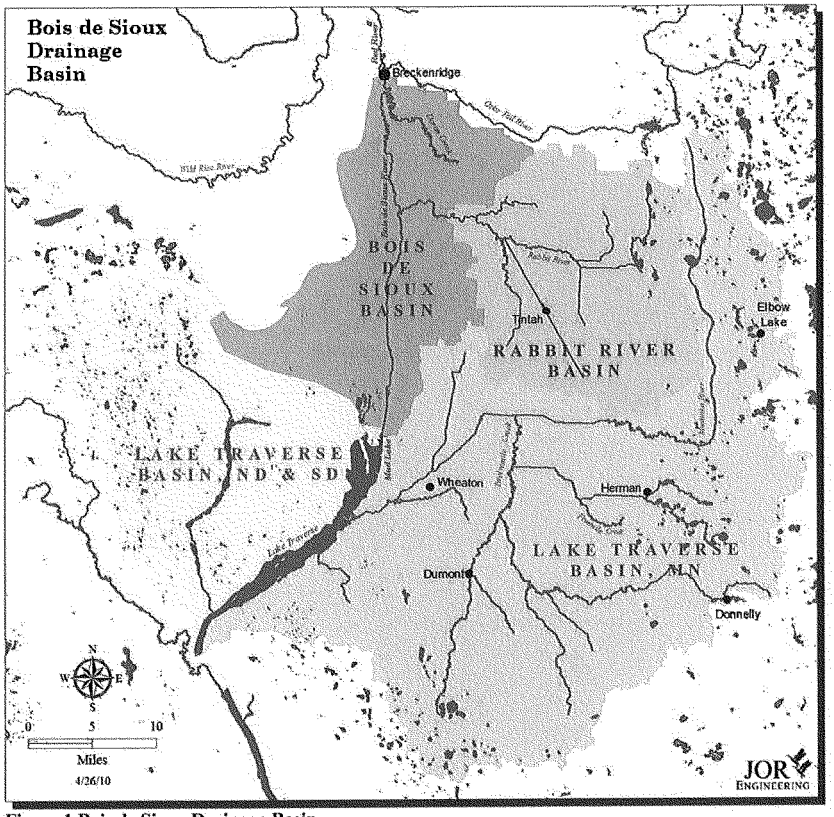


Figure 1 Bois de Sioux Drainage Basin

Site selection

This study focused on placing storage only within the Bois de Sioux Watershed District. A total of 26 sites or potential projects were identified. The storage was placed in the Lake Traverse and Rabbit River basins. Site selection was based primarily on the need for local flood control. Flooding problems are widespread in the Bois de Sioux Watershed District. The Watershed Board looks forward to partnering with regional interests by solving local flooding problems in ways that will benefit the mainstem. This strategy will also encourage local support for the projects.

The map in Figure 2 shows approximate locations of the storage sites and the areas of the watershed that they will control. Table 1 lists the individual sites and the volume of storage that will be constructed. It is broken down into gated and un-gated storage. Gated storage removes flow from the flood hydrograph and the removed water will not be released until flooding

downstream has abated. Un-gated storage delays the water and generally reduces peak flows, but some or all of the water may be released during the flood period.

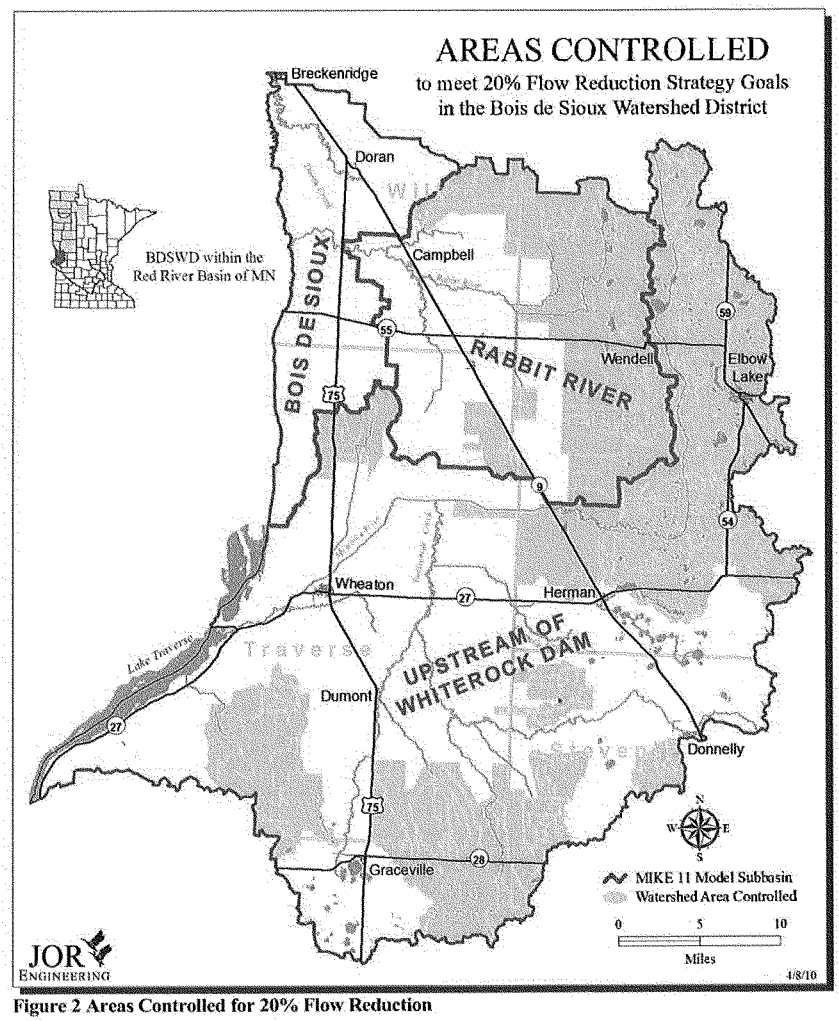


Figure 2 Areas Controlled for 20% Flow Reduction

Table 1

Impoundment sites included in Flow Reduction Strategy Bois de Sioux Watershed District 4/19/2009	Gated Storage (ac-ft)	Un-Gated Storage (ac-ft)	Total Storage (ac-ft)	RRBC 20% plan Reduction (ac-ft)
White Rock watershed				
Red Path	13100	3100	16200	
Red Path West	5501	545	6046	
Eldorodo 7	1700	755	2455	
Big Lake	463	1325	1788	
Moonshine Lake	2723	686	3409	
Moonshine 13	1520	328	1848	
Moonshine 4	885	322	1207	
Leonardsville 31E	1046	413	1459	
Dollymount 30	5484	872	6356	
Leonardsville 31W	1592	350	1942	
Tara 12	3071	843	3914	
Leonardsville 12	6630	1031	7661	
Croke 17	2142	605	2747	
Dollymount 24	1499	552	2051	
Walls 36	1897	850	2747	
Moose Head	1622	896	2518	
Walls 30	3831	937	4768	
Delaware 17	1695	518	2213	
Everglades	1965	890	2855	
Township Slough	3802	950	4752	
Subtotal	**62168**	**16768**	**78936**	**61760**
Rabbit watershed				
North Ottawa	16160	2050	18210	
Brandrup S23	3020	980	4000	
Bradford S34	3042	627	3669	
Lawrence S19	5892	1061	6953	
Tintah S34	833	160	993	
Daniels	867	223	1090	
Subtotal	**29814**	**5101**	**34915**	**24377**
Bois de Sioux Ungaged				
Subtotal	0	0	0	**12119**
Total BdSWD	**91982**	**21869**	**113851**	**98256**

WATER RETENTION Spring 2011 TOUR

Red River Basin

Minnesota, South Dakota, North Dakota

Red River Basin Commission

With tour assistance from:

Bois de Sioux Watershed District

Buffalo Red River Watershed District

JOR Engineering

NRCS SD/ND

Houston Engineering Inc.

Interstate Engineering

Moore Engineering

Tuesday, April 26, 2011

ITINERARY – UPSTREAM WATER RETENTION TOUR

Red River Basin Commission

Tuesday, APRIL 26, 2011

9:00 a.m. **Start: Buses load at Red River Valley Fairgrounds, 1805 West Main Ave., West Fargo, ND**

Overview of Tour Sites

Riverton Township Retention site, Buffalo-Red River Watershed District, MN

Constructed by the Buffalo-Red River Watershed District (BRRWD) in 2008-2009, this multi-purpose site holds 269 acre-feet and controls runoff from a 6.3 sq. mi. drainage area. The project protects downstream areas from erosion and flooding along County Ditch No. 12. Project costs were $800,000. Unique features are that the project was built on agricultural lands owned by The Nature Conservancy.

(Trunk highway 10, go south on highway 9, stop by Riverton, just west of Barnesville, Whisky Creek Tributaries detention site, and then south to Manston Slough)

Manston Slough Restoration Project, (near Rothsay) Wilkin County, MN

The proposed project area, located approximately 30 miles southeast of Moorhead, covers about 35 square miles. In the late 1800s, the state constructed a ditch into the Slough to drain the area for farming. The restoration is a cooperative effort between the BRRWD, DNR, USFWS, NRCS, BWSR, and DU. The project will provide 5,440 acre-feet of ungated storage and restore 1,100 acres of wetlands.

North Ottawa Impoundment Project (near Tintah), MN

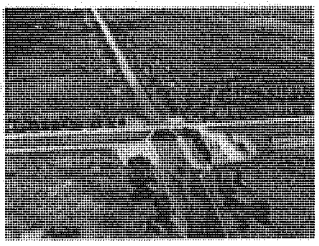
This project consists of a three-square-mile water impoundment designed to retain 18,000 acre-feet of floodwater from a 75-square-mile watershed. Estimated cost is $18.9M. Began full operation for flood damage reduction in spring 2010.

(25 minutes from Breckenridge traveling south on Highway 9, then 15-30 minutes driving and talking around site; lunch on bus; travel 15 minutes)

Redpath Project (west of Norcross, MN) Traverse County, MN

****Will not be stopping at this project site****

A multi-purpose impoundment adjacent to the Mustinka River, the main tributary in the District. This project will store 13,000 acre feet gated and 3,000 acre feet ungated. Currently exploring alternatives to expand the storage capability by 5,000 acre feet or more.



White Rock Dam, U.S. Army Corps of Engineers project, Traverse Co., MN, Outlet of Lake Agassiz. Lake Traverse is located near the junction of Minnesota, North Dakota and South Dakota in the headwaters of the Red River of the North on the Bois de Sioux River. Lake Traverse is comprised of two dams, two lakes and Browns Valley dike at the southern end of the project. White Rock Dam, which forms Mud Lake, is at the extreme north end of the project and controls water flowing north on the Bois de Sioux River. White Rock Dam is 14,400 feet long with an average height of 16 feet. The current spillway capacity at project pool elevation 981.0 feet is approximately 4,000 cubic feet per second.

Dry Run Slough
Information on this project, not stopping at this location

Remnant Glacier Drainage Channel
Sometime around 11,000 to 12,000 years ago, after the retreat of the Des Moines and James Lobes into the basin of the Red River of the North, a proglacial lake came into existence, Lake Milnor, the precursor to glacial Lake Agassiz. Its waters were held in by a high-standing ice-cored moraine on the south (Big Stone Moraine) and by the retreating Red River Lobe on the north. Expansion of this early lake instigated spillover through several channels southward across the collapsing ice-cored divide. Eventually the area of ponded water expanded to become Lake Agassiz, and lake discharge was eventually confined to one major spillway cannel. This southern outlet to Lake Agassiz, named River Warren, became an important control on the early stages of Lake Agassiz, and its waters left an indelible geomorphic imprint along its course across Minnesota.

Dry Run, or Cottonwood Slough, served as an outlet channel during the early phases of glacial lake development. Originally forming during the Milnor phase, it remained active during both the Herman and Norcross phases of Lake Agassiz. This channel, and others in the area, cut through remnants of the Big Stone Moraine complex which acted as the southern boundary of Lake Agassiz. Spillover through early high-level outlets, such as Dry Run (or Fish Creek in Minnesota), was probably not simultaneous, but rather closely spaced in time as the topographic dam settled around melting stagnant glacial ice. This channel was eventually abandoned in favor of a single channel, now occupied by Lake Traverse and Big Stone Lake.

Veblen area, Marshall County, SD Two sites for potential storage near the Storbakken Farm:

Short Foot Creek

Labelle Creek

Shortfoot Creek and La Belle Creek have their beginnings in the Coteau des Praires that rises over 650 feet above the elevation and southwest of the Storbakken Farm. The 15,000 acre watershed of La Belle Creek in Marshall County empties into Lake Tewaukon at the national wildlife refuge. The 22,000 acre watershed of Shortfoot Creek in Marshall County bypasses the refuge and empties into the Wild Rice River near Cayuga, ND.

Hills and wetlands dominated by grassland are typical landscape features of the upper watershed on top of the Coteau. The wetlands fill after spring snowmelt and runoff empties into the steep, wooded draws of the east side of the Coteau. The main creek channels become somewhat deeply incised into the landscape as they enter North Dakota. The lower portions of these watersheds are used as cropland.

Several areas exist in the lower portion of the watersheds to be investigated as potential sites for larger flood retention structures. Examples of smaller dams used primarily for livestock water supply in the upper watershed are easily seen on the travel route to Windy Mound 9 miles west. Wetland restorations, wetland enhancements, and grazing management are conservation practices that may be used in the upper watersheds to promote additional water storage capacity.

Agricultural Water Enhancement Program's (AWEP) – Proposed Retention Site, Sargent County Water Resource District, ND (on the border of ND and SD)

The proposed AWEP Project on the James Gustafson Farm would impound approximately 900 acres feet of water from an 11500 acre tributary of Labelle Creek above Lake Tewaukon. This site has a steep watershed demanding a large primary and emergency spillway. The site would be managed with a permanent pool in the excavated area above the dam of 12-14 feet to meet producer goals and feature a poured in place concrete primary structure. The site is located in rangeland and would provide significant benefits to several township roads below it.
AWEP Funds are limited to $300000 per producer, so a significant funding gap exists with an estimated cost of $600,000. This type of budget would provide the projected flood storage and between 500 and 700 dollars per acre foot stored.

Wild Rice Watershed Retention

The Richland County and Southeast Cass Water Resource Districts recently completed a study of the Wild Rice and Antelope Creek watersheds which resulted in the identification of several retention opportunities. As a result of the study, the WRD's selected a 50,000 Acre-Foot Wild Rice River main stem site for further development. The site is located approximately 4 miles east of North Dakota State Highway 18 near Mantador, ND. An exploratory soils investigation has shown that the site is suitable for the construction of a dam and the WRDs are in the process of determining the downstream benefits of the proposed facility.

Sheyenne River Watershed Retention

The Sheyenne River Joint Water Resource District recently completed a study of the Sheyenne Watershed which resulted in the identification of several retention opportunities. The study showed that main stem retention sites will provide the most flood reduction benefits to the Sheyenne River communities of Valley City, Fort Ransom, Lisbon, Kindred, Horace, West Fargo, Fargo, and Harwood. Optimal storage sites were identified at Hwy 200 north of Lake Ashtabula, upstream of Fort Ransom, and upstream of Highway 18.

Maple River Watershed Retention, ND

The Maple River Dam stands 73 feet high and controls a drainage area of 902 square miles. This Cass County Joint Water Resource District facility is a dry main stem dam that stores 60,000 acre feet of flood water. The project was constructed over 2 years and was operational in 2006. The Maple River spring flood typically consists of 2 peaks. In 2009, the Maple River Dam reduced the first peak from approximately 7,000 cfs to 950 cfs at the dam site. The total project cost was approximately $30 million, meaning that the cost efficiency for the dam is $500 per acre-foot of storage.

6:00 p.m. Arrive Fargo-Moorhead, Red River Valley Fair Grounds, West Fargo, ND

Forum - May 05, 2009

Red River Basin-wide authority garners support

Local, state, federal leaders meet to discuss permanent flood control

The Red River Basin needs an organization spanning both sides of the border that can wield enough authority to push through politically difficult measures, such as creating storage areas for floodwater.

By: Dave Roepke , The Forum

Fargo Mayor Dennis Walaker speaks during an unprecedented meeting of local, state and federal officials of flood-affected areas around Fargo-Moorhead Tuesday morning in the Capitol in Washington, D.C. Forum photo.

WASHINGTON — The Red River Basin needs an organization spanning both sides of the border that can wield enough authority to push through politically difficult measures, such as creating storage areas for floodwater.

An outfit overseeing the basin with broad arm-twisting power would go a long way toward answering the question posed Tuesday by Sen. Byron Dorgan, D-N.D.: "Who's the symphony director here?"

The need for a basin-wide authority was a key point of agreement among local, state and federal leaders at a first-of-its-kind meeting at the U.S. Capitol on Tuesday to discuss comprehensive and permanent flood control along the Red.

"This is something that's always been a problem," said Fargo Mayor Dennis Walaker of the lack of an overarching authority.

A new agency with clout along the Red wasn't the only subject by any stretch. Top officers from the U.S. Army Corps of Engineers were on hand, and North Dakota Gov. John Hoeven pushed on whether Fargo's already-designed south-side flood control — a $161 million project the corps didn't fund or plan — might count as part of a comprehensive flood protection system for Fargo-Moorhead.

But no issue saw more consensus, beyond the need for consensus, than the suggestion of a Red River oversight group empowered to compel action. Though there was strong support for the idea — no one objected when Dorgan asked if anyone opposed — how the basin authority would work was far from decided.

Dorgan suggested the two governors could hash out the details, and Hoeven said he would discuss with Pawlenty a compact between the states and the federal government.

Pawlenty, however, said he would like to see such a group grow from the local level, perhaps forming from the Red River Basin Commission — a group that Walaker, an alternate member, said had "absolutely no authority."

Minnesota Rep. Morrie Lanning, a Republican who represents Moorhead and once served as its mayor, said a basin authority is not a new thought. He first suggested it in 1979. And he, too, would like to see the group spring from the grass roots.

"We need local ownership," Lanning said.

It's still nowhere near a done deal, Pawlenty pointed out in a teleconference after the lunch-hour meeting.

"It's a concept at this point, an idea," Pawlenty said.

Discussion of the authority came up after several officials said floodwater retention needs to be a big part of a comprehensive plan for the Fargo-Moorhead area, which the Army Corps is studying.

Sen. Kent Conrad, D-N.D., said holding back water before it hit the Red could take pressure of the river when it floods.

"Without it, I think we'll end up building more diking than we need," Conrad said.

Retention has always been a tough sell with farmers, whose fields are often used for the storage. Conrad said those farmers would need to be compensated, and Walaker said those payments could be similar to programs that reimburse crop losses due to disasters.

Rep. Collin Peterson, D-Minn., who represents Moorhead and northwest Minnesota in Congress, said while flood-control projects are always fraught with competing interests, the 2009 flooding may have softened some of the most hardheaded.

"I sense a change out there among people," Peterson said. "Everybody's got to compromise, including me. I've been one of the worst."

Retention will be one of the options included in the preliminary results of an Army Corps study of flood control for Fargo-Moorhead, which are set to come out in the next month. Brigadier General Michael Walsh said the study will estimate the cost, and cost-benefit ratio,

of various different types of flood control. These figures will be calculated both with and without the south-side project included, he said.

Feasibility study

The corps feasibility study is one of the key steps toward a federally funded flood control system. If approved, the federal share of Army Corps projects is typically 65 percent, with the other 35 percent coming from local and state sources.

Conrad said the split of the local costs would depend on how the benefits break down. For example, if the study shows that North Dakota would have 80 percent of the benefit, governments on that side would pick up 80 percent of the local match.

After the preliminary results come out, local officials will have to agree on which options appeal to them — assuming the cost-benefit ratios show more benefit than cost. If they can't agree, no federal project will happen. That local consensus will have to be speedily reached for the final version of the report to be ready by its December 2010 deadline, "or we're just not going to be able to hit that," Walsh said.

Hoeven pressed Army Corps officials on whether they could provide an assurance earlier than the end of next year that the south-side project could be considered the first phase of any corps-directed flood-control system.

He continued to press the issue after the meeting, asking Walsh in the hallway outside the Senate Appropriations Room: "We're not asking for money. We're really asking for approval and coordination."

Asked about that during the meeting, Walsh said there would be no guarantees. "It's not a project until it's a project," he said of the corps plans.

Terrence Salt, principal deputy assistant secretary of the Army for civil works, said hearings held by the corps in the spring of 2010 could give local and state officials an indication of whether the south-side project could be considered a part of the overall one.

Hoeven said it's important to find out because south-side control — paid for with $75 million each from the city and the state, and $11 million from the Federal Emergency Management Agency — could count as a portion of the local match on a larger system, for which early estimates have run as high as $1 billion. It might also affect the cost-benefit analysis, he said.

Walaker said part of the worry is that the south-side project has "zero impact to the Red," which could hurt its chances of being included as part of the corps plan.

If Fargo-Moorhead is able to get from preliminary results to final report in 18 months, that would be unusual, Peterson said. The process took three years in Roseau, Minn., one of the cities in Peterson's 7th District still waiting for federal money for Army Corps projects that were prompted by earlier floods.

It's a frustration that Cliff Barth is familiar with. He's the mayor of Breckenridge, Minn., another one of the cities still waiting on federal flood-control dollars.

"I'm tired of studies," Barth said. "Build it. Get it done. Protect us."

The Forum of Fargo-Moorhead and the Herald are owned by Forum Communications Co.

6-17-11

Aaron M. Snyder

USACE, St. Paul District

180 5th St E Suite 700

St. Paul, MN 55101-1678

Aaron Snyder,

I have been asked by Pleasant Township via form letter, to contact you and come out against the FM-Diversion Project.

Here are my two cents:

I am for the Diversion Project. Without a diversion, the property and home I bought after the 1997 flood will continue to hold no value. I am unable to sell and unable to get a loan to rebuild until I retire my current debt. It is concerning that my required flood insurance and property taxes continue to rise while the value of my home and property are nil.

The citizens of Hickson (Oxbow and Bakke Edition) have something – a potential buy-out and prospect to start over after receiving fair price for their property. I have formally asked to be placed on the buyout list twice but have been denied. I have nothing without the diversion; a home with no equity and property that continues to flood, erode, and wash away.

I have replaced carpeting/sheetrock/etc, due to the flood of '01 and '09. I have sandbagged my house four times in the last three years (twice in '09 after the second crest prediction).

The diversion would bring safety, security, and value to my property.

The larger picture is the value the diversion would bring to Fargo: safety, security, and value.

I am in support of the Diversion Project and the benefits it would bring to people of this area.

Sincerely,

Shane Martin

A PLACE OF EXCELLENCE
CITY OF GRAND FORKS

OFFICE OF MAYOR
MICHAEL R. BROWN

City of Grand Forks

(701) 746-2607
FAX # (701) 787-3773

255 North Fourth Street • P.O. Box 5200 • Grand Forks, ND 58206-5200

June 16, 2011

US Army Corps of Engineers
St. Paul District
Attn: Aaron M. Snyder
180 East 5th St, Suite 700
St. Paul, MN 55101-1678

RE: City of Grand Forks comments on Supplemental Draft Feasibility Report for Fargo-Moorhead Metropolitan Area Flood Risk Management

To Whom It May Concern:

Thank you for the opportunity to comment on the Supplemental Draft Feasibility Report for Fargo-Moorhead Metropolitan Area Flood Management ("FM Flood Report"). The City of Grand Forks recognizes the need for flood protection all along the Red River and its tributaries. The Valley has seen too many years of major flooding to make 'no action' a realistic alternative. Our community has been a strong supporter of the Fargo-Moorhead Metropolitan Area's flood fighting efforts through equipment and community volunteers. Grand Forks will continue to support these efforts to move forward with a Fargo-Moorhead Metropolitan area flood protection project ("Project") to provide long-term protection. We also believe at the same time the Project can protect the flood management investments made by the Federal Government, States of Minnesota and North Dakota and local communities of Grand Forks and East Grand Forks, as well as ensure a consistent level of flood protection throughout the Red River Valley basin.

The studies cited in the FM Flood Report show that any alternative being considered will have significant impacts outside the project footprint and will actually affect the entire basin. Grand Forks requests that the FM Flood Report recommend funding be provided as part of the Project to individually affected communities in order to determine mitigative efforts, implement mitigative techniques, and to study the possibility of 500-year frequency protection levels. As such, Grand Forks supports a 500-year frequency level of protection as a reasonable standard that should be adopted and available to all communities within the basin.

Basin wide retention should be encouraged and pursued as a long-term solution. However, until that storage can be fully implemented, structural and mitigative efforts must be implemented in the interim.

The analysis provided in the FM Flood Report introduces both a new hydraulic software model (HECRAS unsteady state model) and new flood frequency analysis methodology (shorter duration 'wet years' statistical analysis). This model and downstream analysis methodology were useful in providing a consistent level of comparative analysis but they also cause difficulties to correlate the flows and frequencies with what downstream communities are currently using for regulatory and engineering purposes.

For example, Grand Forks' current DFIRM was based on a 2001 hydrology study2003 Regional Red River Flood Assessment Report that was not a HECRAS unsteady state modwise, when the Grand Forks/East Grand Forks flood control project was designed and impl, the detailed hydraulics were not based on the HECRAS unsteady state model. The Grand Ft Grand Forks project represents a 400 million dollar public investment in flood protection. In reconcile any variations, the Project must include a detailed study of our local hydrology and h; with the new software to precisely identify impacts at the local level. The same software sho develop and analyze alternatives for mitigation and improvement.

The shorter wet period of record creates some anomalies, particularly with the 500od. The study shows significant decreases in flows compared to those developed in previoes. Given the uncertainties, Grand Forks is not comfortable with using the shorter period d analysis for regulatory or engineering purposes at this time that was identified in the FM Flort. We would request that this data not be used by FEMA or other agencies as part of their 'beste information' criteria.

The FM Flood Report analysis provided shows minimal impacts in the Grand Fa for 100-year frequency events. However, the FM Flood Report shows that for floods of loweicies there are significant increases in flows. These flows translate into higher water surface elevhe majority of our local floods fighting efforts occur at elevations at or below the 50-year freqent. This will mean earlier, more frequent, and more extensive flood fight efforts and resultl impacts. Of particular concern are the impacts on the bridges between Grand Forks and East Grs. There are 3 bridges connecting our communities. The highest of these bridges is located on I 2 and is very near the 50-year event when it needs to be closed. A closure of that final link woulajor impact to our communities and our region.

In conclusion, Grand Forks continues to support the Fargo-Moorhead Metropcod protection project and submit that by addressing the above concerns within the FM Flood Re project will help provide the necessary consistent level of protection for communities throughotin.

Sincerely,

Michael R. Brown, Mayor
City of Grand Forks, ND

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Gary Duggan Telephone 282-4887

Address 3616 14th ST. NW

City West Fargo State ND ZIP 58078

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: —

(Please provide your comments in the space below)

The ND Diversion is very important for us. We live North of the West Fargo Diversion and where the Maple and Sheyenne rivers join. Drain 14 and Swan Creek also effect us. We have very high depths of water each year.

We would also like to see water

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	X Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
___ State Government	___ Other (please specify)

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retention somewhere in this whole area — soon —

We need this project to go through.

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name David J. Lee Telephone 218 494 3609

Address 15894 30 St N.

City Georgetown State MN ZIP 56546

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

I am against the diversion. It is not right to do what you are doing to the area South of Fargo, Moorhead. There should be more study done on using smaller Retention sites as well as Fargo Moorhead do more with diking etc.

I think the cost will be much more than the two Billion dollars in the future

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
X Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Ken Pawluk Telephone 701-239-0144

Address 2808 28 Ave S

City Fargo State ND ZIP 58103

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

I am in favor of this project & can't wait for it to be built. This will solve about 90% of the flooding issues Cass County faces.

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	___ Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
___ State Government	_X_ Other (please specify) Cass Co Commissioner

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Kevin Campbell Telephone 218 236-9347

Address 1301 62nd Ave North

City Moorhead State MN ZIP 56560

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

I fully support the plan submitted as the locally preferred plan. I look forward to this project proceeding to protect this region.

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	✓ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Judy Jacobs Telephone 701-232-2403

Address 2127 35th Ave S

City Fargo State ND ZIP 58104

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

Someone has to talk the Fish & Game & get the Diversion done & not everyone is going to be happy with it. Unfortunately

I cannot believe it will take 2 yrs to start build & 16 more to finish - we a state of our

To run out of time

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	___X___ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING
COMMENT SHEET

US Army Corps
Of Engineers

Name Mark Weston Telephone 701-347-5352

Address 802 N 5th ST

City Casselton State ND ZIP 58012

note: **Name, Telephone, and Address are optional and can be left blank**

☒ I would like email notifications at: Mark.Weston@send.it-nodak.edu

(Please provide your comments in the space below)

What, if any impact will the proposed diversion have on the central cass school Dist. I would like to see map projections showing school district boundaries.

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	X Other (please specify) School District

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Scott Saewert Telephone 701-261-8661

Address 15642 45 Street SE

City Durbin State ND ZIP 58059

note: **Name, Telephone, and Address are optional and can be left blank**

☒ I would like email notifications at: ssaewert@aol.com

(Please provide your comments in the space below)

I live along the Maple River and hearingtthat the Maple River Aquaduct will only take a two year event and then spill over into the diversion, I am concerned about how far the Maple River will back up when it cannot flow into the diversion because it is full.

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
xx Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Shirley and Clarence Jermstad Telephone (701) 428-3417

Address 16383 49 St. SE

City Kindred State ND ZIP 58051

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: cjermstad@att.net

(Please provide your comments in the space below)

1. We think it presumptuous to wipe out a city, Hickson, that has been here almost as long as Fargo. Comstock, too, has been around a very long time. Although Bakke Addition and Oxbow haven't been here as long, they, too, have many residents living there. Bakke Addition doesn't flood.

2. The Corp says that the Diversion (over)

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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would have been used 21 times in the last 109 years. At a cost of $2 billion this does not seem to be very cost effective. Federal projects usually cost more.
3. The Corp hasn't a good reputation for managing projects like this as far as we are concerned. Again this spring we had no water until the Corp opened up the flood gates at the Baldhill. For weeks roads and fields were under water.
4. The human cost is far too much in our opinion. There are huge family farms that will be impacted. Our school district will be decimated. Four towns, 9 cemeteries, many businesses will be wiped out.
5. Find another spot or put up levees as Grand Forks did. (It didn't buy your levee statement at the meeting)

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Dist. 25 Representative John Hall Telephone (701) 642-2103

Address 503 North 3rd Street Apt. # 2

City Wahpeton State ND ZIP 58075

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: jwh@nd.gov.

(Please provide your comments in the space below)

The current plan is flawed for many reasons. First, the cost/benefit ratio is weak and it will only get worse with additional mitigation needed as well as cost over-runs not factored in. In addition, ongoing operations and maintenance costs are prohibitive. Please examine other retention plans such as a state line dam and a dam on the Wild Rice River south of Wyndmere. These along with Colin Peterson's plan will alleviate the flooding problem at a far less cost.

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
✓ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name TOM VRANISH Telephone _____

Address 7606 Shadow Ln

City Horace State ND ZIP 58047

note: **Name, Telephone, and Address are optional and can be left blank**

☒ I would like email notifications at: tomvranish@aol.com

(Please provide your comments in the space below)

Since you are planning on using the WF-Horace Diversion channel as part of your project will the people and property owners who have paid for that diversion be reimbursed for their purchase price and operating expense ~~for the~~ since the WF-Horace diversion project was started.

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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If will this project be funded based on annual funding or will full project funding be sought. If of annual funding, what happens if congress cuts of funding as was done with Garrison Diversion.

Your project has a lot of smoke + mirrors and just trust us statements, from funding sources to mitigation. Step back & find a solution to the problem as a whole rather than protect just a single community.

Water will not flow uphill from the Red River and other rivers into a diversion canal. It will flow backwards into the rivers just a lot slower now.

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Stuart GUNNESS Telephone 701-640-1915

Address 17185 61st ST SE

City Walcott State ND ZIP 58077

note: **Name, Telephone, and Address are optional and can be left blank**

X I would like email notifications at: sgunness@wtc-mail.net

(Please provide your comments in the space below)

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Rick + Vanita Ohlgren Telephone 701-281-1733

Address 7814 Sunset Dr

City Horace State ND ZIP 58047

note: **Name, Telephone, and Address are optional and can be left blank**

[X] I would like email notifications at: poo2for@aol.com

(Please provide your comments in the space below)

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	_X_ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name ROGER KOTCHIAN Telephone 701 588-4411

Address 4048 PLUM TREE RD

City HICKSON State ND ZIP 58047

note: **Name, Telephone, and Address are optional and can be left blank**

☒ I would like email notifications at: RKOTCHIAN@FARGO.MISC.NET

(Please provide your comments in the space below)

PLEASE GET PLAN APPROVED IN CONGRESS ASAP. I NEED TO MOVE BECAUSE OF JOB REQUIREMENT & I CAN NOT SELL MY HOUSE TO MAKE THE MOVE.

THANKS

ROGER

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	X Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name E. JOHN CARLSON Telephone 701-588-4455

Address 115 OXBOW DRIVE

City OXBOW State ND ZIP 58047

note: **Name, Telephone, and Address are optional and can be left blank**

[X] I would like email notifications at: ejc@undalumni.org

(Please provide your comments in the space below)

JUSTIFICATION FOR THE EASTERN STAGING AREA APPEARS TO BE INCREASED WATER FLOWS TO CANADA. THE CANADIANS HAVE A "RIGHT" THAT RESTRICTS ANY ADDED FLOWS INTO CANADA, WHICH IS ILLEGAL. THEREFORE, BY INTERNATIONAL TREATY. WHY SHOULD WE CARE ABOUT INCREASED FLOWS TO DIKES WHEN THEY LIMIT FLOW IN THE FIRST PLACE? GRAND FORKS STARTED OUT AS A DIVERSION AND ENDED WITH FLOOD WALL AND A GREEN FLOODWAY. FARGO COULD DO THE SAME TO A 250 YEAR FLOOD EVENT AND BE AFFORDABLE AND ACCEPTABLE.

Please check **ONE** category below that represents your primary interest in the study.

- [ ] Business/Industry
- [ ] Federal Government (Congressional)
- [ ] Environmental Group
- [ ] Federal Government (All Other)
- [ ] Agriculture
- [ ] State Government
- [x] Personal Interest
- [ ] Media
- [ ] City/County Government
- [ ] Recreation
- [ ] No Particular Affiliations
- [ ] Other (please specify) _____

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Tim Mathern Telephone 701 476 7825

Address 429 16th Av. S

City Fargo State ND ZIP 58103

note: **Name, Telephone, and Address are optional and can be left blank**

☑ I would like email notifications at: tmathern@nd.gov

(Please provide your comments in the space below)

What are the capital + replacement costs for maintenance of the diversion structures one hundred years from now? We need to be clear about the costs we are placing on future generations

Senator Tim Mathern
Fargo - District 11

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	___ Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
✓ State Government	___ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name PATRICK BAKER Telephone (701) 588-4175

Address 315 ELM ST

City HICKSON State ND ZIP 58047

note: **Name, Telephone, and Address are optional and can be left blank**

☒ I would like email notifications at: PBAKER@FARMIDCO.NET

(Please provide your comments in the space below)

WHAT CAN BE DONE IMMEDIATELY FOR ANY MITIGATION FOR HOMES? I CONTACTED 3 BANKS IN FARGO AND FOUND THAT THEY WOULD NOT LEND ANY FUNDS FOR HOME BUYING IN THE DESIGNATED AREA. I HAVE HAD TO TURN DOWN TWO OPPORTUNITIES FOR PROMOTION AT WORK THAT WOULD REQUIRE A MOVE. I CANNOT SELL MY HOUSE AT THIS TIME. WHAT CAN BE DONE ABOUT THAT?

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	☒ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
____ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name DEC SCHNABEL Telephone 218 861 6284

Address PO Box 96

City HENDRUM State MN ZIP 56550

note: **Name, Telephone, and Address are optional and can be left blank**

☒ I would like email notifications at: DECSCHNABEL@YAHOO.COM

(Please provide your comments in the space below)

IT IS EVIDENT THAT A BASIN WIDE APPROACH WOULD BE BETTER RATHER THAN SINGLE INTEREST PLANS.

Please check **ONE** category below that represents your primary interest in the study.

- X Business/Industry
- ___ Federal Government (Congressional)
- ___ Environmental Group
- ___ Federal Government (All Other)
- ___ Agriculture
- ___ State Government
- ___ Personal Interest
- ___ Media
- ___ City/County Government
- ___ Recreation
- ___ No Particular Affiliations
- ___ Other (please specify)

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name CAROLYN & MIKE HANDLOS Telephone 218-585-4646

Address 803 140th AVE. S.

City MOORHEAD State MN ZIP 56560

note: **Name, Telephone, and Address are optional and can be left blank**

☑ I would like email notifications at: staccatoserenade@hotmail.com

(Please provide your comments in the space below)

Hello Aaron, my husband Mike and I are in the FM Flood Diversion Project and after sitting in the meeting @ the civic center in Fargo it seems like some of the anxiety is from homeowners like us who wish to sell their property and are getting ready to retire I will not be able to do so until the final (over)

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	✓ Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
___ State Government	___ Other (please specify)

Privacy Act Statement: Home owner in diversion

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Stage of the diversion (IF IT GOES THROUGH) WHICH COULD PUT THEM @ 10+ YEARS?? HOW ABOUT PUTTING IN PLACE AN OPTION WHERE FROM THE TIME THE PLAN IS PUT IN PLACE BY CONGRESS AND FUNDING IS APPROVED THAT ANY ONE WISHING TO LEAVE AT ANY POINT IN THE PROJECT WOULD GET BOUGHT OUT AND THOSE WISHING TO STAY LONGER UNTIL THE END COULD STAY AND GET BOUGHT OUT AT THE END. THIS WAY THE PROPERTIES WOULD BE GRADUALLY BOUGHT UP AND MOVED (PURCHASED) AND WOULDN'T BE SUCH A LARGE # AT THE END? CAROLYN HANDUS

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Hugh J. Trowbridge Telephone (cell) 701-261-9877

Address 2012 160 Av S

City Comstock State MN ZIP 56525

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

I don't believe it is a matter of sacrificing us few for the 200,000 in The Fargo-Mhd area. It is close to a even swap of us for the small percentage of people who keep building houses down in the river bank. If the Corp would draw a line at the 40' mark and then build a 5' flood wall they would save the FM

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	___ Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	✓ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
___ State Government	___ Other (please specify)

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area and only lose a thousand odd houses that have no business being there anyway, instead of making us move who built on high ground in the first place.

I have spent more time sandbagging than 99% of the people since 1997 but after the first four days I always work at sandbag central because I was so mad at the places I have sand bagged.

You need to rethink your plan and let the river run where it should.

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

06/20/11 Deadline
May 2011

FARGO-MOORHEAD PUBLIC MEETING
COMMENT SHEET

US Army Corps
Of Engineers

Name SEN. LARRY LUICK Telephone 701-474-5959

Address 17945 101st ST SE

City FAIRMOUNT State ND ZIP 58030

note: **Name, Telephone, and Address are optional and can be left blank**

☑ I would like email notifications at: lluick@ND.gov

(Please provide your comments in the space below)

I believe that Fargo and West Fargo certainly need the protection from the water. However, at the expense of local communities and farmers/farm land & property is not acceptible. The diversion could be down sized or channelled right up the existing river bed. And more money spent on retention ponds that could benefit other communities as well as Fargo. (over)

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	___ Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
X State Government	___ Other (please specify)

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"Forcing" this project through is not a good idea. I think a more "Creative" look needs to be looked at to divert this water through the channel that is there already.

Mainly what I see as a huge problem is the Dam. We need to protect these other effected communities also and this dam is not the answer. Figure out more retention areas and spend some money on that. Thank You - Senator Larry Luick

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name_____ Telephone _____

Address _____

City _____ State _____ ZIP_____

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

I am totally against the LPP diversion! It will impact my property immensely Possibly killing large groves of 100 year old Oak trees on our property. A new home only 6 years old which now is worth nothing, A ring dike is out of the question as all the township road will be underwater forbidding travel We have farm land in both Mn. & N.D. which will be impacted. We wish for a better solution to this problem

Please check **ONE** category below that represents your primary interest in the study.

____ Business/Industry	____ Personal Interest
____ Federal Government (Congressional)	____ Media
____ Environmental Group	____ City/County Government
____ Federal Government (All Other)	____ Recreation
✓ Agriculture	____ No Particular Affiliations
____ State Government	____ Other (please specify)

_____

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May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name MARK J. KUHN Telephone 701-428-9888

Address 5261 164 AVE SE

City Kindred State ND ZIP 58051

note: **Name, Telephone, and Address are optional and can be left blank**

X I would like email notifications at: Address Above

(Please provide your comments in the space below)

The public meeting held in Kindred left many unanswered questions. Many more than were addressed at the meeting. The time given for review of these questions is completely inadequate for any thoroughness. I believe this diversion project is way too expensive, poorly engineered, and not

Please check **ONE** category below that represents your primary interest in the study.

___ Business/Industry	X Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
___ Agriculture	___ No Particular Affiliations
___ State Government	___ Other (please specify)

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A good plan for Fargo's flood protection,
The enclosed Fargo Forum Editorials
sum up what is wrong with
this diversion plan. Also,
Who will pay for this?
Please read and contemplate
the enclosure

Mark J. Thuringer

Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

OPINION

ling
ns
west

of the Red River
ho believe Fargo's
l flood problems
lved by dams and
tion features alone
d look at what is
f the valley. The
ver flood at
n and the
Sheyenne River
floods of 2009 and
2010 at Valley
City occurred
despite – and
possibly because
of – dams that
could not hold
back the
incredible
volumes of water
in the rivers.
Garrison Dam on
the Missouri and
the Bald Hill Dam
on the Sheyenne
igned, but too
st that. The
l the dams filled to
er had to be

the dams should
to anyone in Red
who believes only
chemes – either
poundments – can
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ajor flood. It takes

Red River Valley,
a diversion that
er floodwaters
ietro and its
ns. Water-staging
adjacent to or
ion channel come
s required to
s and minimize
icts. Every study by
rps of Engineers
ering expertise has

YOUR OPINION

Fargo diversion group aims to take our homes, businesses

By Michael Bice

Do members of the Metro Flood Study Work Group believe they are Canada? Canada built a road along the U.S./Canadian border that acts as a dike. This road/dike backs up water in the Red River Valley Basin. The Fargo-Moorhead group wants to build a diversion that will act as a dam. This diversion/dam will back up water and flood out southern Cass and Clay counties. It also appears to have adverse effects in Richland and Wilkin counties.

Do the study group members believe they are kings? They want to build what appears to be a moat around Fargo to protect the castle. This moat will flood out our schools, homes, land, businesses, churches and communities. These will all be sacrificed for Fargo-Moorhead.

Does the study group aspire to be nothing more than a common criminal? It seems they want to steal our land, homes, businesses and communities. They claim we will be compensated fairly, but these things aren't for sale.

Do study group members believe they are clever politicians? They appear to have deceived Cass County voters by passing a sales tax to help with flooding issues adversely affect several communities in Cass County. This information was not shared until after the vote.

The diversion/dam is built right on the Kindred/Fargo School District line. It appears the group has also decided that a new power line should follow a similar route. They claim they didn't know where the school district lines meet, and this is a coincidence.

It does appear the group is only acting in Fargo's interests. This plan is called the Locally Preferred Plan. The Fargo Preferred Plan would be a more accurate name. This plan will affect many others, besides Fargo, who have no say in the matter. This diversion/dam does little, if anything, to help anyone but Fargo, while destroying Hickson, Oxbow, Bakke Addition, Comstock, the Kindred School District, businesses and many family farms. The diversion/dam could adversely affect Richland County, Christine and the Richland School District.

The shocking part of this is all of these communities had little to no water in the past three years. Some will have 8 to 9 feet of water on top of them under the current diversion/dam. The land just inside of the diversion/dam has had 5 feet of water on it in each of the past three years. Yet the every year, whether it is used or not. Where will the money come from? The 1-cent sales tax cannot cover more than $2 billion. Fargo and Cass County will more than likely have to increase the tax to make up the shortfall, plus there will be assessments they haven't mentioned yet.

Do the people in Horace and West Fargo realize they will likely be assessed costs for this project? They both currently have flood protection beyond the 2009 flood. Why is the city of Fargo looking for 500-year (0.02 percent chance) flood protection? The highest currently on record is a 50-year flood.

I live in Bakke Addition, own a business in Hickson and have two kids who attend the Kindred School. I have never sandbagged my home or business because they have never flooded.

I am from North Dakota in the USA. Where are you from, Metro Flood Study Work Group? You are not from Canada. You are not kings. You don't appear to be clever politicians. Let's hope you truly don't want to be criminals, either.

In North Dakota, we respect our neighbors, don't live by deception and help each other.

Step back and take some time and come up with a plan that helps the entire

ersion channel come
ties required to
ests and minimize
npacts. Every study by
Corps of Engineers
neering expertise) has
ne conclusion: A
associated water
rage basins can be
ost flood events.
the progress Fargo
have already made to
t high water, a
e best choice.
sinformation seem to
r much of the
te among people who
ject. Opposition is
eas that are identified
storage and staging
hem south of Fargo-
ne of the target areas
n flooded but could
et of water on them,
basins during a
eople living there are
e they've been
crifice to protect the
should dismiss their
st over the possibility
homes and
it no one should take
notion that water
ner upstream can
ing close to the flood
t near-diversion
aging areas can. The
the hydrology don't

gestion that Fargo
protection from a
tastrophic flood
nances of such an
t? Look west. It's been
s since Bismarck
he kind of flood
v. That's not a long
serious flooding. In
, a dam is false
ly takes one great
a catastrophe.

represent the opinion of Forum
the newspaper's Editorial Board.

sale.

Do study group members believe they are clever politicians? They appear to have deceived Cass County voters by passing a sales tax to help with flooding issues countywide. This tax likely will only help Fargo and actually flood out several communities in Cass County that have never flooded.

I believe they knew before the vote last November that the diversion/dam would have 8 to 9 feet of water on top of them under the current diversion/dam. The land just inside of the diversion/dam has had 5 feet of water on it in each of the past three years. Yet the F-M group claims that this is the best place for the diversion/dam?

The cost of the diversion/dam is astronomical at $1.7 billion. I believe it will be far more expensive. There will also be $3.7 million in maintenance

In North Dakota, we respect our neighbors, do live by deception and help each other.

Step back and take some time and come up with a plan that helps the entire Red River Valley Basin. T U.S. Army Corps of Engineers should work fo all of us, not just Fargo. T rest of us like our homes, schools and communities, too.

Bice owns a business in Hickson, N. and lives in the Bakke Addition.

Critic selective in his criticism

By Sanjay Lal
Moorhead

No doubt James Horsley thought he was making an intellectual case against Gov. Mark Dayton's recent vetoes concerning gay marriage, voter ID and abortion (letters, June 5). What Horsley seems to be unaware of is that any position can be carried to its supposed "logical conclusion" and thus seem absurd.

For example, would it only be logical for Horsley to support requiring that everyone who seeks to get married first get an OK from government about the suitability of their desired partner? After all, since so many (regardless of sexual orientation) make bad choices concerning who to marry, could not such a requirement only protect our families and thus society?

Additionally, would it not make sense for Horsley to hold that voters should have to submit DNA samples for confirming their identity before casting their ballots? This would go much further than an ID requirement in ensuring that those at the polls really are who they say they are.

Finally, why not (if you are Horsley) believe that an investigation by law enforcement should be conducted in every case of miscarriage to make sure negligence or purposeful intent was not in play? This would only make sense for Horsley, since si investigations are rout when already-born hum: die.

In writing against D ton's vetoes, Horsley o showed how selective he i his criticisms.

US need not be global policeman

By JoAnn Orvedahl
Moorhead

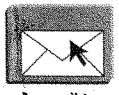
Hey, wait a minute. W are we doing here America? Are we to be policeman of the wh world, telling every nat what to do?

Some good words found in the Bible, Ps: 22:28: "For dominion belo to the Lord and he rules o the nations."

LETTERS POLICY

Letters to the editor should include author's name, address and phone number. Generally, letters should be no longer than 250 words. All letters are subject to editing For questions or comments, call (701) 241-5521. You can send letters three ways:

By mail to:
Letters to the editor
The Forum, Box 2020
Fargo, ND 58107



By email to:
letters@forumcomm.com

By fax to:
Letter to the editor
(701) 241-5487

May 2011

FARGO-MOORHEAD PUBLIC MEETING COMMENT SHEET

US Army Corps Of Engineers

Name Ron Duval Telephone 701-588-4245

Address 4857, 173rd, Ave, S.E.

City Horace State N.D ZIP 58047

note: **Name, Telephone, and Address are optional and can be left blank**

☐ I would like email notifications at: _____

(Please provide your comments in the space below)

My Wife and I have plans for our land. Our land is a source of income for our family. The land has been in our family since my Great Grandfather. The Farmstead is valuable to us. We also have a business Establishment, located on the Premises - Auto Repair Shop. My Folks are also Buried at the St. Benedicts Cemetry - Our Family doesn't want a Diversion.

Please check **ONE** category below that represents your primary interest in the study.

X Business/Industry	X Personal Interest
___ Federal Government (Congressional)	___ Media
___ Environmental Group	___ City/County Government
___ Federal Government (All Other)	___ Recreation
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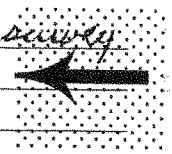
Your Request is denied to survey our land.



Please drop comments in the box provided, or feel free to mail this, and any additional comments to:

Aaron Snyder PM-B
Saint Paul District
US Army Corps of Engineers
180 East Fifth Street - Suite 700
Saint Paul, MN 55101

International Water Institute
Fargo-Moorhead Metropolitan Area Flood Risk Management
Supplemental Draft Environmental Impact Statement

The following are comments received through the International Water Institute Website (http://www.internationalwaterinstitute.org/feasibility/index.htm). Please note that in many instances the online commenting system changed quotation marks to question marks.

2011-02-24_Joseph Tomlinson - Subject: Urgent! Flood mitigation in North Dakota ----- Original Message----- From: drjoetomlinson To: nddes ; rmorrell Sent: Thu, Feb 24, 2011 5:46 am To all it may concern! Water shortage issues and water surplus issues should work hand-in-hand for mutual solutions. I have some ideas for redistributing water from places like Fargo, North Dakota that have too much snow right now to deal with - to places like eastern Colorado and Wyoming where it is being bought and sold at high prices. Read on for my ideas..... I sent the following message to the North Dakota Governor's office earlier this week and copied it to governors in Colorado, Wyoming, Montana and New Mexico. Dear Governor, As you are already well aware, major flooding will occur this spring along the Red River of the North (including into Manitoba, Canada) and along the Missouri river in North Dakota, beginning in mid-March and continuing well into April. As pointed out in a USA Today article last Friday, this is the third year in a row and fourth out of the last six that flooding has occurred along the Red River resulting in huge concerns for people in places like Fargo and Grand Forks, North Dakota and probably for farm family operators in Manitoba, Canada, as well. I have a plan that might seem rather challenging to implement, but I believe it provides an opportunity to mitigate flooding along the Red and Missouri and Mississippi rivers while redistributing those surplus waters to areas in need, especially to Wyoming and Colorado. My plan for mitigating as much flood damage as possible along the Red River, the Missouri River, and downstream into the Mississippi River is to use thousands of industrial strength pumps mounted on trucks, such as those on fire trucks or military trucks, or commercial flatbed trucks, and large diameter hoses, such as fire hoses, as a sort of temporary pipeline to pump as much water as possible in a westward direction to Wyoming, Colorado and Montana, or at least far enough to remove it from the flood zones. If enough trucks, pumps and hoses can be brought into place to be strung together in multiple lines heading westward, I believe enough water can be siphoned off the top of the flooding streams to prevent them from overtopping flood walls currently in place. In addition to fire trucks I would hope that the US Army Corps of Engineers has trucks and pumps that could be put to use for this purpose. I believe communities in Wyoming and Colorado would willingly provide fire trucks and any other type of high volume pumps to support this cause over a period of 4-6 weeks. Their motivation would be to gain the use of the extra water to fill reservoirs in Wyoming and Colorado. Other states such as Montana and New Mexico might also consider helping if they also need water for agricultural use. States such as South Dakota, Nebraska and Kansas might also offer to help to mimize flooding damage in their states, as well. Carpet cleaning trucks have pumps that might have enough volume capacity to help in this cause, as well. If each truck can pump water westward through hoses strung together a half-mile or more in length, and if trucks are stationed about that distance apart in a westward direction, with each truck connected to the westward end of each hose, supplemental pumping from truck to truck to truck to truck can move a significant amount of floodwater westward to pour it into empty reservoirs in Montana, Wyoming and Colorado. States and cities in Wyoming and

Colorado might happily pay a good portion of the cost of this project to receive this water, as it will offset issues of water shortages in at least two of these states. Insurance companies anticipating huge financial losses in flood zones might also contribute substantial amounts of money to help mitigate the flooding. I would hope the US Army Corps of engineers would also help implement this plan, along with the office of emergency Preparedness. If the water can't be pumped beyond the western border of North Dakota or Manitoba, at least it could be pumped far enough west to reduce flooding along the river drainage basins. If the reservoirs west of North and South Dakota become filled and ongoing flooding requires more pumping then the excess can be poured into streams in Wyoming and Colorado or onto farm fields or grazing land where it can seep into the aquifers that have become depleted. Another option is to fill all empty train cars, especially coal cars, heading westward to Montana and Wyoming with snow from areas of North Dakota where excess snow is the big concern. If that is started this week before it starts to melt it could begin to reduce the amount of snowmelt and reduce flooding. Please let me know if you have any suggestions of people to contact to help me lobby to get this plan moving urgently to mitigate the flooding that is already expected to be very serious. Thank you. Sincerely Joseph C. Tomlinson Fort Collins, Colorado 970- 443-1425 Here's another idea: most people bag lawn clippings in summer, they bag leaves in the fall, and now thousands of volunteers in Fargo and Moorhead are busy bagging sand to make 3 million sandbags to hold back the floodwaters from their homes. Why not bag the snow? Bagged snow could be tossed onto trains and trucks and dropped off near reservoirs in Wyoming and Colorado and New Mexico where they could be piled until the snow melts. If they use non water tight bags, like sand bags, as the snow melts it could just seep out onto the ground and drain into the reservoirs. Someone could gather up the empty bags around mid-summer and ship them back to North Dakota. Or, bags of snow could be collected and stored in vacant warehouses around farm towns and cities in North Dakota. They might not melt until mid summer, but once they have melted the water could be released onto the ground to flow into the streams and lakes, or onto lawns to minimize summer lawn watering. Would it be difficult to bag snow? It shouldn't be any harder than bagging lawn clippings, leaves or sand. A lot of people use snow blowers to clear their sidewalks and driveways. The snow could be blown right into bags attached to the machines. After the sidewalks are cleared, if the snow is deep they could use the blower on their lawns and remove most of the snow from their property to be reapplied in mid summer to perk up their lawns. Next option: Highway snow plows could be modified to work like combines - shooting snow into dump trucks the way corn and wheat is poured into trucks in the fields. The trucks could travel behind the plows until they are full, then haul the snow to a center where it could be placed into a bagging machine much like new machines designed to fill sand bags already in use in Fargo and Moorhead. Getting rid of the surplus snow would be a great step in mitigating/reducing flooding. To help prevent similar flooding issues in the future, and to help route more water from those areas into Colorado and Wyoming, and possibly to New Mexico, I propose a pipeline system be built from strategic places along the Red and Missouri Rivers, along with pumping stations to move that water westward. Water shortages and water surplus issues should work hand-in-hand for mutual solutions. I have read about Royal Bank of Canada's Blue Water project and have keen interest in the bank's efforts to better manage water resources, not only in Canada but in the US as well. I believe they could provide help in this effort as Winnipeg is also at risk of flooding. The contact info for RBC is ww.rbc.com.

2011-03-23_E John Carlson - NEW COMMENT ADDED on 2011-04-30 20:10:35: Much basis for the proposed Red River Diversion staging area stems from the anticipated higher river

flows north of Fargo extending to the Canadian border, which would be offensive to our Canadian neighbors. The higher water levels discussed were in INCHES, whereas the proposed water staging area of water upstream places FEET of water on Oxbow, Hickson, et al. It seems logical to me that a few inches of water could be dealt with much more cost effectively by raising dikes for the communities and farms involved rather than buying our entire communities and destroying a way of life - permanently. Furthermore, no discussion has been given to the offensive "road" the Canadians have at the border, which they recently raised some more. That "road" conveniently acts as a dike/dam and only allows a finite amount of Red River water into Canada. Therefore, we need not be concerned about an increased level of water into Canada because they have already solved the problem for us by limiting the flows.

NEW COMMENT ADDED on 2011-05-25 06:48:22: At the EIS Feasibility Study public meeting at kindred High School on May 24th, Mr. Hertsgaard outlined a plan for a downstream 400,000-500,000 acre feet storage cell north of Fargo in MN being sought by MN Rep Collin Peterson in the Farm Bill. That plan has merit and could preclude the need for a upstream storage scheme south of Fargo that destroys over 400 homes and communities and a way of life. I was greatly distressed when Aaron Snyder discounted the plan Mr. Hertsgaard elequently described as if the plan had no place in the present Corps plan and only interfered with the present Corps planned objectives. I think this plan should be looked at seriously and examined along with a more determined look at environmental impacts of running rivers over the diversion channel, farm buyout procedures that leave farmers "whole" and impacts on people who need to sell their homes NOW and are being prevented from doing so by a US Army Corps imposed property value devaluation and freeze by recent EIS Study impacts.

2011-04-01_Aaron Carlson - I am concerned about the accuracy of the structure number in the affected staging area. I live at 5361 County Road 81 South. When I zoom in on my area of the staging area map, you are not including a "structure" icon on my house. My in-laws live 75 yards north of us. You have included their two sheds, but not their house. Both houses were built in 2008 with the understanding that we were not in the 100 yr flood plain, nor were we in the 500 year flood plain. I am concerned that if our houses are not included on your map, did you count us in the number of affected structures? Also, we built our ground level up around our house by about 2.5 feet. This does not show up on the map as a change in water depth. The sheds were built up about 1 - 2 feet and they show up as having shallower water depths. To summarize: I am concerned about the accuracy of your staging area map. Did you include all structures in your latest cost increases, or were we (and presumably others) left out. Thank you for your work on such a controversial but important study.

2011-04-29_Ralf Mehnert-Meland - I fully support the findings of the feasibility study except that the Western alginment for the ND diversion option needs to be considered.

2011-05-03_Anonymous - As a resident of West Fargo, I feel we are already protected from a major flood event from the Sheyenne River and we have already PAID for that protection. I have concerns about diverting water from another river into our neighborhood. I have concerns with paying for something that we as West Fargo residents have no need for.

2011-05-09_David Strand, Amenia, ND - The diversion plan being proposed for flood protection for Fargo is a horrible idea that should not have advanced to the current stage. This

plan simply shifts the problems created by excess water to other people in the area instead of creating a comprehensive plan good for the entire area. The success that Fargo has had in flood fights by using temporary levees and sandbags shows that an environmental and ecological horror such as the proposed diversion is not necessary. If the city of Fargo were to install permanent levees and floodwalls to 42 feet along with some new retention dams and holding areas the flooding problems would be addressed at a much lower cost. There are too many construction and maintenance problems with the proposed diversion. Let common sense prevail.

2011-05-13_JoAnn Jameson - I believe the cost of the current "possible" diversion is too high for the adverse effects that it will have on areas outside of the diversion. The cost will surely become closer to 2 billion as time goes on. Where will the money come from? Our federal government has no extra and the state of North Dakota doesn't really have a history of high spending/funding. The Sheyenne diversion was paid for by tax assessments to the people who benefit from the project. Ask the people of Fargo if they are willing to pay for the Fargo/Moorhead diversion since they are the ones who benefit. I would guess that they would agree to the plan if the rest of us pay for it but wouldn't want to pay for it on their own. The city of Fargo needs to continue to buy out property along the river, dike where they can and certainly STOP giving building permits in flood prone areas. It is also of interest that the areas protected by the diversion, follow the Fargo school districts borders exactly. Fargo has shown that they are not willing to give up anything for the project (they have to leave room south of town for development) but anyone living outside of those lines, should sacrifice whatever needs to be sacrificed for the city of Fargo. The cost is simply too high for the number of people that it protects. I want to see WHERE all of the money will come from and I believe that the current numbers are low

2011-05-23_Dean Rust - I have been steamed by the various attempts to divert Red River flows through my Farmland that lies eight miles west of that river. The Corps of Engineers plays the game of hide and seek. If ever there was a project that has failure written all over it, this project is a winner. Promises have been made for funding that should not be fulfilled. Yet the search goes on for solutions such as a huge FLATLAND reservoir and dam south of Fargo. In the drought years of 1988 and 1989 Two Red River Bridges were built between Fargo and Moorhead. The Toll Bridge at 12th Ave No. and the North Broadway Bridge. As I monitored these two low level bridges become submerged by rising water this spring, I took picture evidence of how ice and debris piled up against these two bridges which delayed the early flow of rising water out of the Metro area. I will not give up my land to a Red River Diversion while these two bridges and other flow restrictions remain in place on the Red River. Dean A. Rust

2011-05-24_Judy Willem - My husband and I live less than one mile south of Oxbow on the Minnesota side of the Red River on my husband's family farm. Our home is only about 7 years old. The house and that of my father-in-law are high, overlooking the river. This farm, that has been in the family for 4 generations has never flooded. When we chose the location of our home, we purposely checked to make sure we were high and not on a flood plane. This is our retirement home. We have 2 sources of heat; a ground source heat pump and an outdoor wood stove that heats our basement floor. We just finished the siding and added a deck. We have brought in fruit trees. Now our home and farm that have never flooded are going to be sacrificed for homes that do flood? This makes no sense. We did it right. 1. Why is our home and property not as important as the homes in Fargo and Moorhead? We planned to finish our basement this

summer. I am retirement age. I do not want to live the rest of my life with my home in limbo. If it takes 12 years before we are bought out, I don't want to be moving at that time of my life. I designed our home. I do not want to give it up. 2. Do we finish our basement? 3. Will the government pay to have our house moved? 4. Will they replace our heating systems and move our fruit trees? 5. We have sheds full of stuff. What happens to all that? I am not afraid of a natural flood. I am not afraid of a diversion because that is basically a big ditch. I am afraid of the holding pond. 6. Why can't the diversion be built with many smaller holding ponds that use up only farmland? 7. Why can't the diversion also have a series of locks that can control the flow?

2011-05-24_Landis Hjelle - I live 3 miles sounth of Grand Forks and my home is located on the Red River. It presently is high enough to withstand recent flooding. My home would not be able to withstand any additional water without suffereing significant damage. Please. Do NOT approve any flood protection that will add water to the downstream residents.

2011-05-25_Sue Knutson - My grandfather owned the land that Oxbow was built on (selling it to them in 1973) and created the Bakke subdivision. My parents, grandparents, and two sets of aunts & uncles built their homes in the Bakke subdivision from 1973 to 1976. This is my home. My parents home. And my late grandparents home. To flood this entire area is completely ignorant of the history and the effect that it will have on families, businesses and schools (Kindred). It is not appropriate to take out several little towns to save a bigger town. Fargo & Moorhead need to take their own issues and fix them themselves. Just as Oxbow did. This year Oxbow had no flooding issues because they did what they needed to ensure that they wouldn't have the devastation like before. There needs to be other alternatives studied and explored that won't take out complete communities.

2011-05-25_Patrick Pfaff - This diversion process has continued to get out of hand. The goal is to protect Fargo from the flooding Red River there are ways of doing this without flooding other families from their homes. This has been proven over the last three to four years, make these changes permanent. Why reinvent the wheel and risk other persons properties? I live in West Fargo and have paid for and continue to pay for our flood protection, so why do I need to pay for Fargo's. It is easy to spend others money. I also work south of Fargo along I29, and the new plan appears to flood my place of business this is a negative situation for Myself and the other 65 plus persons that work there. We need to fix what is broken. Make permanent the diking that worked in 2009 and 2011, make farmers stop draining their fields and put retention ponds back where they were twenty or thirty years ago....in the low spots in fields, known as sloughs. The ducks will love it!

2011-05-25_Mike Bindas - I built my home in Oxbow 1996 moving in April 15th after the flood of 97'. I've never had any water from any of the floods. I now have a 4 1/2 ft high "burm" in the middle of my back yard (eliminating my back yard which backs up to the Oxbow CC) to "help" the rest of the city of oxbow in the case of overland flooding above 40'. The market value of my home is ZERO.. If the diversion is passed why do we have to wait 10-12+ yrs to get a buy out? If the diversion ends up not happening I have little to none chance.. of the value of my home returning to its pre-diversion values anytime soon. I'm struggling to seem how this is even close to "fair". WHY DO WE HAVE TO WAIT IF THE PLAN IS TO GO AHEAD WITH THE DIVERSION...

2011-05-25_Chris Holland - If the project is approved please dont make the people of Oxbow, Baake, Hickson & Comstock wait for their buyouts until 2021 or longer. They should not have to wait until the completion of the Dam to move out of their homes. If you leave these people in limbo until the completion of the project they will not be able to sell their homes or move on with their lives for 10+ years. That is just not fair to people that are not asking for this project to happen in the first place. We are hurting them enough by taking their family homes and uprooting their lives. Make the project purchase the homes of the people that have to move, or wish to move, once the project is approved. The people that want to stay until the end when the project in complete also have the oppertunity to do so. The project can then rent the homes out until project completion. This will assure that these communities stay as they are today until the very end. This is still not a fair trade for ALL that they have to give up but at least it gives them something to look forward to. It doesnt leave them land locked to their homes for years with no one willing to buy their homes. It would give them some flexablitly to move on with their lives after the project starts. AT THE VERY LEAST GIVE THEM THIS!!!! Thank you

2011-05-25_Teri Lingen - I am a resident of the Bakke Addition which will be directly affected by the LPP Diversion Proposal. I have two children enrolled in the Kindred school district. This proposal will directly affect them by having to uproot and move to another area unknown? We have NEVER had problems with flooding in the 10 years that I have lived in the Bakke Addition, but we are being forced to become a holding area for the water? One of the reasons we moved to this location was because we wanted to get out of Fargo to raise a family in a smaller school district and also to have a bigger lot and more room for our family. This area has never flooded and this is one of the reasons we also chose this area to live...knowing we would not have to deal with flood issues? It seems to me there HAS TO BE other solutions and I feel the time given for this project approval is unacceptable. There needs to be more research and other options need to be presented. There is more to this state than Fargo and we need to look at a solution for rural areas as well as Fargo.

2011-05-26_Charles Townsend - It's simple, As a resident of Oxbow, ND. I will do everything in my power to stop the diversion. You guys have little consideration for anyone that lives at Oxbow. Chuck T.

2011-05-26_Amanda McDowell - My husband and I are opposed to the proposed diversion that would affect Pleasant Township. We live on a 12 acre farm 7 miles south of Horace, North Dakota. This is the first home my husband and I have ever owned. We worked hard for this home and it means a lot to us. This home and farm is our entire life. If we were forced to move because of this diversion, we would be devasted. It makes me sick to think someone can make us move without giving us the choice. Imagine someone forcing you out of your home and how you would feel. When my husband and I bought this farm, we never thought this would happen. This is so upsetting and awful to us. Please, please, PLEASE do not force people out of their homes and make them move. There are people who have lived on these farms and homes for years and years. People have grown up in these homes. It not only holds financial value, but sentimental value as well. Thank you, Amanda McDowell 17094 52nd St Se Horace, ND 58047

2011-05-26_Neal A Folstad - As a resident of Wilkin Countyand A Cnty Comm. backing up the water on the Red River will Impde the efficancy of judicial ditches hencefort hbacking the water up land that is benefited by these dithes, actually making them useless, How will those benefited growers be compemsated now that the ditches are useless? How will taxing

authoritiesbe be made whole when evaluations drop? Will the benifited properties(Fgo-Mhd)be assessed and who determines fairness?

2011-05-27_Doug Lingen - To: Project Manager I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I understand that Fargo needs help in protecting its city, but to the extent that the U.S Army Corps of Engineers and its sponsoring commissions are asking other towns and its people to take on Fargo?s water problem is beyond comprehension. The staging area is stated to be 33,390 acres, and the Corp acknowledges that there will be impacts outside of this area. If the Corp has not determined this cost or possible impacts how can you proceed with a project not knowing the possible outcomes and still say this is the best plan when not all is know. I also have a problem with this many acres being affected since my job is directly tied to agriculture and these acres since I work at the local elevator in Kindred. Will I have a job if the elevator doesn?t have any grain to handle due to persistent flooding of these acres? How do account for and pay for this? Is this project more about flood protection for Fargo or for expansion of the city? Dr. Mahoney talks about how Fargo has given up 400 or so houses that were built by the river at 36 or 37 feet. How high is the level around Davies high school? They are still issuing building permits at these same levels banking on the diversion aren?t they? What about the rural water systems? Have the systems been accounted for in how to protect them and account for the cost? Fargo is a vital part of North Dakota?s economy but that does not give it the right to destroy other communities and school districts just to promote its own new school (Davies) and expansions areas. Kindred and Richland should not have to lose out, and its remaining citizens should not have to pay the higher taxes it will require to maintain itself without due compensation. In my mind that does not mean that just because a tax statement says a piece of property is worth $200,000 that is all a person should get. Where can you replace your home and friendships for the same money that has been established based on what a tax statement says? It can?t be done!! If Fargo wants the land that bad, bring a BIG checkbook. I ask that the Corp take a step back and look for other alternatives to Fargo?s water problems. We all know there are other things that can be done to minimize the problems. Please listen to others and well. We all have to live in and around Fargo, not in it. Thanks for your time Doug Lingen

2011-05-27_Mike Strei - To The Army Corp of Engineers concerning the LPP or proposed F/M diversion project. I consider it an absolute travesty and miss use of funds when these flood waters could be dealt with in a manor much less costly simply by aligning with the basin authority and their study of holding areas such as low spots (sloughs) and drainages holding off these waters during peak melting periods. Farmers are continually finding more effective ways to drain their land all the while you are trying to develope flood control. I contend to go back to natures way of dealing with flooding and its by filling the low areas and holding it until the river has had its time to empty.

2011-05-27_Kathi&Dan Trottier - Our address is 5067 171 AV SE Horace ND. We have lived here since '75 and have other buildings on our place. We dont farm but we also dont want to leave.This diversion would be such a waste of prime farmland.I wish another way to do it could happen....maybe there's somewhere else where less farms would be impacted....and you never know if we will begin a dry cycle this year or next. There is not one person in the impacted area that wants this. Thankyou....Kathi

2011-05-27_Barb Rheault - I feel the diversion plan is overkill for Fargo and more so for the surrounding area. Yes we need protection--but it has to be affordable--this is too costly!!!

2011-05-27_Shanda Gustafson - I disagree with the current plan for a diversion around Fargo and with the buyout south of Fargo. I am not willing to spend that much on flood protection. I would rather see flood walls and permanent levees similar to Grand Forks.

2011-05-27_Ben Mauch - Hello Thanks for considering my comment. I feel that something must be done to protect the Fargo-Moorhead area but more study must be done on the surrounding areas. We need to find out what the affects are on the Tieback Levee that is proposed on highway 17. My concerns are the overland flooding that has occurred in the Kindred and Davenport rural areas the past couple years, currently the overland flooding flows north and east across highway 17 until it gets to the Wild Rice River. I have not heard anyone address what the affects are when the levee is built and no water can flow under highway 17. I would suspect that there would be more flooding on normal wet years like 10' and 11' that could put the towns of Kindred and Davenport at more risk of flooding. I also feel that not enough consideration has been done on alternatives to the staging areas and where the logical place to store or if storing water is the best solution. I believe that we should consider the FCP plan over the LPP plan for a couple reasons, 1. Initial Cost. Cost of the FCP is currently over $550,000,000 less than the LPP plan that Cass and Clay counties along with Cities of Fargo, West Fargo, Moorhead and possibly the State of ND will have to use tax dollars to fund. 2. Annual Cost. average annual cost is almost $30MM less and the net benefit is about $27MM per year better with the FCP plan. 3. Chance of getting Congressional approval. With the benefit to cost ratio at a 2.44 vs a 1.75 it is more likely to get approved through Congress, especially with the current political landscape and everyone trying to get elected under the talk of reducing the deficit. Granted with all I have said in approval of the FP plan I also think this proposal needs to be looked at closer to see the impacts that it will have down and upstream of Fargo. Thank you for taking my comments Ben Mauch

2011-05-28_Steve Dockter - It is absolutely ridiculous how many times you have changed this project and yet still haven't addressed everyone's problems. You are only looking at Fargo and basically have said to forget everyone else. You have not looked at how to help everyone and not just Fargo. Until that is the case this project (not diversion anymore) needs to be re-examined regardless of any time line that Washington has set. As you know there is very little chance that Congress is going to approve this project, so it is your responsibility to have the best plan to move forward with. You are putting too many people at risk and honestly only have Fargo's best interest in mind. It's time to re-assess the feasibility of the project and hopefully then you will see that it is not worth going forward with.

2011-05-31_Norman E. Mark - I am writing as a resident of the city of Oxbow, ND, and interested and affected party to the proposed Fargo diversion which would also affect the cities of Hickson, Kindred, Bakke addition, Pleasant Township, residents of the MnDak Upstream Coalition area, and all eastern North Dakota residents outside the proposed diversion. Much time and money have been spent and continue to be spent on engineering studies focusing on the affects on fish and wildlife and basically ignoring the affects to residents; decimated values of properties, interrupted, irreplacable life styles, making future planning impossible, to say nothing of the economic impact on the Kindred School District as well as individual residents. Even if the Corps happens to receive approval of the above project there is not adequate federal or local

funding to complete the project. I will join any group in requiring buyouts before one shovel of dirt is moved to commence the project. And let me be specific - I will not be purchasing a residence in the cities of Fargo, Moorhead or the counties of Cass or Clay. The Corps' ineptness seems to have already been adequately demonstrated by the incompletion of the McClusky Canal, the present flooding of south Bismarck by inadequate control of Lake Sakakawea, and ignoring of the near emergy situation of Devils Lake. The present plan does not guarantee flood protection inside the diversion and the Corps and involved bodies refuse to study a series of holding reservoirs or the waffle system - which we see being used by nature during current floods. Sections of land that have been previously inundated the city of Fargo or someone has miracuously found a way to control the water at some unknown point, because this year sections of land were void of water. The Corps at public hearings insists levees are not efficient, but yet two such levees are designed into the present plan. This year other than part of our golfcourse there were no flooding problems in the city of Oxbow. Give us a Permit to raise our dike around the east part of our city like Fargo is rampantly diking all over the city, do not force additional water on us, and we'll be fine. I could continue ad infinitum, but I'm sure this communication will be stored in the bowels of your archives. Do not bother to respond with a Form Letter. I've listened to and read your comments ad nauseam. Norman E. Mark

2011-05-31_Diane Samuelson - I live in West Fargo and understand the need for flood control, having experienced high waters before our diversion was built. However, the current plan to create holding ponds that destroy acre upon acre of farmland, tear down homes and minimize school districts is unacceptable. There are not enough people in Fargo who are affected by recent floods to offset the devastation to home and property you will cause to those outside Fargo city limits, both to the south and north. Your current plan is morally distasteful. You can do better.

2011-06-08_James A. Sauvageau - The affect of the diversion to the area I grew up in, Totally taking it off the map. The farm I grew up on will be eliminated. Not only our family, but the neighbors that I grew up with. My Parents, brother and brother inlaw all have home in the area that will be the holding / storage pond. What are they to do? Not so much for me now, but the families and relatives that are still in that area. They have young sons that want to keep the farm going. this diversion is saying no, not here anyway. I personally do not disagree with putting in a diversion, but this plan cuts through a neighborhood that a lot of people call home.

2011-06-10_Anonymous - The soil where the diversion path is designed is not stable. One can look at many examples where soil stability in this region has failed. The most recent graphic example is the I 94 interchange at Veterans Boulevard. This project had to be completely rebuilt on a foam base. Another current example is the interchange that allows I94 west and east bound traffic into the west end of West Fargo. The West Fargo diversion is another example of soil instability. If a 500 year event were to actually occur. I doubt the soil of this proposed diversion would stand up and a breach would almost be certain to occur.

2011-06-10_BRUCE CHRISTMANN - I AM FILLED WITH MORE QUESTIONS THAN WHAT ONE SHOULD CALL A COMMENT. I HAVE ATTENDED SEVERAL OF THE MEETINGS ON THE PROJECT AND EVERY TIME I COME AWAY MORE ANGRY AND FRUSTRATED THAN BEFORE. I LIVE IN DAVENPORT TOWNSHIP OF CASS COUNTY AND SERVE ON THE TOWNSHIP BOARD OF DAVENPORT TOWNSHIP. I WILL SUBMIT MY COMMENTS IN FORM OF A SERIES OF QUESTIONS AND I EXPECT A CLEAR AND CONCISE ANSWER TO EVERY QUESTION, NOT JUST A JUMBLE OF

TECHNICAL JARGON THAT YOU PUT OUT AT THE MEETINGS. QUESTION #1 IN READING THE OPERATING GUIDELINES OF THE CORE OF ENGINEERS IT STATES THAT THE CORE CANNOT CONSTRUCT AND OPERATE A PROJECT THAT BENEFITS ANY UNDEVELOPED PROPERTY. THE PLAN THAT IS PRESENTED THE LPP CLEARLY CONTAINS WITHIN IT FARMLAND THAT IS UNDEVELOPED. HOW CAN YOU TAKE THE PROJECT ALL THE WAY TO HICKSON TO PROTECT THE LAND WITHIN THAT AREA THAT IS UNDEVELOPED AND YET LEAVE HICKSON, BAKKE EDITIN AND AXBOW OUT OF THE PROTECTED AREA AND STILL BE IN YOUR GUIDELINES. QUESTION #2 FROM THE MEETINGS I HAVE ATTENDED IT IS MADE CRYSTAL CLEAR THAT THE FEDERAL GOVERNMENT, STATE GOVERNMENT AND COUNTY GOVERNMENT WILL NOT GIVE FUNDING FOR BUYOUTS OR MITIGATION. THEREFORE WITH THE COST OF PROPERTY AT PRESENT AND THEN IF YOU TAKEOUT OF THE EQUATION THE LAND THAT WILL FALL INSIDE THE PROJECT TO BE BOUGHT OUT THE REMAINING LAND IN THE AREA WILL RAISE IN COST TO VALUES THAT NO REASONABLE RICE COULD BE ESTIMATED. THEREFORE IF THE PROJECT CANNOT OPERATE OR BE COMPLETED UNTIL THE BUYOUTS OR MITIGATION IS SATISFIED ARE YOU AWARE THAT YOU ARE PROPOSING THE NEXT GARRISON DIVERSION PROJECT. A PROJECT THAT HAS NEVER FUNCTIONED IN ITS LIFETIME AND IS NOW IN NEED OF MORE REPAIR AND MAINTENANCE THAT IT COST TO BUILD IT AND HAS NEVER OPERATED A MINUTE IN ITS LIFE. AS FARGO AND MOORHEAD WILL NEVER COME UP WITH THE FUNDING TO GIVE FAIR AND REASONABLE REPLACEMENT VALUE TO WHAT IT WILL TAKE AWAY. QUESTION #3 FROM LOOKING AT THE MODELS YOU SHOW FOR THE PROJECT IT APPEARS THAT THE CITY OF COMSTOCK MN WILL POSSIBLY BE FLOODED. BUT WHY HAVE NOT ANY OF THE MEETINGS ON THE NORTH DAKOTA SIDE ADDRESSED BUYING OUT THAT AREA. THERE HAS NEVER BEEN A A ANSWER TO THE QUESTION OF THE WATER COMING OUT OF THE SHEYENNE RIVER AS TO HOW OR WHERE IT SILL HAVE TO BE DIRECTED TO GET BACK INTO A CHANNEL TO GET IT OUT OF THE AREA. I ALSO QUESTION SOMETHING THE FEASIBILTY STUDY PAGE 7 ABOUT THE 400,000 ACRE FEET OF BENEFIT.IF THE COST OF 1.6 FEET OF BENEFITS IS 1.6 EQUALS 400,000,000- 6,000-000-000 DOOARS THEN FOR A GOAL OF 12.4 FEET WOULD COST 4'960'000'007'440'000'000 CORRECT. THIS IS NO WHERE NEAR THE COST THAT ARE ACTUALLY BEING DISCLOSED AS 400'000ACRE FEET @1.6 FEET OF BENEFIT WOULD REQUIRE 19.84 FEET OF BENEFIT. THUS 40,000ACRES COVERED WITH 10 FEET OF WATER X 19.84 = 198.40 FEET OF WATER ON 40,000 ACRES. LONG BEFORE YOU COULD HOLD THAT AMOUNT OF WATER IN THE WHOLE RED RIVER BASIN OR LAKE AGASSIZ REGION LAKE AGASSIZ WOULD RETURN AND FARGO WOULD GO UNDER ALONG WITH YOUR DIVERSION , CORRECT. HAS ANYBODY ASKED THE FARGO CITY COMMISION AND THE POOWERS THAT BE THAT WANT TO SO DEARLY PRTECT THE SUPPOSED GREAT ECONOMIC ENGINE WHAT GOOD ANY OF THERE INDUSTRY WILL BE WITHOUT A WORK FORCE. BECAUSE IF YOU TAKE INTO ACCOUNT ALL THE JOBS THAT FARGO TOUGHTS IF IT WERE NOT FOR ALL THE PEOPLE THAT COMMUTE FROM THE A 90 MILE RADIUS OR MORE OF FARGO THEY WOULD NOT HAVE THE WORKFORCE IT REQUIRES TO FILL THESE JOBS. WITHOUT A STEADY WORKFORCE COMPANIES WILL LEAVE FARGO WITHOUT

PAYING THERE TAXES AND WORKERS WITHOUT JOBS TO BUY GOODS, PAY SALES TAXES AND OTHER INCOMES THAT FARGO INTENDS TO USE TO PAY FOR THERE ALREADY UNSUSTAINABLE PORTION OF THE RESPONSIBILTY FOR THE PROJECT. ALSO ACCORDING TO THE FIGURES IN THE STUDY THE SALES TAX THAT IS IN PLACE TO SUPPORT THE PROJECT WILL NOT EVEN PAY FOR THE COST OF UPKEEP AND MAINTENANCE OF THE PROJECT MUCH LESS LEAVE ANYTHING LEFT FOR DAMAGES OR MITIGATION.

2011-06-11_Marie Talley -.Please provide a detailed reason as to why the diversion is placed where Fargo can continue to develop and grow in the 100 Flood plain rather than placing it directly south of their new high school? NEW COMMENT ADDED on 2011-06-11 08:39:55: I would like to receive a 500 yr map of Eastern ND showing how the state and red river basin will flood with the diversion and without the diversion. I would like to see both options. This type of analysis should be required and completed before a decision as I don't see how the diversion will accommodate a 500 yr flood for anyone once Devils lake breaks out, the Sheyenne continues to overflow and the Wild Rice. We need to complete a due diligence of all the rivers at a 500 yr flood stage. Since economincs is the key factor to keep Fargo alive in a 500 yr flood, we need to see what other communities are alive - you might find that Fargo will have no commerce from anyone once you run that map.

2011-06-11_Anonymous - The proposed diversion will still have a major impact on downstream areas. Diverting water into a engineered path will speed the flow of water that is naturally restricted by the red river's natural flow path. The redesigned diversion will impact all areas to the west of diversion and cause flooding backup where it has never been seen before. These areas include the lower branch of the Rush River, The Rush River, the Maple River and the Sheyenne river and multiple legal drains, county and township ditches.

2011-06-12_Karen J Kruse - Dear Mr. Synder, I live 25 miles from Fargo along the Sheyenne. We have experienced water all around us with all roads washed out to make it difficult to exit our farm during the spring floods. When I heard the dam and tieback(on hwy 17)was going to come one mile east where we have farm land, I felt like I had received a blow to the chest. What is Fargo doing with their water in my back yard at Kindred?? This is not only stupid, it is criminal!! The Army Corps has had many distasterous projects over the years. What does the Army Corps do? I feel they go to war with water and take out people and property!

2011-06-12_Pamela Hall - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. After attending the March 30, 2011 public informational meeting in Kindred, I came away with several questions and concerns that do not appear to have answers. ? I live north and east of Kindred. My property has not had any flooding issues and is not currently in the map of areas impacted by the diversion. I do question, however, if consideration has been given to properties in this area. If Cass County Road 17 is raised to be a tie back levy, will the water that naturally flows out of the Sheyenne River to the north and east be able to do that? ? County Road 17 will be a spillway for water to overflow out of the retention area. When water flows over the tie back levy on County Road 17, will I become a victim of this water? In addition, the water from the Sheyenne will mix

with the overflow. How far west and north of Kindred will water from the Sheyenne back up when it is not able to take its natural course of flow? What will be the impact of this water? Will the LPP protect me as a home and property owner in this impacted area? ? I believe I heard you state there is an inflation amount allowed for this project. What is that amount? I am not certain if that inflationary amount would be cost shared between the government and us as residents, or if that amount would become additional cost to local residents? Sincerely, Pamela Hall

2011-06-12_Terry Guttormson - NEW COMMENT ADDED on 2011-06-12 07:43:16: It is obvious, to anyone who has been following this diversion debacle, that there are more things at play than common sense flood mitigation issues. At times this project seems to be planned more around career building for USACOE principal planners than about what would be good for the basin. To spend literally billions and billions (carl sagen) of tax payer dollars on a project that will cause litterally millions and millions of dollars of annual damage up stream and down stream is much more than foolish. It is irresponsible waist of tax payer money, even at a time when the country is fiscally emabarassed. The constant rejection to spend the same of less money on a plan that could improve and in many cases nearly totally mitigate flood issues tells volumes of what is going on behind the scenes here. Unfortunatly, through closed doors meetings and other such sculdugery, this train has been sent on the wrong track and will be hard to stop. I fear that this diversion will be built at the cost of the livelyhood, heritage, and history of both up and downstream. It should not be built until all other flood mitigation measures that have positive impacts are implemented. But, once again, we get to witness how government works. Against wise dollar managment and common sence. Terry Guttormson Hendrum, MN.

2011-06-13_Keith Monson - Our names are Keith and Jann Monson. We live one mile west of Harwood, well within the proposed Fargo Diversion. There are many reasons that we believe this diversion is a bad idea. The word diversion means to divert and not to fix the problem. 1. Fargo needs to understand that protecting themselves for a 500 (or .2 percent chance event) is not realistic. Be satisfied with something less ..ie.. Grand Forks. 2. The intersept structures for the rivers crossing the diversion are unproven and no where in the world is there such a structure as told to us by the Corp of Engineers. 3. THE COST...in dollars and in the sacrifice that the people in its path..upstream...downstream and outside,is not in our opinion worth the cost. Fargo needs to stop being arrogant and be willing to sacrifice something themselves for their own protection. We also feel that there is no way to monetarily compensate the owners of the 6500 acres of farm land that will be taken out of production. There is no way that their income stream can be replaced...that land is gone forever. And there is no land nearby it to replace it at a resonable price. Not to mention the farmers that are loosing rental property that will not be compensated or able to replace this land. 4. WILL IT WORK AT ALL..this project is so massive and so many things can go wrong, we don't believe the numbers we are hearing. We are told that the project is now 10 ft shallower and the berm will be higher on the inside than the outside like the West Fargo Diversion. We feel that the Harwood area and north will flood anyway because of back water issues. Living downstream of the West Fargo Diversion we really don't trust much of what we are told will happen. We say these things even though we live inside the project and should be very happy about it because if it did work as advertised, we would be flood free, but we feel that the whole project and the effects that it has on the people upstream, downstream and outside the project, make the entire project not only wrong but immoral. Keith and Jann Monsono Whom it may concern, My name is Keith Monson. My wife Jann and I live three quarters of a mile west of Harwood, ND along the Sheyenne river on Cass County 17. WE LIVE INSIDE THE

PROPOSED NEW DIVERSION and we are against this diversion project. The reason we are against it is because of the many unanswered questions. 1. How can you possibly mitigate the amount of water that the new corp numbers say will be put on the downstream residents all the way to Grand Forks, and maybe beyond , who knows? 2. How can 6500 hundred acres of farm land be replaced to the farmers and at what cost and where will this land be found. 3. How can you justify taking 6500 hundred acres out of the tax base. 4. Who is and at what cost is going to maintain the project forever including the 800-1000 foot bridges (only on county roads). In our opinion this entire project is being rammed thru at a much too fast pace mainly for political reasons. We do not feel that this area can ever be flood proof. Face it, we live in the bottom of a big lake. We think that protecting the city to a safe level can be done with a retaining structures and much less expensive retention projects. I don?t think the people of Fargo understand the horrible scar that this project will put on the landscape forever. Keith and Jann Monson 2995 170th Ave Se Harwood, ND 58042 <P>NEW COMMENT ADDED on 2011-06-13 20:58:33: Our names are Keith and Jann Monson. We live one mile west of Harwood, well within the proposed Fargo Diversion. There are many reasons that we believe this diversion is a bad idea. The word diversion means to divert and not to fix the problem. 1. Fargo needs to understand that protecting themselves for a 500 (or .2 percent chance event) is not realistic. Be satisfied with something less ..ie.. Grand Forks. 2. The intersept structures for the rivers crossing the diversion are unproven and no where in the world is there such a structure as told to us by the Corp of Engineers. 3. THE COST...in dollars and in the sacrifice that the people in its path..upstream...downstream and outside,is not in our opinion worth the cost. Fargo needs to stop being arrogant and be willing to sacrifice something themselves for their own protection. We also feel that there is no way to monetarily compensate the owners of the 6500 acres of farm land that will be taken out of production. There is no way that their income stream can be replaced...that land is gone forever. And there is no land nearby it to replace it at a resonable price. Not to mention the farmers that are loosing rental property that will not be compensated or able to replace this land. 4. WILL IT WORK AT ALL..this project is so massive and so many things can go wrong, we don't believe the numbers we are hearing. We are told that the project is now 10 ft shallower and the berm will be higher on the inside than the outside like the West Fargo Diversion. We feel that the Harwood area and north will flood anyway because of back water issues. Living downstream of the West Fargo Diversion we really don't trust much of what we are told will happen. We say these things even though we live inside the project and should be very happy about it because if it did work as advertised, we would be flood free, but we feel that the whole project and the effects that it has on the people upstream, downstream and outside the project, make the entire project not only wrong but immoral. Keith and Jann Monson

2011-06-13_Rhoda K. Ueland - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. This Diversion is the Peak of Arrogance on the part of the city of Fargo, ND, ESPECIALLY when alternative and far less costly plans exist that would address flooding basin wide (not just for the protection of Fargo alone). I oppose this preposterous project as it will be catastrophic for homeowners, landowners, farmers, businesses, school districts, cities upstream from the Diversion. Over 33,000 acres PRIME agricultural land will be affected. Costs to local sponsors

for this Diversion will be astronomical, considering adjusting for inflation, compensation for loss of property & damages and purchasing land & relocating buildings to owners satisfaction, to name just a few. Also the estimated annual cost for maintenance/ongoing operation of the Diversion is $3.6 million. As owner of farmland & properties at 689 160th Ave SE, Moorhead, MN (2 m. w. of Comstock, MN along the Red River), the Diversion will not only affect me personally, but will result in the destruction of local, township, county and state history. My great-grandfather, Civil War Veteran Narve G. Roen, Homesteaded this acreage in 1871 which has remained in the family for 140 years. Preservation of this heritage has been a priority. The historic Roen family cemetery, First frame house in Clay County built by Narve Roen in 1881, historic School House, Narve Roen Family Log House Site Marker (Dedication of this marker was held at the 2006 Roen Reunion @ site of original log home- built 1871) would all be inundated with at least 5' water. We have never flooded and no amount of money can adequately compensate for the destruction of history/community. Sincerely, Rhoda K. Ueland

2011-06-13_Ken Knudsen - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I think the plan borders on insane. Let?s start with the question of jurisdiction. By what authority does the Metro Flood Group have to inflict such unimaginable pain and suffering on folks that they have nothing to do with, do not represent, and the folks impacted do not get to vote on their position. Those impacted have no representation. I live in northern Richland County and none of the MFG are elected by us. We do elect our township board and our County Commisioners. They are all opposed to the project. I think the jurisdiction and lack of representation must be illegal and certainly not ethical or moral. Let?s start this over with proper representation. This has been a comedy of errors, only it is not funny. For several months, the Corp said there would be NO IMPACT SOUTH OF HIGHWAY 46. When I contacted our local officials with my concern, they replied with the same quote they were given?no impact on Richland County. Then late in the game, we see maps with significant and unacceptable impact on Richland County. Was this intentional deception to get this off the ground so the opposition wouldn?t have adequate time to react? If so, that should kill this project right there or make them start over. If not, then it proves the Corp has very little idea on the accuracy of the impacts. We cannot and should not have to incur whatever comes at us and have little idea of what the impact will be. If the Corp is that far off on their impact maps, it is much too uncertain to move forward. Deception or inaccuracy? Shouldn?t matter. Either should kill this project or at the very least, start over and do it better so folks have some degree of confidence in those maps, impacts, costs, and concrete plans for those costs. This is not a subtle issue. Involuntarily forcing hundreds of people out of their homes forever, or destroying the homes and environment where they still live often behind new ring dikes previously unnecessary, and taking millions of dollars of prime farmland and future development land out of use forever should not be taken so callously. We have not looked hard enough at all the options. This is too huge of an issue personally and financially to barge ahead recklessly as is being proposed. New impacts spring up regularly. Unanswered questions keep surfacing. New costs keep emerging without answers to how they are to be handled or worse, that they were simply not considered. Often answers are ?that?s a local issue? (problem). But we have no local solution! You are destroying our tax base and telling us to increase taxes to pay for

the damages you are inflicting on us! Doesn?t this sound almost too strange to be real?! The true costs are not discussed or disclosed. Some of these include replacement costs of buildings, damage to roads, costs to raise roads, moving cemeteries and churches, and more. And if the Corp is off a foot or more, as they have been, there are millions more dollars and hundreds more people impacted than current studies show. Anyone worried about the increased flow of water into the Ottertail River that drains into the Red? With a diversion (that was quietly put in and no studies or mitigation done) on the south end and a dam on the north end and the Red flowing north, isn?t is possible or likely we will flood even more than the continuously updated maps show today? And who pays for that? The answer is --that is YOUR local problem. Why is it our problem when this project is the cause? Come on. How do you look in the mirror and repeat that? The risks of costs being much higher than disclosed are high and no discussions on what happens if they are wrong on their measurements/maps (which keep getting revised so there is little confidence in them) or who will pay for unplanned costs or problems. The Corp says they will pay a flat amount. Where will all the extra dollars needed come from and what if there is not enough money to handle that? I get eminent domain. I have always hated it but thought I understood its purpose. The involuntary taking of land for a greater good kind of sucks, but sometimes makes sense. But I have never agreed with that involuntary taking unless there are no other better choices and the pain and suffering that is inflicted on the innocent is justly compensated. How can we wreck people?s lives and then not justly compensate them? How can we as a country justify that? In civil courts when dire damage is done to someone personally, they pay millions to try to offset their pain and suffering. Here we have the Corp or MFG admitting we will not even get what we have coming. Buildings will be at depreciated values. To replace will cost hundreds of thousands for some and thousands for all. And in most cases you can?t replace. What is the value of a home in the country surrounded by woods and river (which doesn?t flood you out) and yet have short access to Interstate highways and Fargo Moorhead? Surely it is not valued by square feet. It is different than a home in town. I have owned both. I know the difference. There is not enough money to pay people for what they deserve so the plan is to just pay them less. A double scourging. And no shame in not trying to make it right. Absurd. Worse than absurd. Immoral. Shame on you. If this dam goes through, what are our options? Where do you move to? How can you replace your farmstead? Where are such places today? They are all taken. I spent 10 years from 1980-1990 looking for a place out of town, on the river, high and out of flood danger with some woods and acreage. I finally found my dream home and bought it. I have never had a flood problem. My farmstead was one of the first homes settled in the area in the 1860?s, likely because of it being on higher ground and the beauty of the woods and topography along the river. It is a beautiful place but also close enough to Fargo for a quick commute. We enjoy the quiet of the country with the proximity of the bigger city close by. Our kids attend a small school. If this diversion goes through, the trees along the river for several miles will all be dead and look like Devils Lake or around Pelican Rapids in those low areas. Thousands of dead trees instead of the beautiful woods we enjoy today. Even if you can ring dike your property, what do you have left? If all the woods are dead and most of your neighbors are bought out and gone, you have lost your home anyway. Where do you relocate? I don?t want to take my kids out of the school they go to. There are no vacanies in our area. You would have to start devolopments on bare farm ground. The commute to Fargo would be longer and you would not have anything like the home you were forced out of. I can?t believe the audacity of the folks proposing this carnage. Just how ?impossible? is it to build levies in Fargo like GF did. We are told it can?t be done. If this current insane plan is killed, won?t some of those impossible plans

become reality? Won?t Moorhead and Fargo do the smart thing and protect their cities by building levies and other such protections? Just how protected can we get? Are we sure it can only be about 43 feet? How do we know that? What would it take to get higher protection? Don?t just say it can?t happen. Tell us why and what it would take to go higher. Maybe that IS an option after all. That is the most popular option so let?s make sure we study that to the fullest. I have not seen the science or the options that make that ?impossible? but we deserve to see that and study that as our first choice. We need that and ask for that before we move further. If a dam is needed, how did the location get chosen? It appears to be against regs or the law to build this for future economic development. That is why they won?t move it west as West Fargo wants. But they are moving it further south of Fargo to create economic development for Fargo?.how does that work? TheCorp says the dam should be as close to town as possible for maximum effectiveness, yet they move it way south of town? This needs to be explained and hasn?t been. Why isn?t the dam better placed further north if it is to be placed at all? Just what are the options for ?no impact to Canada?? What choices do we have there? Have those been explored? The original plan without a dam was killed because some small amount of water apparently goes to Canada. Are we sure there are no options there? Can we build a dam right at the border to hold back the amounts above what is acceptable? What would that impact look like? Would it be a better solution than the current plan? Have we met with Canada to determine what they might agree to? We have the issue of that road up there that is more of a dam. That seems unjust. Maybe we have to negotiate with our dependent neighbor and see what other choices we might have. We need to do this before we take such drastic measures as currently proposed. Basin wide retention plans have been discussed a lot. Let?s try to solve the bigger problem, not just the metro problem. The Corp does not like these plans, but most others do. This needs to be explored before we would move forth with any plan. This could be a plan that almost all agree with as opposed to the current one that is universally hated by all south of the dam. Tiling might be an option as well. A little here and a little there might be the better solution. If we can get Fargo protected up to 43 feet or higher and then do some upstream retention plus other options like tiling etc, and maybe some options downstream to reduce or otherwise deal with the Canada issue, we can solve this without the carnage and likely with less dollar cost and much less human cost. The dam will cause the Kindred and the Richland School districts tremendous harm and it is forever. For obviousl reasons, this is our most valuable tax area now, and our plans are for that to continue. Our future tax base projections are for the area being inundated to be where our population and tax base will mostly come from. It is our most densely populated rural area today and it will only continue unless this project goes through. Once the dam is built and those many miles prime land rendered uninhabitable and the taxable values devastated, it is not a temporary issue. It is forever. No ?do over?. Way to big of a risk to ?give this plan a try?. We have seen the unintended impacts of the existing diversion in West Fargo on those outside the diversion. ?Water as far as the eye can see? by Harwood this year. That will be what we have in much more of the area with this plan. Why is that acceptable to people? And is it? Where I work in Fargo we have over 100 people working in the building. Most did not know there was a DAM proposed until recently when the local groups started their opposition. They couldn?t believe a dam was part of the plan because it had never been called a dam, just a diversion. Why was this fact hidden? If this is a good plan, why try to sneak it through? Why hide the impacts to Richland County? When you can?t look us straight in the eye and tell the truth, that tells you something is wrong. Come on you guys. The vote on the sales tax did not disclose the change in plans to a dam south of town. There seems to be proof that those in power knew of this likelihood or

certainty but kept that quiet until after the vote. Isn?t that a crime? Did someone break the law? What?s with that? Other than it is consistent with the rest of the behavior on this project. And what kind of leadership is this to not involve those impacted by the plan? Who would ever set up an authority group and not include those most impacted? Where is the representation from Richland and Wilkin counties? Are we still in the United States? Unbelievable. The MFG says Fargo has paid dearly so far with millions of dollars of buyouts. Those buyouts are all voluntary. And you paid them up front and well over their value. Do not be condescending and make that comparison to us who are not threatened by flooding and have no interest in being removed from our properties. Shame on you for making that comparison. Those who state that are not unintelligent, which means instead they are deceiptful. Then they should not be one of the Metro Flood Group. We need honest folks that take all things into consideration?not just what is good for Fargo. We need a change in representation. So what should we do? Whatever we do, it is of such magnitude that we have to do it right. We need to be very accurate in our impacts on water levels and on costs. There is zero confidence that we have that today. Proof is in the ever-changing numbers. And time after time we bring up other costs that were not considered and are therefore not planned for. We need to study what we can do in the metro and get answers as to why we can?t do more. We need to be able to challenge those studies as that is the most likely choice. What engineering firms are available for second opinions? Where is our Mayo Clinic of engineering firms to get the critical second opinion when you have so much at stake? We cannot accept the one, ever changing ever moving opinion by the Corp which seems to be in bed with the MFG when they are supposed to be neutral and represent US equally with the MFG. They should not be taking sides here. We need a change of leadership on this project as the current leadership has taken sides. And we need to do adequate studies to really know the impacts and costs, disclose them, and have plans for them. We do not today. Not even close. Slow down and do this right. We need to get better numbers on the costs. The current plan doesn?t come close to doing that. We keep adding to the territory impacted but do not update the costs. Once we know the true costs, we need to know how they are paid for and what are the contingencies? We do not have this today. A remodeling of your kitchen goes from $10,000 to $20,000 like nothing. How many millions might this be off? And no money in escrow for those contingencies? Who does business like that? We need to study other alternatives. When the only plan on the table causes such carnage, you should not roar forward recklessly to meet foolish deadlines. We all know what we learned as children about things done in a hurry. We need to do this right. There must be other better alternatives. Several ideas have been surfaced, but not studied. Don?t we owe it to ourselves to look into those? We have not. Again, we need a new leader at the Corp on this project and a new group to replace the Metro Flood Group that has proper representation. Unfortunately since this has been handled so poorly, we need to kind of start over. Yes we need to do something. We get that. But we need proper representation, we need an unbiased group in leadership of the authority group and the Corp. We need all realistic options studied. When we find the best solutions we need to fully disclose those with full transparency and honesty including solid costs and ranges of costs, and impacts on folks including ranges of impacts. And we have to have plans for those impacts, and plans that are fair to those damaged. That sounds so simple because it is. It is the way we usually do things in this country. For some reason we are not doing that on this project. We need to change that.

2011-06-13_Ken Knudsen - Shorter version of my long comments just sent: Change the leadership group to include folks impacted to get better representation. Do more studies to ensure

we choose the best plan. Do a much better job of explaining the choices and costs and impacts, and then have a concrete plan to manage those costs and impacts properly and transparently. There are several options not explored or explained. If the leadership includes the right representation and the plans show all the options clearly, it will be much more acceptable to folks impacted and there will be more buy in. And then we have to treat those impacted more fairly, whoever they end up being. We are all in this together. You have torn us apart. Time for a do over.

2011-06-13_Pat Askegaard - Re:Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diviersion with storage and staging) for flood control in the Red River Valley. I live on a farmstead that has not flooded during the 30 years I have lived on it. I am concerned that 34,000 acres of prime farmland is going to be affected. Communites are going to be destroyed, hurting school districts and damaging roads, costs of which are not currently in the project. This project is affecting townships and counties that were not included in the decision making process. You are affecting hundreds, probably thousands of lives. Had these families been living in a swamp and on poor land there might be some merit to your project, but that is not the case. You really need to look at alternatives and work with all the people involved. Project costs do not include the moving of cemetaries, rebuilding of roads, moving farmsteads and making them whole again. This project has got to be halted. More study needs to be done. Sincerely, Pat Askegaard

2011-06-13_Candace E Loken - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. This Diversion is not well thought out on the part of the city of Fargo, ND, ESPECIALLY when alternative and far less costly plans exist that would address flooding basin wide (not just for the protection of Fargo alone). I oppose this project as it will be catastrophic for homeowners, landowners, farmers, businesses, school districts, cities upstream from the Diversion. Over 33,000 acres PRIME agricultural land will be affected. Costs to local sponsors for this Diversion will be innordinate, considering adjusting for inflation, compensation for loss of property & damages and purchasing land & relocating buildings to owners satisfaction, to name just a few. Also the estimated annual cost for maintenance/ongoing operation of the Diversion is $3.6 million. the proposal will result in the destruction of local, township, county and state history. My great-grandfather, Civil War Veteran Narve G. Roen, homesteaded this acreage in 1871 which has remained in the family for 140 years. Preservation of this heritage has been a priority. The historic Roen family cemetery, first frame house in Clay County built by Narve Roen in 1881, historic School House, Narve Roen Family Log House Site Marker (Dedication of this marker was held at the 2006 Roen Reunion @ site of original log home- built 1871), the Gilbert Roen home and the Stennom Roen home would all be inundated with at least 5' water. None of these have ever flooded. These are markers of our shared history and no amount of money can adequately compensate for the destruction of Historic Buildings which have been treasured and cherished. In those buildings and in that land, I have been able to connect to my "roots" on this Continent and to the United States of America. Certainly there are other options which would

preserve History, farmland and Fargo: all of three of which are worthy of protection. With deepest regards, Candace E Loken B.A. LL.B Member of the Law Society of Alberta (Retired)

2011-06-14_Joe Talley - The Fargo dam project will destroy thousands of acres of farmland and hundreds of homes, if it is built. In the interim period, the value of property in the affected area has been destroyed. If the city of Fargo can pay for a lobbyist, citizens who have had their property values destroyed should be immediately comnpensated.

2011-06-14_Joe Talley - The dam created by this project will flood numerous areas including areas that have values that can not be calculated. For example, flooding the city of Oxbow, ND will flood the memorial created in memory of Michael Champ. This memorial can't be moved without severely damaging its value, since it was created on the location where Michael Champ spent so much of his brief time here on earth. The Oxbow golf course was the site of great joy for him, and memories of him are inextricably entwined with Oxbow Country Club. Destroying the location by flooding it would be a travesty. How will you save the monument that has been built to honor Michael Champ, and preserve the ability of people to visit the site?

2011-06-14_Anonymous - The dam created by this project will flood numerous areas including areas that have values that can not be calculated. For example, flooding the city of Oxbow, ND will flood the memorial created in memory of Nadia Losing. This memorial can't be moved without severely damaging its value, since it was created and placed specifically to honor Nadia. Destroying the location by flooding it would be a travesty. How will you save the monument that has been built to honor Nadia Losing, and preserve the ability of people to visit the site?

2011-06-14_Anonymous - The Fargo dam project is not adequately funded. There is a high risk that the local sponsors of the project will not be able to raise the fundsd necessary to complete the project. If this happens, who will compensate property owners who have had the value of their property detroyed by this project?

2011-06-14_Anonymous - The USACE regulations require that people impacted by projects like the Fargo Dam be appropropriately compensated. The city of Oxbow is unique in that it has a combination of a golf course, it is within 15 miles of the Fargo-Moorhead area, and children that live in the town can attend school in Kindred, ND (thereby avoiding the large, over-crowded schools in Fargo, West Fargo, etc. Since the living arrangements in Oxbow are unique, how will the residents of Oxbow by compensated?

2011-06-14_Anonymous – With so many other projects requiring funding, such as the Devils Lake outlet, Missouri River flooding, etc. - how can the USACE guarantee that the Fargo Dam project won't be started but not completed? In that scenario residents of Oxbow will have had their home values destroyed (which has currently happened) but will likely not be compensated.

2011-06-14_Anonymous - How will the Fargo Dam / Red River Diversion project protect the city of Fargo from flooding on the Sheyenne River caused by excessive flows from Devils Lake? That event is more likely than the 500 year flood that is being used to plan for this project.

2011-06-14_Lori Propp-Anderson - It has become very clear after reviewing the maps and hearing the truth come out begrudgingly little by little that this LPP is a political move, pure and simple. Fargo wants to grab land that currently is in the 100 year flood plain and destroy the communities and farms of others who live above the 100-year flood plain. Why are we pursuing a plan that will create a New New Orleans just north of a New Lake Agassiz when other solutions exist which will not create so much destruction? The Minnesota diversion costs a fraction of the North Dakota diversion, and according to the maps has negligible upstream and downstream impact. Fargo is protected, and the surrounding communities are not destroyed. Why is this option not top on the list? I'll tell you why. Fargo is getting hemmed in on the west by West Fargo and on the east by Minnesota. It doesn't want to grow north because of the airport and settling ponds, so that leaves south. The trouble is the land south is in the flood plain, so let's build on that flood plain and destroy the Kindred school district and the Richland 44 school district instead. We are growing communities as well. Not everyone wants to live in Fargo. We need to pursue other options that are affordable and do not create such a wake of destruction.

2011-06-14_Greg Hanson - This week the City of Moorhead has made known concerns over the proposed diversion/dam to be constructed in Cass County. When speaking of these concerns on a local call-in radio program, this Moorhead councilman made a comment over how he was informed over the change in the size of the proposed diversion, it came at a public setting from a city resident. If Fargo in its arrogance believes they need not inform a co-sponsor of sizeable changes to this project, how can those of us on the outside, trust information being sold to us now and in the future? Our lives depend on the information given to us, so we make the right decisions, Fargo has shown now and in the past to be less than honest in its dealings with those who would be affected by their actions. Due to where our farm/home is, we have had dealings with Fargo and their plans to protect their future growth area since 1997 and personally I do not know if I have met a more dishonest group in my life. It is also interesting that the property they want to protect was under water this spring, while I who live along the Red River, never placed a sandbag. Lastly, I would want to point out, I now live in limbo, there are things to be done, improvements to make, do I or don't I? Will I be compensated completely? The meetings I have attended suggest that Fargo may not have the funds to cover costs both present and future to compensate us for property taken and damage to roads and crops. Thanks for your time Greg Hanson P.S. In the yard sits a log home that has survived since the 1880's, if Fargo has their way, it won't last much longer.

2011-06-15_James Hanson - James Hanson 17263 50th R St. SE Hickson, ND 58103 June 14, 2011 US Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste, 700 St. Paul, MN 55101-1678 RE: FM Dam/Diversion Project This letter is being written in objection to the proposed FM Dam/Diversion. My farm is located in Pleasant Township, just south of the proposed dam/diversion in section 10 along the Wild Rice River. This farm has been in my family for over 100 years and I have spent most of my 80 years living on this land. I have fought floods off and on over the years and have been able to keep the water at bay, no thanks to any efforts of the Corps, the City of Fargo, nor Cass County. Your proposed dam/diversion will completely wipe out the farm that my great-aunt homesteaded including the original log home that still stands today. Hundreds of years of history will be gone at the swipe of a plan dreamt up at a desk of engineers hundreds of miles away in St. Paul. It is unfortunate that this is the best that you can come up with as your plan completely ignores each and every individual being

negatively impacted by the creation of the proposed dam/diversion. According to one of the Corps of Engineers maps that has been shared with me, if this dam/diversion goes through as planned, there will be an additional 10 feet of water over my farmstead and farmland. Simply stated, this is not acceptable. I have personally spent tens of thousands of dollars building infrastructures that protect my farmstead. This latest plan by the Corps lacks merit and only benefits the City of Fargo. It is beyond comprehension that the Corps was able to develop a plan that will completely wipe out farms, churches, cemeteries, roads --entire communities including most of Pleasant Township. The southeast corner of Cass County will be wiped out. I believe that the Corps of Engineers has acted irresponsibly and has been dishonest and short-sighted in not revealing details of this latest plan until after the Cass County Vote. Your efforts are creating ill-will between neighbors who in the past have come together to work and solve problems as a community. You should be ashamed and embarrassed of the efforts put forth thus far. As a taxpayer, I cannot support a plan that does so much harm to so many people. Everyone agrees that Fargo needs additional protection, but the physical and financial costs of your latest plan are too great. Sincerely, James Hanson

2011-06-15_Joel Hanson - Joel Hanson 3418 Parkview Ln S Fargo, ND 58103 June 15, 2011 US Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste, 700 St. Paul, MN 55101-1678 RE: FM Dam/Diversion Project I am a resident of Fargo and am strongly opposed to the lasted proposal that the Corps of Engineers has recommended. As a taxpayer of the United States, North Dakota, Cass County, and the City of Fargo, I am shocked at the cost of this ridiculous project and the debt that you be putting on the shoulders of each of us and future generations. I guess that is how the government works... which is why our country is in such terrible financial condition. In my opinion, there isn?t one bit of this proposed project that makes any sense to me. For some reason the Corps has climbed in the hind pocket of the City of Fargo and are ignoring the people in the areas most affected by the dam/diversion. The community meetings are near pointless as you don?t listen to anyone anyways. I am disappointed that the City of Fargo, Cass County, and the Corps in their willingness to throw so many under the bus. I strongly believe that the Corps withheld information prior to the Cass County vote which has led to my belief that the Corps, Cass County, and the City of Fargo cannot be trusted. That?s a sad state of affairs when someone says that about their own community. Thanks to your deception, every time I make a purchase in Cass County I am paying for my family?s farm to be destroyed. I shop outside the area as much as possible. How do you all sleep at night knowing that a way of life is being destroyed for so many? Farms, families, communities and businesses all wiped out. Terrible. Have you ever sat down and processed just how much money $3 billion is? Oh yah, I forgot, the Corps is a government agency and in your eyes, money grows on trees. We?ll just pay for it later. Please, please, please stop this madness before you waste any more money on this plan. It lacks feasibility and credibility. Fargo resident, Joel Hanson

2011-06-15_Matt Ness - I, Matt Ness, farm along the Red River just two miles south of Oxbow, with much of the land I farm, directly affected by this diversion plan. I am strongly opposed to the fargo diversion/dam proposal that is being pushed through at a rapid pace, as it would put me out of farming and the way of life I have come to know. I think there are way too many holes in this project with too many questions that the ACOE, or city of fargo officals cannot answer. I believe the projected cost of this project is estimated way to low as many buyouts and changes to infrastructure are not figured correctly. I also question the accuracy of the ACOE, as the maps

and plans have changed numerous times in just a couple months. Without getting into specifics, many of the questions we have regarding proper farmstead buyouts, the lack of insurance for manmade flooding on farmland, wiping out communities, cemetaries, and rich traditions that generations before have created, have not been answered. The answer we get is "Lets just get this diversion through and we'll take care of the other stuff later". It doesn't work that way. Our farm, along with many other farms and communities that are to be flooded with this diversion plan, have NEVER flooded in the 130+ years and have never had to throw a sandbag for protection. This plan only saves Fargo and its desire for growth to its south for development and its tax base. The Locally Preferred Plan (more like the Fargo Preferred Plan has got to go back to the drawing board, or at least slow down, get more concrete answers to these questions, and look at alternative protection for the whole Red river basin. This starts with plans like Congressman Peterson has in the Farm Bill for retention, the 20/20 plan, and other retention areas that have been identified in the tributaries leading into the Red River. I believe a combination of these plans would protect more, cost less, and less mitigation of homes. And lastly, the citizens of the Fargo/Moorhead community should have all the numbers and facts laid out in front of them to see exactly what this will cost each individual in taxes and assessments. As the people of Cass County were voting on an protection plan that was skewed from the beginning with deception to the voters.

2011-06-15_Paul West - Wednesday, June 15, 2011 I am writing in reference to the Supplemental Draft EIS for the proposed Red River diversion in the Fargo-Moorhead area. I live west of Wahpeton, North Dakota in the watershed of the Wild Rice River. In the current maps illustrating the impacts of the proposed diversion, increases in water elevation are shown as far south as Abercrombie. Overland flooding has been an issue along the Wild Rice River and the Bois de Sioux River in recent years. What impact will the staged [stored] water for the proposed diversion have on the levels and rate of flow of waters draining northward in these rivers? These rivers affect the drainage of a large portion of southern Richland County. Also, if the proposed diversion is constructed, how will the operation be coordinated with discharges from White Rock dam? Thank you.

2011-06-15_vern Johnson - In Fargo, you have the affected farmers completely scared. In reality one should assume that they will get wet in a 500 year rain.Relative to the plan for Fargo ND, it is apparent that you have not yet come to the common sense place. The idea of not letting rivers mix that do meet a few miles down stream is unbelievable. NEW COMMENT ADDED on 2011-06-15 21:57:14: In Fargo, you have the affected farmers completely scared. In reality one should assume that they will get wet in a 500 year rain.

2011-06-15_Rachel A Morgan - U.S. Army Corps of Engineers St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I own prime agricultural land 1 1/2 to 2 miles west of Comstock, Minnesota which was appraised at $3,000/acre in 2008. It is hard to imagine what the value of this property and that of our neighbors is now that this diversion has been proposed. My great grandfather, Narve Roen,

homesteaded this land in 1871 after returning from the Civil War. He carefully chose property that didn't flood. With the Diversion, our family farm would be in "ground zero" of the retention area. It is my understanding that over 33,000 acres PRIME agricultural land will be affected. I oppose this project as it will be catastrophic for homeowners, landowners, farmers, businesses, school districts, historical cemeteries and cities upstream from the Diversion. Furthermore, costs to local sponsors for this Diversion will be astronomical, considering adjusting for inflation, compensation for loss of property and damages, purchasing land and relocating buildings to owners satisfaction, to name just a few. Also, I understand the estimated annual cost for maintenance/ongoing operation of the Diversion is $3.6 million. . . not a wise use of people's tax money. Fargo seems to have created their problem by permitting building in the flood plain - those upstream should not be asked to pay for Fargo's mistakes. Sincerely, Rachel A Morgan

2011-06-15_Erin Kub - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. The project does not affect my home, but it affects my parents, community and neighbors. I live in Kindred, ND and have a 1 year old son who will attend school there. I can see the construction of our new school right outside my window and couldn?t be more proud of our district! Both my husband and I graduated from Kindred and are looking forward to the day when our son and future children do the same. The diversion would take away a large part of our district?s income and could cause terrible problems. Isn?t it convenient that the line for the diversion is the Fargo/Kindred district line?! Our neighbors in Oxbow have nowhere to go. They cannot sell their house because it has no value until a decision is made. What happens to the elderly people who live in Oxbow and are ready to enter a retirement home? They will have to continue to pay their mortgage while paying a similar amount for an apartment at a retirement center. People who have job offers in other states have to decide if they can afford to pay two mortgages to advance in their career. Where are all these families going to relocate to? I can guarantee many of them will not move to Fargo. How can a group that is supposed to be working for Cass County do this to a community that is in the county and brings an important source of income to the Kindred School District? My parents live just on the outside line of the buyouts and live on a family farm that my grandpa built. It makes me sick that they are considering rebuilding so they can stay on the farm. They will get no reimbursement for their current home, but if they choose to stay, they will battle flood waters every year with this ridiculous diversion project that benefits ONLY FARGO. The Corps needs to take a closer look as to who this diversion affects and compensate ALL who are affected including my parents and our school district. Please understand that this diversion does not only affect the people in the ?lines?, it affects people in Richland, Wilkin, and Cass County. Sincerely, Erin Kub

2011-06-16_Scott J. Hendrickson - Project Manager I am writing in opposition to the April 2011 (locally prefered plan) for flood control in the Red river valley. I have many issues with said plan. It seems to me that Fargo is much more concerned with the growth of city. Moving south directly into flood plain than trying to protect for a .2% chance of a 500 year flood event. By allowing this plan to continue it will eliminate all future growth of impacted area and also all current residents will be relocated. The loss of tax dollars and residents will disable Richland and Wilkin counties. The Kindred school district and Richland #44 school district will also be negatively impacted. The local economy will be short about 20 million dollars year after year. As I write this letter the properties within impact area are already loosing value just from the talk of this plan. Just a few short months ago people were actively looking to purchase or build within the impact area because it is close to FM area and has not had a history of flood issues. My farm was established in the 1870's. I have a homestead certificate #1099 this is signed by then President Chester A. Arthur on July 10 1883. This plan is dividing are region we must work together to work on flood protetion for the entire Red River Basin. Their are other alternatives that will help all residents within basin and also spread out cost. Do the right thing. TEAR DOWN THIS WALL. Thank you Scott H.

2011-06-16_ Joseph H. Wallevand - I reside in Christine (Richland County), ND, and am writing regarding the Corps of Engineers' diversion project aimed at protecting the cities of Fargo-Moorhead. While I realize we need to fix the flooding situation in the Fargo-Moorhead area, the Locally Preferred Plan (LPP) will create a dam which will allow artificial flooding of a large amount of high-value farmland and at least four cities (from both MN and ND), possibly including Christine. At risk are at least eleven congregations and their churches? accompanying cemeteries, plus several other maintained cemeteries. As president of Christine Lutheran Church council, one of four churches making up the Shepherd of the Prairie Lutheran Parish, I can tell you point-blank this project will destroy our parish. The impact in the area under consideration will permanently affect our parish both directly and indirectly: the Hickson church will have to be moved?where? Who will the membership be when it is moved? Who will deal with the history of that congregation in regards to the families who have been displaced? They make up the second largest of the four groups of parishioners and will remove a significant portion of the membership and revenue base for which the remainder of the parish is dependent. The remaining three congregations will not be able to sustain the pastor, part-time administrator, parish nurse, and programs which are now supported. Though not as much at risk, Christine Lutheran Church still lies within the staging area. To make matters worse, nearby churches such as Comstock Lutheran (lying within the now-proposed 100-year flood area) will be severely impacted as will Richland Lutheran (lying on the Wild Rice) and Faith in Wolverton, MN, (near the Red), so the possibility of those churches taking on impacted members or joining to make a single parish is out of the question. While our numbers may be relatively small, we have ties with members of families throughout the area to include Fargo-Moorhead itself; some of us, myself included, work in the larger metropolitan area. As I have previously alluded to, there is history within this parish?more than 125 years of history. Because we are small in number does not mean we are

without value or significance. The CULTURAL IMPACT of this project has been understated by the Corps; it should not be minimized. During Corps-sanctioned meetings which I have attended, Congressman Peterson?s name has been mentioned regarding money in the Farm Bill ($500 million) for a Red River retention project. Mr.Snyder, the diversion project manager, did not seem to understand that upstream retention project(s) in conjunction with a diversion but without an upstream staging area or dam could mitigate most Fargo-Moorhead flooding problems. Instead, he chose to ignore it. In light of this, I urge Mr. Snyder and the Corps of Engineers along with local leaders to re-evaluate the LPP. Thank you; I am yours truly, Joseph Wallevand Council President Christine Lutheran Church (ELCA) Christine, North Dakota 58015

2011-06-16_ Mary Osborn for Karen Kromar - HARD COPY WILL FOLLOW BY US MAIL June 16, 2011 Mr. Aaron Snyder Chief, Project Management and Development Branch U.S. Army Corps of Engineers 180 East 5th Street, Suite 700 St. Paul, MN 55101-1678 Re: Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement Dear Mr. Snyder: Thank you for the opportunity to review and comment on the Supplemental Draft Feasibility Report and Environmental Impact Statement (Supplemental EIS) for the Fargo-Moorhead Metropolitan Area Flood Risk Management project (Project) located in Fargo, North Dakota and Moorhead, Minnesota. The Project consists of the construction of a diversion channel around the Fargo-Moorhead Metropolitan Area to reduce flood risk. Minnesota Pollution Control Agency (MPCA) staff has reviewed the Supplemental EIS and have no comments at this time. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this Supplemental EIS, please contact me at 651-757-2508. Sincerely, Karen Kromar Planner Principal Environmental Review and Feedlot Section Regional Division KK:mbo cc: Craig Affeldt, MPCA, St. Paul Will Haapala, MPCA, Detroit Lakes

2011-06-16_ Linda J. Wallevand - To the Army Corps of Engineers: This is in regards to the LPP you have put out for the Fargo area. I live in Christine, ND, which will be affected by this plan. I am not in agreement that you have thoroughly studied the outcome for our area. It appears all impact studies have been for Fargo and the downstream communities. Our Richland County commissioners were taken unawares last February when all this started to break loose. I would have thought you would have approached them as well as the other areas. Our farming community would be greatly affected by this plan. You seem to be of the opinion that money in the form of compensation is sufficient for their needs. I think besides uprooting their livelihoods, including out buildings, equipment, animals, you should be responsible enough to tell them exactly where they are to suppose to relocate and start over. The compensation figures are somewhat insulting. Farming is just one of the considerations you didn?t think through. The tax base for possibly three school districts will be greatly affected if this goes through. To expect the counties to take care of their own future problems caused by this plan in regards to the infrastructure of roads and ditches for something you designed, is nothing short of irresponsible. The cost of this project is unwieldy. The state legislature of North Dakota simply cannot ignore the needs of other areas such as Devils Lake, Minot, Williston, Bismarck, and Mandan to take

care of Fargo. They were at fault to begin with to allow developers to build on what they knew was a flood plain. We have dealt with the overland flooding in this area many years. The city of Oxbow took the initiative to ?dig in? and take care of their own, knowing their city was indeed built around the oxbow and would continue to have problems. It is hard to believe a city of approximately 250 has more on the ball than a city of 200,000. (and excuse me, but not all 200,000 are in danger of flooding. In the future that number should be reduced to the numbers of property owners who continue to believe they will be taken care for their choice of building spot) A tremendous amount of taxpayers money could be saved if Fargo just bit the bullet and built dikes around these few select areas. I?m sorry, but if they?re upset about their view being ruined, maybe someone can inform them about how this plan of yours will impact the livelihoods of those upstream. It appears that Moorhead has figured out the plan is moving too fast as well and they really can?t afford to be part of a deal this expensive without much more study on it. I urge you, on behalf of our towns, churches, schools, rural farmers and neighbors to put the brakes on this project and do more studies of the upstream areas. A plan of this magnitude is not going to happen without some pitfalls, but this current plan is nothing short of crater size. Thank you for your attention, Linda Wallevand 36 year Christine, ND resident

2011-06-16_ Normanna Township Officers - June 15, 2011 Normanna Township Officers Supervisors Mark Ottis Darrin Schreiner Tyler Odegaard Treas. Lynn Overboe Clerk Curt Leslie 16504 ? Cross Rd. Kindred, ND 58051 U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: We are writing to you in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We believe the project as proposed will have many negative impacts on the landowners and residents of our township, and should be delayed for further study and revision. Normanna Township is located from one mile west of Cass County 17, to two miles west of Kindred, and including the city of Kindred. There are three major issues of the design of this project that will cause harm to Normanna Township. The first is the loss of tax base for the Kindred School District, the second is loss of property valuation and impact on economic development, and the third is questions about the spillway on Cass County 17. The dam and reservoir will cause the destruction of the communities of Hickson, Oxbow and Bakke and many farmsteads in Pleasant Township. This will result in the loss of approximately a quarter of the valuation and students in the Kindred School District. The school is physically located within Normanna township, in the city of Kindred. The loss of taxable valuation by the district, will result in increased taxes for the rest of the residents of the district. As the school taxes increase, the valuation of our property will decrease. Army Corps representatives have stated it will be the responsibility of the local sponsors to mitigate those types of economic damages. The likely result will be that our residents will have to take legal action to recover any damages, and the outcome of that would be in question. The Corps has a responsibility to include these damages in the cost of the project. The SDEIS does not consider those costs to our township, or the loss in economic activity to our area a cost of the project. Many of the businesses are located in the rural area as well as in Kindred?s city limits. We are particularly concerned about the loss of agricultural production in the water storage areas. Late planting will mean reduced inputs and reduced production. The storage area is in the heart of the marketing area of local agricultural suppliers. Construction of the project will mean a loss of revenue for our local businesses. We have no way to recover those losses. We

also have no benefit from the project. These costs need to be included in the Corps cost estimates for the project. It is unfair to force us to try and recover these losses from the project?s sponsors. Finally, we are concerned about the planned operation of the spillway along Cass County 17, and how that would interact with overflows from the Sheyenne River. The report appears to indicate that excess water would pass over the spillway instead of topping the dam and entering the protected area. The assumption is also that this would only occur in a 500 year flood. Our concern is that if the dam and pool are operated according to plan in smaller floods, unexpected rainfall events while the pool is full, could push water west to the Sheyenne River. If the overflows from the Sheyenne are already filling the area west of County 17 as they currently do, the water from the pool would cause serious damage to homes and farmsteads between County 17 and the Sheyenne river. The Corps also seems to equate shallow water on the fields with more serious overflows from the spillway in a large flood event. The additional water from a pool overflow could seriously affect transportation west of the spillway and limit access to residences and farms in that area. This is an issue for safety and emergency response. This area should be included in the area mitigated by the Corps because of the potential serious consequences. We are an elected governmental entity, and we must act in the best interest of our residents. We believe the negative impact on Normanna Township has not been adequately addressed. As a Federal Agency, the Army Corps of Engineers has a responsibility to Normanna township as well as the project sponsors. Thank you for the opportunity to comment on this project. Normanna Township Officers

2011-06-17_Jana Reinke - We need accountability to the financial numbers provided. Your cost estimates for are simply, horribly understated. Who is held accountable when the true costs for the project and the mitigation are revealed? And when you find within the project, massive failures due to soil instability - who covers those costs? Additionally, you cannot simply take the word of the project sponsors that they will cover the remaining costs of the project - not covered by Federal/the Corps. They have not been able to demonstrate how they will cover those costs. Now Moorhead is waffling.. and it is entirely feasible that Minnesota and/or Moorhead will not pay one penny of the costs. Fargo is counting on Minnesota to cover half of the mitigation costs. The cost coverage plan needs to be revealed and detailed - in terms of how exactly the project financial needs will be met. It is beyond me how you can proceed on a simple statement of "yes we will cover it". You indicate you will not put the diversion in play until the costs are paid? What happens when there is an emergency - like Mississippi - when Levees were blown to save the larger city. You are telling me you would not enact the same steps to save Fargo - even if the bills have not been paid? How can it be acceptable that the cost to buy out all that Fargo is trying to destroy can be based on depreciated costs... when Fargo is currently buying out their own citizens at sometimes 30-40% above tax valuation. The Corps must have a role in ensuring that any mitigation results in giving all those impacted a fair chance to rebuild their lives...

2011-06-17_Michael R. Brown, Mayor City of Grand Forks - June 16, 2011 US Army Corps of Engineers St. Paul District Attn: Aaron M. Snyder 180 East 5th St, Suite 700 St. Paul, MN 55101-1678 RE: City of Grand Forks comments on Supplemental Draft Feasibility Report for Fargo-Moorhead Metropolitan Area Flood Risk Management To Whom It May Concern: Thank you for the opportunity to comment on the Supplemental Draft Feasibility Report for Fargo-Moorhead Metropolitan Area Flood Management (?FM Flood Report?). The City of Grand Forks recognizes the need for flood protection all along the Red River and its tributaries. The

Valley has seen too many years of major flooding to make ?no action? a realistic alternative. Our community has been a strong supporter of the Fargo-Moorhead Metropolitan Area?s flood fighting efforts through equipment and community volunteers. Grand Forks will continue to support these efforts to move forward with a Fargo-Moorhead Metropolitan area flood protection project (?Project?) to provide long-term protection. We also believe at the same time the Project can protect the flood management investments made by the Federal Government, States of Minnesota and North Dakota and local communities of Grand Forks and East Grand Forks, as well as ensure a consistent level of flood protection throughout the Red River Valley basin. The studies cited in the FM Flood Report show that any alternative being considered will have significant impacts outside the project footprint and will actually affect the entire basin. Grand Forks requests that the FM Flood Report recommend funding be provided as part of the Project to individually affected communities in order to determine mitigative efforts, implement mitigative techniques, and to study the possibility of 500-year frequency protection levels. As such, Grand Forks supports a 500-year frequency level of protection as a reasonable standard that should be adopted and available to all communities within the basin. Basin wide retention should be encouraged and pursued as a long-term solution. However, until that storage can be fully implemented, structural and mitigative efforts must be implemented in the interim. The analysis provided in the FM Flood Report introduces both a new hydraulic software model (HECRAS unsteady state model) and new flood frequency analysis methodology (shorter duration ?wet years? statistical analysis). This model and downstream analysis methodology were useful in providing a consistent level of comparative analysis but they also cause difficulties to correlate the flows and frequencies with what downstream communities are currently using for regulatory and engineering purposes. For example, Grand Forks? current DFIRM was based on a 2001 hydrology study and the 2003 Regional Red River Flood Assessment Report that was not a HECRAS unsteady state model. Likewise, when the Grand Forks/East Grand Forks flood control project was designed and implemented, the detailed hydraulics were not based on the HECRAS unsteady state model. The Grand Forks/East Grand Forks project represents a 400 million dollar public investment in flood protection. In order to reconcile any variations, the Project must include a detailed study of our local hydrology and hydraulics with the new software to precisely identify impacts at the local level. The same software should help develop and analyze alternatives for mitigation and improvement. The shorter wet period of record creates some anomalies, particularly with the 500-year flood. The study shows significant decreases in flows compared to those developed in previous studies. Given the uncertainties, Grand Forks is not comfortable with using the shorter period of record analysis for regulatory or engineering purposes at this time that was identified in the FM Flood Report. We would request that this data not be used by FEMA or other agencies as part of their ?best available information? criteria. The FM Flood Report analysis provided shows minimal impacts in the Grand Forks area for 100-year frequency events. However, the FM Flood Report shows that for floods of lower frequencies there are significant increases in flows. These flows translate into higher water surface elevations. The majority of our local floods fighting efforts occur at elevations at or below the 50-year frequency event. This will mean earlier, more frequent, and more extensive flood fight efforts and resulting local impacts. Of particular concern are the impacts on the bridges between Grand Forks and East Grand Forks. There are 3 bridges connecting our communities. The highest of these bridges is located on Highway 2 and is very near the 50-year event when it needs to be closed. A closure of that final link would have major impact to our communities and our region. In conclusion, Grand Forks continues to

support the Fargo-Moorhead Metropolitan flood protection project and submit that by addressing the above concerns within the FM Flood Report, the project will help provide the necessary consistent level of protection for communities throughout the basin. Sincerely, Michael R. Brown, Mayor City of Grand Forks, ND

2011-06-17_Joan Braaten-Grabanski - Ray Grabanski 16749 49th ST SE Kindred ND 58051 June 17, 2011 Comments for F-M Diversion Project Dear Metro Flood Study members and Corps of Engineers: My name is Joan Braaten-Grabanski and I am writing to you regarding my concerns with the Fargo-Moorhead Diversion project (?The Diversion?). As you are well aware from news reports and correspondence from residents, the recent decision to use upstream retention to mitigate the impacts of the Diversion downstream is a very different set of outcomes than was originally pitched by the Corps of Engineers. These impacts will negatively affect the school district and the school tax base where I live, which is Kindred. In addition, I feel the Diversion will also negatively impact the Sheyenne River which directly affects my property during flooding. I believe there is an option that needs to be reconsidered or studied to the extent that it should be. I feel that the beneficiaries of a Diversion should also bear the pain of the Diversion. First, the option of widening the current Red River through the F-M area needs to be explored fully. By deepening the river, purchasing structures along the river, and building a greenway/floodway, you can achieve the results that the F-M area is looking for. If this strategy was effective for Grand Forks, there is no reason why it can?t be effective for the F-M area. If Fargo is benefiting from the Diversion, they should also bear the pain of the Diversion. It is not ethical to purposely flood other communities while Fargo feels no effect. It is also against Corp policy to protect undeveloped land. There are 8 miles of undeveloped land from Fargo?s city property line and the diversion location. I object to the Diversion protecting undeveloped land. Furthermore, the county sales tax is collected from all residents and I know the county residents didn?t vote for a Diversion that would flood the Oxbow, Hickson, Bakke Addition and surrounding areas. They also didn?t vote for Kindred School District to lose 23% of its tax base and the student aid for 125 students that totals just shy of $850,000 per year currently. This cost has not been accounted for in the buyout proposals. If the Fargo Diversion was to ?buyout? the Kindred School District for its loss, that would amount to $85 Million over the next hundred years. I have also been made aware that the impact on the Richland School District would be similar as it will lose tax base equal to that of Kindred School District. Therefore the school district ?buyouts? could be nearly $170 Million and are not currently accounted for in the Diversion cost estimates. Second, the widening and deepening of the Red River through Fargo needs to be coupled with drain tiling from Wahpeton to north of Fargo. Dr. Hans Kandel, NDSU Extension Agronomist, has documented the benefits of drain tiling for agricultural land and Rep. Collin Peterson has suggested that it could be very effective in flood mitigation. If drain tile was used along the agricultural property adjacent to the Red River, the saturation of the land would be lowered in the fall. The use of drain tile takes excess water out of the land during non flooding periods and removes it from the soil. During flooding periods the drain tile pumps are turned off so as to not add to the flooding. The soil has the ability to absorb more water because it isn?t at saturation levels. Just think if all the farmland along the Red River could absorb an additional 3 inches of water that it currently doesn?t. Many of our flooding issues would be greatly reduced. If we compare the effect of drain tile to what we would call a dry period, we can better understand the positive impacts. Currently we are in a wet cycle. Before this wet cycle, we were in a dry cycle. The land wasn?t saturated with water so we had much less flooding. During the

wet cycle, the land is super charged with excess water and there by can?t take any more and thus the water runs off and creates the flooding issues. I presented this proposal of drain tile and making a greenway through Fargo to project author Craig Evans and he dismissed the idea without even studying it. This had been a common thread in the entire Diversion project. Project supporters only want one plan and are unwilling to consider the negative impacts of the plan and are unwilling to redesign and study further better options. I can?t imagine that it isn?t wise to explore all options when we are looking at a $2 Billion project. I feel the Corps and the Metro Study Group have been misleading in their numbers and haven?t given the project enough study for the upstream impacts. As the Corps of Engineers Diversion proposal stands currently, I encourage you to vote ?NO? to the Diversion project. The Corps isn?t considering the economic impact of the current proposal on those communities to the south of Fargo and on the Kindred and Richland School districts and its patrons. The cost is too expensive when it will truly only benefit approximately 10,000 people. Most of the others included in the 200,000 person estimate won?t ever be affected by a flood or they will get flooded by this diversion project and currently they aren?t affected by flooding. I encourage you to push the Corps to study a Diversion that goes through the current Red River coupled with drain tiling along the agricultural land adjacent to the Red. I think you will find this is a much less expensive option, it affects the people who it also benefits, and you would maintain the communities that are south of Fargo. You would also have a permanent solution for flood control that has more positive impacts than negative. Fargo may be the biggest city but it is not the only community in Cass County. Fargo needs to take the responsibility of the negative impacts of a diversion. If that means that 1000 structures need to be moved or relocated or bought out within its city proper, then that is what needs to be done. They would fix their problem instead of purposely putting their problem on another community, landowners and school districts. I would appreciate your thoughts about the above proposal. Sincerely Joan Braaten-Grabanski Ray Grabanski 16749 49th ST SE Kindred ND 58051 joangrabanski@ideaone.net rlg@progressiveag.com

2011-06-17_Carman Lynnes - Comment: June 20, 2011 US Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 Subject: Comments on Supplemental Draft Environmental Impact Statement (SDEIS), Fargo-Moorhead Metropolitan Area Flood Risk Management From Carman Lynnes, PE I am submitting comments as a negatively affected individual who has farm land and a farming operation that is part of the Kindred School District: THE VIABILITY OF THE KINDRED SCHOOL DISTRICT WILL BE DESTROYED WITH THE PROJECT AS PROPOSED The impact on the district will be devastating with the reduction of tax base associated with the permanent lose of a considerable area of prime farm land. The homes in Oxbow and their associated value could theoretically be reestablished within the district, but the farm land that would be acquired within the project is lost forever. The city of Fargo would have to compensate the Kindred School District with the Present Value of the stream of lost tax payments for the next 100-250 years, for a degree of fairness to be achieved. By law, I don't believe this is going to happen so the project rings hollow with a lack of fairness to those negatively affected. It is also not plausible that the home equities and other properties within the district would recover to the pre-project level within a short time frame. It is reasonable to expect this process to play out over several decades. My opinion is that the this project as currently envisioned, will destroy the Kindred School District which is currently building a 15 million facility in Kindred ND. DAMS DON'T

ALWAYS WORK AS PLANNED Unfortunately, dams, particularly in ND, have encouraged development in the floodplain and they do not in my opinion result in a reduction of average annual damages. They work affectively most of the time but when Mother Nature delivers its significant rain &/or snowmelt events there is an increased potential for major damage. These events all too often occur when the project is at with maximum storage capacity. Baldhill Dam at Valley city was hailed as the project that would end all flooding along the lower reaches of the Sheyenne River. We know differently today. The Garrison Dam on the Missouri river has resulted in extensive development in the floodplain in Bismarck. Now the resivoir is full and the Corps knows the potential for a major disaster exists. This condition exists all the way to the mouth at the Mississippi. Staging is verbiage for storage behind a dam. It sounds pretty good, but unfortunately, is subject to the same disastrous shortcomings as any other dam on a river. It should be anticipated that maximum in-flow events will occur simultaneous with the storage at capacity. The probability of this occurring is inversely proportional to the size of the storage project. In this regard I believe that the proposal to provide storage or staging as an element of design of the SDEIS is not well conceived. I do not believe that the incremental costs associated with this element of the plan have been adequately evaluated nor are they justifiable relative to the potential benefits of the added feature. NEGATIVE IMPACTS OF TRIBUTARIES TO THE WEST OF THE PROJECT HAVE NOT BEEN EVALUATED IN THE SDEIS Historically the Sheyenne River at Kindred tops its normal banks and runs overland to the east and into coulees that are tributary to the Wild Rice and the other tributaries west of the project. The overland flows mitigate potential damages to the West of the proposed project. The South to North Levee at Cass County RD 17 will eliminate this passage and will result in additional flood damage to agricultural land and residents between the project and west to Kindred, Horace, and other communities further North.. The Corps has not evaluated the impacts of flooding in these areas and has not considered the costs associated with the negative impact. This reality cannot be ignored. It is not acceptable to design a project on the Red River and then ignore incremental negative impacts on agricultural, residential and commercial property associated with tributaries that are impacted. I know that this is complicated, but it is essential that all project impacts be identified and reflected in the cost. The areas negatively affected will make certain that the incremental damages will be the responsibility of the Fargo, Moorehead & local sponsoring organization. The Corps needs to inform them of these additional liabilities associated with the project. STABILITY OF LARGE CONCRETE BRIDGES AND AQUEDUCTS The Corps has acknowledged that the diversion is being built on relatively unstable soils in many locations and made reference to design changes in the elevation to assure stability of the profile of the channel. They also make note of the fact that the Fargo-Moorehead Diversion will be the first such structure to cross significant tributaries where the tributary flow must be accommodated through the use of aqueducts. I don?t have the data to say that this will or will not be a problem, but as an engineer I can recognize a potential problem associated with heavy concrete structures in slippery unstable soil. A heavy bridge structure on South university drive in Fargo which crosses Rose coulee was recently found to be sinking and will have to be repaired and supported to the tune of $500,000. This needs to be addressed by the Corps. If the structures have to be anchored to bed rock to prevent them from sinking or slipping, there will be significant costs associated with that design feature. These added costs that would increase the funds required from the local sponsors. . THE LOCALLY PREFERRED PLAN (LLP) IS ASSOCIATED WITH LOCALLY NON-PREFERRED COSTS. The local sponsors in the Fargo Moorhead area who were responsible for picking the LLP over the Nationally Preferred Economic Plan have been caught

in a typical ?want? and ?need? conundrum. They desperately need relief from the cost and disruption of the reoccurring flood threat. However, they have chosen a potentially non viable alternative because they wanted to enhance future development in areas contiguous to what they envision as the preferred area for future development. It is the typical vision that drives development of the floodplain. This is in it self a problem, but the more pressing issue is the social and economic costs associated with that decision. Carman Lynnes President, Lynnes Farms Inc 15480 59th Street SE Leonard, ND 58052 .

2011-06-18_Colleen Israelson - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 To the Attention of Project Manager: Corps of Engineers -- Comments 6/18/2011 I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. 1. Corps employees were in Richland County taking soil samples without permission by land owners in November of 2010. End of March, 2011 Mr. Mahoney was asked on camera if the diversion would have any effect in Richland County at the Bennett School meeting Mr. Mahoney stated that it would be 0 effect in Richland County. 2 weeks later there was staging past Christine entered in the plans for the diversion. Corps employees have not gone to land owners in Richland County, not bothering to introduce themselves or attempt to sit down and discuss what they are planning to do. They have no idea who we are as individuals yet have every intention of flooding all that we own, driving us out of our homes and evicting us from our community. How could a complete study possibly have been done in Richland County without meeting any property owners on the Red River or any affected in the staging area without permission from the landowners? 2. We are expected to farm this land with insurance that will not cover a flood created by the diversion. This will be an occupation that is not only controlled by Mother Nature, Government's regulation of the dollar and now Diverted flooding, all without insurance. Our government will allow our prime land to be taken out of production? We all know there are limited prime acres available in the US along with a limited number of Farmers. This plan reduces both, once gone it is a commodity you will not get back. 3. Farm buildings and bins along with any other out buildings are going to be evaluated at depreciated values. Farmers are expected to start over -- that is what this is -- starting over -- imagine moving an entire lifetime possibly 4 lifetimes -- to another unknown, unwanted, location then offered depreciated values. Where is "fair" in this? We have paid our taxes, stayed inside the law, complied with our neighbors, and supported our community only to be exiled from our inherent right to be here. Our family has been in this area since 1869 --- Fargo was established in 1871. We were here first! 4. In 1870 some members of our family settled temporarily at the Wild Rice and Red River intersection, discovering the water situation they moved south to high ground ?.taking responsibility to protect themselves. No government funding necessary. 5. Fargo is planning to save undeveloped low ground by the taking of high ground that does not flood to protect Fargo's right to grow.....where is our right to exist and pass our property on to the next generation as we had planned. No one has asked, but we have plans for our families and our way of life. We have not asked for assistance, we have not whined for flood protection. It has taken 5 generations to get to where we are now and suddenly we have property value that is dropping due this diversion knowing without it we would have to hold back the buyers. We built on high ground, shouldn't there be responsibility in where you choose to build ? government should hold those who choose to build in low areas responsible for their decision. 6. Fargo overall is incurring very little expense on this diversion and is destroying the livelihood of many around it. Fargo plan pays

25% of the sales tax when the surrounding area pays the remaining 75%. The citizens within the diversion will foot the remainder of the bill, are they aware of those costs? The true use of the ? cent sales tax didn?t come out until after it was voted on. The premise was that it was for flood control not to wipe out entire communities and businesses. 7. We will no longer have a community or friends here so there is no reason to stay if the diversion passes. The community and people are our home ? that is why we live here and that really is the reason we stay. Bakke, Oxbow, Hickson, Comstock, Christine, Abercrombie and Wolverton are all communities affected along with the 8 churches and many more cemeteries that keep our loved ones safe. Fargo has not flooded and has proven it is capable of protecting itself. 8. Ice flow on the Red River in this area in the spring has been difficult in the past knocking down bridges from their pilings -- let's imagine spring with the diversion, the banks of the river have softened even more then usual as the river is many feet higher, more trees pulled into the river along with their roots and earth the ice is thick and moving fast. Can you picture the mud the trees and thick ice stacking up against the outside of this clamshell hydraulic system. Now the flood water has resided and we are ready to drain the fields .....will the clamshell open? Or must we wait until the ice has melted? What month will it be operational? We have limited short season for crops as it is in this region and are geared for particular crops, this diversion will control what crops are planted and what profits are made; if planted late there will be none. It will control our livelihood, is there funding in place to pay for those losses? 9. Roads are going to be built up to ridiculous heights of 10? to 15? ? this spring in Fargo you could not rent a car because of the accidents due to all of the ice. What will be the death toll from a year such as that with a 10?-15? drop off the highways. Studies will need to be done for the safety of our citizens and visitors. 10. Costs have not been factored in for roads other then Highway 29 and Highway 46. There have been no other roads considered. Highway 81 is a major throughway and so is Highway 2 in Richland County. A study is lacking for infrastructure in Richland County and in Southern Cass County. 11. We live at a historical site; I have included information about Mr. Montgomery. Are historical sites considered along with historical grave sites and early settlements/Indian burial grounds on the river, are they considered? These should be government protected areas. 12. There are businesses that have no other choice for location other then the one they are in. Once bought out they have no ability to resume with that same business serving their clientele. That is a catastrophic effect equal to a horrific act of Mother Nature. With Mother Nature one could rebuild, with this diversion there is nowhere to rebuild. 13. Our local school districts depend on the tax dollars generated by the number of students living in this rural area along with the tax dollars paid by property owners. I find it interesting that the areas outlined in Cass County specifically follow the boundary between the Kindred School District and Fargo School district line with the diversion in the Kindred School District only. That is not a coincidence. 14. There is considerable undeveloped land South of Davies School that is very low and undeveloped ? too low for housing ? that should be water a storage area. Fargo should be able to house water storage for this diversion ? own some of what you ask others to own. Allowance for growth should not be a factor with a project of this size if you expect cooperation from others. 15. It will be necessary to tile fields if they are ever expected to dry out to plant for any hope of a profitable crop. We did not invite this flooding; have the costs of tiling been factored in to this project for all of the acres involved? 16. Unstable soils-inadequate analysis of soils and the cost of assuring that structures (bridges, overpasses, aqueducts, and control structures) will not fail; full costs need to be in project ?hydraulic dams have been banned in California because of unstable soils. What studies have been done to prove we do not have those same issues here? As no studies

have been done in Richland County how is it that you know the stability of the river banks and that this is the best option for our area? 17. Have the costs of lost crop production been factored in year after year after year? Who pays those costs? Will litigation be necessary every year to collect that loss in production? Assuming yes, who will pay for litigation? 18. We have 2 major grain elevators ? grain, fertilizer and equipment at those sites cannot get wet with ?? of water, losses would be catastrophic. No insurance coverage for them either. Relocation of grain elevators to follow their clientele? 19. We are in a wet cycle now, has it been considered by the time this is built, that it has not only tied up the lives of our people and these rural communities but that it will no longer be necessary? 20. The plan states you are putting in 15? high gates ? if you do not intend to flood us 15? they you do not need 15? high gates. My engineering degree may be lacking but you do not put in what you do not plan to use. If there is anyone reading this letter that is not self-serving to the Preferred Plan Diversion Project. I ask you to consider an alternate plan that will benefit more then this one town when all of North Dakota is flooding. There are other options to consider, that being the Red River Basin 20/20 Retention Plan for overall statewide protection. I have no opposition to Fargo being saved it is the mass destruction to achieve that I have issues with. The 20/20 plan protects the entire Basin including Fargo. It is far less expensive then the proposed diversion. Please consider it; there is another option available with protection for everyone. Colleen Israelson Member MnDak Upstream Coalition Christine, ND

2011-06-18_Dallas Israelson - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. 6/18/2011 Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. The Retention for the Fargo Diversion should not be in Hickson and Christine as the flood comes about 4 to 5 days after Christine?s water has drained off. It only makes sense that the Retention area for this diversion should be out a minimum of 100 miles to incorporate the water upstream. This diversion is going to help only the city of Fargo?s 100,000 people. When this money is spent we will still have half of the population in North Dakota and much of Minnesota still flooding in the Red River Basin. The Red River Basin 20/20 Plan will still need to be built. Fargo will continue to deal with giving out permits to build below the well established 1897 flood levels. In Fargo there are very few people that have died from flooding. With this diversion in place some people will die due to icy roads because they are raised 10-15? high on highways I-29 and 46. Allowing engineers that cannot tell that the Wild Rice River will raise South of highway 46 when the road that has to be raised 10? to accommodate the water on the North side of 46 gives me zero confidence in them. Allowing them to divert the Wild Rice River over the Fargo Dam would seem scary to me. The informational meetings that were held may as well as have been presented by an English Teacher instead of your various Engineers as no specific numbers were given for any of the questions asked. The maps that were given out have no elevations listed above sea level. I am opposed to this diversion because there are other options at a far better price with the 20/20 Red River Basin plan and because I do not want to see needless deaths. Dallas Israelson Member MnDak Coalition Christine, ND

2011-06-18_Allan Swenson - June 18th, 2011 U.S. Army Corp of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental

Draft Environmental Impact Study Fargo-Moorhead Metropolitan Area Flood Risk Management Dear Project Manager: My great grandparents homesteaded near Christine, ND in 1871 and I live on that homestead today. There has never been flooding on this land during that 140 years. That is the reason that I write to you today. While I agree that the Fargo-Moorhead metro area needs flood protection, I am opposed to the present plan which clearly violates E.O.11988. The plan effectively takes higher upstream land that has never been flooded and floods it, ensuring that there would be zero development there indefinitely. Why is Fargo allowed to violate this executive order? Do they hold a higher status than those communities upstream from them? The project manager said that no other alternatives will be considered. Surely there must be other options that work for the greater good of all. It seems that downstream impacts have been studied, but why have there been no impact studies conducted for the upstream areas? No one knows the impact of water that will be coming from Devil?s Lake. Most probably, the Sheyenne River will always be full as a result. In addition, any heavy rain will create overland flooding, overflowing the Wild Rice and Red Rivers. The water will back up further upstream than the staging areas. Have there been impact studies done regarding the Wild Rice or Otter Tail Rivers? The lakes that drain into the Otter Tail River are all full. Several lakes are sandbagging under current situations because of high water table levels. What happens when some of the land locked lakes get drained out to end up in the Otter Tail River, which drains into the Red River? At the Richland County Meeting, Terry Williams said ?The red staging line is an arbitrary line and that we?re not totally sure where the water will go during a flood event, but this is our best guess.? Comments like that are not reassuring. Why did the Corp know of the upstream plan but didn?t announce it until after the vote for the extra sales tax to help with flood protection? I am of the belief that it is because the tax would not have been passed. When I asked a Corp person at the Marriot Hotel meeting in Moorhead about why the diversion was right on the Fargo-Kindred School District line, he thought there were politics involved regarding planning for Fargo?s 60 years of development. Without that line being where the diversion is planned, Fargo could not develop to the South because the land is lower and has always held water in every major flood we have had. So Fargo wants to build a diversion so they can develop on land that has always flooded in flood years. What happens if the diversion would fail? Fargo would be flooded out. Why weren?t Richland County, Wilkin County and other communities involved with decision making when it came to flood control for Fargo-Moorhead when it was going to affect them? The proposed area of 60 year?s development will come at other?s expense. Areas outside of the diversion will have their economic development come to an end forever. Much of Wilken and Richland County?s tax base comes from the Northern portion of the county. The present plan will negatively impact the Kindred School District in Cass County and the Richland 44 School District in Richland County. This plan will also flood thousands of acres of the most valuable farmland in the world. Who would want to take a chance on farming that land when there is no crop insurance offered to cover man made flooding? Farmer?s are rightfully concerned about being paid depreciation value for buildings that will be flooded. There would be compensation offered to build ring dikes around farmsteads affected by three feet or less of flooding, but after heavy rains or snow melts, this water will need to be pumped out of the ring dikes. Additional concerns are many: What will be done with cemeteries? How will emergency vehicles get to people?s homes during flooding? How will people that receive their prescriptions by mail get them? Who will pay for washed out roads and bridges? If homes and other buildings need to be relocated, who pays for that? Who pays for river bank erosions that threaten buildings? What will happen to people once their property values plummet? Is the cost of damage to the control

structure included in project costs, such as ice jams, logs, etc (Fort Peck is reporting stabbility dangers to their project structures)? Why did the Corp ask Fargo to see if the control gate could be opened a little more to let more fish through, lessening impacts on Fish (this seems to put fish above humans located upstream)? How will the Corp rebuild it?s credibility related to information given to the public (Moorhead is already having second thoughts)? Why are so many upstream cost items not included in the project costs (cost will be well over 1.7billion dollars before it is done)? Why were the concerns voiced at the two Kindred meetings not recorded if the Corp was looking for community input and concerns? For those people who live in the upstream areas and who have never needed to purchase flood insurance for their homes, will they now need to buy it and who will pay for those costs? Why was the 2009 flood down graded to a 50 year flood event after the diversion plan was being drawn up, other than to exaggerate the impact and build support for the diversion? With the record the Corp has of managing the release of water from the Fort Peck, Garrison and Bald Hill Dams, why would unprecedented amounts of money be spent on a project like this that has never been done anywhere in the world? I don?t think it is unreasonable for everyone involved in this project to slow down and consider other alternatives that will work and help the whole length of the Red River Basin from Northern South Dakota to Canada. A plan that would not impact communities, schools, churches, farmland, infrastructures, businesses, homes and families. I realize that Fargo-Moorhead needs flood protection, but so does the whole Red River Basin. Let?s all work together to find a solution that will not impact so many people. The costs on this project are only going to keep increasing with all the unknown factors that the Corp has not addressed or studied. Representative Collin Peterson is working on getting funding for retention, starting in South Dakota and continuing all the way to Canada. It would result in retention combined with diversion with no upstream storage or dams. Thank you for your time. A reply to my questions would be greatly appreciated. Sincerely, Allan Swenson 17450 56th Street SE Christine, ND 58015 alma3846@gmail.com (701) 998-2369

2011-06-18_Anonymous - With the enormously high costs of construction and the estimated annual cost to operate along with the opposition expressed from upstream, downstream, and from some residents within Fargo/Moorhead it is time to look into an alternative plan for protection of the metro area. Several have requested a better look into retention. This also will affect property owners and needs to be handled with the greatest respect for their rights. I don?t think this plan is demonstrating a proper use of taxpayer dollars. It upsets me that my taxes are being used to disrupt people?s way of living and destroying their personal property.

2011-06-18_Dale Mumm - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. 6/18/2011 Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I am writing this comment to you today stating that I am opposed to the Fargo Diversion Preferred Plan. This plan will flood thousands of acres of flat ground holding very little water while damaging a very large area of prime farm land. The Red River Basin 20/20 Plan with dry dams placed at White Rock and Mantador will help far more people with far less impact overall. Dale Mumm Wahpeton, ND

2011-06-19_Mark @ Barbara Askegaard - U.S. Army Corps of Engineers, St. Paul District Attn. Aaron Snyder 180 fifth Street East Ste. 700 St. Paul, MN 55101-1678 Re: supplemental Draft Environmental Impact Statement, F-M Metro. Area Flood Risk Management Dear Project Manager: We are writing in opposition to the April, 2011 Locally Preferred Plan for flood control to the Red River Valley We oppose the project because there are many negative impacts on our community and farm which have not been taken into account. With upstream staging, we run the risk of not being able to have adequate access to medical, fire, and police protection during periods of water storage. Our farm will not have access to the above as the roads to and from will be under water. We are also a certified organic farm operation and have been for the past 13 years. Our farming operation will not be able to maintain its organic certification if it is flooded and contaminated with water containing chemicals, residue, debri and seed that is genetically modified. Our infrastructure will be affected and the human costs for injury/loss of life have not been taken into account. Whenever roads and land are flooded, there will be damage to them. Roadways which are flooded will not be usable and/or stable enough to use for a lengthy period of time after being inundated with water. Who is to bear the cost for maintaining our roadways and the lack of access to and from our communities/farms both during retention and after the water has receded? The safety of residents and people needing to use these rural roads has not been adequately addressed! The safety of all of the people in the water staging area has not been given adequate attention-the potential for loss of life and/or injury exists with this project. Please address these concerns before moving forward with this plan or any future plans. Sincerely, Mark and Barbara Askegaard

2011-06-19_Joyce M Hendrickson - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East Ste 700 St. Paul, MN 55101-1678 RE: The Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. Understanding the need to protect the Fargo-Moorhead Metropolitan Area from flood on the Red River, I oppose the above mentioned proposal for many reasons. The effects on the Kindred School district including loss of students and tax base, the destruction of the communities of Hickson, Oxbow and the Bakke subdivision along with countless rural residents would greatly affect our school tax base. It?s not just about the cost of the new school but the effect on our school district for years to come. Obviously, upstream communities were not ask to participate in the decision making process. Although the Corp acknowledges that there will be impacts outside the 33,390 acre staging area, these issues have not been assessed and these costs are not included in the project. The interaction with flooding from the Sheyenne and other overland flooding; proposed levee along the Horace Road (County 17) prevents the natural flow of water east. These costs to homes and agricultural lands are not in the current project. The costs of the ongoing operation and maintenance are the responsibility of the local sponsors, now estimated at 3.6 million, which is more that the current annual cost of flood protection. Potential damage to remaining roads and bridges during the flooding of land (these costs are not currently included in the project). Finding a route open for travel to the Fargo-Moorhead area during the flooding is already extremely difficult. The current proposal would leave those of us South of

Kindred with potentially no way to travel north. Possible breach of the levee is another concern. Corp report says that the breach would be catastrophic. Who will pay for the recovery? I know alternatives exist that address flooding basin wide. These have not been studied or addressed by the Corp nor have areas affected by the issue been included in the planning stages. Sincerely, Bruce A Hendrickson 5555 County Road 3 Kindred, ND 58051U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East Ste 700 St. Paul, MN 55101-1678 RE: The Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. With empathy and understanding the need to protect the Fargo-Moorhead Metropolitan Area from flood on the Red River, I oppose the above mentioned proposal for a number of reasons. All costs of the ongoing operation and maintenance are the responsibility of the local sponsors, now estimated to be 3.6 million, more that the current annual cost of flood protection. Although the Corp acknowledges that there will be impacts outside the 33,390 acre staging area, these issues have not been assessed and these costs are not included in the project. The interaction with flooding from the Sheyenne and other overland flooding; proposed levee along the Horace Road (County 17) prevents the natural flow of water east. These costs to homes and agricultural lands are not in the current project. Effects on School districts (Kindred and Richland 44) including loss of students and tax-base. We in Kindred just approved the building of a new school. That project was dependant in great part to our many families living in the proposed storage and staging areas. The destruction of the communities of Hickson, Oxbow and Bakke Subdivision would greatly affect our school tax base. Damage to remaining roads and bridges during the flooding of land (these costs are not currently included in the project. Finding a route open for travel to the Fargo-Moorhead area during the flooding is already extremely difficult. The current proposal would leave those of us South of Kindred with potentially no way to travel north. Possible breach of the levee is another concern. Corp reports says that the breach would be catastrophic. Who will pay for the recovery? Alternatives do exist that address flooding basin wide. These have not been studied or addressed by the Corp nor have areas affected by the issue been included in the planning stages. Sincerely, Joyce M Hendrickson 5555 County Road 3 Kindred, ND 58051

NEW COMMENT ADDED on 2011-06-19 09:08:43:

NEW COMMENT ADDED on 2011-06-19 09:12:17: U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East Ste 700 St. Paul, MN 55101-1678 RE: The Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. Understanding the need to protect the Fargo-Moorhead Metropolitan Area from flood on the Red River, I oppose the above mentioned proposal for many reasons. The effects on the Kindred School district including loss of students and tax base, the destruction of the communities of Hickson, Oxbow and the Bakke subdivision along with countless rural residents

would greatly affect our school tax base. It?s not just about the cost of the new school but the effect on our school district for years to come. Obviously, upstream communities were not ask to participate in the decision making process. Although the Corp acknowledges that there will be impacts outside the 33,390 acre staging area, these issues have not been assessed and these costs are not included in the project. The interaction with flooding from the Sheyenne and other overland flooding; proposed levee along the Horace Road (County 17) prevents the natural flow of water east. These costs to homes and agricultural lands are not in the current project. The costs of the ongoing operation and maintenance are the responsibility of the local sponsors, now estimated at 3.6 million, which is more that the current annual cost of flood protection. Potential damage to remaining roads and bridges during the flooding of land (these costs are not currently included in the project). Finding a route open for travel to the Fargo-Moorhead area during the flooding is already extremely difficult. The current proposal would leave those of us South of Kindred with potentially no way to travel north. Possible breach of the levee is another concern. Corp report says that the breach would be catastrophic. Who will pay for the recovery? I know alternatives exist that address flooding basin wide. These have not been studied or addressed by the Corp nor have areas affected by the issue been included in the planning stages. Sincerely, Bruce A Hendrickson 5555 County Road 3 Kindred, ND 58051

2011-06-19_Delores & Jay Kleinjan - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth St E, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Metropolitan Area Flood Risk Management Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage & staging) for flood control in the Red River Valley. We oppose the project for various reasons. The following are some of the reasons: 1. Our home and property are in the "staging area" for your project. In other words, we stand to be affected by an increase in water levels, however, we are not considered in the "buyout" properties. We want to know just exactly what will happen when your "predictions" in the water levels are not accurate and we take on significantly MORE water than you "predicted" and we lose our home to flood waters? What will the Corps do for us at that point???? The Army Corps has a history of not being accurate in their predictions. Earlier this spring Valley City, ND, was in disaster mode due to the inaccurate predictions of snow pack and runoff from the Sheyenne and the mis-management of Baldhill Dam. Currently, Bismarck/Mandan and all points along the Missouri are flooding and in disaster mode because of mis-management of water flow through numerous dams. Several articles have been written verifying the Corps mistakes in mis-management. They are currently in the news with regards to the Missouri River issues. We are aware of the notifications from the Burleigh County personnel requesting the Corps and the powers that be in Omaha to prepare the Garisson Dam for the water that was to come....with the request being made in February.....and the request was totally ignored. Now the Corps wants to hang local officials for their mistake. In the mean time, look around and see how many lives have been affected! 2. The Kindred School District stands to lose a significant (>25%) of its tax base and students. Who is going to make up for this loss? We are building a new school! Our neighboring school district (Richland) stands to lose approximately the same money/students. 3. The Army Corps knew they were going to use the upstream route prior to the Cass County sales tax vote. Our neighbor was approached by a Corps engineer about farm buyout costs in October 2010. Why was this hidden from the taxpayers until after the vote for the sales tax took place????? Isn't it ironic that everytime I purchase something in Fargo, I am helping to pay for our demise and the demise of our

neighbors? 4. How are we going to be compensated for loss in property value? My taxes are staying the same, however, my value has dropped. 5. What about the impact on numerous roads/highways? Who is paying??? 6. Where are you planning on relocating all the farmsteads impacted? Where will there be enough "dry" buildable land??? 7. What about the cementaries & churches? Who is paying to relocate the bodies and where is the "dry" land going to be to relocate the bodies & churches? 8. What happens when there is a breach in your "dam" and/or parts of your project??? You admit it will be catastrophic....but we haven't seen any solutions. 9. Where is the Sheyenne River water going to go when you have your proposed levy following Hwy 17? The City of Kindred will be flooded along with other farms.....none of these properties are currently in the "affected" area. 10. Why weren't all upstream communities/counties & commissions included in decision making process? 11. What about the impacts outside the staging area that the Corps acknowledges? Costs & assessments of these damages?? 12. What about all the losses to the farmer?? How can you put a price tag on the loss of infinite income from crop production???? 13. Why does the diversion line conveniently follow Fargo's school district and extra-territorial lines???? Do you really think we are all stupid??? 14. Where is the Federal government going to get the money to pay for this project? We are taxpayers. Can we separate our tax dollars so that they cannot be used to flood us and our neighbors??? We believe that Fargo is important. I work in Fargo. However, there is a bigger picture that needs to be looked at. Fargo has been successful in their flood fights. They need to follow Grand Forks and clean out the river corrider and build their protection along the river. Let the river flow the way nature intended. We know why they don't want to do this. They are currently receiving BIG tax dollars from all of the high end homes on the river lots. It was recently decided that they aren't going to buyout any more of those homes. They don't want to lose their tax base, however, the rest of us are supposed to suffer! We believe the Corps better do their job and continue looking for a more feasible alternative. Delores & Jay Kleinjan 17121 54th St SE Horace, ND 58047-9600 kleinjans@ideaone.net

2011-06-19_Anonymous - While I am not directly affected by the proposed Fargo diversion project (at the present time), I have many friends and neighbors who will be. These are people who - 1) have never previously had a problem with flooding, 2) have their entire livelihood dependent on their current home and property, 3) are in situations where job re-location has now made their current residence unsellable, 4) are in the Kindred School District as a new school structure is being built and is dependent on the tax base of diversion-affected residents, and 5) currently live in the Sheyenne River basin which may be impacted on Devils Lake drainage. I have several questions which may already have been considered and answered: 1. What kind of buyout is appropriate for families who are living on century-old farms? Whose ancestors had the forethought to watch for possible flooded areas and then built "on a hill"? They haven't had problems with flooding, either overland or by river, in the past. Does it seem fair to change their family's ancestoral homes? 2. What about rural residents whose entire livelihood will be changed in an effort to save Fargo? What kind of buyout is adequate for them? Will it be the same as those living in the Fargo area along the Red River? Fargo residents will still have their jobs if and/or when homes are flooded; the same can't be said for farmers. 3. Rural residents may be dependent on the sale of homes/property to finance their move to an assisted-living facility. Will a buyout be completed in a time frame that allows these residents to live their senior years with dignity? What about the homes that are now unsellable because of the proposed diversion - not only older residents but also those who are being transferred because of jobs? Or those who want

to downsize or upsize? 4. The Kindred School District is at a huge disadvantage with this proposed diversion project. The construction of the new building has already begun; how can it be put on hold for a "proposed" project? Who is going to fill those classrooms? How will the current tax base be affected for the new structure with the lose of those in Oxbow, Hickson, Bakke Subdivision, rural Horace? 5. Has consideration been given as to how or if drainage of Devils Lake into the Sheyenne River is going to affect the residents of Kindred/Horace/Walcott and surrounding areas? Will this extra water have an impact on the proposed diversion? Will the proposed diversion be able to hold more water if needed? Will new diversions continue to be proposed to protect other communities? 6. What about rural cemeteries, churches, and small-community businesses? What is their future? 7. ND, and the Red River Valley especially, is known for its agricultural influence. How will that be affected with the loss of primary land? I realize Fargo-Moorhead-West Fargo is the hub of commercial business, entertainment, and education. Will this area continue to grow and prosper if rural residents in affected diversion areas leave the community? The current Fargo Diversion proposal appears to have been put together without complete consideration of the rural areas affected. It appears that Fargo residents and businesses have been given a high priority over the rural people who help them survive.

2011-06-19_Ron and Melissa Heesch - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: We are writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We oppose this project due to the destruction it will cause to our local communities and to our home. Our home has never been flooded or needed sandbagging. Decisions have been made which neglected to include affected parties in Richland and Wilken County. The project will negatively impact both the Kindred and Richland school districts with loss of students and overall tax base. Initially our home south of Highway 46 would not be impacted. After a "modeling error" was discovered the water is now shown to surround our property. We now will be unable to sell our property as we are within the boundaries of the project. In addition, we to date do not know what options will be available to us, since we are outside the larger affected communities. The overall costs of this project are enormous already and have not begun to include all aspects of the affected parties and farmland. It seems best for the Corps to slow this process to evaluate alternatives that exist to address flooding in the entire basin. Sincerely, Ron and Melissa Heesch

2011-06-19_Anonymous - Attention Aaron Snyder: RE: Supplemental Draft Environmental Impact Statement, Fargo Moorhead Metropolitan Area Flood Risk Management I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I am located in the Richland County. My great-grandfather staked this area after the year of 1897 flood. My family built many homes in this area due to high ground and would never have to worry about flooding in this area. WE HAVE NEVER FLOODED HERE. My son is the 5th generation. Now because of Fargo having problems with water, Fargo wants to put a diversion (DAM) here to prevent flooding in Fargo. The Red River is the only river that flows north and now you?re trying to prevent the natural flow of the river. That is not how Mother Nature works. How many times do you people have to see incidents in the nation? Look what the Garrison Dam did to Devils Lake and now Bismarck,

Minot, the Mississippi in Minnesota, Missouri, Ohio and other states. Open your eyes, this plan will not work. Look what the West Fargo diversion did to Harwood this year, but we heard nothing. There are people in Fargo that have other ideas and you are REFUSING to listen to them. A large percentage of people in Fargo, West Fargo, and other towns in the area are not for this project and have NO IDEA on what's involved here. If they did they would not want this project either. It?s not right for you to keep this from people. I can?t imagine what?s not being said, but I do know there is plenty. What happens if the project isn?t finished? Are we going to be another Devils Lake? The cost to the Fargo people alone will drive people out of Fargo. Do you realize the cost of this project and it's only going to continue to go up. Where is this money going to come from? The economy is in very short supply of money right now and people CANNOT continue to pay this. Families are struggling now, so let?s raise their taxes to pay for this diversion (DAM). Would the grounds even hold this structure? The soil is known for being unstable. The grounds shift here all the time. I believe it will cost more than 3.5 million dollars to maintain simply because of the clay in this area. Once it?s completed, if completed. I would say 10 years from now it would probably be at least a 1/3 higher. There are a lot more states in far worst shape than we are. If someone would have told me a few years ago that we could flood, I would never have believed them. I feel I'm in a nightmare. I find it very hard to believe that people can be moved so easily. How are you going to pay for all these homes, cemeteries, churches that we have belonged to for many years, many were baptized in these churches. No matter what you say you are going to pay us, it does not justify the means. How do you compensate for the land, people, animals, trees, nature and etc? There is NO money to compensate that. MONEY CAN'T buy everything like you people feel. In fact I would say it would be quite a bit less. How do you sleep at night? Do you justify it by saying you?re saving FARGO. There are no more people in Fargo that you are saving than there is out here. I believe it is less populated in Fargo. You say your saving 200,000 thousand people. That is a false statement. I have yet to see 200,000 thousand people go under water in Fargo. If that was the case you would not have had the population that you have now in Fargo. Only a small portion of people have flooding problems and instead of telling them to go else where you continue to let them stay there. They should have never been allowed to build by the river in the first place, especially since 1997, yet you continue to let them be there. They love living by the river until the flood waters come up and then they expect everyone?s help including the government. People have to start taking responsibilities for their actions. Help them once then they should be on their own if they still want to remain there. You should not continue to help them. Its funny how you can help people over and over again in these areas, but you can't let the people stay in their homes that are high and dry, have never had flooding issues, and paid attention to where they were building. I feel we are being punished for making the right choices and the people who choose to remain where they are, flood after flood, and are being rewarded for it. When we had the 1997 flood south of Fargo, the building south of Fargo should have been stopped. Instead south of Fargo has probably tripled. I was born and raised in Fargo. Oxbow was a slew. Even when I was a young girl I couldn?t believe they were allowed to build there; yet they were and did. Have you taken into account the power lines that power a large portion of Minneapolis? Are those power lines able to go under water and if so what is the cost for making sure they will continue to supply electricity to other states. What about the ice jams that could and will occur? Are you going to be here to prevent that? Do you have that in your budget of $1.8 billion? I doubt it. You project managers have eliminated so much from the proposal. The buying homes, raising of bridges, highways, cemeteries being moved, churches being moved, schools moved

and above ALL THE LAND. How do you move a school to another location? There is no price for the land, This area is the Red River Valley with the rich black soil, found no where else in the world. We should be proud of living in this area, but yet you?re ready to put it under water and all the nature that goes with it. You said you would have a park, fishing and all these great additions around the diversion, DAM, but that will be man-made. We still have the wild prairie rose out here in the ditches, which is the State Flower of North Dakota. Some of the trees out here are over 100 years old. How are you going to save the prairie rose and trees? Are you going to dig everyone of them up and move them elsewhere? I sure would like to see you move the soil to another area. I know that?s what the farmers would want. On the edge of Richland County, we have a cemetery that has some Civil War Soldiers; babies and young children who were buried there due to the hardships of the times. The cemetery has bodies there that date back to the middle of the 1800?s. There?s also the Wolverton Cemetery, North and South Pleasant Cemetery, Christine Cemetery just to name a few. These people that are buried in these cemeteries chose to be buried there. Have you thought about the money and all the people you are going to have to contact to get approval to move them and the cost of moving them? Not to mention the fact, their will be people opposed and probably a percent ready to sue. I know there is a better way to solve the problem we have here in Eastern North Dakota. I would like you to give other people a chance to come forward and give you a plan. We have a lot of smart people right here in the eastern part of North Dakota. Open your eyes. You?re the ones that are to be doing what?s best for all the area, not just Fargo. We need to work together in this. I feel there is only a hand full of people involved in this project. The majority of Fargo people have no idea what?s going on, because of that I KNOW this is not a good thing, or you would be more open about this in Fargo. They have a right to know. You better be open to all ideas that come to you and not so closed minded thinking your ideas are the best ideas. This is too expensive of a project to have only the one idea. I KNOW we can figure something out that will help all of us here in Eastern North Dakota and for a lot less money. You?re not being fair to the majority of the people in Fargo or to us. The main reason I feel you want this, is so you can continue to develop south because there is no where else you can go. Sincerely, Wanda Patrick , Northern Richland County

2011-06-19_Leo Richard - Richard Farms 17107 50th St. SE Horace, ND 58047 June 18, 2011 US Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager, I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. The destruction of Pleasant Township that would result with the implementation of this plan would be unconscionable. I own land and buildings in both the storage area and the staging area. In the flood of 1897, the middle of Section 9 of Pleasant Township was dry. I know this because my great-uncle moved his livestock from the southeast corner of the section. In the early 1950?s Drain 47 was dug and 49th Street was raised and has subsequently functioned as a dike ever since. The first major flood of memory I have was 1969 and the entire section was under water. In 1997 our water level was a foot higher than 1969 because of another man-made obstruction, I-29. The Fargo diversion/dam would be another man-made straw that broke the camel?s back. Where is the justification to increase our water level to protect future growth area for Fargo. In my opinion Fargo IS the problem by building in the flood plain and choking off the flow of the Red River. There are

many more homes that could be bought out in Fargo to allow the river room to spread out rather than divert their problem to someone else. Farming in this area would become riskier as crop insurance does not cover ?man-made disasters?. They say this area is an agricultural-based economy but you would never know it by proposing to flood thousands of acres of prime farmland. I am the 4th generation to farm in this area and hope to pass it on to the 5th generation. Should this plan go through it would no longer be a viable option. This is a basin-wide problem that requires a basin-wide approach and in the end a much higher cost benefit ratio. Sincerely, Leo Richard Cc: Governor Jack Dalrymple Senator John Hoven Senator Kent Conrad Congressman Rick Berg

2011-06-19_Anonymous - Your computer system does not function as described. Is this intended to preclude comment? If not, you should correct the errors, publicize the correction and extend the comment period. I know there are people that tried to comment but were not able to do so.

2011-06-19_Anonymous - A newspaper article recently quoted a member of the USACE as stating that the flow rate of the diversion (spillway)channel was reduced to 20,000 cfs. A change like this will have a large impact on the amount of land flooded by the dam included in this project. This change has not been adequately studied. In addition, people have not been properly notified of this change so they can't comment on it. This change is material, and the project analysis should be re-done to consider it. In addition, the methodology that would be used for managing the dam and the water stored behind it have not been adequately studied. Based on how the USACE has mis-managed the dams on the Missouri River system, people in ND and MN should be informed that the dam will be poorly managed and result in excessive flooding in many areas.

2011-06-19_Richard A Geurts - June 19, 2011 U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 Sent Via Email RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We live a mile and a half south of 46 along 171st Ave SE and have been on this site since 1996. We built on the highest ground on the property and have never had water against our buildings. Some of our concerns come from the fact this does not appear to be a basin wide project or plan as it was originally stated it would be. Upstream communities not asked to participate in the process. Richland and Wilkin County Commissions and other upstream officials were not included in decision-making. We have over $600,000 invested in our property at this time and others in our area have invested similarly. At these levels, buyouts of property to execute the LPP will likely far exceed the estimates we have seen reported in the feasibility studies. We believe the costs are grossly understate and far less expensive options are available if further work is done to engineer and study the issues across the entire region, including further downstream improvements. Alternatives exist that address flooding basin wide and we ask you to step back and take a much broader view of the options available. The LPP Project takes upstream land so that downstream land can be developed; which supports building in flood plains. This has proven over years to continue to cost the government and tax payers on-going and incents the wrong behaviors. All costs of ongoing operation and maintenance are the

responsibility of the local sponsors, now estimated to be $3.6 million. This is more than the current annual cost of flood protection. The plan as proposed is already having a very negative effect on property values and economic growth in our immediate area. We again ask you to take a broader look at the solutions we have available. Sincerely, Richard A Geurts 5539 171st Ave SE Christine, ND 58015

2011-06-19_Anonymous - This project has destroyed property values in the affected area. As a result, property tax revenue for the city of Oxbow and Kindred School District will be reduced before the project is complete. The sponsoring entities should be required to reimburse Oxbow and Kindred School District for this loss, and the cost should be included in the project cost. Additionally, this project is intended to protect the city of Fargo to flood levels that have never been seen. Therefore, the USACE flood models are no doubt inaccurate and should be independently verified.

2011-06-19_Mark Richard - US Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 Dear Project Manager: I grew up living and working on our family farm. It helped me learn how to build and fix machines. My love for mechanical things is what drove me to become an engineer. I got my mechanical engineering degree and started working for Caterpillar Inc. I had a good career and loved my job. However, something was always missing. Illinois wasn?t North Dakota. Even though both are considered Midwestern states, people in a state that is driven by large corporations have a different mentality. They quite trying to help their neighbors and greed is the predominate trait. I didn?t want to raise my family in this environment. So after over 12 years working for a Fortune 100 company, I quite, packed up my family, and moved back home to North Dakota. I am now the 5th generation on our family farm. Our farm was started in the 1890?s and the house I am living in is 100 years old. It is located 2 miles from the Wild Rice River and has never been flooded. With the latest proposed Fargo diversion, our farm will be sacrificed and be under 8 feet of water. Since the Army Core of Engineers has told us the buyouts will be based on market value or depreciated value, we will not afford to build a new farmstead. Moving to a new farmstead is not like moving to a new house. There are lots of good houses for sale all the time. However, good farmsteads may never be for sale. Most good farmstead are still working farms that have been passed down through the family for generations. Where does the USACE expect an entire township of farms to relocate? Even if we are able to relocate our farmstead, almost all the land we farm would be flooded whenever the diversion was operated. Since Federal Crop Insurance won?t cover losses from man-made disasters, raising crops on this land would involve a lot more risk. A family farm that has been in the family for 5 generations could all be lost with one operation of the diversion channel. What is the USACE going to do to ensure this does not happen? I always thought that the USACE was supposed to do what is best for all citizens. I thought I was leaving the corporate greed behind me when I left Illinois, but apparently it is alive and well in Fargo. Unfortunately, I am learning that the only ones that matter to the USACE are the project sponsors. How does the USACE justify letting the sponsors protect everything that matters to them while those that are being hurt don?t have a seat at the decision table? What data is the USACE using to determine the ?new? 1% and .2% floods? How is it that with the original flood levels the cost benefit ratio did not meet the thresholds, but with the increased level they exceed the thresholds? To protect the city of Fargo beyond any level that has ever been seen seems excessive. It would be nice to be able to protect against all possible treats but usually this

is not feasible. Has any consideration been taken to history of the area being destroyed by this project? This project will wipe out almost all the French Canadian farms that originally homesteaded in this area. It seems like a modern version of ethnic cleansing. Mark Richard 17107 50th ST. SE Horace, ND 58047

2011-06-19_Lynn C. Larsen - June 19, 2011 U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. My husband and I live just ? mile west of I-29 and 1 ? mile south of ND Highway 46. We purchased our land and built a new house in 1996. We researched flood history and chose the highest spot on the 29 acres and even built the site up. We have been there for every Spring flood since and our home has never flooded nor have we had to sandbag. My concerns with the proposed project are: It will flood homes and farms that have never flooded to benefit those who are in a flood plain. It will destroy communities. In rural North Dakota your neighbors may live miles away, but they are there to help in any emergency. This plan will erase whole communities and the few people left behind will have no support system. The small towns are the nearest fire, EMS and law enforcement entities. They will be gone with this plan. It will destroy the agricultural areas with the best farm land in the state. A recent article (Scientific American, July, 2011 article ?A Quick Fix to the Food Crisis?) pointed out that the switch of food crops to energy crops is creating a new food crisis. Do we really want to remove thousands of acres of prime farm land and contribute to the destabilization of governments? The funding of this project will fall on the shoulders of the very counties and communities that will be decimated. Who is going to foot the very costly bill if about ? of the southern counties are no longer tax producing entities? Those who may want or need to sell their property will be held in a legal limbo for years. The data provided had a 10 year timeline. Who will purchase the homes/farms of the elderly? Most people in this area consider their home and property as part of their retirement plan. This diversion will wipe that source of income out. I attended a meeting in Fargo in the first week of December. It was important enough that I left my mother?s deathbed to attend so I am unsure of the date. At that meeting I heard multiple times that this would be a regional plan. This is no longer the case. This plan saves several towns at the cost of the neighboring towns and counties. I want to make clear that I have great respect for the Army Corps of Engineers. You are given the most complicated and difficult tasks and have to design systems with available information. Recent letters and articles have lost sight of the difficulty of your task. I have not. It is for these reasons and many others that I oppose the propose ?Locally Preferred Plan?. Sincerely, Lynn Larsen 5539 171 Ave SE Christine ND 58015

2011-06-19_Cash Aaland & Laura Oster-Aaland - Dear Project Manager: We oppose the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. We understand that Fargo needs flood protection, but we do not believe it should come at the expense of our personal property, our community, our churches, and our schools, the communities of Hickson, Bakke, Comstock, and Oxbow. There are basin wide plans what would address flooding in the entire region that has not fully been explored. Further, Fargo could be protected by a permanent plan such as that implemented by Grand Forks North Dakota. Such a plan would be a fraction of the cost and would not result in the taking of

property that does not now flood. Our home sits high on the banks of the Wild Rice River 1.5 miles south of Highway 46 in northern Richland County. Our home was built in the late 1800?s and has never taken water due to its positioning on high ground. The current maps place 0 ? 3 feet of additional water on our property which cannot be mitigated forcing a buyout. The figures that we have seen put out by USACE vastly underestimate the costs of compensating land owners for the taking which will occur. We for one will litigate the value of our property. Our neighbors will as well. The attorney?s fees incurred by the sponsors in the taking proceedings have not been included in any estimates. Fargo?s mission to provide itself protection for a potential 500 year flood is nothing more than an attempt to protect low lying flood prone land contiguous to Fargo for future growth and development at the expense of communities outside of Fargo that are not now in the flood plain. The LPP amounts to an unconscionable taking of private land. We expect a response to our concerns. Cash Aaland & Laura Oster-Aaland 5555 171st Ave. SE Christine, ND 58015

2011-06-19_Ray Grabanski - June 19, 2011 Re: Comments on Fargo-Moorhead Diversion Project Dear Corps of Engineers, I am opposed to the Fargo-Moorhead Diversion or as I less affectionately refer to it, the Fargo Dike. The Fargo Dike is a project that has gotten out of hand, as what initially started as a method of mitigating floods in the Fargo-Moorhead region has turned into a bit of a farce, and has left many of the rural citizens south of Fargo shaking their heads. First of all, the diversion was meant to make it easier for the Fargo region to withstand the spring floods that often disrupt the city somewhat, although rarely does any area actually suffer flood damage from the rising waters. Instead, dikes that are put up each year are painstakingly taken down every year as well. So instead of leaving the levees as permanent levees, they are put up and taken down every year. So it was reasonable for Fargo to get help with this matter. So we voted on the proposal for a permanent solution to Fargo?s problems. But when we voted as a county, all we knew was that a flood control program was proposed. But after we voted, it was revealed that the flood proposal would involve a dike south of Fargo that would effectively flood thousands of acres of farmland, and up to 1,000 structures south of Fargo would need to be bought out and moved! Effectively, that would eliminate over 20% of the tax base for the Kindred School District!!! After spending what is likely to cost over $2 billion dollars, the Fargo Dike will still flood out 1,000 homes, far more than has ever been impacted by any flood the city of Fargo has ever experienced in over 100 years!!! And this flood will be man-made - at a whopping cost of over $2 billion dollars!!! Now, you can certainly appreciate it when government oversteps its bounds, and clearly this Fargo Dike is a project where government has gotten out of hand. What started as a legitimate project has resulted in deception of citizens on the nature of the project while voting has taken place, and ballooning of costs to nearly $2 billion dollars - and still the plan floods out more people than ever were impacted by nature itself. This dike is like the ?bridge to nowhere? that was considered such a waste of resources. But this project is in our district, supported by our politicians, and promoted by our citizens. It?s time for those who abhor wasteful government spending to step forward and say enough is enough!!! It?s time to recognize this Fargo Dike project for what it really is, a waste of government resources to accomplish virtually nothing. While the project promoters say this project protects 200,000 people from flooding, that is really a joke. For over 150,000 of those residents, it?s protection of 1? or less from flooding. For the majority of the others, it?s 1-6? of protection. This project really is for the few homes along the Red River that are built too close to it in the first place. It?s time for those citizens to take responsibility for their bad decisions, and for them to bear the costs of

permanent flood control. Simply leaving the temporary levees in place is enough for the Fargo flood protection, and simply building a permanent dike system that goes right through town is the only project that has ever made sense. To reach for the $2 billion dollar project for Fargo is atrocious when Grand Forks, who experienced flooding of historic proportions, instead opted simply for an expanded floodway through the city. The Fargo Dike system must be opposed and exposed for what it really is, a waste of government money and a colossal insult to the taxpaying citizens of Cass County, North Dakota, the United States, and the world. It would be a incredible waste of money, and would adversely impact more people with the Fargo Dike than ever were impacted by the floods it was meant to address. This is atrocious and should not be tolerated. For the record, I strongly oppose the Fargo-Moorhead Diversion project because it is a huge waste of government resources, negatively impacts more people than it helps, and doesn?t accomplish what it was originally intended to do efficiently. Sincerely, Ray Grabanski rlg@progressiveag.com

2011-06-19_Gail T. Rogne - I understand that the Red River of the North is a significant threat to the city of Fargo. I also understand that much of the city of Fargo is built on a flood plain as we have seen in recent years. The diversion which is planned with the staging area flooding areas which have not been flooded since the days of Lake Agassiz is something I do not understand. Therefore, I have serious concerns for the current plan. My concern is for all of the people who would lose their homes and their livelihood (farming) if this plan proceeds. My concern is for the costs to the counties, townships, etc. of repairing roads and infrastructure. My concern is for the churches, cemeteries and other cultural sites which would be impacted, possibly destroyed. My concern is for the environment, the added air pollution as farmers have to drive further on gravel roads to get to fields due to the removal of farm sites in the staging area. My concern is for those residents who need to move and are unable to do so as they cannot sell their homes. My concern is for the costs of building this project, the unknown costs (buyouts, relocation, etc) and the ongoing costs of maintenance, many of which are unknown at this time and the general public does not have this information. My concern is for the safety of those behind the levee as we have seen that levees do fail. My concern is for the health of the surrounding population due to increased mosquito breeding grounds from the water which is being held and the increase in wetlands around a metropolitan area. It is my understanding the USACE will not (or does not) consider other options, such as upstream retention, as possible additional solutions to the problem of protecting Fargo from future floods. Although I understand that the upstream retention sites which have been identified would not be enough to provide complete protection, I believe this option as well as others must be considered and explored before destroying the homes, livelihoods and 100+ years of family heritage of ?several hundred or thousands? of residents. Sincerely, Gail T. Rogne 5477 County Road 1 Kindred, ND 58051-9403

2011-06-19_Trana Rogne - We are writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley The Sierra Club views the FM Metro LPP plan of promoting the changing of a stable rural community into a highly urban environment as a negative development. The plan is promoted as removing a large area from the flood plain, which results in 70 square miles of land out of flood plain requirements, thereby promoting development. This urban development with its accompanying urban sprawl, the paving over of large land areas causing increased runoff, and

the increased air pollution is not an environmentally sound policy. This plan has not had input from the very communities it will impact the most. While this lack of community wide consensus is not a traditional Sierra Club issue, it is a valid concern as it gives the community a sense of control and a bigger stake in the building of a viable environmentally friendly community. The plan, requires the relocation of thousands of people, the relocation of homes, and the relocation of farming operations in the staging area of southern Cass County and northern Richland County. This will require an increase in travel distance from the farm headquarters to the farming operations. This Increases air pollution and particulate pollution as most of the roads are not paved. Particulate pollution is inevitable, but a plan that by its formulation forces more miles to be traveled on unpaved roads is not in the public interest. At the Corps presentation on April 4 in Wahpeton, the concern for the location of the farming operations headquarters was noted as needing to be addressed. With the removal of all buildings, the equipment will have to be driven in from outside of the staging area. With the limited availability of land for homes and farming headquarters, this could be a considerable distance. We will hope to see a resolution to this problem in the final draft and are asking for a period for comments on the proposed resolution. We also question the support of a plan that promotes the use of a dam/levee to act as a means of protecting a population from flooding. The wisdom of building a dam/levee to protect an urban community that, in the judgment of the Corps, does not evacuate in emergencies and prefers to fight a flood, is greatly questioned. The catastrophic failure of the "dam" would result in a social, economic and environmental tragedy. There appears to be a attempt to mitigate for the impact to wildlife. The impact to the environment would be considerably less if a staging area were not part of the plan and other means were implemented to retain water. Other options such as many small retention projects and restored upstream wetlands have less adverse environmental consequences than larger concentrated water retention projects. The stated rationale that the Corps does not do small retention projects as mentioned at the April 4 Wahpeton presentation does not alleviate the necessity to provide a plan that does less environmental damage. FISH: 5.2.1.7.5.6, p. 275 "For the LPP and ND35K, fish passage at the upstream control weir does not seem feasible. . . . Under the LPP, the bypass would be especially problematic due to staging additional water upstream of the control structure.? ?Professional judgment suggests that attempting to include a fish passage for the diversion channel under the LPP could cost an additional $20 to $30 million. Costs for the ND35K could be less, but still substantial.? We would strongly recommend that the fish passage be included in the LPP. WETLANDS 5.2.1.5.3 LLP AND ND35K The loss of wetlands is addressed with the creation of new wetlands in the diversion channel bottom. We do not feel the native wetlands are replicated by the proposed solution. We question that the quantity of replacement wetlands can be maintained with the known variability of the water flow in the diversion channel. We are asking how is the funding to maintain this wetland channel provided and where in the document it is noted. Also who is responsible to provide the maintenance? We cannot assume the meandering channel will maintain itself due to the varying flows in the bigger channel, silt, etc. This wetland needs to be maintained as it is part of the project. If the necessary maintenance on

this wetland mitigation is neglected, who is to enforce the maintenance of the new wetlands? Are the citizens left to apply legal means to achieve compliance? The approval of this plan is a means of protecting a specific area, but it does not provide for the development of a long term environmentally sound solution to the valley wide flooding problem. Trana Rogne Political Chair Dakotah Chapter Sierra Club 5477 Co Rd #1 Kindred ND 580511. RELOCATION COSTS At the Corps meeting in Kindred on May 24, 2011, Corps officials acknowledged that their appraisal of farm buildings would be the depreciated value. This is clearly unacceptable since this would make it impossible for many farmers to rebuild their operations. If the Corps formula for the costs uses depreciated values, then the cost of acquisitions and relocations is vastly underestimated. The replacement value needs to be sufficient to buy property in an inflated market. The number of farming operations needing new locations outside of the staging area of 33,000 or 54,000 may be considerable. Existing sites are limited within a reasonable driving range. If new sites are to be considered, bare land purchased and improved to the comparable level of functionality of the ?bought out? existing site is a cost that is considerably more than the ?bought out value? of a to be flooded site. The plan does not account for the real cost to the farming community. This issue must be addressed to prevent the costs of the plan being put on those who do not profit from the implementation of the plan. This needs to be corrected before we can be certain of the real costs of the project. 3. RELOCATION IMPACTS The report states in Section 5.2.3.1.7 ?Several hundred or thousands? of residents would need to be relocated. Hundreds of homes and farm structures would be removed, and farm operations relocated. Many of these homes have never flooded. Those who have maintained non flooded homes are being penalized for their good planning, while those who build in the flood plain are rewarded. This is not the function of good government and will be long remembered. 4. WHO IS RELOCATED Homesteads along the Red and Wild Rice south of Fargo and Moorhead are some of the oldest in the Red River Valley, some as old as 1869. They were living there when a 1% (100 year) flood occurred in 1897 (see Section 2.3.1 page 16), so they knew where to build their permanent homes, many of which still stand. 5. OTHER COMPENSATION FOR RELOCATIONS Compensation for the added travel time and expense for commuting back and forth to their fields from some distant location outside the staging area (transporting equipment and crops) is not currently in the project costs. The Corps refers questions about relocation and acquisition to their standard real estate policies, but the specific questions of how issues like this would be handled are apparently to be addressed in negotiations with landowners when the project is being built. Questions such as these need to be fully answered and the costs fully accounted for before decision makers move forward with authorization of the project. While federal guidelines leave these questions for a later phase, it is in the sponsors? best interests to have these costs known in advance of the decision to move ahead. As many of the farm sites to be relocated are home sites, the social impacts of the work place, many miles from the home place, make family farm operation more difficult. After school work by children, part of the building ot the next generation of farmers is impeded. The participation in school and church activities are impeded by additional drive time to the home place and then to the activities. This

is part of the family farm life in rural North Dakota. 6. SIMULTANEOUS FLOOD ON TRIBUTARIES The Corps has not considered the effect of the proposed diversion in cases of simultaneous floods on other rivers (such as the Sheyenne), but they acknowledge there would be impacts. ?The study has been primarily focused on the Red River event with coincidental flow events on the tributaries and no models have been developed to assess the exact impact, however it can be said with certainty that there would be impacts? (SDEIS Section 3.7.3.2). The challenge of dealing with multiple rivers in flood is a common occurrence in the area, and parts of the staging area are lands that are regularly affected by overland flooding from the Sheyenne. This would multiply the agricultural damages in that area, and these damages are not a part of the current costs of the plan. ? Note there is a current Corps plan for the Devils Lake flood control, which may provide for a ?natural? draining of Devils Lake . This amount of water in this ?natural? draining is yet to be determined. Fargo diversion study does not consider the flooding on Sheynne from Devils Lake and large summer rains that have occurred in the past. Summer floods in the staging area are to be expected. The summer Red River gate operation plan cannot be determined until Devils Lake outlet water flow is projected. It is possible there will be two Corps projects affecting the flooding. Since the Sheyenne and the West Fargo Diversion channels could be full due to summer rains and water released from Devils Lake, water would have to be held longer in the staging area, thus flooding crops which have no crop insurance. The gates will have to be opened to send water to Fargo or flood out crop land. No one wins. This plan can only work when upstream retention on the tributaries is included. The Basin wide solution, which the Corps does not consider, is the solution. If Highway 17 is used as a levee, breakouts from the Sheyenne River will be prevented from taking their natural path to the Wild Rice River. This would flood land west of Highway 17. Corps officials have said they could dig a ditch to take that water north to the diversion, but the plans for that have not been specified and no costs have been included in the project. These costs and other costs from the impacts on tributary flooding need to be spelled out before the project moves forward. 7. IMPACTS OUTSIDE THE STAGING AREA In response to an e-mail about how many acres were in the staging area, Corps Engineer Terry Williams replied on 5/16/11: ?The Staging Area impacts 33,390 acres of land. The defined Staging Area does stop at the areas you mention. There are additional impacts outside of the Staging Area as shown on the map on page 74. Read paragraph 3.13.1.2 of the main report.? 3.13.1.2 (paragraph 5) states: ?Some areas along the Red River, Wild Rice River and connected drains that are outside of the designated staging area will be affected by staging operations. A legal analysis will be conducted to determine if impacts in these areas rise to the level of a taking under the Fifth Amendment of the U.S. Constitution. Outside of the designated staging area, landowners will be compensated appropriately for any takings.? So, the Staging Area impacts 33,390 acres but there are impacts of the staging area outside the designated staging area. Richland County and Wilkin County need to know fully what the ?impacts outside the designated staging area? are, since Figure 32 shows 54,721 acres (much of it in Richland County) in the 1% event inundation map. That acreage would be subject to varying depths, with a good deal of it subject to an increase of 1-3 feet. It appears the plan has

been approved without full consideration of impacts and costs. This deceives the public by hiding the real impacts of the staging area. Wasn?t the Southside Development Project ?overcome? by the current project and will be built if this plan is not approved? Upstream retention does reduce Fargo-Moorhead river stages, so that is indeed an alternative (though one that would not qualify for Corps of Engineers support). The Corps is a federal government agency funded by tax dollars of all citizens and the size of projects necessary to solve a problem should not be the criteria for the dismissal of a possible solution. If this is the case it is an argument for the reform of the Corps. procedures. Before more funds are used to find other solutions, upstream retention must be considered in conjunction with recommended solutions. When will we know if property in this ?affected area outside the staging area? would be subject to a taking? How can elected officials responsibly make a decision without knowing who will be affected and how much this will cost? All these costs need to be accounted for before the project moves forward. 8.. CONVERSION OF PRIME FARMLAND TO WETLANDS The Corps suggests in Section 5.2.3.1.9 of the SDEIS that there are opportunities to convert some of the land in the staging area to ?wetlands, grasslands, or wooded areas or other uses (a significant part of the staging area is currently farmland).? This results in a net loss of prime farmland. The Corps states that there would also be wetlands created (from prime farmland) in the bottom of the diversion channel (5.5.3.5). This would be a possibility of there being an increased mosquito problem, and this would have to be mitigated (especially in the area of the new trail system created as part of the project) to prevent infectious disease. This is currently not part of the project costs, and this would no doubt be an additional annual cost born by the taxpayers of Fargo and Moorhead. 9. DEVELOPMENT The key driver of this project does not appear to be protecting existing property, but protecting property that could be developed. Viable alternatives that would provide protection to current residents have been dropped from consideration because they did not provide for future development. How much should the taxpayers be responsible for to fund private developers who continue to build on flood-prone land, especially when there are other places where the greater FM area could grow? The 33,390-acre staging area could not be used for development (SDEIS Section 5.2.3.1.7). The project destroys an extended community, removes ?several hundred or thousands? of residents, and forecloses opportunities for us to develop our land so people in Fargo can develop their land. The determination that this is ?in the public interest? is dubious. 10. ECOLOGICAL IMPACTS In Section 5.5 of the SDEIS the Corps report states ?ecological impacts would likely be the greatest under the LPP.? They state, however, that ?sponsor preferences? (among other issues) are involved in the selection of the preferred plan, even though ecological impacts are highest under the sponsor-preferred plan. The report in this section (p. 341) says that mitigation and associated costs will be addressed in the Final EIS. However, only 30 days are allowed for comment on the Final EIS and there will be no public participation meetings following the Final EIS. Since the ecological costs are the highest with the LPP and since ?sponsor preferences? are important in the decision to move forward despite these costs, it is inappropriate that there will be no more public meetings and such a short comment period. While this may be a standard Corps planning guideline, I believe more time

and public scrutiny should be allowed to examine the costs and the trade-offs required related to ecological impacts. 11. EXECUTIVE ORDER 11988 In Section 3.8.3.4.5 of the SDEIS, Floodplain Impacts, the Corps states that Executive Order 11988 ?requires federal agencies to avoid direct or indirect support of floodplain development where there is no practicable alternative, and then to minimize impacts to the floodplain.? They argue that there is no ?practicable alternative? since a diversion channel in either Minnesota or North Dakota is the only feasible alternative that will significantly reduce flood risk, and they note that the FM Metro area will grow at the rate of 266 acres per year, regardless of any flood risk management project. The report notes numerous times that the LPP takes more land out of the floodplain than other plans. Moving forward with the LPP in the light of this does not seem to be consistent with EO 11988. Apparently the Southside Development Project was ?overcome? (SDEIS Section 1.5.2.2) by the current project because it did not protect enough land for development. These and other alternatives that are in compliance with EO 11988 should be given more consideration in the evaluation process. Upstream retention does reduce Fargo-Moorhead river stages, so that is an alternative that would be compliant with EO 11988. 12. F-285 (APPENDIX F) This is, according to the Corps a ?sticky? issue. The report states in F-285 (Appendix F): ?From minutes of November 8, 2008 public meeting: Q: B/C ratio?is that taking into account urban sprawl and future development? A: That?s a little sticky from a Federal perspective. We count benefits for reducing flood risk to homes, commercial and public infrastructure, and agriculture. Future developments (intensification benefits) are highly scrutinized, because we don?t want to promote growth in flood plains. We will include intensification benefits in the Regional Economic Analysis, but not in the Federal B/C ratio.? This whole area of compliance with EO 11998 does, indeed, require much more scrutiny before considering moving forward on a massive project that rewards poor planning and exploitation of land that should not be developed. 13. RECREATION Recreation benefits have apparently been built into the project according to federal planning guidelines and to increase the benefit cost ratio. Homeowners and landowners to be permanently displaced and have their communities destroyed resent the idea that recreation benefits are being used to justify this project. In the Fargo Moorhead area, cabin ownership and recreation at the ?lakes? in nearby Minnesota is prevalent. Section 2.2 lists ?desire for increased recreational opportunities? as a ?public concern.? How was that desire determined? What brings this ?desire? to the level of needing $35 million in costs? There is a long description of the many recreational opportunities in the area, including 99 miles of biking and walking trails in Fargo-Moorhead. The report in Section 4.2.3.10 states there are five state parks within reasonable driving distance. Why do we need a $35 million recreation project? The Corps states on ES 19 that the recreation plan ?could result in a healthier, more vibrant community.? Who determined that and how? Certainly, ?several hundred or thousands? of residents permanently losing their homes does not lead to a ?healthier, more vibrant community.? Weighing recreation benefits against destroying communities should result in a different calculus. 14. RISK OF PROJECT FAILURE AND LOSS OF LIFE An overtopping or breach of the tieback levee, storage area levee, or failure of a control structure in an extreme event would be ?catastrophic? (Section 3.10.3 SDEIS). Ice or

debris could affect the flow through the control gates. The Corps has not done a loss of life analysis for this but did include as a benefit of the project the protection from the loss of nearly 600 lives in a catastrophic flood event, arguing that local people historically do not evacuate in case of a flood. So, since no one will exercise caution or reason in case of an extreme flood, it is apparently OK to include the protection from loss of life from failure to evacuate as a benefit of the project. Why is the potential loss of life from a catastrophic failure of the project not included in the costs of the project as well? In addition, the projection of 600 lives seems out of line with reality considering the fact that the 1927 Mississippi, the worst flood in United States history, only resulted in 246 deaths. 15. HEALTH AND SAFETY ISSUES There would be buildings in the staging area (those ring diked and those that don?t qualify for ring dikes) that would be at an increased risk of flooding: ?. . . a large staging area for a number of days or weeks . . . will pose a safety concern? (SDEIS Section 5.2.3.1.5) Safety measures would need to be implemented to minimize risks, and those measures are not spelled out in the plan nor are the costs included in the benefit/cost ratio. This is another area that is not covered adequately in the SDEIS. Decision makers should not move forward without more information on who is at risk, what the measures would be, and how much this would cost. If the only roads raised in the staging area are I-29 and Highway 75, county and township roads used to access remaining homes in the area will not be usable. Therefore, emergency access would be a serious problem. If these homes were bought out because of this, project costs would increase. All these special situations need to be identified and the costs accounted for before the project moves toward authorization, since these additional costs will be significant. Design of tieback levees and control structures for safety is another concern (Section 5.2.3.1.5), and the full measures to assure safety will no doubt add to project costs. In the event of a 500 year flood only one community will be left. The statement was ?you will have Fargo to shop at?. The reason is that Fargo has a 500 year flood protection while all other cities have lesser flood protection. This point was made at the presentation at Wahpeton, ND, April 4, 2011. Our government is willing to build a project with the expectation that in a 500 year flood, all other cities and communities in the Red River valley will be flooded out. It appears some one has lost perspective of the real values of our country. 16. ROADS There is no provision in the project for maintenance and repair of township and county roads to provide access for remaining residents and for farmers to access their fields. With farm headquarters relocated out of the staging area, there will be increased travel on these roads moving farm equipment from home to field. With reduced revenue from loss of homes in the staging area, and in the case of Pleasant Township the virtual elimination of residents in the township, it will be impossible for roads to be maintained. Farmland would still be taxed, but at a reduced level due to the reduction of taxable value with a modifier applied as allowed by the tax code. Non farmers who have paid property taxes to maintain roads would be gone. The local sponsors of the project must pay for the incurred cost to the impacted townships and counties. Ultimately, local sponsors will have to make up for the losses. These costs are not in the project, and they should be in the benefit/cost ratio before the project moves toward authorization since leaving them out would be highly misleading. 17. FISH HABITAT Concerns have been raised by fish and wildlife experts

on the adequacy of the measures to assure the health of the fish population. In Section 5.2.1.7.5.6, page 275 of the SDEIS, the report states that for the LPP and ND35K, ?fish passage at the upstream control weir does not seem feasible. . . . Under the LPP, the bypass would be especially problematic due to staging additional water upstream of the control structure.? It states further that ?Professional judgment suggests that attempting to include a fish passage for the diversion channel under the LPP could cost an additional $20 to $30 million. Costs for the ND35K could be less, but still substantial.? The rest of the page speculates about the effect on migrations and long-term population trends, saying this is impossible to predict. ?The impact to fish migrations likely can only be evaluated through monitoring once the project has been constructed.? It talks about ?potential migration measures that might include deterrent systems to keep fish out of the flood diversion.? It seems there are major issues here, but they have not fully been addressed in the SDEIS. The Corps states the fish would have a path to exit the diversion channel, so the risk to mortality would be ?very low.? This will be further evaluated ?following project construction.? If the recommended measures are not going to be built because of cost, we can expect there to be losses to the fish population that would need to be remediated later on. The cost of monitoring and remediation needs to be in the original project costs. This could be another long-term cost not included in the project estimates. Better yet, the recommended fish passage needs to be part of the plan and included in the original project costs. Why has this not been included? 18. AIR QUALITY 5.4.1.2 Corps report talks about air quality problems caused by construction but does not talk about air quality problems caused by increased road traffic on gravel/dirt roads for farmers moving equipment greater distances. The travel distances could easily be doubled, depending where the impacted farm land is and where the new farm head quarters is located. 19. PARTICIPATION 6.3 The Corps report states: ?The sponsors have worked closely with the other local entities to develop a consensus on the path forward . . .? Richland County was not involved in the planning process. The people in the staging area in Richland County, southern Cass, and Wilkin county were finally made aware, they were not brought into the planning process by the sponsors. When there is a violation of the Corps protocol no attempt was made to resolve the violation except to tell them they, those impacted, were affected; they were not brought in to the process. When upstream impact to Oxbow was known, the mayor was given an non-voting position on the FM Metro group. This was ?touted? as working with those impacted. This violation leads one to see the present Corps plan is seriously flawed by the failure of the Corps to follow it?s own protocol. If this failure is accepted on the federal level, the whole system is also seriously flawed and in need of revision. 20. HYDROLOGY 3.10.1 The historical record shows much of the staging area has never, in the last 140 years, had a flooding occurrence. The frequency of flooding is ZERO. What effect does this have on the plan?s calculations? A prolonged dry out period is noted as a possibility which would cause planting to be delayed until it is too late to plant. No compensation is provided for this occurrence. 21. WETLANDS (Page 92, page 233) The nonfederal sponsors will be responsible for the long-term maintenance of the project. The maintenance of the meandering wetland mitigation is not noted. The feature of the project must be maintained as integral parts of

the project. The wetland feature is subject to damage by high flows in the channel and silting in. The plan must provide for the maintain of this feature. Who is to oversee the maintenance of this feature? The 36 mile diversion channel is noted implying 36 mile of diversion channel is available for wetlands. Much of that diversion channel is the Horace and West Fargo diversion channels and are not suitable for wetlands due to the high water flow from the Sheyenne River during the summer months. With the change to 20,000 capacity of the diversion channel the flood level in Fargo must go up or there must be more water in the staging areas. The staging impact area then will be larger than the current plan calls for and the cost must be higher, and more upstream impacts, more summer crop losses etc. 22. FISH STRANDING Page 257 fish stranding, It appears if fish stranding occurs something will be done if ?possible?. If it is built to allow fish stranding and it is not possible to resolve the fish stranding, nothing will be done. This is not acceptable. Again no funds are allocated for the resolution. It will be a cost to the non-federal sponsors. Is the Corps going to require the non-federal sponsors to provide the necessary funds? 23. FLOOD ELEVATIONS The flood level by FEMA and the Corps are not the same, Why does this occur and how does it affect the plan?s calculations ? Trana Rogne 5477 Co Rd #1 Kindred ND 58051

NEW COMMENT ADDED on 2011-06-19 23:08:08: We are writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley The Sierra Club views the FM Metro LPP plan of promoting the changing of a stable rural community into a highly urban environment as a negative development. The plan is promoted as removing a large area from the flood plain, which results in 70 square miles of land out of flood plain requirements, thereby promoting development. This urban development with its accompanying urban sprawl, the paving over of large land areas causing increased runoff, and the increased air pollution is not an environmentally sound policy. This plan has not had input from the very communities it will impact the most. While this lack of community wide consensus is not a traditional Sierra Club issue, it is a valid concern as it gives the community a sense of control and a bigger stake in the building of a viable environmentally friendly community. The plan, requires the relocation of thousands of people, the relocation of homes, and the relocation of farming operations in the staging area of southern Cass County and northern Richland County. This will require an increase in travel distance from the farm headquarters to the farming operations. This Increases air pollution and particulate pollution as most of the roads are not paved. Particulate pollution is inevitable, but a plan that by its formulation forces more miles to be traveled on unpaved roads is not in the public interest. At the Corps presentation on April 4 in Wahpeton, the concern for the location of the farming operations headquarters was noted as needing to be addressed. With the removal of all buildings, the equipment will have to be driven in from outside of the staging area. With the limited availability of land for homes and farming headquarters, this could be a considerable distance. We will hope to see a resolution to this problem in the final draft and are asking for a period for comments on the proposed resolution. We also question the support of a plan that promotes the use of a dam/levee to act as a means of protecting a population from flooding. The wisdom of building a dam/levee to protect an urban community that, in the judgment of the Corps, does not evacuate in emergencies and prefers to fight a flood, is greatly questioned. The catastrophic failure of the "dam" would result in a social, economic and environmental tragedy. There appears

to be a attempt to mitigate for the impact to wildlife. The impact to the environment would be considerably less if a staging area were not part of the plan and other means were implemented to retain water. Other options such as many small retention projects and restored upstream wetlands have less adverse environmental consequences than larger concentrated water retention projects. The stated rationale that the Corps does not do small retention projects as mentioned at the April 4 Wahpeton presentation does not alleviate the necessity to provide a plan that does less environmental damage. FISH: 5.2.1.7.5.6, p. 275 "For the LPP and ND35K, fish passage at the upstream control weir does not seem feasible. . . . Under the LPP, the bypass would be especially problematic due to staging additional water upstream of the control structure.? ?Professional judgment suggests that attempting to include a fish passage for the diversion channel under the LPP could cost an additional $20 to $30 million. Costs for the ND35K could be less, but still substantial.? We would strongly recommend that the fish passage be included in the LPP. WETLANDS 5.2.1.5.3 LLP AND ND35K The loss of wetlands is addressed with the creation of new wetlands in the diversion channel bottom. We do not feel the native wetlands are replicated by the proposed solution. We question that the quantity of replacement wetlands can be maintained with the known variability of the water flow in the diversion channel. We are asking how is the funding to maintain this wetland channel provided and where in the document it is noted. Also who is responsible to provide the maintenance? We cannot assume the meandering channel will maintain itself due to the varying flows in the bigger channel, silt, etc. This wetland needs to be maintained as it is part of the project. If the necessary maintenance on this wetland mitigation is neglected, who is to enforce the maintenance of the new wetlands? Are the citizens left to apply legal means to achieve compliance? The approval of this plan is a means of protecting a specific area, but it does not provide for the development of a long term environmentally sound solution to the valley wide flooding problem. Trana Rogne Political Chair Dakotah Chapter Sierra Club 5477 Co Rd #1 Kindred ND 58051

2011-06-19_Kristen Harry (Ness) - Hi, My dad informed me of the Corps of Engineers intent to flood the Comstock/Wolverton area. I am extremely disappointed with the possibility of this happening. I now live downstream near Omaha and have seen the effects of flodding in this area due to the Corps of Engineers poor ability to manage the dams. We are not morons. We know it's a tough job, but if you are going to create a reservoir, dig a big hole. Do NOT flood 30,000+ acres of the richest farmland in the country with a few feet of water! What are you thinking? They can grow rice there? It's not enough water for recreation or for building a resort area on(to generate more revenue and jobs). It's just enough to ruin thousands of lives and livlihoods for what? The sake of developing some natual wetlands around Fargo. Build elsewhere. Buy some land and dig a hole. The right way.

2011-06-19_ Kevin Heiden a General Partner Heiden Family LLLP - NEW COMMENT ADDED on 2011-06-19 22:58:14: In studying the table on page 31 of supplemental EIS all of your plans impact approximately the same amount of structures. Of these stuctures how many are homes? My question to you is how many structures would be affected if flood walls and levees through Fargo, what would the cost benefit ratio be for that.You say that it would not work, its not the locally preferred plan. Tell the people that would be flooded out with your new plan that it wouldn't work. You say you want to restore river habitat, start in Fargo move stuctures back from the river, create a space where flood waters could spread out like its

supposed to work. The whole issue with the diversion is to protect areas of Fargo that were built in a flood plain. The Red River which formed as lake Agassiz drained, you want to protect the lowest part of the Red River valley. The management skills of the Corp of Engineers is really in question with the problems in Bismark, Minot, Valley City and West Fargo. I hope your not using the same computer used to predict water releases to design this project,if you are we're all in trouble. Flooding is nothing new to the Red River Valley, you say that were in a wet cycle that has changed the 100 and 500 year flood levels. Try going back to 1826 and 1897 was the valley in a wet cycle then too? I purpose that the qoute record level in Fargo in 2009 is a false record because of diking which funnels inward and upward. The loose of flood plane which allowed the water to spread out, now there are homes and other stuctures built in these areas. Case in point Rose Creek golf course used to be a slough which stored water and eased flooding. Some how the City of Fargo allowed it to developed, imagine that.Common sense is not a requirement to run a city. You ask for technical issues reguarding the purposed project. 1) A flood plain is to hold water at times of flooding not to build houses in. 2)Every spring money is spent to put up dikes(which has saved Fargo each year), then money is spent to take them down. The people along the river in Fargo don't want the dikes there all the time, it ruins their view. The people being affected with lose of their income from their land don't care for it either. 3) OUR COUNTRY IS BROKE !!! If all the structures in Fargo cannot be protected get rid of them for good. You will say that cannot be done because it's the economic engine for the area, if it's so important why was Fargo built on the banks of a river in a flood plain. 4) Your purposed river control structures have never been built anywhere, how do you know they will work. Were they designed by a computer? The same computer that was supposed to predict run off levels to control our damns? That's pretty scary. Are we supposed to destroy the history of our area for a big ditch, I've been told of an area in the path of this ditch with large amounts of Native American artifacts, some possibly as old as 3000 to 4000 years old. I know of one area that will be destroyed that has never been cultivated,never seen the dreaded plow. There are very few of these areas left and they need to be protected. All this to protect a city that was largely built in a flood plain. 5) The cultural survey should be redone. I observed a group doing a survey northeast of Harwood. They were walking in close enough proximatey to be talking and visiting with one another. How accurate was this survey if it was done like this. I do not trust their survey of our families land, they were working for the Army Corps of Engineers finding and seeing what they want to see. 6)Another issue is the route northeast of Harwood it parallels drain 30 and then crosses it near the sheyenne river. Why was the channel of drain 30 not used or better yet use the channel of drain 13 to get rid of a 90 degree bend in the purposed channel. I would think that a sharp bend like that would increase the maintance costs in this area. And about a petition for drain 13 , I've talked to most of the people that signed this petition did it to try to stop the project. A public official that is supposed to represent all people equally used his position to further his own ajenda. He told me in a phone call he didn't care about anything else in this project just drain 13. I purpose that if this channel is going to work so well and it is for the people of cass county and not only for the people of Fargo it should be connected to drain 13 reducing flooding and road destruction in the areas surrounding drain 13. 6)You are vastly under estimating the economic lose that will be suffered by people that will loose their land and their opportunity to make a living.This issue added to your cost benifit ratio would shed a different light on your project. 7)Move the stuctures away from the Red River, construct flood walls and levees, restore the flood plain and use retention projects to hold the water from reaching the Red River so fast changing the timing and lowering the crest. But this would not fit into Fargo's development

plans. Which it's my understandings that the Army Corps of Engineers are not supposed to aide in development. 8) Why are the large holding ponds in the City of Horace's ET and not in Fargo's. Fargo wants this project they should suffer the most and pay the biggest price. 9) What is happening to Fargo's co sponser(Moorhead), cold feet.

2011-06-20_Christopher Lish - Subject: Develop an alternative for flood control in the Red River basin Dear Aaron Snyder, I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions. "It is horrifying that we have to fight our own government to save the environment." -- Ansel Adams As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. "Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish--indeed, all the living creatures of prairie and woodland and seashore--from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement." -- Theodore Roosevelt Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." -- Aldo Leopold, The Conservation Ethic Thank you for your consideration of my comments. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources. Sincerely, Christopher Lish Olema, CA

2011-06-20_James Jacobson - Aaron Snyder Chief, Project Management and Development Branch 180 East 5th Street, Suite 700 St. Paul, MN 55101-1678 Subject: Review of the Supplemental Draft Feasibility Report and Environmental Impact Statement for Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Mr. Snyder, Thank you for sending a copy of the above April 2011 subject Feasibility Report. My understanding is that this feasibility report now proposes a 200,000 acre-foot storage area/dam near the Oxbow/Hickson area south of Fargo and would require a buyout of that community and 23,000 acres of farmland would be flooded for storage of flood water. This plan may provide flood protection for the Fargo-Moorhead metropolitan area, but at a cost that would wipe out the existing communities of Oxbow, Hickson and Comstock, only benefiting Fargo-Moorhead residents. That is not a wise engineering solution for any Red River Valley flood control plan in my opinion. As I previously commented in my August 2, 2010 letter on your initial draft feasibility report, in my opinion, comprehensive basin wide flood retention water storage projects along Red River tributaries are a better solution for overall valley flood control during wet cycles. Water retention storage could then also provide a needed water supply during the drought cycles. The diversion plan does not provide a solution to alleviate both flooding and drought. Sincerely, James H. Jacobson, PEQuestion- Do the 10yr, 50yr and 100yr flood areas as delineated on Figs 37,39 and 41 include a similar yr type flood event also occuring at the same time on the MN Wild Rice, Buffalo and other tributaries of the Red River?I would like a copy of this subject feasibility study for the Fargo/Moorhead Diversion. Mailing address is 8175 Ponderosa Dr. Salida Colorado 81201. Thank you <P>NEW

COMMENT ADDED on 2010-08-08 21:53:28: <P>NEW COMMENT ADDED on 2010-08-08 22:25:36: Question- Do the 10yr, 50yr and 100yr flood areas as delineated on Figs 37,39 and 41 include a similar yr type flood event also occuring at the same time on the MN Wild Rice, Buffalo and other tributaries of the Red River? <P>NEW COMMENT ADDED on 2011-06-20 00:02:58: Aaron Snyder Chief, Project Management and Development Branch 180 East 5th Street, Suite 700 St. Paul, MN 55101-1678 Subject: Review of the Supplemental Draft Feasibility Report and Environmental Impact Statement for Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Mr. Snyder, Thank you for sending a copy of the above April 2011 subject Feasibility Report. My understanding is that this feasibility report now proposes a 200,000 acre-foot storage area/dam near the Oxbow/Hickson area south of Fargo and would require a buyout of that community and 23,000 acres of farmland would be flooded for storage of flood water. This plan may provide flood protection for the Fargo-Moorhead metropolitan area, but at a cost that would wipe out the existing communities of Oxbow, Hickson and Comstock, only benefiting Fargo-Moorhead residents. That is not a wise engineering solution for any Red River Valley flood control plan in my opinion. As I previously commented in my August 2, 2010 letter on your initial draft feasibility report, in my opinion, comprehensive basin wide flood retention water storage projects along Red River tributaries are a better solution for overall valley flood control during wet cycles. Water retention storage could then also provide a needed water supply during the drought cycles. The diversion plan does not provide a solution to alleviate both flooding and drought. Sincerely, James H. Jacobson, PE

2011-06-20_Vern Liebelt, Chairman of Davenport Township, Cass County - June 20, 2011 TO: United States Army Corps of Engineers (USACE) FROM: Vern Liebelt, Chairman of the Davenport Township Board RE: Red River Diversion Project THE DAVENPORT TOWNSHIP WANTS TO GO ON RECORD IN OPPOSITION TO THE FARGO DAM & RESERVOIR AS PROPOSED BY THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE). WITH THE RED RIVER DIVERSION PROJECT. WE OPPOSE THE DESTRUCTION OF COMMUNITIES, FARMS, BUSINESSES, SCHOOL DISTRICTS, AND HOMES BY THE FARGO DAM & RESERVOIR AS PROPOSED BY THE RED RIVER DIVERSION PROJECT. Even though Davenport Township is situated west of the point that the proposed diversion is set to be constructed, we are concerned that the impact will also affect the Sheyenne River and farmland and roads in our township as well. In past springs any overflow from the Sheyenne spills over into Davenport Township and causes considerable damage to the roads and farmland, so what will be the impact on roads and other infrastructures in our township of the Fargo Dam & Reservoir? We don?t feel that sufficient study has been done to what the effect this project will have on the overflow from the Sheyenne. We are also opposed to this project because the residents in our township will be subjected to a raise in taxes to make up for the loss of property taxes in other townships and communities due to flooding.

2011-06-20_Janith D. Ness - I am James A. Ness, Janith's husband. I have the same e-mail address. Should the Fargo Diversion come about, which I pray doesn't, I'm concerned about emergency services being unable to do their job. How will fire trucks get to a fire? How would an ambulance save a heart attack victim? I'm also concerned about water staying on the river banks too long, causing banks to slough into the Red River. This has already happened at my farm and numerous places along the river. The Fargo Diversion plan leaves a lot of unanswered questions which the Corp has not been able to answer. There is a better plan. Ideas have come

from many at the meetings, but the Corps has not responded to them. Sincerely, James A. NessI am asking you to reconsider the Fargo Diversion plan as submitted as it will be so destructive to those of us living upstream. We look at the Red River from the windows of our home, yet at its worst it still had approximately 8 feet to go to reach the top of the bank. When I first heard of this plan, I considered it too asinine to ever become reality, yet here we are, spending our time and money to fight a plan that should never have been proposed. We want the cities of Fargo and Moorhead to be protected, but do you really believe the only solution is to damage or destroy so many of us who live upstream? Why have you not considered the much more affordable and less destructive plan of EKO? I'm sure you've been sent this information, but I want to send it to you again. Heinz Munz Wayne Flittner Marketing Director President, Eko Flood Systems USA, LLC. wayne@ekofloodusa.com heinz@ekofloodusa.com 307-733-8982 307-739-2538 I do not know the source of this quote, but it applies: "To admit you made a mistake is to acknowledge that you are smarter today than you were yesterday." Sincerely, Janith D. Ness

NEW COMMENT ADDED on 2011-06-20 08:13:29: I am James A. Ness, Janith's husband. I have the same e-mail address. Should the Fargo Diversion come about, which I pray doesn't, I'm concerned about emergency services being unable to do their job. How will fire trucks get to a fire? How would an ambulance save a heart attack victim? I'm also concerned about water staying on the river banks too long, causing banks to slough into the Red River. This has already happened at my farm and numerous places along the river. The Fargo Diversion plan leaves a lot of unanswered questions which the Corp has not been able to answer. There is a better plan. Ideas have come from many at the meetings, but the Corps has not responded to them. Sincerely, James A. Ness

2011-06-20_Patrick Reinke - I live in the Bakke Sub-Division that is going to be negatively impacted by the current LPP Diversion plan for Cass County / Fargo. The project seems to have been put on the fast track and is not being reviewed properly for ALL potential posssibilities. I have several questions and points that I want answered: How was the Metro Flood Study work group formed and why is there no one included in the group from the highest impacted area ? Why wasn't the public made aware of possible diversion realingment changes prior to the sales tax vote in November ? Aaron Snyder has made comments that they were considering these alternatives back in May of 2010. Yet the public wasn't told of the re-alignment until after the vote ? Are we supposed to put our lives on hold while waiting for buy outs ? We have been told that buy-outs will occur from North to South and we would the last group of people to be bought out ? What happens if the Sheyenne, Wild Rice, and Red River all crest at the same time ? We haven't been given proof that this has been considered. When can we get an accurate cost breakdown of all the costs ? If we as tax - payers are helping pay for the project we should get a full accounting of all costs. I would like a full accounting of the $1.7B price tag. I think we will find that the price will easily exceed $2.0B. How is the new Kindred School going to be paid for when 23% of the property tax base will be wiped away ? Please provide proof that ice jams have been taken into account when designing the diversion. How is Fargo able to protect areas currently now developed, but held for future development. Isn't that a direct violation of EO 11988 ? Please explain. These are just a few of the many concerns about the current proposed project. The project has NOT addressed many of the concerns and impacts of the people living in

the storage and staging areas. I would like my comments and questions answered to the fullest extent. Patrick Reinke Concerned Bakke Resident Patrick

2011-06-20_Melvin Bolton - I reside in rural Cass County, ND and I am writing in opposition of the current locally preferred plan (LPP) diversion project as designed by the Corps of Engineers aimed at protecting the Fargo-Moorhead cities. During a May 22nd corps-sanctioned information meeting held at the Kindred School gymnasium during the question and answer session, it was said that Congressman Colin Peterson (MN) believed that there was money in the Farm Bill ($500 million) for a large Red River retention project. The diversion project manager, Mr. Aaron Snyder, said in his reply to this information that the corps? ?preliminary analyses? suggested that any Red River retention project by itself did not go far enough to keep flood waters out of Fargo-Moorhead. While I realize we need to fix the flooding situation in the Fargo-Moorhead area, the LPP will create a dam that floods a major amount of land, including several cities and my home. Given the extreme impacts of the proposed diversion, it should be incumbent upon Mr. Snyder to exhaustively seek out and compare every potential solution to the flooding problem, which includes retention. Quite simply, ?preliminary analysis? by the corps should not rule out other potential solutions at this stage of planning. In light of this, I disapprove of the current LPP and ask that more studies be conducted to evaluate whether an upstream retention project(s) in conjunction with a diversion, but without an upstream staging area or dam in the Oxbow/Hickson/Bakke areas/Klitzke Dr. areas, could mitigate most Fargo-Moorhead flooding problems. In my mind, this potential solution alleviates artificial flooding of pristine farm land, hundreds of rural homes like mine, and at least four cities (from both MN and ND) while still protecting Fargo-Moorhead. Moreover, Cass County and other local counties will retain their tax-base in this area rather than having to buy out each farm, company, or residence.

2011-06-20_Todd and LeAnn Toppen - June 20, 2011 U.S. Army Corp of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft EIS Fargo-Moorhead Metropolitan Area Flood Risk Management Dear Mr. Snyder: We am writing this letter in opposition to The Locally Preferred Plan for the Fargo Diversion. We live on, own, and operate a farm on the Wild Rice River in Section 4 of Walcott Township East. This northern area of Richland County is very important to the county tax base as it represents its largest growth area. It is also vitally important to the Kindred and Richland 44 school districts. This current plan shows an impact of less than 1 foot on our land; however, 10 miles south of our land, it shows an impact of 2.6 feet. We are not engineers but this would not make sense to any rational thinking person. We can only therefore conclude that there have been no credible impact studies done south of Highway 46. It would seem that there has been very inadequate peer review of this project to have left such an important area out of proper study. I have come to expect very short-sighted planning from the City of Fargo and the Cass County Commission; however, we are very disappointed to also see it from the Corps of Engineers. The flooding in the Red River Valley Basin is a basin-wide problem that deserves a basin-wide solution. To simply single out Fargo for flood protection at the expense of others shows the incredible ignorance of the COE about the unique flooding problems of the Red River Valley. It is very clear the sponsors and the COE are choosing to flood thousands of acres of land that has never been flooded in order to provide development property to the City of Fargo that is in the flood plain. The City of Fargo continues to develop land that is very flood prone while asking for help from flooding. Something is very wrong here. This project begs for underwriting by the

USDA, FEMA, EPA, and perhaps the Justice Department at the very least. The current estimated cost of $1.7 billion, which is of course grossly underestimated because many impacts have not yet been studied, should cause the COE to question whether the local sponsors have an adequate plan for funding. With the ND legislature, Moorhead, Clay County, and the State of Minnesota now questioning their commitment financially to the project the COE is mismanaging the public trust to continue to work on this project without a more detailed plan for funding and more transparency from the City of Fargo and Cass County . They both are representing their voters very poorly. When the diversion was changed to a diversion with a dam and the upstream retention was added to the project, the COE stopped listening to the local people affected by this huge area of retention. People choose to live on a farm and in rural areas with small communities for a lifestyle that many ?city? people do not understand. It is a nourishing mix of community, church, friendship, faith, and lifelong commitment to family that cannot be bought out and moved. It seems to be a threat to ?cities? and something easily done away with. It is with respect that we ask that there be no upstream impacts and that much more time is needed to work for a basin wide solution. Thank you for your consideration. Sincerely, Todd & LeAnn Toppen cc: USDA, FEMA, EPA, Justice Department

2011-06-20_Anonymous - Hello, My name is Jodi Arneson and I live at 112 1st Ave in Hickson, ND and my husband and I have lived there for 11 years. I am 35 years old and have planned to live in my home, in Hickson the rest of my life. This is extremely disturbing and upsetting to my husband and I. Our house isn?t just a house to us and never has been, it actually has some type of meaning. It used to be the old School House in Hickson, and is very unique. You cannot replace my home with any other. Over the passed 11 years we have never had any type of flooding from either of the rivers around us so why would you just think you can wipe out that entire area? In the event of a .02% chance flood it will put 5-7 feet on us, let?s be realistic, you have to say this amount. So never in my lifetime will I see this type of flood, I guarantee you that if this diversion goes through we will never see water in that area, ever. So then what, all these people were displaced from their homes and livlihood for absolutely nothing? I think it?s absolutely ridiculous for the City of Fargo and how this ?diversion? thing was secretly pushed under everyone's noses. Why isn?t Oxbow/Hickson being included in this diversion area or even given the opportunity? Where are the statistics on that? I demand that the options/expenses be figured out to include us, as well as costs/expenses for protecting the City of Fargo with floodwalls etc, just like Grand Forks. How silly is it to displace all these people, and ruin all this farm land and the COST?..the cost alone! I?m glad the government has all kinds of our money to ?waste?. There are other ways of protecting the City of Fargo from flooding and you know it. Also what about the Kindred Public School and how this is going to affect that? Why should I be ?forced? from my home for the benefit of others. I do not want to be uprooted. My husband and I currently have three businesses that operate in the City of Fargo every single day. If I am forced out of my home, this will be jeopardizing those businesses in the City of Fargo as well. We will NOT live in the City of Fargo, nor Cass County for that matter. The Core knows there are other ways to take care of the flooding issues within our area, and where is our Political Representation from our Cass County Commissioners? Who are these people and why aren?t they fighting for or with us, where is there backbone? I'm just going to leave you with this: Flood of 1997, nothing, Flood of 2009, nothing, Flood of 2011, nothing. Diversion Protecting the City of Fargo only, 5-7 feet of water on us. Back in the day Churches and Schools

were built on high ground in the event of a catastrophic flood. Andre' and Jodi Arneson 112 1st Avenue Hickson, ND 58047

2011-06-20_Kathleen Lingen - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have several concerns related to the proposed plan. First, I am extremely disappointed by the fact that the many people who will be negatively impacted were not included or represented in the planning process. People?s lives are now on hold while under the threat of this project. We are homeowners in the Bakke addition and don?t have the options of selling our home or borrowing money to make home improvements. We feel like we are living in limbo until we know what will happen with this project. Secondly, I can definitely sense a loss of community cohesion and trust between our bedroom communities and the city of Fargo. I truly believe that we do need them and support some type of flood protection, but they also need us. Right now that relationship and trust has been severely damaged. These social impacts have not been taken into consideration. In addition, I am a teacher in the Kindred Public School District. I don?t feel that it?s been taken into account how this project will affect our school. Who will be responsible for the costs related to the loss of tax bases? We have a strong thriving school district with a new secondary school under construction. The future of our school district is unknown if this project proceeds as proposed. We have many students who live in the areas that would be adversely affected. There is no way that all of those families/students would be able to relocate in the Kindred Public School District thus more people and communities are adversely impacted. Lastly, it seems obvious and imperative that better, less expensive alternatives need to be given adequate consideration. In conclusion, please take the time to review and address the concerns of the many people whose lives are going to be changed forever by this project. Sincerely, Kathleen Lingen

2011-06-20_Forrest D. Wilkerson and Ginger L. Schmid - We would like to take the opportunity to express our concerns about the proposed flood control program for Fargo ND. We agree that Fargo is vulnerable, but our background in surface processes and soils leads us to question whether the proposed large scale engineered structures can actually be safely constructed and maintained upon the soils of the Fargo area. The substrates in this area are notorious for shear and deformation and when combined with the wet or dry extremes of the Fargo climate these shrink/swell substrates are problematic for any type of engineering. The area proposed for this flood control project is underlain by the Sherack and Brenna geologic formations. By definition these formations are characterized by 2:1 lattice smectite clays. The shrink-swell properties of these clays are defined by chemical and physical properties of the clay minerals present in these deposits. The 2:1 nomenclature indicates the ability of these minerals to absorb water molecules to expand to twice their volume, and then shrink again when drying. No amount of money or engineering can alter the physical and chemical properties of these clay minerals. These are such basic, defining characteristics that the engineering issues associated with these clays are addressed in any multitude of sources from basic introductory soils textbooks (e.g. Singer and Munns 1987) to on-line and scientific journal publications (e.g. Harris 2003; Anderson 2005, 2006; Schwert 2011). Please consider the complexity and cost of building

on these substrates before approving such an expensive and potentially impossible engineering project. Submitted by: Forrest D. Wilkerson, Ph.D. Ginger L. Schmid, Ph.D. Associate Professor Assistant Professor Department of Geography Department of Geography Minnesota State University Minnesota State University forrest.wilkerson@mnsu.edu ginger.schmid@mnsu.edu Professor Wilkerson has a master?s degree in Geography and a Ph.D. in Environmental Geography. Both of his degrees concerned surface processes and erosion. Professor Schmid has a master?s degree in soils and a Ph.D. in Environmental Geography. Both of her degrees involved soil stability and erosion processes. Selected References Anderson, Fred. J. 2005. A highlight of engineering geologic issues in Fargo, North Dakota. North Dakota Geological Survey Newsletter. 32(1): 1-4. Anderson, F. J. 2006. A highlight of environmental and engineering geology in Fargo, North Dakota., USA. Engineering Geology. 49(7): 1034-1042. Harris, K. L. 2003. Riverbank collapse in northwestern Minnesota: an overview of vulnerable earth materials. Minnesota Geological Survey. University of Minnesota. Schwert, Donald P. 2011. Geology of the Fargo-Moorhead region, North Dakota-Minnesota. Department of Geosciences. North Dakota State University. http://www.ndsu.edu/fargo_geology/ Singer, Michael J. and Donald N. Munns. 1987. Soils, an introduction. New York: Macmillan Publishing Company. 453-455.

2011-06-20_Tom & Penny Cirks - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: We are opposed to the Fargo Dam/Diversion. It is such a narrow minded plan that if it wasn?t so serious most people would shrug it off with a laugh. This project will TAKE people?s homes and livelihoods without the blink of an eye. Sure, we are promised compensation (and some people are wearing rose colored glasses if they think it will be a fair compensation). But my issue is that our house, property and livelihoods are not for sale. When we looked for property on which to build our new house eight years ago, we took the topography and history of the land into consideration. We built high? on land that has historically been dry. We know that the river rises in the spring. When we wanted to build our new house, we knew where the flood prone areas were; where to stay away from. So our reward for picking a high and dry location is to have Fargo take it to put water on it. And we are supposed to just give it up. Fargo is not rescuing us from a property that floods. They are creating a property that will certainly flood. Fargo is TAKING our home so that they can push water uphill. That doesn?t make much sense at all. We are at an elevation of 925 feet. Fargo is 905 in several places we checked into and maybe even lower in some places. If this Dam fails or breaches for any reason, where do you think that water is going to flow? Hint?it is not south. While there has been much development in our neck of the woods (Northern Richland County) and new folks moving in, there are many families that have been here for generations. Why do these people have to toss aside their history? To you it may only be a plot of land and some dirt, a house, and some out buildings. But to the people who have lived here, it is roots. It is a stable environment. A home. A way of life. Why on earth would the project people think that the homes in Fargo are so much more important? Is Fargo prepared to compensate the people fairly for taking away their careers, their livelihoods, their retirement? It?s pretty tough to relocate farmland. You may be able to ?trade? acre for acre, but can you guarantee the quality? Are the local sponsors prepared to compensate what would be a normal income each year for every farmer displaced? I have heard people say that the needs of many outweigh the few. Let?s run with that theory. There are many,

many more people involved here than Fargo, The flooding reaches out to the entire Red River Basin. Why aren?t these people?s needs being considered? Instead of protecting Fargo only, protect the Basin from South Dakota to Canada. Wouldn?t that be more responsible? It was said at one of the meetings, that if people to the west of the dam/diversion want to stay dry, they will have to build their own diversion. So now we are just creating a catacomb of diversions, pushing the problem further upstream of every river that enters the Red River Basin. That seems extremely irresponsible. Many of our family and friends are buried in a cemetery that will be affected. I don?t know about you and your relationships, but the thought of moving mine from their FINAL resting place to somewhere else is extremely upsetting. This also not addressed in the LPP. Many of these graves are very old. Are the local sponsors prepared to find the families of those affected? Are they going to pay for cemetery re-location? We also own a business out here. Foss Johnson Oil, maybe you heard of it. But then I bet not. The study hasn?t actually gone out here to see who will, in reality not just on paper, be damaged or destroyed. We are simply a dot on a computer generated map. We are on the Wild Rice River. But the Wild Rice hasn?t really been taken into consideration in the project. Not one person on the Metro Flood Study Group has approached us as to how much we are going to be affected. Plain and simple?. We are community driven. When the community is gone, so is a large portion of our business. Is Fargo going to compensate us for that? Are we expected to move into Fargo? Will we be made whole by automatically be given a customer base? I think not. We have put 20+ years into expanding and maintaining this business. Again, not one cent from Fargo. It is not theirs to take. This Project has so many costs that haven?t even been considered. The residents of Fargo have no idea how much they are going to have to pay for this Dam. They deserve a right to know. This has been withheld from them. The rest of North Dakota has the right to know that their money will protect only Fargo. And when the water does come and flood northern Richland County, Fargo has said that they will not be responsible for the damage costs. It will then become a ?local issue?. Neither Richland County nor Eagle Township has the extra money lying around to fix roads and bridges. Taxes will have to go up. That is not exactly a drawing card for new residents. If the roads and bridges are in disrepair, how do people commute? What if there are emergency services needed? Will Fargo be there to console the family that just lost a building, home, or God forbid a family member simply because the road to their ring-diked home was under water? All alternatives need to be seriously looked into. Fargo has been successful in each and every flood to date. Improvements are being made each year. We realize that it is getting to be a tiring fight. But it is a fight the entire valley is involved in. Once this dam is built, there is no going back. If this turns into a failure, where is the money going to come from to fix it? This project is too big to rush into. Tom and Penny Cirks 5515 174 Ave SE Christine, ND

2011-06-20_Madeline Luke - Although I do not live in the area upstream from the diversion, my tax money, both state and federal will be used to fund this project. If I am reading the EIS correctly, the upstream Red River crest will be increased by up to 86 inches in the spring. This, by itself, would indicate that you are willing to sacrifice the upstream communities for the good of Fargo-Moorhead, just as a year ago, before they protested, the downstream communities were threatened. Worse yet, your analysis does not take into effect of the overland flooding from tributaries such as the Sheyenne, which will be even more swollen by water release from Devils Lake. Your mitigation plans do not consider in a real way, the loss of farm income outside of the channel. What happens when fields soaked through cannot be planted in a reasonable time period? Will crop losses be covered under any existing programs? How do the towns and county

operate with less tax income if there are no crops? Just this week, Governor Dalrymple?s request for FEMA assistance for private homes was declined. A realistic assessment and budget for homes that could be damaged by the extra water before the project begins is lacking. In this light also, should there be a failure of the diversion, who will pay for the destroyed homes, ruined infrastructure and damaged fields? Presently all of eastern ND is facing serious challenges from the wet cycle. Large projects such as the F-M diversion and outlet structures at Devils Lake are appealing as they respond to the concerns of a large or vocal constituency in a very obvious manner. They also, however, set communities against each other as the transfers of these large amounts of water have the potential of destroying the receiving towns and farms. Because of the profound implications of these large projects, it is of paramount importance that all concerns be heard, all damages be considered seriously and addressed in an honest and comprehensive manner. Furthermore, all alternatives must be considered. The Red River Basin Commission has advocated a 20% reduction on all tributaries to the Red River. How much would this, assuming an aggressive wetland restoration program, along with permanent flood walls, and buyouts in Fargo Moorhead cost? This spreads the burden to all the affected communities while not threatening the survival of any one. Thank you for accepting my comments.

2011-06-20_Joel Noreen - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 Mr. Snyder, My family has lived in the city of Christine, ND for the past 22 plus years. We have raised a family of four boys and have provided foster care for several children, two of which we recently adopted, for the past 8 years. All of our children, 6 now, call this "home". Also, some our past foster children refer to this as "home" as they never had a feeling of stability and permanency prior to living with our family. There are at least 15 to 20 other families it the effected area that provide the same stability and permanency to foster children. You and the powers that be have taken away that feeling of stability and permanency. You are effecting the lives of families that have been here for generations and many like ourselves that more recently moved here to establish homes and families! We chose to live here because of the smaller rural community. The property that my wife, Crystal, own has never flooded as far as we have been able to determine. We have taken a somewhat neglected house that was built in 1901 and brought it back to life, much of which has been with our own blood, sweat and a lot of money. We recently had started a badly needed kitchen remodel only to find out that the dam/diversion plan had suddenly changed! A report that you and city of Fargo knew about last fall but failed to make public until after the Cass County sales tax had passed. We are in our late 50's and should we want or need to sell our home there is currently little if any value. No one is interested in a location that is currently proposed as "holding area" for flood waters. Even if someone was to buy a home or land in the area they would expect to pay pennies on the dollar. I have been in attendance of many or the meetings concerning this dam/diversion. The one thing that has impressed upon me is the lack of empathy that you and others from the Corp and officials from Cass County and Fargo! The public comment meetings have only been provided to allow those effected to vent. At the Kindred, Fargo, Moorhead and Hendrum meetings there were no official notes taken, no names taken, nothing recorded. Comments such as "the red lines are a best guess we don't know where the water could actually go" leaves everyone with no confidence with your "expert" knowledge. Comments by yourself and others from the Corp provides substance to the old saying that "the world is full of educated derelicts" Very sincerely, Joel Noreen Christine, ND

2011-06-20_Allen Ricker - I am writing oppose the proposed North Dakota Diversion. I realize that Fargo Moorhead needs to have some type of permanent flood protection, but there hase to be a better way than the FMPP (Fargo Moorhead Perferred Plan). I live basically at ground zero, 1 house between us and the proposed Fargo Dam location, and have lived there for 12 years. Other than the the couple of weeks of flooding on the flood years in the spring, it is an absoulte wonderful place to live and raise our family. This proposed diversion would not only destroy our house and development Rivershore Subdivision), but also our church in Hickson and the whole communities of Hickson, Oxbow, Bakke Division, and Comstock. I think most North Dakota residents agree that it was wrong when Canada built a dike, to hold back water, at the border and called it a road. So why should it be right for Fargo to build a dike and call it diversion when it will destroy so many homes and business? Please slow down and find a better solution that won't affect so many people! Sincerely

2011-06-20_Katy Boyer - June 20, 2011 Dear US Army Corps of Engineering, I am a resident of Fargo. I agree that Fargo could benefit from permanent flood protection. However, I do not think we should protect Fargo at the expense of the surrounding communities. It is not right to force non-Fargo residents out of their homes just to protect the city of Fargo. We should be able to find a way to improve permanent dikes within Fargo city limits. Almost the entire state of North Dakota has experienced issues and damage due to flooding this year, and Fargo actually had a lot less flood damage than most other cities. The current proposal is also extremely expensive. We should not spend all of our resources on one city. Please try to find a less expensive and less invasive solution to spring flooding. Thank you for your time Katy Boyer 3623 Harrison St S Fargo ND 58104

2011-06-20_Tom Knudsen - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste 700 St. Paul, MN 55101-1678 Minn-Dak Farmers Cooperative is a grower owned sugarbeet processing company located in the southern end of the Red River Valley. The factory is located in Wahpeton, North Dakota. We have been around since 1974. Annually our grower owners produce 2.5 to 3.0 million tons of sugarbeets from 115,000 acres. Total revenues in 2011 were $280,000,000. The area being considered for storage and retention has us very concerned. If implemented we would lose 2,000 acres of production annually. On a rotation basis that number would escalate to 6,000 to 8,000 acres. We have a copy of the RMA interpretation of preventive planting and crop insurance. It simply will not work for sugarbeets year in and year out. The best time to plant sugarbeets is from mid April to the first of May. We do not foresee the retention and storage areas being emptied are ready for planting at that time. Delayed planting has a direct correlation with lowered yields. Sugarbeets are one of the most intensive and expensive crops to produce in the Red River Valley. The uncertainty of spring planting is difficult enough without the storage/retention question mark. Infrastructure to move the crop from field to market is also a major concern. During the mitigation and flowage easement process critical roads may disappear. The window for harvesting and delivering sugarbeets is very small and good roads are crucial. No one will plant a sugarbeet crop if roads are lacking. Sugarbeets do not tolerate standing water very well. If the crop would get planted in the retention/storage area and spring/summer flooding required the gates to be opened the crop would be lost and not insurable. That is simply too great a risk for anyone to take on. In short sugarbeet production within the storage/retention area would disappear. We would also see the loss of grower shareholders who have been with us since the Cooperatives formation in 1974.

They would lose fields, farms and their livelihood and that is something we cannot support under any circumstances. We fully agree that Fargo-Moorhead needs protection. We have watched and worried for them as the struggle annually to defeat the Red River. Fargo-Moorhead is our economic hub and we agree we cannot stand to lose that area to a major flood. We feel the Corps along with the current sponsors need to more fully consider the implications of the essentially eliminating 25,000 acres and everything inside that area. A diversion for Fargo is needed. Downstream interests and impacts need to be considered (and have). Now attention needs to shift to upstream interests. This does not have to be winners and losers in this if time is taken to look at more creative solutions. Nothing is going to happen very fast so why not look at less invasive, more long term solutions. Upstream storage near the source of major tributaries of the Red River is constantly brought up. The Corps agrees that needs to be looked at and will reduce the extent and amount that the proposed area would be flooded. We have congressional support at the moment to implement such storage systems. Some have already been completed (North Ottowa) others are in design stage (Red Path) and others are in their infancy and others should have a second look (Mud Lake and Lake Traverse). If the Corp can source 400,000 acre feet of storage using these less invasive methods Fargo-Moorhead can have their diversion, downstream interests can taken care of and the current proposed upstream storage/retention area can be eliminated. Thank you for your time, Tom Knudsen VP Agriculture Minn-Dak Farmers Cooperative Wahpeton, ND 58075

2011-06-20_Fred Schumacher - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth St. E., Ste. 700 St. Paul, MN 55101-1678 Re: Comment on Supplemental Draft Feasibility Report and Environmental Impact Statement Fargo-Moorhead Metropolitan Area Flood Risk Management April 2011 From: Fred Schumacher Retired Red River Valley farmer A. OVERVIEW The present Locally Preferred Plan (LPP) delineated in the SDEIS is deeply flawed in concept and process. As presently constituted, it is much more a flood plain development plan than a flood abatement plan. The LPP places itself squarely in the middle of a long standing ?turf? conflict among the individual communities of the F-M metro area, choosing sides by shifting water flows around to benefit primarily one community, the city of Fargo, to the detriment of others. The plan is a tautology. By creating a levee system that functions as a dry dam to store water in the Red River Valley itself, it attempts to solve the problem of flooding in the valley by flooding the valley. If in 1975, when the Kindred Dam was resurrected, a person had proposed putting a flood control dam across the Red River Valley, he would have been laughed out of the room. The concept is just as unreasonable today as it was then. B. THE PLAN VIOLATES EXECUTIVE ORDER 11988 The LPP operates counter to Executive Order 11988 on flood plain management, which ?...requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development.? (http://www.fema.gov/plan/ehp/ehplaws/eo11988.shtm) The key documentation to corroborate this claim are the floodplain maps on pages 293-296 of the SDEIS. The LPP uses the diversion as a functional ring dike to enclose the floodplain south and north of Fargo high ground, opening up these regions to development. That Fargo land developers are the primary movers of the LPP is open knowledge. The logic can be seen in the PowerPoint demonstration endorsed by former North Dakota Governor Ed Schaefer that can be seen at www.youtube.com./watch?v=ahiw314d8jc, especially at 1:30 into sequence, when the high ground of Moorhead is derided and the lower area to the west of Fargo is promoted as a flood

pool with ?retention opportunity.? There is no shortage of flood-free land capable of being developed in the Fargo-Moorhead area; however, most of it lies to the east in Minnesota. As another chapter in the decades long conflict between Fargo and West Fargo over annexation of undeveloped land, Fargo sited the new Ronald Davies High School in the floodplain and is now having trouble meeting property tax assessments without additional development in this floodable area that would be protected by the LPP. It is not the task of the Corps to cure self-inflicted wounds. C. THE NORTHERN PACIFIC RAILROAD AND EARLY FARGO The plan ignores centuries-old historical knowledge. Fargo-Moorhead developed because that was the site chosen by the Northern Pacific Railroad for its crossing of the Red River. In 1871, NP land agent Thomas H. Canfield and surveyor George B. Wright scouted out a crossing. Noting that ?there was a tradition among the Indians (corroborated by Hudson Bay Company employees to Canfield) that the Red River overflowed its banks.... Canfield and Wright spent some time that spring going up and down the river searching for high embankments upon which to build a railroad bridge... (and) decided that Moorhead was the highest point as far as they could determine...? (?History of NP railroad crossing at Fargo? http://www.fargo-history.com/early/beginnings.htm) The Northern Pacific sited their crossing nearly perfectly. Canfield and Wright had found the highest ground over a space of some 50 miles. Up until the 1970s, Fargo developed in its characteristic sideways T-shape in order to stay on the high ground, high ground which the NP tracks bisected. Canfield expected Moorhead to dominate, since Moorhead is higher than Fargo, in fact, most of it is above the 500-year floodplain; however, that would have meant running counter to powerful conditions that favored the development of cities on the west side of a dividing north/south river as portals to a rolling frontier expanding from east to west. This is true from Winnipeg to St. Louis and Omaha, with Bismarck being the exception that proves the rule. D. EARLY SETTLERS OBSERVED FLOODS AND AVOIDED LOW LAND Although the Red River Valley appears uniformly flat to the unpracticed eye, it is actually full of perturbations, which early settlers to the valley observed during flood periods. They used that knowledge to site their homes above flood waters, homes that would be removed for the LPP's flood pool. These pioneer homes, which have never flooded, would be sacrificed for the development of Fargo's floodplain, a clear violation of Executive Order 11988. The knowledge that Canfield and early pioneers discovered was lost by modern real estate developers, who expect a government bailout for their mistakes. E. THE LPP IS A NON-COHESIVE PLAN The LPP is not a coherent, unified plan but a series of ad hoc adjustments and compromises to deal with problems as they arise during the design phase. Many of these adjustments are not detailed but are shuffled off into the nebulous ?contingency? area, which is rapidly filling up. These running adjustments concatenate so that the need to avoid the Brenna soils requires making the diversion channel shallower, reducing its capacity from 35,000 cfs to 20,000 cfs, which in turn requires expanding the flood pool upstream, which in turn requires a ditch on the west side of the Highway 17 tie-back levee to move Sheyenne River breakout flows which can no longer take their natural course to the Wild Rice River, and so on and so on. The LPP uses complexity as a problem solving tool, attempting to do something not done before: the crossing of five rivers with a diversion on a flat plain, the construction of two river carrying aqueducts, and all on extremely weak and plastic soils. As 15th century Franciscan philosopher William of Ockham warned, ?non sunt multiplicanda entia praeter necessitatem? (entities are not multiplied beyond necessity). Ockham recognized that the greater the number of ?if... then? statements, all of which need to be valid for the entire argument to be so, the greater the chance for failure. The complexity of this project is a harbinger of project failure. E. THE

CORPS HAS FAILED AT COMMUNITY INVOLVEMENT The community involvement process in LPP planning has been abysmal, with the larger community impacted by the plan essentially blocked out of the planning process. This is a massive shift from the behavior of the Corps during the Kindred Dam/Sheyenne River Diversion project of late 1970s and early 1980s. Although the community involvement component of that project got off to a shaky start, it ultimately became a model for a how to do a planning process properly, with all parties involved in a dialogue with each other and the Corps during monthly meetings over a period of six years until consensus was reached. As the General Reevaluation and Environmental Impact Statement for Flood Control and Related Purposes, Sheyenne River, North Dakota, Rev. January, 1984 states on page EIS-30, section 6.12: ?During the public involvement program, many public views were expressed that had a major influence on the study and that were considered in the decision making process.? That is, the Corps did not simply hold public participation meetings but actively encouraged the affected communities to be an integral part of the process. F. LACK OF TRUST AND TRANSPARENCY Community liaison in the LPP planning process has been so poor that even members of the city council of Moorhead, one of the primary sponsors of the project, were quoted in a June 15, 2011 Fargo Forum article, ?Moorhead officials miffed at corps' diversion changes,? at feeling left out of the planning process. ?It feels like we're an afterthought,? said Council Member Brenda Elmer. The article goes on to state that Councilor Mark Hintermeyer said that change from a 35K cfs to a 20K cfs diversion, ?should have been highlighted, as it did not register with him during a meeting he attended.? ?This (capacity change) is a big deal,? The lack of a ?heads-up? Hintermeyer said, ?sets the framework for a lack of trust and transparency, in my point of view.? The council then tabled action on a joint powers agreement with Fargo. This is a stunning development that bodes poorly for the LPP. G. SHORT PLANNING PROCESS TIMELINE UNDERMINES PUBLIC REVIEW The planning process is being artificially accelerated to meet an artificial deadline: the effort to have the LPP authorized by Congress in the 2011 omnibus water projects bill. This plan is in no way ready for this stage. For a project whose success is absolutely dependent on solid geotechnical knowledge of soils notorious for their low load carrying capacity, additional soil borings, necessary for the engineering of levees and aqueducts, won't be begun until July and data analysis will not be available until early 2012. In the light of the long history of soil failures underneath structures in the Fargo area, it is not a stretch to say that without this geotechnical information, there is no project. That the Corps does not have sufficient geotechnical knowledge to go forward with the LPP is also the analysis of Julian Digialleonardo, manager of the Independent External Peer Review being conducted by Battelle for the Corp. and detailed in Appendix I-15 Reviews. The speeding up of the process also has a negative effect on the ability of elected officials and lay people to understand and comment on the plan. The volume and complexity of the documentation that the planning process can now produce and reproduce can easily overwhelm most people, even technical experts. I spent four hours one day downloading the SDEIS and Appendices and still did not finish the process. Changes in the documentation are made with no indication of where they are, unlike in the legislative process, where original wordage is struck out and new language added in italics. Forty-five days is not enough time to study the gigabytes of data available, and thirty days is totally inadequate for commenting on the final report. Based on observed behavior, it is clear to me that most local decision makers have not read the SDEIS, let alone the Appendices, and yet endorsements of the project have been made on the flimsiest of knowledge. H. TRIBUTARY EFFECTS UNMODELED At the same time that the process is being forced ahead, extremely crucial hydrological modeling of interacting flows of the Red

River Diversion, Sheyenne River, Sheyenne River breakouts, diversion overflows, Maple and Rush Rivers and legal drains and overland sheet flooding has not been done. The simple statement from the Corps that there will be ?effects? is completely inadequate. The area to the west of West Fargo could easily turn into a lake. Combined with the flood pool created by the dry dam tie-back levees, Fargo could end up being an island surrounded by ?Lake Fargo.? That this modeling was not completed before release of the DEIS is unconscionable. I. FLAWS IN BENEFIT/COST ANALYSIS There are serious flaws in the benefit/cost analysis. Part of the problem lies with the protocols the Corps is forced to use, but much of it is commonly seen in benefit/cost analyses: minimizing of negative effects, exaggeration of recreation benefits, unrealistic death projections. There is a lesson that can be learned from the work of 14th century philosopher Ibn Khaldun, who is considered the father of sociology and scientific history. Khaldun developed methodologies for testing the veracity of stories. One test was that if a claim is made about something in the past, could it be replicated today? We can reverse this and apply it to the Corps projections for flood death potentials if no project is built. Since the worst American flood on record is that of the Mississippi River in 1927, which resulted in 246 deaths, are the higher projects for Fargo-Moorhead reasonable? No. It fails the test. Have the present Sheyenne River Diversions created recreational opportunities? No. The $35 million annual recreation benefit fails the test. Has the Fargo-Moorhead area experienced $193 million in annual unprotected flood losses? No, again. The greatest flaw, however, is the lack of inclusion of annual agricultural losses resulting from the diversion/dry dam plan. This is a procedural issue that will require making changes at the federal level. Farm land is different from manufacture and service where replacement of an operator's infrastructure can be accomplished without displacing another operator. Compensating a farmer for his opportunity cost does not account for the annual loss of production from the land being taken for a project, since in farming, loss of land results in displacement of another farmer. The land slated for removal from production, either permanently or temporarily, is not just any land, but is Prime, Class 1, Red River Valley farmland. It cannot be recreated somewhere else out of nothing. There is a medical dictum: ?First do no harm.? This also applies to flood control. The LPP breaks this rule and is thus unacceptable. J. NORTH DAKOTA'S ECONOMIC ENGINE Fargo is often touted as the economic engine of North Dakota. This is untrue. The economic engine that drives North Dakota's economy is agriculture, mining, and energy production. These industries create new wealth every year and form the basis of an economy. This wealth is then recycled by places like Fargo and multiplied. Without agriculture, Fargo would have had no reason to exist, especially since it is located in the center of the continent, far from the coastal regions that contain the majority of America's population and commerce. That losses of annual agricultural production resulting from the LPP are not included in the planning process makes the SDEIS an incomplete document. K. DELAYED PLANTING AND FEDERAL CROP INSURANCE As a retired farmer, I have years of experience of the two frantic farming seasons of the year: Spring planting and Fall harvest. A three week delay in onset of spring's work, as is projected for the plan's flood pool, would be devastating. On the Northern Plains, the opportunity window is narrow, and while other crops can be substituted as the season goes on, there is a limit. We have a joke in farming: buckwheat can be planted up into the first week of July, but two bushels of buckwheat is more than the market can bear. Farm program agencies recognize this reality and adjust compensation for damages based on it. That the DEIS planning process did not recognize that federal crop insurance does not provide coverage for man-caused damages is an indication of a basic lack of knowledge of agriculture. That the problem is facilely set aside by announcing that

drain tile could be installed to mitigate the problem begs the question of who installs the tile and who pays for it. That the Corps could seriously entertain the idea that depreciated value only would be paid for farm structures to be moved or replaced, as a result of the project, shows a disconnect from reality. That damage to the grid of farm to market roads is minimized by stating that water will rise and fall slowly and cause no damage shows a lack of on-the-ground experience. One of the officers of Walcott Township, where I farmed, told me that the township is having serious problems keeping gravel on the roads, since the waterlogged state of clay-base roads is ?swallowing up the gravel.? This has ominous implications both for the roads in the flood pool and for the Corps' plan to rip-rap the bottom of the diversion channel where Brenna class soils become exposed. The waterlogged Brenna soils will let gravity do its work and also swallow the higher density rock. L. AQUEDUCT SOILS PROBLEMS The engineering problems the Brenna soil horizon presents will also create serious engineering difficulties for the two aqueducts. These aqueducts, unlike a building, will be receiving both static and dynamic loads from the moving water. Cofferdams will, of course, extend down to the glacial till which will carry the static load. But if the Brenna is expected to carry the shear load exerted on the cofferdam columns, I think failure can be expected. I don't see how these aqueducts can be safely built without going all the way down to bedrock and allowing the till to absorb the shear load. This will greatly increase cost. I have concluded, however, that the aqueducts will not be able to function as planned and that they will have to be deleted from the project. M. CLIMATE CHANGE MODELS NEEDED Although it is fashionable these day to denigrate climate change as real, people who work in the realm of reality cannot ignore the changes that are occuring. The Corps' precipitation projections were calculated without taking into account climate change. These projections need to be reworked by taking into account NOAA and NASA climate models. Evidence is growing stronger daily that the Tropical Convergence Zone is moving north, with implications for changes in precipitation regimes all the way to the study region. This indicates the potential for more frequent floods, which would impact the staging and storage areas, resulting in greater crop losses resulting from the project. It also means that a realistic and implementable flood reduction solution for the Fargo-Moorhead area is even more essential. N. LOCAL COST SHARE IS UNAFFORDABLE The longer the Corps and local sponsor bind themselves to an unviable solution, the longer it will be until Fargo-Moorhead sees some form of permanent relief. Opponents of the project are not opposed to flood protection for the metro area. It is that the form of protection must be affordable and not do additional harm to the rest of the region. This project, they argue, has nearly reached $2 billion in cost, with less than $800 million to be federally funded. This is a huge outlay for a comparatively small population. In addition to up front costs, maintenance and damage indemnity costs must be borne by the local sponsors. Projected annual maintenance costs already exceed the amount spent for temporary flood protection during serious floods. Damage to farm land caused by the operation of the project will have to be paid by the local sponsors, since the losses will not be covered by federal crop insurance. This puts the local sponsors under economic duress, and is a primary reason the City of Moorhead appears to be on the cusp of pulling out of the project as a local sponsor. The low taxation rate of North Dakota is often touted as a primary reason for the continued development of Fargo. However, the cost of this project will seriously strain the ability of Fargo to generate the necessary funds. Property taxes are already high and will need to go much higher. The half percent county sales tax that was passed will only generate enough funds for maintenance of the project. As Fargo residents realize the cost of what they are tying themselves into, opposition to the project from inside Fargo will grow, as will opposition in rural Cass County, which will be

negatively impacted by the project. The Corps has not aided local sponsors in developing methods for raising the funds required. This should be a part of project planning. O. LACK OF COORDINATION WITH BASIN-WIDE PLANNING There is a lack of coordination with the Red River Basin Commission's small, upstream retention dam project. The Corps has dismissed this effort as being insufficient to solve Red River mainstem flooding problems. What has not been recognized is the potential for these dry dams to act as the water equivalent of pollution credits or carbon trading. A project which would help one area, but increase stages downstream, a common occurance in a shallow bowl like the Red River Valley, could pay for upstream retention which would compensate for mainstem projects, retaining constant or lower stages downstream. This is an promising, untried concept that requires further investigation. The continuing rise of Devils Lake is sure to impact the SDEIS study region. Models need to be developed for the impact of Devils Lake outflows into the Sheyenne River on flooding conditions in the study area. P. POLITICAL FACTORS Political factors have changed significantly since project planning began, making authorization and funding of any flood control project in the area much more difficult. The North Dakota Triumvirate of Sen. Kent Conrad, Sen. Byron Dorgan, and Rep. Earl Pomeroy no longer exists. Four years ago, the LPP would have been authorized and funded without much problem. Today that is no longer the case. Sen. Conrad is leaving the Senate and is primarily concerned with tackling the federal deficit in his final year in Congress. Sen. John Hoeven is a freshman senator in the Senate Minority and is politically weak in Washington. Rep. Rick Berg would have to carry this project, since he is a member of the majority party in the House, however, he has voted for drastically cutting the federal budget, including public infrastructure spending, and has already indicated he may run for the Senate to replace Conrad. This leaves Berg in a very weak position. North Dakota Governor Jack Dalrymple is a scion of a powerful Cass County family which has had a great impact on North Dakota's agricultural history. He has shown lukewarm support for the project. Dalrymple may very well be concerned by the LPP's damage to agricultural production. Catastrophic flooding by the Missouri and Mississippi Rivers this year will also impact the federal pecking order for flood relief funding. The LPP's high cost in relationship to the small population it serves will put it at a disadvantage in Congress. Realistically, it will stand little chance of funding when competing against the needs of regions with much greater population and flood damage. Q. CONCLUSIONS The plan outlined in SDEIS-April 2011 is not politically, socially, or economically implementable. The project does not address the present problem of Fargo-Moorhead flooding so much as it clears the way for future development in the flood plain. This is directly counter to Executive Order 11988, which prohibits federal funds being used to help develop a flood plain. The plan is extremely complex, in a region with supercritical geotechnical problems that put elements of the project at great risk of catastrophic failure. In the real world, the plan would damage more than it saves. With the loss of seniority that North Dakota's Congressional delegation once had, the difficulty of getting this project authorized has risen by an order of magnitude, and the possibility of federal funding has decreased by two orders of magnitude. A diversion as a central element of F-M Metro flood relief is dead, both in North Dakota, where it is not doable, and in Minnesota, where opposition presented by arguably the most powerful politician in North Dakota and Minnesota, Rep. Colin Peterson, and the threat of extended litigation makes the idea of implementation a fantasy. R. RECOMMENDATIONS The first priority is process, not product. This project can no longer proceed without credible, local representation having the authority to dialogue with the Corps and drive the direction of planning. The Metro Flood Study Group is of much too limited scope to be a credible local

partner. Establishment of a Citizens Advisory Committee, chosen in an open and transparent process by an independent entity and composed of members representing the entire region, is a first priority. For the Kindred Dam/Sheyenne Diversion project, this task was undertaken by the Lake Agassiz Regional Council. Something has changed during the intervening years. The community connections the Corps was once able to develop are no longer being cultivated. This change has had a negative effect on the planning process. Facilitation of meaningful dialogue between proponents and opponents is necessary for the development of community-wide consensus and the success of any project. With the diversion/dry dam out of the picture, a cohesive plan needs to be developed out of the possible. Moorhead has already taken steps on its own initiative to remove vulnerable structures from the natural floodway. Fargo has done some of this work also, but it needs to be expanded. Moorhead has the advantage of being on higher ground; however, the original T-shaped Fargo town site is also high ground. Broadening the floodway, moving any permanent levees or floodwalls farther back from the river and leaving the floodway to serve as a public park through most of the year is doable. For the existing problem areas of Fargo which were developed in the floodplain, a system of ring dikes could be emplaced. The DEIS is critical of ring dikes as not solving all of the problem, but they do not need to solve everything. They are simply a component where they are most applicable. Higher stages downstream, which could be caused by the more efficient flow of floodwater down the Red River floodway, could be mitigated by upland retention of water behind dry dams. Again, these dams do not have to solve the entire problem; they only need to reduce inflows sufficiently so that no stage increases occur north of Fargo-Moorhead. Future development should be encouraged in naturally flood free regions of the F-M Metro area. For too long, the independent cities that make up the F-M Metro have vied with each other over development, with Fargo frequently taking the role of bully to get its own way. It may be time for these cities to merge, as the cities in the Winnipeg Metro area did some decades ago and form a unified government to provide city services more efficiently and do development planning more logically. Perhaps the state legislatures of North Dakota and Minnesota could take action to facilitate such action. Non-structural solutions to flooding may end up being the most effective mechanisms we have. Fred Schumacher 12104 Red Oak Ct. S. Burnsville, MN 55337 952 938-2633 fredschum@gmail.com

2011-6-10_Leah Rogne - June 20, 2011 TO: U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 FROM: Leah Rogne, Ph.D. Associate Professor Department of Sociology and Corrections 113 Armstrong Hall Minnesota State University, Mankato Mankato, MN 56001 RE: Supplemental Draft Environmental Impact Statement (SDEIS), Fargo-Moorhead Metropolitan Area Flood Risk Management I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have multiple concerns, outlined in detail below. 1. Planning Process/Public Involvement: A Broader, More Inclusive Process Is Needed 2. Loss of Agricultural Production: Impact Not In Benefit/Cost Ratio 3. Crop Insurance: Impact on Property Values Not Taken Into Account 4. Drain Tile: Costs Not Currently in Project 5. Loss to Tax Base: Impact Not Taken into Account in Benefit/Cost Ratio 6. Social and Cultural Impacts: Data in SDEIS Entirely Inadequate 7. Cost of Relocations and Acquisitions Vastly Underestimated 8. Unstable Soils Threaten Viability of the Project 9. Coincidental Tributary Floods Not Modeled and Costs Not in Project 10. Definition of the Staging Area Is Misleading: More Land Is Affected 11. Future Project Modification: Too Many Costs Left to Future Planning 12. Ice Dams: Cost of Remedies Not in the Project 13. Other

Social Effects Not Adequately Assessed 14. Risk of Project Failure and Loss of Life Not Taken Into Account As Costs 15. Health and Safety Issues Not Adequately Addressed 16. Local Liability and Responsibilities Place Local Sponsors at Great Risk 17. Trade-Offs Process Is Critical 18. Controversy Is Significant, Persistent, and Threatens Implementability of Project 19. Determining the Public Interest: A New Process Is Required to Bring Parties Together 1. Planning Process/Public Involvement: A Broader, More Inclusive Process Needed The FM Metro Flood Control Study lacks a fair and comprehensive planning and public involvement process. Without a process that gives a wider public a role in decision-making, the determination that the project is ?in the public interest? is highly inappropriate. The pace with which this project is being propelled forward does a disservice to the region?s residents and taxpayers who hope for flood protection and especially to those currently paying for this wholly inadequate planning process. The course of action that has been followed by the local sponsors has served to undermine public trust by members of a wider community that has been left out of the process. Therefore, without a process for effective public dialogue, controversy will continue to build, and opposing camps will solidify their positions, rather than come together to work for consensus. Because the recent addition of upstream staging imposes a radical change and a permanent negative impact on communities south of Fargo-Moorhead, there needs to be an extended study review process that involves significant participation in decision making by citizens negatively affected by the project and by county commissioners, water board members, and township officers from Richland and Wilkin Counties, as well as township officers from the rural Cass townships negatively impacted. Only with a process that provides meaningful input into decision-making for these constituencies could a reasonable recommendation be made about what plan is truly ?locally preferred.? Even though Cass County Commissioner Darrell Vanyo, a key member of the Metro Study Group, has stated that over 90 percent of the people speaking at the public participation meetings are against the project, the Metro Study Group has not responded to any of the concerns raised by citizens at any of the public meetings. That is because there simply is no system set up to require the Metro Study Group to interact meaningfully with others. The entire Metro Study Group does not attend the public meetings. No notes or recordings are made of the public meetings, and members of the Metro Study Group (the ?local decision makers?) are not informed of the issues raised. Therefore, their ?decisions? are not fully informed. For these reasons, the actions of the Metro Study Group cannot be taken to represent the wide range of citizens affected by this project, and their role representing what local people want is illegitimate. Allowing the local sponsors to appoint themselves as the local decision makers without input from all those affected violates the democratic process through which decisions, especially those of this magnitude, should be made. In Section 6.3 of the SDEIS the Corps states: ?The sponsors [Fargo and Moorhead] have worked closely with the other local entities to develop a consensus on the path forward . . .? The local entities involved, however, are only those already part of the self-appointed Study Group, not the entities that represent much of the wide area affected by the project with staging: Richland and Wilkin Counties. The Corps SDEIS states in Section 4.3.2.2: ?Among the three alternatives, the LPP would permanently remove the most land from agricultural production. Although it is anticipated that much of the land in the storage and staging areas could continue to be farmed, flood risk would be increased, and building of structures to support farming would be limited in those areas. These changes could reduce the agricultural output and tax base of the local communities. This reduction could limit the services provided by the municipalities to its residents.? In its haste to meet an arbitrary timeline, the Corps of Engineers has failed to spell out and quantify these adverse impacts,

leaving these and many other questions to be addressed in the ?design phase.? Concerns raised about these issues at public meetings have not been addressed at the Metro Study Group meetings. The decision of these ?local decision makers? to move forward without interacting with this information is inappropriate. Richland County was not included as a Resource Agency Team (Section 6.2) and was not part of the meetings in March 2011 when it was already known that the staging area included parts of Richland County. The Richland County Commission was not on the mailing list for the April 2011 Supplemental Draft EIS, even though the Corps had finally told Richland County there would be effects in the county. The Richland County elected officials were instead expected to drive to Minnesota and check out the SDEIS from the public library in Breckinridge. This disregard for the interests of an impacted governmental entity is stunning and unacceptable. To move forward on a project that negatively impacts economic activity in Richland County, southern Cass County in North Dakota and rural Clay and Wilkin Counties in Minnesota and that requires ?several hundred or thousands? of residents to be permanently relocated without true dialogue among all those affected is unacceptable. While it is appropriate that the local sponsors (who will be paying the local cost share) have a key voice in the decision-making, it is not appropriate that they are the only ones to guide the process forward. The North Dakota and Minnesota taxpayers who will be asked to contribute to the local share and the taxpayers of counties and townships negatively affected need to have a real voice at the table. Guardians of the federal tax dollar also have an interest in knowing their money will be well spent. A balanced advisory committee should be appointed to represent all those affected by the project. This advisory committee would work together to evaluate fully the true impacts and costs of the project and to evaluate fully all reasonable alternatives. There is precedent for such an advisory committee in Corps planning procedures. A Citizens Advisory Committee was appointed by the Lake Agassiz Regional Council in the mid-1970s to address flooding on the Sheyenne River and to review the proposal for the Kindred Dam. A balanced committee representing those who would benefit from the project and those who would be negatively impacted was appointed and met frequently over the course of several years until a consensus was obtained. All parties were able to question Corps planners, and all were able to engage in the give and take necessary to create a reasonable, acceptable, and economically feasible plan. The process resulted in the building of the Sheyenne (West Fargo) Diversion. While District Engineer Michael Price has pointed out in Section 8 (Recommendations), page 370, of the SDEIS that his recommendation ?reflects the information available at this time and current departmental politics governing formulation of individual projects,? the high degree of controversy surrounding this particular project warrants an added level of scrutiny to the issue of substantive public involvement. A process such as I have outlined above could help bring credibility to the process and help assure that the ultimate recommendation truly is ?in the public interest.? 2. Loss of Agricultural Production: Impact Not in Benefit/Cost Ratio Section 4.3.2.2 in Appendix D (Other Social Effects) states that the LPP would ?permanently remove the most land from agricultural production? and that implementation of the storage and staging areas would ?reduce the agricultural output.? Further, in Section 5.2.3.2.7 (Farmland/Food Supply) the report states that crop production losses may occur on as much as 20,000 acres if the staging area is used in the spring and that crop losses could occur during a summer flood (which has occurred four times in the last 36 years). Since they are manmade, these losses cannot be compensated through federal crop insurance. So, the local sponsors (Fargo and Moorhead) would have to pay. The costs of losses of agricultural output and the impact on food supply need to be in the project costs. 3. Crop Insurance: Impact on Property Values Not Taken Into Account Late planting reduces

yields. While farmers can get crop insurance for delayed planting, losses from a manmade project cannot be compensated. Losses from summer floods (which are often total losses) that are caused by a manmade project do not qualify for crop insurance. While Corps officials have said that it would have to be proven that the loss was actually caused by the diversion project, this would be reasoning after the fact. Land subject to staging from the diversion would be devalued for sale or rental since competing land without this risk would be more desirable. 4. Drain Tile: Costs Not Currently in the Project In Section 5.2.3.2.7 the Corps suggests that drain tile could be a solution to late planting of crops, but the cost of installing drain tile on tens of thousands of acres is not currently part of the project. These costs would be local costs, not federal, and should be spelled out in cost projections before the project moves forward. 5. Loss to Tax Base: Impact Not Taken into Account in Benefit/Cost Ratio As the Corps indicates in Section 4.3.2.2, the storage and staging area will negatively impact the ?tax base of the local communities. This reduction could limit the services provided by the municipalities to its residents.? The Corps asserts that these impacts would be ?short term,? but they provide no documentation that they would short term. The impacts would certainly be long term since the area will be denuded of people. The permanent effects on the tax base in at least three school districts in North Dakota and Minnesota need to be taken into account. The districts have commitments that will need to be paid, and the local sponsors will need to have those costs fully spelled out in the projected costs. Valuation of land for tax purposes is based upon the soil type with modifiers depending on conditions such as whether the soil tends to be wet, tree coverage, etc. These modifiers could be applied to the valuation of the land affected by periodic flooding from staging because of the diversion. Wet fields from spring flooding would delay planting and affect crop yield, and summer floods would be even more devastating; both conditions may contribute to reduced valuation of the land for tax purposes. This would result in a reduction in taxes to the counties and to the school districts. Since crop insurance does not cover losses from flooding from a manmade event, landowners whose land is impacted by staging will not be able to guarantee that their renters will not experience uncompensated crop losses from delayed planting or a total loss from a summer flood. Therefore, they will likely receive lower rent for their land. Their land will not be competitive with land not subject to these impacts. Therefore, landowners whose income has been reduced are likely to ask for a reduction in valuation. This needs to be factored into the benefit/cost ratio. 6. Social and Cultural Impacts: Data in SDEIS Are Entirely Inadequate The project has failed to provide even the most cursory examination of the social impacts of the staging area, treating these issues only in generalities and with speculation. The Corps has presented no data to support their claims related to social effects. There have been no data collected: no focus groups, no interviews, no observations, no social network analysis, and no basic community studies to assess the nature of the social and economic ties among the thousands of North Dakota and Minnesota residents who would be displaced by the project. There are particular characteristics of the staging area that must be fully studied and understood before a decision to eliminate the human population would be made. This plan eliminates the rural villages/cities/subdivisions of Hickson, Oxbow, and Bakke as well as a rural community that is at the intersection of the communities of Comstock, Christine, Kindred, Walcott, and Colfax. These intersecting networks magnify the social and economic impact to a region that is far wider than the borders of the designated staging area. It is a rural area that, after decades of declining social and economic infrastructure in other parts of rural America, has established a level of social and economic health, viability, and equilibrium. The removal of ?hundreds or thousands? of residents and the relocation of farm operations threaten the health of

all those communities, not just those inside the staging area. No project as radical as this one should move forward without community studies that assess the impact of the proposed changes. The plan includes an assessment of cultural resources only for the area affected by the diversion channel itself. There is no consideration whatsoever of cultural resources for the 54,000 acre area affected by storage or staging upstream. There may be many potential historical sites in this area since it was one of the first occupied by European settlers in the early 1870s, but the project has failed to do any assessment of the cultural resources in this area. Members of the French community at St. Benedict were the first European settlers in this part of the valley. Some of that land would be taken for the storage area and some would be in the staging area. Early Norwegian settlers used Ft. Abercrombie as a portal to the southern Red River Valley, and a number of historic and unregistered cemeteries exist, several especially vulnerable to increased flood levels caused by staging. One particular area of interest is located in and around the old site of Lithia, Eagle North Township, T-136-N, R48-49W, Section 1. This was the site of the bonanza farm of William T. Montgomery, African-American bonanza farmer and businessman, and this site would be affected by staging. This resource needs to be thoroughly evaluated and recognized. Montgomery was the son of Ben Montgomery, the manager of Jefferson Davis?s brother?s plantation and the first Black man to hold office in Mississippi. (Attached is information on this historic North Dakota entrepreneur.) Rendering the cemeteries unsuitable as memorials to the dead due to flooding, sedimentation, and access is a social/cultural issue that must be addressed. The costs of preserving these resources, and, if necessary, moving the cemeteries need to be in the project costs before the project moves forward. 7. Costs of Relocation and Acquisitions Vastly Underestimated Corps officials have said that farmers would get only the depreciated value of their farm buildings, and this is clearly unacceptable. This would put many farmers out of business. The valuation of the property needs to be recalculated to reflect the real costs so that local sponsors, who will be responsible for these costs, can make an informed decision about this investment. 8. Unstable Soils Threaten Viability of the Project I do not see an adequate analysis of the issues related to the unstable Red River Valley soils. In Section 3.6.2 (Revised Cross Section for North Dakota Diversion) the SDEIS states: ?The cross section of the North Dakota diversion as described in section 3.5.4.1 was modified to account for weak soils that were identified as part of the soil investigations. This resulted in the depth of the channel being raised three feet, to a maximum depth of approximately 29 feet. The channel bottom widths remained unchanged. Side slopes on the excavation were modified to be 1V on 10H up to a 10 foot high 50 foot wide bench then 1V on 7H to the top of the channel.? In Attachment I-15 page 23 of the SDEIS outside reviewer Julian DiGialleonardo stated in May 2010, ?The level of geotechnical analysis and evaluation is not sufficient to support an accurate feasibility cost estimate for the North Dakota Alternative.? He noted that of 85 borings taken for levee alternatives, only 9 were taken for the North Dakota Alternative. DiGialleonardo also remarked on ?inconsistencies between the Fargo-Moorhead DFR/EIS and the Geotechnical Appendix I.? Finally, he stated ?it appears that the geotechnical analysis for both Diversion Alternatives was not developed completely and/or was not accurately incorporated into the project cost estimates.? The report suggests on page 24 of this section a plan to address these issues, but I do not see the results anywhere in the SDEIS. This, combined with the fact that Project Director Brett Coleman stated May 26, 2011 in Fargo that borings are to be done in July of this year and results will not be available for six months, leads me to believe that these data are not yet available. A timetable for authorization by the end of this year seems inappropriate considering the lack of these crucial data. According to the Fargo Forum (May 24, 2011) shifting soils 27 feet below beneath the

approaches to the new bridge over Rose Coulee in South Fargo will necessitate a $500,000 repair project. If this bridge is at risk only two years after being completed, how can we be confident that the engineering for the 19 bridges, two aqueducts, three drop structures, and other huge structural components is adequate so that the project won?t require very expensive remediation shortly after completion? Considering the long history of building challenges on Red River Valley soils and the cost of remediation after the fact, the Corps has a responsibility to do exhaustive analysis and to spell out fully all these costs before the project moves toward authorization. 9. Coincidental Tributary Flooding Not Modeled and Costs Not in Project According to the SDEIS the effect of coincidental floods on tributaries has not been modeled, though there would be impacts (SDEIS 3.7.3.2). This is a major flaw in the report and shows a lack of consideration for region-wide flooding issues. When asked what would be done about water from the Sheyenne River that would be blocked by the new Highway 17 levee, Corps officials said they would create a ditch to bring it north to the diversion. No plans have been shown about where this would be, how much it would cost, or how it would deal with the fact that there is a stretch of high ground just south of Horace. These plans need to be shared with the public and landowners who would lose property for the ditch, and the costs to deal with this issue need to be considered in the benefit/cost ratio. In the summer flood of 1975 the Wild Rice River had already experienced major flooding when, on June 28, a rain of at least 15 inches occurred in the Sandhills area of the Sheyenne River upstream from Kindred. The combination of flooding from the Wild Rice, saturated soils from heavy rains that had already occurred earlier in June, and the breakouts from the Sheyenne River following this event caused widespread damage in northern Richland and southern Cass Counties. If the staging area were being used when such an event occurred on the Sheyenne, the effects on homes, land, roads, bridges, and safety access would be magnified. Clearly, tributary effects need to be modeled. and plans to address these effects need to be in the project costs. 10. Definition of the Staging Area Is Misleading: More Land Is Affected While the designated staging area only includes 33,390 acres of land, there is a large area not in the official staging area that expands the impact area to over 54,000 acres. Artificially designating only a portion of the area impacted as the ?staging area? creates the illusion that the impacted area is less than it really is. This misleads the public into thinking the impacts are limited to the area inside the ?red lines? on the map. The report says that there may be ?takings? outside the staging area, but no analysis of this has yet been made. These issues need to be more fully explored and the costs accounted for before moving forward with the project. 11. Future Project Modification: Too Many Costs Left to Future Planning Section 5.5.4 of the SDEIS states that ?future monitoring will verify the impact conclusions reached during the feasibility study and evaluate the effectiveness of mitigation.? This would be done by the non-federal sponsors and agency partners. Richland County was not included as an agency partner, so Richland County?s interests are not represented in the monitoring process. Richland and Wilkin County representatives need to be made agency partners so that they are involved in the monitoring and evaluation process. I am not satisfied with the discussion in this section of future modifications. The process and funding sources are vague and uncertain, leaving open the possibility that funding might never be found for needed modifications. This leaves the public with a project with problems that might not ever be fully mitigated. The haste in which this project is being moved forward in order to get into the Water Resources Act presently moving through Congress contributes to many issues being left to later stages. The goal of getting a project into a Water Resources Act by the end of 2010 was cited then as a reason to move forward quickly with planning. The same argument is being made this year. This is not a valid

reason for rushing any aspect of project planning. All these issues need to be fully explored before moving toward authorization and funding. 12. Ice Dams: Costs of Remedies Not in the Project In a section on issues relate to ice, the report speculates about a series of poles, piers, or ice booms to break up ice dams (Structural Appendix J-16). There doesn?t seem to have been enough consideration of this problem and what will be the cost of measures to control this problem. 13. Other Social Effects Not Adequately Assessed Appendix D includes Richland and Wilkin Counties on a map as the study area, but the narrative seems to be focused largely on Oxbow, not on the wider staging area. The report acknowledges that there will be significant adverse social effects in the upstream area, but states this may be lessened by ?certain types of mitigation measures, such as relocating the town and all of its residents as a whole? (Appendix D, 4.4, p. 56). This indicates they are focusing mainly on Oxbow, not on the entire staging area. This is an example of what appears to be a hastily prepared document that did not fully examine all the ramifications of adding staging to the plan. Why was time not taken to deal with the issues related to the entire area, not just Oxbow? Most of the discussion of social effects and cultural resources deals only with the diversion channel itself, as though many parts of the document were not updated after staging was added. How can we be confident of the accuracy of the document when we see this the type of error in the SDEIS? When one of the local sponsors, the City of Moorhead, has expressed its dismay at changes in the project that were not apparent to them (moving from a 35K to a 20K cfs channel), is it any wonder that people question whether the SDEIS was thorough, accurate, and adequate and the involvement process highly questionable? 14. Risk of Project Failure and Loss of Life Not Taken Into Account An overtopping or breach of the tieback levee, storage area levee, or failure of a control structure in an extreme event would be ?catastrophic? (Section 3.10.3 SDEIS). Ice or debris could affect the flow through the control gates. The Corps has not done a loss of life analysis for this but did include as a benefit of the project the protection from the loss of nearly 600 lives in a catastrophic flood event (arguing that local people historically do not evacuate in case of a flood). So, since no one will exercise caution or reason in case of an extreme flood, it is apparently OK to include the protection from loss of life from failure to evacuate as a benefit of the project. Why is the potential loss of life from a catastrophic failure of the project not included in the costs of the project as well? In addition, the projection of 600 lives seems out of line with reality considering the fact that the 1927 Mississippi flood, the worst flood in United States history, only resulted in 246 deaths. 15. Health and Safety Issues Not Adequately Addressed Residents whose homes would otherwise be able to remain in the staging area (that is, homes that could be ring diked) may be forced out because it would not be possible to reach their homes with emergency vehicles during the staging period. This may magnify the number of homes faced with a buy-out and raise project costs. All this needs to be spelled out clearly in the project costs before moving ahead. 16. Local Liability and Responsibility Places Local Sponsors at Great Risk In Section 8.0 (Recommendations), the report states that cities of Fargo and Moorhead (the local sponsors) must agree to ?hold and save the United States free of all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project . . . ? except for damages from U.S fault or negligence. There are so many unknowns in the project that the local sponsors (as well as the federal government) should be very concerned to make sure that as much as possible is spelled out and addressed before moving forward. The issue of unstable soils (addressed elsewhere in my comments) should raise red flags for the local entities that will be liable for the cost of repairs. 17. Trade-Offs Process Is Critical In Section 3.8.4.2 of the SDEIS the Corps states ?trade-offs are not clear cut.? They state

further (Section 3.8.4.2 page 103) that acceptability is not entirely a technical question: ?Trade-offs related to local acceptability and cost are primarily non-federal political considerations that cannot be resolved with a technical analysis.? The trade-off the Corps is talking about in this section of the report is apparently among the diversion alternatives. This kind of trade-off analysis related to ?non-federal political considerations? needs to be done in relation to other alternatives or combinations of alternatives, such as upstream retention and nonstructural measures to reduce flood damages. When there are large social impacts such as the forced relocation of thousands of people and permanent adverse impact on rural communities, the people negatively affected by the project need to have a voice in the ?trade-off? discussions. These people have been excluded from the process (especially Richland and Wilkin Counties), and they must be given a voice before this project can be expected to be in the ?public interest.? 18. Controversy Is Significant, Persistent, and Threatens Implementality According to Section 3.4.2 of the SDEIS, controversy and effects on community cohesion are one of the Corps? criteria for ?acceptability? of a plan. There is a high level of controversy related to this plan, so ?acceptability? is very much in question. In Section 5.3 the Corps acknowledges controversy related to the location of adverse impacts but states that owners of agricultural land would be compensated at fair market value. Financial compensation does not eliminate controversy nor satisfy community members. This will continue to be hugely controversial, and the exclusion of involvement by negatively affected communities in the planning process has created an atmosphere of bitterness and distrust. Richland and Wilkin Counties have gone on record against the plan, as have the township officers of Richland County. 19. Determining the Public Interest: A New Process Is Required to Bring Parties Together According to SDEIS Section 8.0, the District Engineer has ?determined that the tentatively selected plan is in the public interest.? How can the public interest have been determined when crucial parts of the public affected by the plan and their elected representatives (including Richland and Wilkin Counties) were not included in the process or even sent a copy of the report when it was done? This exclusion of communities and entities other than the beneficiaries of the plan makes the process illegitimate. If this way of determining the ?public interest? is standard federal policy, that policy is deeply flawed. It is crucial to bring opponents and proponents into a face-to-face process to educate one another, build mutual trust, and create a consensus on moving forward with reasonable basin-wide flood protection measures that are publicly acceptable and implementable. Attachment William T. Montgomery, North Dakota?s Black Bonanza Farmer Sherman, William C. and Playford V. Thorson. 1986. Plains Folk: North Dakota?s Ethnic History. Fargo, North Dakota: North Dakota Institution for Regional Studies. ?While some black farmers came to North Dakota as homesteaders, others came to the prairies with a bit of wealth and acquired agricultural properties. In several cases blacks worked as laborers until they had accumulated enough money to pay the price of a farm. ?Of special distinction was William T. Montgomery, a black gentleman who came to the state with a considerable amount of capital and can, perhaps, be considered a ?bonanza farmer.? The Fargo Argus of Sunday, October 19, 1890, refers to him as a ?selfmade man? who ?lives in Fargo most of the time, but has a large farm on the Fargo and Southern Division of the Chicago, Milwaukee and St. Paul Railroad.? Montgomery?s farm was, indeed, a large one by contemporary standards, over one thousand acres of prime Red River Valley Land. ?No ordinary individual, Montgomery was born a slave, joined the Northern Navy, and served as a steward under Admiral Banks in the Red River Expedition. His brother, Isaiah, was the only black member of the State Constitutional Convention in post-war Mississippi. William Montgomery himself was elected treasurer of Warren County, Mississippi, in 1881 and

by that time was recognized as a highly successful cotton grower. ?After coming to the Red River Valley with some close friends who decided to locate in the Dakotas in 1884, Montgomery purchased his land in 1885. Historian Hiram Drache says he developed his farm, built his own elevator near the railroad, and went into partnerships with local businessmen. Following a loss in the grain futures market, Montgomery eventually sold his farm and joined some Fargoans in a land investment in Canada in the 1890s. He returned to Mississippi later in life. When he last visited Fargo after World War I, he was nearly blind. Today, a large farmstead and traces of an old elevator, twenty miles south of Fargo, compose the last remnants of the small town of Lithia, once called Montgomery for William Montgomery? (p. 284). McBride, Earnest. 2006. ?Black and Tan Party Rule in Mississippi, 1868-1875.? Retrieved May 29, 2011 (http://www.bjmjr.net/mcbride/black_tan.htm) ?Cardozo struck up an alliance with Peter Crosby, Furlong?s black chief deputy, I. D. Shadd, a state representative and future Speaker of the Mississippi House, and Warren County Constable William T. Montgomery, the older son of wealthy black plantation owner Ben Montgomery, the first black man to hold public office in Mississippi. Their plan was to marshal as many of their black and white allies in the Black and Tan Republican bloc as possible to demand that black men be elected to at least half of the top political offices in the state. At the local level, they developed a strategy to get black men elected to the top county offices wherever they had an obvious majority of the population.?

2011-06-20_MNDak Upstream Coalition - June 20, 2011 Mr. Aaron Snyder Planner and Project Manager U.S. Army Corps of Engineers Saint Paul District 180 E. Fifth Street Suite 700 Saint Paul, Minnesota 55101-1687 Re: Comments of the MnDak Upstream Coalition to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement of April, 2011 By U.S. Mail, e-mail to aaron.m.snyder@usace.army.mil and digital submission at www.internationalwaterinstitute.org/feasibility Dear Mr. Snyder: On behalf of the MnDak Upstream Coalition (?MnDak?), Rinke Noonan submits the following comments to the Fargo-Moorhead Metropolitan Area Flood Risk Management Supplemental Draft Feasibility Report and Environmental Impact Statement of April, 2011 (?SDEIS?) prepared by St. Paul District, U.S. Army Corps of Engineers (?Corps?). These comments are furnished pursuant to the Corps? ?Notice of Availability? of EIS No. 20110138, Draft Supplement, Fargo-Moorhead Metropolitan Area Flood Risk Management, published in the Federal Register Volume 76, Number 88, at page 26286 on May 6, 2011, as required by regulations of the President?s Council on Environmental Quality (?CEQ?) at 40 CFR 1503 et seq. and Corps regulations at 33 CFR 230.19 et seq. Since the Corps has failed to provide critical technical information in the SDEIS and failed to adequately consider a reasonable range of alternatives to, and all environmental effects of, the Locally Preferred and Tentatively Selected Plan described in the SDEIS, among other inadequacies in the SDEIS, MnDak respectfully requests that the Corps further supplement its analysis and prepare a second Supplemental Draft EIS that addresses the issues raised in these comments. These comments address the inadequacies of the SDEIS under the National Environmental Policy Act (?NEPA?), including (i) an inconsistent articulation of the purpose and need for the Proposed Action; (ii) the inadequate consideration of storage alternatives to achieve a portion of the flood risk reduction objective; and (iii) an incomplete or absent analysis of the environmental and other impacts of the Tentatively Selected Plan. Additional comments focus on the failure of the Corps, during the re-scoping that occurred during the preparation of the SDEIS, to include participation of local government and citizens within the area to be

impacted by the Tentatively Selected Plan. Introduction: It is futile to assume that Red River shall never again overflow its banks. Man is utterly powerless to prevent its occurring periodically, and whenever it occurs the disastrous consequences will be intensified in proportion to the increased number of inhabitants within the submerged district. Sir Sandford Fleming, 1880 Sir Stanford Fleming?s observation regarding Red River flooding remains as true today as it did over a century ago. It is fortunate that residents of the basin, their political leaders and a multitude of state and federal agencies are currently seized by the flooding issue. However, this seizure peaks in times of high water. Were this a drought time, complacency would have already set in and the cities of Fargo and Moorhead would again be blindly encroaching on the floodplain ? saving for the future a multi-billion dollar project to place on the backs of unsuspecting rural communities and citizens throughout the basin. Since the 1997 flood, governments at all levels have made changes in flood-related policies, funded new programs and changed existing ones, invested in research into many aspects of flooding, and supported the establishment of new institutions such as the Red River Basin Commission. Not only major floods such as that of 1997, but also smaller tributary floods have been the focus for attention. After 1997, the International Joint Commission (IJC) for the Red River basin studied methods to reduce or eliminate the impacts of future major floods. In 2000, the IJC released its report, Living with the Red. Living with the Red contained a series of policy and action recommendations directed at major flooding in the Red River basin. In June 2001, the United States and Canada directed the IJC and the newly created International Red River Board to monitor progress by governments in implementing the recommendations contained in the publication Living with the Red, and to provide encouragement for continued cooperative, innovative, and integrated watershed management approaches. In January 2003 the IJC specifically requested the Board to provide a written report on progress. A report indicating substantial progress on many recommendations was prepared and made available to the public through the IJC website. More recently, in 2006, the Red River experienced a significant flood with relatively little urban damage, although costs were incurred for measures such as closing ring dikes. In 2009 a flood that, at Fargo-Moorhead, exceeded those of 1997 and 1897 occurred. In the lower basin the 2009 flood was exceeded in the instrumental record only by that of 1997. The flood management measures implemented following the 1997 flood have led to a higher level of preparedness and improved mitigation measures. The basin has become more flood resilient, and this significantly reduced the effects of the 2009 flood on the people and communities of the Red River Valley. The IJC made 28 recommendations to government and endorsed another 30 recommendations of its International Red River Basin Task Force without change. The expenditures since 1997 relating to the IJC recommendations have exceeded one billion dollars. No recommendations have been formally rejected although a few are unlikely to be implemented. In the United States, policy changes by the Army Corps of Engineers were aimed at a more integrated basin-wide consideration of projects. That is, until the current Fargo-Moorhead plans were initiated. Activities by the Minnesota Red River Watershed Management Board and its North Dakota counterpart, the Red River Joint Water Resource District, continue to seek more integrated approaches. The articulation of ?Purpose and Need? within the SDEIS and associated documents has changed so drastically over the course of the feasibility analysis and EIS development that existing comparable alternatives are no longer feasible or practicable to achieve the overall project purpose: At least three articulations of project purpose can be found in the SDEIS. First, the main document describes the project purpose as follows: ?The purpose of the proposed action is to reduce flood risk, flood damages and flood protection costs related to

the flooding in the Fargo-Moorhead Metropolitan Area.? (SDEIS ? 2.5) . Second, in its Clean Water Act section 404(b)(1) evaluation, found at attachment 1 to the SDEIS, the Corps describes an overall project purpose as ?reducing flood risk from both the Red River and the five North Dakota tributaries.? (SDEIS, Attachment 1, p. 17). Finally, the analysis leading to identification of the Tentatively Selected Plan, in phase 4 of the feasibility study, did not focus on the project purpose described in the SDEIS. Rather, it focused on a feasibility objective of eliminating ?adverse impacts on floods [sic] levels downstream of the diversion channel outlet.? (Feasibility Study ? Phase 4, Volume 1, General Report, p. 8) Analyses based on a drastic departure from the project purpose articulated in the SDEIS have led to the elimination of multiple feasible and practicable project alternatives. The eliminated alternatives would otherwise satisfy the project purpose articulated in the SDEIS. Exacerbating this summary elimination of feasible alternatives is the lack of policy analysis under NEPA and a hard look at the environmental merits of the alternatives. The Tentatively Selected Plan does not meet the project planning objectives and violates the planning constraints. The outcome is a Tentatively Selected Plan that protects downstream interests, already prone to flooding, at the expense of tens of thousands of acres of prime and unique farmland, several small communities, hundreds of farms and residences and an extensive network of rural infrastructure that is not presently prone to flooding. The shifting project purpose has allowed the Corps to ignore, without substantial analysis, the benefits of distributed storage alternatives that would not only benefit flood risk reduction for Fargo-Moorhead, but would also prevent the damage described above. Prior studies indicate that distributed upstream storage, as opposed to the consolidated storage proposed in the Tentatively Selected Plan, will significantly reduce flood risks across the Red River Basin, including Fargo-Moorhead. Implementation of the Corps? Tentatively Selected Plan, will result in construction of a massive project that will essentially eliminate future opportunities to implement flood risk reduction alternatives, such as distributed upstream storage. After spending over $1.7 billion on the hastily prepared Tentatively Selected Plan, it is highly unlikely the Corps, federal government or any local sponsor, would consider studies or funding for such other alternatives. Though the DEIS expressly acknowledges the basin-wide nature of the solution by stating a SDEIS objective ?[t]o develop a regional system to reduce flood risk? (SDEIS ?1.2), the Corps proceeds toward a narrow-visioned alternative that provides the fewest regional benefits at the greatest expense. The Corps is now left with an untenable position under NEPA and its and the CEQ?s regulations. If, in fact, feasibility considerations under the project purpose require that an alternative ?eliminate adverse impacts on floods [sic] levels downstream of the diversion channel outlet,? or if the overall project purpose is to ?reduc[e] flood risk from both the Red River and the five North Dakota tributaries,? then neither the NED plan nor the FCP are feasible, practicable alternatives. The Corps must start over in its planning process in order to identify a valid NED plan or FCP. The SDEIS ignores prior investments in regional flood planning and current initiatives: The Corps? existing policies and efforts in the Red River Basin reflect a preference for a basin-wide approach to flood management. For example, the Corps is a signatory to a December, 1998, agreement establishing the Red River Basin Flood Damage Reduction Work Group, a non-binding agreement among Minnesota stakeholders in the Red River Basin, whose members acknowledge certain goals and principles for flood damage reduction. One principle of the Work Group is that ?[water resource problems should not be passed along to others. A solution for a watershed should not create a problem upstream or downstream.]? Speaking to the concept of distributed storage as a regional contribution to a flood risk reduction solution, the principles include the concept that ?[w]ater should be

stored/managed as close to where it falls as is feasible and practical.? The Corps, as an active participant in Red River Basin planning and study efforts, has endorsed distributed storage as part of an overall solution. In the US, policy changes by the COE are aimed at a more integrated basin-wide consideration of projects. Activity by the RRWMB and the ND RRJWRD also seeks more integrated approaches. (R.A. Haliday, R. Haliday & Associates, How Are We Living With the Red? A report to the International Red River Board, June 15, 2009 http://www.ijc.org/php/publications/pdf/ID1633.pdf at p. 4 (Accessed June 11, 2011)) Somewhere in its haste to make a recommendation to congress, the Corps has lost sight of an integrated, basin-wide approach. The Corps has shown little determination to consider the basin wide benefits in relation to this project. The sole focus of the Corps has been Fargo-Moorhead and no other interest. The Corps failed to analyze reasonable upstream storage alternatives and to evaluate the Tentatively Selected Plan in light of existing flood management policies and initiatives: Even if we assume the Corps was not distracted by the shifting articulation of Purpose and Need and competing and inconsistent planning objectives found throughout the SDEIS, the SDEIS fails to analyze a reasonable range of alternatives to the Tentatively Selected Plan. Under NEPA and CEQ regulations, this consideration must include (i) appropriate initial screening of such alternatives, (ii) in-depth analysis of the environmental impacts of alternatives that survive screening, and (iii) comparison of these impacts to anticipated impacts from the Tentatively Selected Plan. CEQ regulations also require the SDEIS to reconcile the Tentatively Selected Plan with existing local or regional flood management policies, as required by NEPA, CEQ regulations, and Corps NEPA regulations, including the Corps? planning notebook, Regulation ER 11 05-2-1 00. The Corps? Alternatives Screening Document (?Screening Document?), December, 2009, prepared as a foundation for its NEPA analysis, considered and then eliminated five alternatives as stand-alone plans ? plans that would be completely effective by themselves. Among these stand-alone alternatives were two forms of upstream flood storage: distributed storage in flood retention ponds and the ?waffle,? the use of the existing road network with additional water control structures. Both were eliminated because the Corps believed they would be less physically effective and less cost-effective than the various diversion channel plans, and thus did not meet the purpose and need of the study. (Attachment 4 to Appendix O, ? 2.5). Ultimately, in late 2010, a determination was made that diversions were not feasible or practicable stand-alone alternatives to meet flood risk reduction objectives. The Corps backtracked on its initial screening and determined its originally proposed Tentatively Selected Plan was not a practicable alternative. In its preparation of the SDEIS, the Corps conducted a subsequent screening of alternatives. Accepting that none of the originally scoped measures were adequate as stand-alone alternatives, the Corps looked at combinations of measures in its subsequent screening process ? ultimately settling on a combination of diversion channel and consolidated storage as the Tentatively Selected Plan. The subsequent screening, found in Section 8 of Appendix O to the SDEIS, summarily dismissed distributed storage and the ?waffle? plan from evaluation. The SDEIS, in turn, failed to properly evaluate them, despite clear evidence of their effectiveness in reducing flood volumes and altering the timing of peak flows. There was no serious analysis and, for this reason, MnDak believes the Corps? elimination of these alternatives is unreasonable, arbitrary and capricious and in violation of NEPA and CEQ requirements. The Corps relies heavily for its elimination of upstream storage alternatives on the Fargo-Moorhead and Upstream Feasibility Study (FM Upstream). This study remains incomplete but has been refined and demonstrates greater flood reduction potential at lesser cost than previously anticipated. (R. Harnack, comments of Basin-wide Flow Reduction

Strategy, June 2011). The Corps? analysis does not appear to have considered the most recent analysis of distributed storage options. Therefore, its alternatives analysis must be considered incomplete and inadequate under NEPA. The Corps? own screening analysis of distributed storage options contradicts its decision to eliminate them from consideration. Appendix O, Section 8.4.3.5 discusses a multitude of beneficial environmental, flood reduction and economic virtues of distributed storage. But in a logic defying turn, the options are summarily eliminated. What is curious is that the supplemental screening recommends retention of storage options for possible inclusion in a Locally Preferred Plan (LPP). In fact, the Tentatively Selected Plan is the LPP and does contain a consolidated storage component. However, no comparison was ever made between the consolidated storage component contained on the Tentatively Selected Plan and distributed storage alternatives. (Appendix O, ? 8.4.3.5) Appendix O, Section 8.4.3.5, makes a series of what it calls ?pivotal? conclusions in the evaluation of flood storage: 1. There are opportunities to implement flood storage and wetland/grassland restoration basin-wide. These measures could have substantial cumulative benefits basin-wide; however they are relatively ineffective in reducing the significant problem of flooding in the Fargo-Moorhead Metro area. This conclusion is based on an analysis of storage as a stand-alone alternative. No one has ever indicated that upstream storage is the solution to all the problems in Fargo and Moorhead. However, to suggest that upstream storage is not effective is inconsistent with the current data. 200,000 to 400,000 acre feet of storage in the tributary watersheds that impact Fargo and Moorhead is not unrealistic. The benefit is three fold: One, the retention helps minimize or eliminate the downstream impacts of the diversion; second, the retention provides an additional degree of protection to the cities by reducing the peak flows; and third, the retention has significant benefit for the tributary watersheds by significantly reducing infrastructure damages for roads and bridges, agricultural damages, erosion & sedimentation, and benefits small communities in the area. The consolidated storage component of the Tentatively Selected Plan does nothing to address the broader basin flood damages. The Corps has already concluded that neither a diversion nor storage can stand alone to achieve the project purpose. The diversion channel is necessary and can only be achieved in combination with storage. It is an analysis to the type and location of storage that is lacking. 2. It would be difficult and time consuming to implement a 400,000 acre-foot storage system as a unique measure. The most cost effective and timely way to implement a storage system is in increments, creating small impoundments as opportunities arise. This conclusion states what is true of the entire effort to provide flood protection to Fargo and Moorhead ? it is difficult and time consuming. These factors do not make implementation of storage impracticable or unworthy of analysis. 3. A system of flood storage is likely unable to offset downstream impacts induced by diversion channels. However, it would be effective in changing the frequency of how often the diversion channel would operate, making it operate less often. The phrase ?likely unable to offset downstream impacts? is speculative and unsupported by any analysis. Further, it confuses a planning objective with the project purpose and highlights the shifting focus of this project. It presumes that it is unacceptable to have downstream impacts but acceptable to have upstream impacts. 4. Although flood storage and wetland/grassland restoration measures provide environmental quality benefits and additional wildlife habitat, they would not be justified as an increment to this project, nor would they have much ability to reduce flood damages in the project area. The conclusion flies in the face of the Corps? Tentatively Selected Plan. This is primarily because there is no engineering distinction between ?staging? and ?storage? ? both store water on the landscape for a period of time. (Again, compare Appendix O, Attachment 4, ?2.5.1 to Appendix O, ?8.4.2.1.1)

The Corps? conclusion is not support by the existing data. State, regional and local agencies with flood control responsibility in the Red River basin have determined, on the basis of both technical study and experience with existing facilities in the Red River basin, that upstream flood retention storage may be an effective means of flood flow reduction. The conclusion is unsupported by study data or rigorous analysis. NEPA does not require statistical certainty for an alternative to be studied in an ElS, rather only that it be a reasonable alternative in light of the Project Purpose and Need. Under NEPA, as an otherwise implementable alternative with potentially lower environmental effects, distributed storage qualifies as such an alternative, not to be discarded on the basis of benefit and cost comparisons alone. The Corps? summary elimination of distributed storage alternatives is belied by a considerable body of study data indicating their effectiveness, some of which is described below and none of which the SDElS cites or discusses. The Corps? reference to cost is misplaced. The degree of economic benefits, as measured using federal or Corps methodology (e,g., measurement under National Economic Development (NED) criteria using the 1983 principles established by the Water Resources Council methodology, see SDElS, ? 3.8.2.1), while furnishing a basis for selection among federally implementable alternatives themselves, is not a NEPA criterion for comparison of federal and otherwise feasible non-federal alternatives. Significantly, none of the reasons cited in the SDElS for elimination of distributed storage include adverse or beneficial environmental effects. The SDEIS contains no discussion of the environmental effects of these alternatives, either singly or in comparison to the Tentatively Selected Plan. NEPA requires that each reasonable alternative be ?rigorously? explored and its environmental effects identified and evaluated. (CEQ Regulations, 40 CFR Sections 1502.14(a)) The environmental effects of the respective alternatives must then be compared, as between the particular alternatives. (40 CPR Section 1502.16) Several recent studies and reports show that distributed storage would be at least equally effective as the consolidated storage component of the Tentatively Selected Plan, and would have substantially greater regional benefit and positive environmental effects. The Corps ignored these studies, both in its overall alternatives screening process and in the SDElS discussion of alternatives. Among these studies is Technical Paper No. 11, dated May, 2004, by the Technical and Scientific Advisory Committee of the Flood Damage Reduction Work Group (?Technical Paper 11?) online at http://www.rrwmb.org/files/FDRW/TP11.pdf. Technical Paper 11 evaluates and recommends an array of alternatives, including upstream impoundments along with downstream urban measures, such as removal of channel and floodway obstructions, each contributing to flood prevention in its own way, in tandem with others. This paper is based on distributed storage. Similarly, the Red River Basin Commission, a basin-wide planning organization in which the Corps participates, published a ?Progress Report to the Minnesota Legislature.? (?RRBC Progress Report?) The RRBC Progress Report sets out a detailed flood damage reduction and project identification strategy calling for reduction in Red River and tributary flood flows by a target percentage (currently set at 20 percent), through a mix of basin-wide approaches, including retention dams, wetland creation and restoration, impoundment, etc. Among the findings in the RRBC Progress Report is an estimate that a million acre-feet of storage would be sufficient to provide basin-wide protection from a flood similar to that of 1997. Using current costs of $1000 per acre-foot, a basin-wide project would cost over $800 million less than the Tentatively Selected Plan and provide substantially greater benefit to a greater area. (Red River Basin Commission, Progress Report to the Minnesota Legislature, http://www.redriverbasincommission.org/2-3-2010_MN_Leg_Rpt.pdf, Appendix 4 (Accessed June 11, 2011)). The Corps Planning Guidance Notebook, Regulation ER 1105-2-100, contains,

in Appendix H, a ?Project Study Issue Checklist? (?Corps Issue Checklist?) that includes the following planning checklist item (No. 26): ?Was the planning effort conducted in a systems/watershed context and was this reflected in the presentation of the without-project conditions, problem and opportunity statements, and the plan formulation, evaluation and selection?? Failure of the SDEIS to consider - or even mention - Technical Paper 11, the RRBC Progress Report, or the substantial technical literature of which these important studies are a part, evidences the Corps? intent to arbitrarily limit consideration of reasonable alternatives, to an extent that not only renders the SDEIS seriously inadequate under NEPA but also patently nonconforming with the Corps? own regulations and guidance. CEQ Regulations require that an EIS ?discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law.? (40 CFR Section 1506.2) The DEIS wholly fails to address local plans and policies, including the regional flood reduction policy of the Red River Watershed Management Board (RRWMB), a joint-powers agency comprised of Minnesota watershed districts within the Red River basin. This policy, called the ?20% Reduction Policy,? developed for the entire basin by the RRBC, centers on the concept of flood flow reduction on the Red River main stem and its tributaries by altering the hydrology of the contributing watersheds on a basin-wide effort. (Red River Basin Commission, Progress Report to the Minnesota Legislature, http://www.redriverbasincommission.org/2-3-2010_MN_Leg_Rpt.pdf, Appendix 4 (Accessed June 11, 2011)) On June 14, 2010, the Board of Managers of the RRWMB formally adopted the 20% Reduction Policy. These minutes note, in their words, the Corps? ?disagreement? on the benefits of such policy. That the Corps might disagree with a local policy is not a sufficient reason to ignore the policy in the SDEIS or to fail to study the alternatives on which the policy is based. In this case, the 20% Reduction Policy has been developed by the RRBC and adopted by the RRWMB as a policy direction for itself and its constituent watershed districts. As noted throughout these comments, the Corps? planning approach to flood protection in the F-M Metro, as set forth in the SDEIS, materially conflicts with the 20% Reduction Policy. The SDEIS fails to squarely address and analyze the conflict of this policy with both the Proposed Action as well as with the Tentatively Selected Plan itself. (See also 40 CFR 1502.6(c) (need to discuss possible conflicts between the Tentatively Selected Plan and objectives of Federal, regional, State and local land use plans, policies and controls)) Funding for development of the 20% Reduction Strategy has included $1 million in funding from the North Dakota and Minnesota legislatures ($500,000 from each); to the extent both states have encouraged, and funded this policy development and are receiving progress reports on it, including the RRBC Progress Report, the work of the RRBC and the 20% Reduction Policy may also be considered policies of the States of Minnesota and North Dakota. Moreover, the State of Minnesota, through its Flood Damage Reduction program administered by the Department of Natural Resources, has invested heavily in storage projects in the Red River Basin. These projects are consistent with the 20% Reduction Strategy. The Corps Issue Checklist requires response to the following checklist item (No. 28): ?Did the planning effort collaborate with other Federal, state, Tribal, and local entities to develop solutions that integrate expertise, policies, programs, and projects across public entities?? Failure of the SDEIS to consider, and either integrate or explicitly justify non-integration of the 20% Reduction Policy, or similar state or regional watershed policies, with the Proposed Action and with the Tentatively Selected Plan not only contravenes NEPA, as discussed above, but also the Corps? own guidance. The SDEIS failed to utilize a sufficiently large study area in order to

evaluate the impacts of wetland drainage on flood frequency and the opportunity to restore the natural flood attenuating effects of wetlands on flood frequency, flood timing and flood magnitude: The Corps, though evaluating flood impacts and alternatives measures to prevent flooding within the Fargo-Moorhead Metropolitan Area, did not look beyond its narrowly defined study area. The limited study area did not allow the Corps to accurately evaluate the causes of increased flooding in the Red River basin or the full range of alternative remedies, including wetland restoration and other watershed management possibilities. Ample evidence demonstrates that the loss of natural storage capacity, including wetland drainage, throughout the Red River basin has significantly contributed to increased flood frequencies and flood peaks. The prairie pothole wetlands of the northern Great Plains are one of the world?s great natural resource treasures. Within this 300,000 square mile area, retreating glaciers left tens of thousands of small depressions that seasonally fill with water and provide habitat for millions of waterfowl, shore birds and other wildlife species. Almost since farming began in this region in the mid 1800?s, wetland drainage has been employed to increase tillable acreage and to facilitate other agricultural activities. The cumulative impacts of this wetland drainage have been staggering. Over the last 100 years, and especially since the end of the Second World War, over 50% of the region?s wetlands have been drained with over 90% in some watershed basins. In addition to the severe impacts to wildlife and water quality, wetland drainage has also impacted the timing, frequency and severity of floods throughout the region. Wetland drains and channels literally crisscross the entire region and dramatically accelerate spring run-off and reduce upstream, upland water storage capacity. For example, much of the damage caused by the extensive flooding along the Mississippi River in 1993 resulted from levee failure as the river reestablished historic connections to the floodplain as well as the loss of upstream wetland storage and the alteration of the landscape that encouraged water to quickly drain into the nearest river or stream. Indeed, a recent study by The Wetlands Initiative noted that the wetlands lost in the upper Mississippi River had the capacity to retain all of the water that caused the 1993 flooding. Thus, although elaborate storage dam, diversion and levee systems can ?reclaim? the floodplain for agriculture and human settlement in most years, the increasingly frequent and inevitable large floods the Great Plains and Midwest are seeing impose high disaster costs to society. Evidence strongly suggests that wetland drainage has significantly impacted flooding in the Red River basin. In fact, the Red River basin has experienced 8 of the 10 all time record flood crests in the past 30 years. One study dealing with watershed contributions to the Red River was published 28 years ago by soil scientists at North Dakota State University. It found an average 60% increase in stream flow rates and concluded that: Significant increases in flow to the Maple, Wild Rice and Goose Rivers have occurred over the last 30 to 40 years. Flow rates were shown to be related to climate (precipitation), however, there appears to be no change in precipitation patterns to account for increase in flow rates. Predicted flow rates were shown to be closely related to basin size due to land drainage in the Maple River and Goose River basins. Since this study was published, wetland drainage has continued throughout the basin. Based on this information, the SDEIS should consider an enlarged study area to include all upstream river basins above Fargo-Moorhead. In taking this step, the SDEIS will necessarily have to evaluate the impacts on flood crests, flood frequencies and flood severity of wetland drainage. Through this evaluation, the SDEIS can then take the next and most critical step ? evaluating the benefits of wetland restoration in terms of reducing these flood impacts. The Corps should have considered a wetland restoration alternative: Restoring upstream storage capacity must be studied as an alternative to flood mitigation for the Red River. Several studies have demonstrated the

effectiveness and feasibility of restoring wetlands or using upland depressions to temporarily store water during a flood event. One such study concluded that, ?non-structural means as temporary storage of runoff on agricultural lands in the upland areas of the watershed during periods when flood risks are high, may provide ecological benefits . . . at the same time diminishing the threat of downstream flooding.? (A. Manale, Flood and Water Quality Management through Targeted, Temporary Restoration of Landscape Functions: Paying upland farmers to control runoff, Journal of Soil and Water Conservation, Summer 2000 55.3, 285) Another study concluded that, ?floodwater attenuation is one of the most widely recognized ecosystem services provided by restored wetlands . . .? The potential storage capacity on USDA program lands in the Prairie Pothole Region (PPR) alone is, conservatively, 458,151 acre-feet of water, if filled to maximum capacity. (USGS, Robert A. Gleason & Brian A. Tangen, Ecosystem Services Derived from Wetland Conservation Practices in the United States Prairie Pothole Region with an Emphasis on the U.S. Department of Agriculture Conservation Reserve and Wetlands Reserve Programs, Chap. D: Floodwater Storage, http://pubs.usgs.gov/pp/1745/pdf/pp1745web.pdf (accessed June 11, 2011). Additionally, restoring drained and farmed wetlands could increase the water retention capacity of a watershed in the PPR of Minnesota, ?by up to 63%.? (Id.) The restoration of wetlands can significantly reduce flood frequency and severity while also providing vital ecosystem benefits: The benefits of wetland restoration are numerous. Wetlands provide various ecosystem services to farmers and communities, recreational opportunities, global warming mitigation, and most importantly, flood control. One study concluded that, ?wetlands on [USDA] program lands [in the PPR] have significant potential to intercept and store precipitation that otherwise might contribute to ?downstream? flooding. (Id.) Additionally, the ?conversion of cultivated cropland to grassland cover as part of conservation programs results in a reduction in surface runoff and, ultimately, reduces the rate at which a basin refills and overflows.? (Id.) An Army Corps study on the Charles River in Massachusetts concluded that the floodplain wetlands were so effective for flood control the Corps purchased the wetlands rather than drain them to build a levee system. Maintaining the 3,400 hectares of wetlands in the Charles River basin rather than draining them saved Boston an additional $17 million in flood damages per year. (William J. Mitsch & James G. Gosseling, Wetlands, 347 (John Wiley & Sons, 2007)). Another study looking at the relationship between upstream wetland drainage and downstream flooding concluded that, the increase in peak stream flow was significant for all sizes of streams when wetlands were removed. (Id. at 349) Utilizing wetlands for flood protections provide a multitude of additional benefits. Increasing wetland habitat will provide stability to migrating and nesting bird habitats as well as numerous other species of wildlife. This in turn creates opportunities for hunting, fishing, bird watching, hiking and other types of recreation. Wetlands also serve as nature?s kidneys, filtering polluted water and releasing cleaner water into both nearby ground and surface waters. This improves water quality. Wetlands further serve to recharge ground and surface waters, meaning that while they prevent flooding in wet times, they serve to replenish and retain adequate water supplies and stream flow during drier times. As climate change increases the severity and frequency of both floods and droughts, these functions will become crucial to maintaining healthy aquatic systems and to protecting communities from the impacts of climate change. Wetlands play at least two critical roles in mitigating the effects of climate change, ?one in the management of greenhouse gases (especially carbon dioxide) and the other in physically buffering climate change impacts.? (The Ramsar Convention on Wetlands, Wetland Values and Function: Climate Change Mitigation, http://www.ramsar.org/pdf/cop8/cop8_doc_11_e.pdf

(November 2002)) Studies show the great potential for wetlands to act as carbon sinks to sequester carbon, thus mitigating the impacts of global warming. USGS data suggests that terrestrial carbon capture may be greater in wetlands over smaller acreage than the potential capture on a larger area of cropland. (USGS, Prairie Wetlands are Important for Carbon Storage, http://biology.usgs.gov/cro/Fact%20Sheets/carbonnewban.pdf (last updated July 2002)) Given the multitude of benefits in addition to flood protection that wetland restoration provides, especially in light of the many challenges presented by climate change, it is the most effective, affordable, and ecologically sound solution for the Red River basin, and must be given the full consideration of the Army Corps of Engineers, when preparing the EIS for the proposed flood protection plan, found at 74 FR 20684. Grassland areas upstream of Moorhead provides viable distributed storage opportunities not possible with the consolidated storage component of the Tentatively Selected Plan in the SDEIS: Grasslands or grazing lands span approximately 600 million acres of the United States. Grasslands have proven to be a major source of watershed filtration, ground water recharge, and carbon sequestration. Grasslands have excellent potential to markedly improve water and air quality. (Grazing Land Conservation Initiative Strategic Plan 2010-2015, http://www.glci.org/images/Current%20News/StrategicPlan_WebVersion3.pdf (accessed June 11, 2011)) Proper management of existing grasslands can enhance the land?s ability to better reduce erosion and flooding by slowing and more evenly distributing surface waters. Grasslands also help the percolation of precipitation creating recharged groundwater aquifers. Conservation of grasslands can occur on private and public lands, and wildlife populations thrive with the availability of these habitats. Through cooperative efforts with agencies such as the Bureau of Land Management (BLM) and the Natural Resources Conservation Service (NRCS), private landowners can learn to maintain their property as grasslands in a manner that is most effective in preventing soil erosion and flooding in the Red River basin. Again, the Corps failed to explore this economically feasible and ecologically friendly alternative in its DEIS. Based on this information, the Corps should enlarge its study area to include all upstream river basins above Fargo-Moorhead. As a result, the Corps will necessarily have to evaluate the impacts of flood crests, flood frequencies and flood severity of wetland drainage. It is only then that the Corps can adequately evaluate the benefits of wetland and grassland restoration in terms of reducing these flood impacts. The Waffle Project, combined with wetland restoration is also a viable alternative: One effort currently being studied and potentially implemented in the Red River basin is called the Waffle Project. The Energy & Environmental Research Center (EERC) ?recognized the need for alternative methods of flood protection to augment existing flood protection measures. This sentiment was mirrored by other major organizations and agencies in the Red River Basin, and it was determined that innovative concepts of nonstructural measures should be explored to augment the design capacities of structural measures planned to protect against future floods similar in scope to, or greater than, the 1997 flood.? (Bethany Bolles, Xixi Wang, Lynette de Silva, Heith Dokken, Gerald Groenewold, Wesley Peck & Edward Steadman, An Innovative, Basinwide Approach to Flood Mitigation: The Waffle Project, http://www.undeerc.org/Waffle/info/pdfs/bb-floodmitigation.pdf (accessed June 11, 2011)) As Minnesota Public Radio reported in 2006, ?the waffle plan is simple. Existing roads serve as levees to store water in farmers? fields. The potential for storage is amazing. One square mile storing water a foot deep would hold more than 200 million gallons of water.? (Bob Reha, Waffle Plan researchers convinced they can lower flood levels, Minnesota NPR, http://minnesota.publicradio.org/display/web/2006/04/13/waffleredux/ (April 17, 2006)) Because this plan looks to slow the movement of water entering the system at any time, the

chances of flooding are greatly minimized. The additional benefit of the plan would allow the retained water to recharge the aquifer and prevent droughts in the future. The Waffle Plan is also a more affordable solution to mitigating flood damage, with the price tag to implement the Plan across the Red River basin ?estimated at $50 million. The protective dike system in Grand Forks cost $397 million.? (Id.) And, the estimated cost of levees or a diversion channel along the Red River far exceed Grand Forks at $625 million and $909 million, respectively. In this economy, haphazard spending for a levee or diversion project is not only unwarranted, but also irresponsible management of resources, both economically and ecologically. And the extraneous building costs are not a one-time expense. Levees will require continued spending for maintenance and upkeep, and they are uncertain to retain flood waters in our world of extreme weather patterns, so greater structures may have to be built in the future, at greater costs, in order to seize the swelling waters of the Red River. When the Waffle Project is implemented in conjunction with continued wetland restoration, a successful and long-term flood protection plan results. Programs such as the Waffle Project, Wetland Reserve Program, and other studies and programs through Ducks Unlimited, US Fish & Wildlife, and numerous other agencies and organizations, provide ample data and opportunity to implement wetland restoration as a significant option to prevent flooding downstream. Flood stages in Fargo-Moorhead during the 1997 flood (nearly a 1-percent chance flood event) could have been reduced by 3.3 to 4.4 feet if the Waffle Project had been in place. But this data is not considered in the SDEIS. The SDEIS omits mention entirely of a later EERC report estimating that had some form of ?waffle? been in place upstream in 1997, it would have reduced the crest height at Fargo and Moorhead by between 3.91 feet to as much as 6.17 feet, depending on the scale on which it were deployed. The EERC Report concludes that ?[i]n the case of Fargo/Moorhead, the anticipated crest height reductions appear to be substantial.? (D.A. Bangsund, F.A. DeVuyst & F.L. Leistritz, Benefit-cost Analysis of the Waffle?: Initial Assessment, July 2008, http://ageconsearch.umn.edu/bitstream/42216/2/AAE603.pdf at page 40 (Accessed June 11, 2011)) Overall, the analysis concludes that ?the Waffle appears to be capable of generating around $200 million to $600 million in net benefits over a 50-year period.? (Id. at p. 56) Failure to accurately characterize and soundly analyze research studies and data on the ?waffle? renders the SDEIS? lack of consideration of this alternative incomplete, misleading and in violation of NEPA. The SDEIS should evaluate an alternative combining diversion alignments and a mix of distributed storage options against the current diversion/consolidated storage configuration of the Tentatively Selected Plan: Alternatives incorporating distributed upstream storage as a component of the Proposed Action should have been considered in the SDEIS alongside the Tentatively Selected Plan. As it is, the Corps has only performed a detailed analysis of a single alternative in the SDEIS. The suggested, additional alternatives analysis is required by NEPA and, as noted above, is supported by considerable technical study and opinion. Because detailed analysis of distributed storage alternatives was omitted from feasibility screening and, thus, left out of the SDEIS, it is not possible to know whether distributed upstream storage will cause less economic, social and environmental damage than the Tentatively Selected Plan. Similar to the EERC?s Waffle, the Red River Basin Commission (RRBC) also created a strategy that would decrease flood levels in the Red River basin. They simulated 1997 flood conditions (9.25? of precipitation) and found that their storage areas could reduce flood levels in the Red River up to 20% in some areas. They found that the most significant reduction was a 20% peak flow reduction and 20% volume reduction at White Rock, South Dakota. The study demonstrates that storage areas built in river basins are 80% effective, and if all of the tributary basins upstream of

the Red River do their share in flood storage, effects on Red River flood reduction can be substantial. (Red River Basin Commission and Bois de Sioux Watershed District, Application of the Flow Reduction Strategy in the Bois de Sioux Watershed, 7-18 (JOR Engineering 2010)) There was no formal cost-benefit analysis done for this study. However, preliminary estimates showed that upstream storage competes very favorably with the Corps? diversion channel option because of the ratio based on the Fargo-Moorhead area damages alone. There would also be more widespread flood control benefits, in addition to a great potential for natural resource benefits under this program. It is clear that the optimal strategy for minimizing flood risk, while also improving water quality and fish and wildlife habitat in the Red River basin, would involve a combination of wetland restoration and utilizing farm fields for temporary storage. The Corps, working with state fish and wildlife agencies and other federal agencies including the USFWS and the Natural Resources Conservation Service, should develop an alternative or alternatives that combine these approaches. The National Wildlife Federation urges the Corps to formulate an alternative that would include 500,000 acre-feet of storage through wetland and grassland restoration and an additional 500,000 acre-feet of storage through temporary storage utilizing farm fields. Wetland and grassland restoration, combined with flood storage, will have many positive impacts: A successful and long-term flood protection plan results when flood storage concepts, such as those developed by EERC and RRBC, are implemented in conjunction with grassland and wetland restoration. In evaluating such an alternative, the Corps should consider the following costs and benefits: flood control benefits; water quality benefits; fishery benefits; benefits to upland and migratory birds; and recreational benefits, including increased hunting and fishing opportunities. 1. Protects more than just two cities: The Corps? Tentatively Selected Plan will only provide significant flood protection for two major metropolitan areas, Fargo and Moorhead. Upstream communities will be damaged and remaining areas of the basin will not receive the benefited flood protection, and will likely see flooding similar to that they are now experiencing. Should wetland and grassland restoration strategies be implemented along with flood-water-storage projects, not only will Fargo-Moorhead see decreased flooding, but communities throughout the basin will also experience flood relief. Basin-wide flood reduction only adds to the overall benefit of wetland and grassland restoration and flood storage efforts. Programs such as EERC?s Waffle Project, RRBC?s Flow Reduction Strategy, and concepts created by numerous other agencies and organizations, including Wetland Reserve Program and USFWS, provide ample data and opportunity to implement wetland and grassland restoration and flood storage as viable alternatives to the consolidated upstream storage currently proposed. 2. Creates and enhances wildlife habitat and recreation, while also mitigating affects of climate change: Increasing wetland habitat will provide stability to migrating and nesting bird habitats, as well as numerous other species of wildlife. This in turn creates opportunities for hunting, fishing, bird watching, hiking and other recreation. Wetlands also play an important role in filtering polluted water and recharging the aquifer into both nearby ground and surface waters, greatly improving water quality. Grasslands further reduce the runoff of water and sediment, creating a more stable water level and providing an area to host a diverse community of native grasses, sedges, rushes and other submersed vegetation. (R. R. Johnson, F. T. Oslund & D. R. Hertel, The past, present and future of prairie potholes in the United States, Journal of Soil and Water Conservation, May/June 2008, 63(3), 85A. at p. 14) Wetlands play at least two critical roles in mitigating the effects of climate change, ?one in the management of greenhouse gasses (especially carbon dioxide) and the other in physically buffering climate change impacts.?(The Ramsar Convention on Wetlands, Wetland Values and Function: Climate Change Mitigation,

http://www.ramsar.org/pdf/cop8/cop8_doc_11_e.pdf (November 2002)) Wetlands International, a global organization that works to sustain and restore wetlands, states that ?inland wetlands in arid regions can play a very cost effective role in attenuating the impacts of extreme weather events such as the impacts of extremes in precipitation and increases in evaporation due to higher temperatures.? (Moreno J. Garcia, Cost-effectiveness of maintaining and restoring wetlands as an adaptation measure against climate change, Wetlands International, http://www.indiaenvironmentportal.org.in/files/wetlands%20and%20climate%20change.pdf, (last updated April 2010)) Wetlands serve to recharge ground and surface waters, meaning that while they prevent flooding in wet times, they serve to replenish and retain adequate water supplies and stream flow during drier periods. The benefits of wetland and grassland restoration are numerous. Wetlands and grasslands provide various ecosystem services to farmers and communities, recreational opportunities, global warming mitigation, and most importantly, flood control. One study concluded that, ?wetlands on [USDA] program lands [in the PPR] have significant potential to intercept and store precipitation that otherwise might contribute to downstream flooding.? (Gleason & Tangen, supra) Additionally, the conversion of cultivated cropland to grassland cover as part of conservation programs results in a reduction in surface runoff and, ultimately, reduces the rate at which a basin refills and overflows. 3. Economic benefit to farmers: The Tentatively Selected Plan will eliminate tens of thousands of acres of prime and unique farmland from operation and place still more at risk of limite production. On the other hand, the Waffle or Flow Reduction Strategy would only ?borrow? or ?rent? land from willing landowners in the event of flooding and, in most cases, will use natural storage areas to store greater amounts of water. Even if cropland was used to store water, it would be done early enough in the spring so that the landowner would still be able to farm their crop in most years. Therefore, the payment from these flood storage programs would be a bonus above and beyond the farmer?s ?normal? agricultural income. 4. Set precedence for other green flood control solutions: As human activity continues to escalate and their harmful affects become increasingly evident through climate change, environmentally friendly alternatives will only gain in popularity. The states of North Dakota and Minnesota have a unique opportunity to show the rest of the nation a more natural and cost effective method of flood control. The precedent could be set for more ecologically favorable flood mitigation efforts rather than more expensive, concrete and environmentally damaging solutions. There has already been an international trend to move toward nonstructural flood control methods, and it is in our nation?s best interest to closely follow in the same direction. The SDEIS omits analysis of connected actions and cumulative effects: An additional requirement for the Corps to consider in its SDEIS are the simultaneous actions of the Fargo-Moorhead Metro Project and the Southside Flood Control Project, which calls into question requirements under NEPA regarding connected actions. An assessment of cumulative impacts is required by the Council on Environmental Quality (CEQ) regulations under NEPA. (Council on Environmental Quality, Considering Cumulative Effects Under the National Environmental Policy Act (Jan. 1997)) Cumulative effects are defined as, ?the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.? (40 CFR ? 1508.7) When considering whether there are cumulative effects or connected actions, an agency must look at the scope of the proposed project and must consider 3 types of actions: connected actions, cumulative actions and similar actions. (40 C.F.R. ? 1508.25) A connected action means that there is a close relationship between actions which must be considered in a single EIS. Similarly, a single EIS

must be prepared for cumulative actions, which when viewed with other actions ?have cumulatively significant impacts and should therefore be discusses in the same impact statement.? (40 C.F.R. ? 1508.25(a)(2)) A similar action is one, when viewed with other proposed or reasonably foreseeable actions have similarities that would be reasonable to analyze together in a single impact statement. (40 C.F.R. ? 1508.25(a)(3)) In the context of the Fargo-Moorhead and Southside Projects, given their timing, scope, relatedness, and proximity, the projects would be considered cumulative actions, and are required, by NEPA, to be considered under a single EIS. (42 USC ?? 4321, et. seq. See also, Kleppe v. Sierra Club, 427 U.S. 390, 96 S.Ct. 2718 (1976)) Cumulative effects analysis is an additional, central, and critical component of NEPA. (See Council on Environmental Quality, Considering Cumulative Effects, http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm, January, 1997 (Accessed June 11, 2011)) Incomplete modeling of flood impacts upstream of the diversion structure and tie-back levees for the Tentatively Selected Plan, and failure of the SDEIS to consider anything beyond possible ?taking? of real property, make a meaningful evaluation of cumulative effects on upstream communities impossible. Based on the incomplete information in the SDEIS, there is no way for any of the communities in the upstream storage area, or any other commenter for that matter, to evaluate the effect, over time, of frequent and persistent innundation: ? Impacts to agricultural land, including delayed planting, crop stress, prevented access to fields. ? Damage to improvements, including rural infrastructure, residential and commercial properties and social, religious and educational institutions. ? Additional economic and psychological burden to local residents from increased or new flood protection and risk mitigation efforts. ? Economic damage to residents, including reduced farm or business income, reduced property values and increased mitigation costs. ? Increased flood insurance expense, including rejection of crop insurance. ? Increased risk to persons and property resulting from flood-delayed response by law enforcement and other emergency responders, such as fire and ambulance. ? High fiscal burdens to residents for maintenance, repair or replacement of infrastructure or private improvments. ? Accelerated migration of rural residents, particularly younger people, to the safety of non-flood prone or protected areas. Local communities, left with declining and aging populations, and vulnerable to flood, more than they are today, will suffer irreversible decay. NEPA requires analysis of this socioeconomic degeneration. (Id., Appendix A, Section 11) But the SDEIS is silent on it and on this basis alone is inadequate and must be supplemented before it is presented to the Corps? final decision maker. Upstream communities and residents, including then members of MnDak, are being asked to bear new burdens for the sake of Fargo-Moorhead and for the sake of eliminating downstream impacts. The upstream communities and residents are owed a detailed analysis and explanation of the impacts, including cumulative impacts listed above, under the Tentatively Selected Plan. Without such analysis, the SDEIS is inadequate and must be supplemented. The SDEIS fails to adequately address the negative consequences of the Red River diversion channel options: In the SDEIS, the Corps has evaluated only one alternative, the Tentatively Selected Plan against the NED pan and FCP developed prior to the SDEIS. Neither the NED plan nor the FCP were updated during development of the SDEIS. Under NEPA, it is ?mandate[d] that federal agencies take a hard look at the environmental consequences of a major federal action before taking that action.? Mid States Coalition for Progress v. Surface Transp. Bd., 345 F.3d 520, 533 (8th Cir.2003). Discussed below are several potentially damaging effects of the Corps? LPP, which seriously call into question the thoroughness of the Corps? SDEIS. The Tentatively Selected Plan will result in greater ecological impacts than both the FCP and the NED plan. More tributaries and hundreds more acres of wetlands, forests, aquatic riverine, and fish

tributaries and passages will be affected by the Tentatively Selected Plan than the FCP. The Tentatively Selected Plan will have a greater impact on wildlife and fisheries than the FCP and the NED. Under the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the U.S. Fish and Wildlife Service (USFWS) is authorized to provide recommendations to the Corps on federally funded water development projects. For the reasons listed above, it is likely that the USFWS will recommend the FCP alternative rather than the Tentatively Selected Plan. As discussed herein, such a recommendation will be problematic for the Corps since the FCP is no longer a practicable alternative to achieve the ever-changing project purpose. The Corps selected the Tentatively Selected Plan primarily because of political considerations. The primary impetus for the construction of the massive diversion channel and consolidated upstream storage area being proposed has come from the North Dakota congressional delegation and the City of Fargo. Because of lukewarm support for the project by Moorhead and other Minnesota political entities, North Dakota supporters pressured the Corps and the Assistant Secretary of the Army for Civil Works to accept the Tentatively Selected Plan ? mind you they previously pressured the ASA-CW to approve a LPP that later proved to cause massive downstream damage. The result is that the SDEIS has identified a Tentatively Selected Plan that is the most ecologically harmful and the most expensive, the 36-mile North Dakota LPP. The comparable costs (in billions) of the Tentatively Selected Plan, FCP, and NED are $1.7, $1.2 , and $1.4, respectively. The DEIS states that upstream effects of the consolidated storage area on social resources could be significant, but it fails to adequately measure these impacts. The river?s northward flow creates an increased possibility of ice downstream further impeding the flow of water through the diversion structure increasing the magnitude of upstream flooding in an area not normally prone to flooding except in the largest run-off events. The Tentatively Selected Plan exacerbates this problem by removing thousands of acres of floodplain associated with the diversion. The SDEIS fails to give any concrete sedimentation data. The Corps? diversion channel will substantially affect sedimentation in the Red River and other connected tributaries. Sedimentation is a major problem in many rivers and lakes, which can cause a reduction in storage capacity that can lead to flooding. A build up of sediment can also lead to many aquatic changes that could have negative impacts on aquatic life. As a result, fish may begin avoiding areas of heavy sedimentation, ultimately changing their migratory patterns, wintering grounds, nursery areas, or spawning habitat. Valuable fish spawning areas could be covered in silt, and the sediment increase could lead to adult and juvenile fish mortality if their gills become filled with sediment. Fish foraging success will decline, which could also lead to mortality, especially in younger fish, and adult fish could be kept from spawning due to malnutrition. Therefore, sedimentation impacts and sedimentation mitigation costs must be, but were not included in the SDEIS. The diversion channel will affect more than 200 acres of wetlands. The Corps has suggested that any wetland taken away or adversely affected by the diversion channel will be replaced with new wetlands within the diversion channel in a low flow channel. The SDEIS describes the low flow channel as ?a channel that is typically in the center of a larger channel which is sized to handle small flows from drains, ditches or groundwater.? It will be approximately 10 feet wide and 3 feet deep. A strip of wetlands 10 feet wide does not provide the security and benefits that larger blocks of wetlands provide. The SDEIS does not address how these wetlands will be comparable to the previously existing wetlands that were affected by the diversion and does not describe the diversion channel wetlands? functions for surrounding wildlife. In addition, many problems can arise with a low flow channel. The channel will need frequent maintenance and modifications to ensure that it is effective, and it can be very easily damaged in severe situations such as flooding

or drought. Wetlands near the five North Dakota tributaries intercepted by the diversion channel will not receive the same recharge from overland flooding that they have received in the past. The SDEIS does not address these impacts or their mitigation. The SDEIS must include projected mitigation costs for additional wetlands that will be impaired such as those near the five North Dakota tributaries. The Corps must also include in its SDEIS exactly what function the low flow channel will serve and how it is guaranteed to adequately compensate for existing wetlands adversely affected by the diversion channel. The diversion contemplated in the Tentatively Selected Plan will cross five tributaries: Wild Rice River, Sheyenne River, Maple River, Lower Rush River, and Rush River. In addition, the SDEIS states that ?[t]he channels of the Lower Rush and Rush Rivers between the diversion channel and downstream to their confluences with the Sheyenne River will be abandoned . . . Nesting birds, mammals, and mussel species could be displaced or killed during the project?s construction, and nesting birds? eggs could be abandoned or crushed. Construction and excavation within the riverine aquatic habitats could kill adult or juvenile fish,? and some fish mortality is unavoidable. The additional sediment load, deposition, and accumulation into the Red River could alter aquatic and riverine habitat. The SDEIS indicates that fish could use the diversion channel, but the diversion channel will not contain any meaningful fisheries. The SDEIS continues on to state that fish ending up in the diversion channel without their natural habitat will not be a significant issue during the operation of the diversion channel. Fish caught in the diversion channel during flooding, however, will be forced to use concrete fish ramps for passage. It is not known at this point whether certain sensitive fish species, such as the Lake Sturgeon, will be successful at using artificial passages. The DEIS also does not address how changing the velocity of water within the diversion might affect certain fish species. The velocity of the water within the diversion and downstream of the diversion could be too strong and prevent certain species and juvenile fish from traveling upstream. The diversion channel will create numerous problems for multiple tributaries and wildlife and aquatic species. The final EIS must address the negative impacts to all tributaries and the specific adversities facing wildlife and aquatic life. A plan to mitigate these adversities must be identified and mitigation costs must be included in the final EIS. Failure to adequately consider impacts to prime and unique farmland: It is a requirement under the Farmland Policy Protection Act (FPPA) that projects with impacts to agricultural lands be reviewed to determine their impact on agricultural lands and that an assessment be completed related to those impacts. The assessment is documented by the USDA using a form AD 1006 ?Farmland Conversion Impact Rating?. Instructions for the form indicate the inclusion of indirectly converted farmland. Indirect conversion includes ?acres not directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.? For the Tentatively Selected Plan, the USDA did not include converted farmland in the staging area upstream of the diversion structure and tie-back levees. Rather, the USDA only included farmland directly converted by the diversion channel, levees and structures associated with the Tentatively Selected Plan. The modeling data in the SDEIS demonstrates that thousands of acres of prime and unique farmland will be inundated upstream of the diversion structure in relatively small storm-flow events. The duration or long term impact of inundation is not calculated but will, in all scenarios, prevent access to farmland for production, destroy growing crops and prevent harvest of mature crops. Additional analysis is necessary to determine and document actual indirect impacts to farmland as required by the FPPA. (see Appendix F to SDEIS, p. F-42-73) The Tentatively Selected Plan violates the directive of Executive Order 11988: As proposed, the Tentatively Selected Plan violates Executive Order 11988. Executive Order 11988 requires

federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions: acquiring, managing, and disposing of federal lands and facilities; providing federally-undertaken, financed, or assisted construction and improvements; and conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. The guidelines address an eight-step process that agencies should carry out as part of their decision-making on projects that have potential impacts to or within the floodplain. The eight steps, which are summarized below, reflect the decision-making process required in Section 2(a) of the Order. 1. Determine if a proposed action is in the base floodplain (that area which has a one percent or greater chance of flooding in any given year). 2. Conduct early public review, including public notice. 3. Identify and evaluate practicable alternatives to locating in the base floodplain, including alterative sites outside of the floodplain. 4. Identify impacts of the proposed action. 5. If impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate. 6. Reevaluate alternatives. 7. Present the findings and a public explanation. 8. Implement the action. Among a number of things, the Interagency Task Force on Floodplain Management clarified the EO with respect to development in flood plains, emphasizing the requirement for agencies to select alternative sites for projects outside the flood plains, if practicable, and to develop measures to mitigate unavoidable impacts. With regarding to the Tentatively Selected Plan, the City of Fargo has made clear its desire and intent to open additional areas of the flood plain to development. This is one reason why management of flooding from the five North Dakota tributaries has become so important in rushing the Tentatively Selected Plan to decision. During re-scoping from November 2010 through March 2011, Fargo specifically requested the diversion channel alignment be moved further west. The request was made with the expressed intent of providing additional protection to lands in the current flood plain for future development. While the request was rejected, the current design supports the same intent. The current design eliminates thousands of acres from the flood plain. The diversion channel includes 15 foot, elevated spoil banks designed to serve as flood levees. (See SDEIS figures 15 and 29 and ?3.5.3.3) Several practicable alternatives to this design exist that would prevent federal support to future flood plain development. These same practicable alternatives would increase the efficacy of distributed storage and/or reduce the requirement for the currently proposed consolidated storage area. For example, if the diversion channel were designed to take advantage of the additional, nature flood attenuation provided by the flood plain, rather than closing it behind spoil levees, less new storage would be required and a smaller diversion channel could be planned. Alternatively, moving the diversion structure further north would allow storage in naturally flood prone areas of the flood plain ? again reducing the requirement for new storage. If combined with the distributed storage alternatives discussed herein, the consolidated storage component of the Tentatively Selected Plan, upstream of the diversion structure and tie-back levees, could be eliminated. Elimination of the consolidated storage area would preserve four small communities and tens of thousands of acres of prime and unique farmland. By all objective standards in the SDEIS, the Tentatively Selected Plan is the least effective, most expensive and most environmentally damaging alternative: The comparison

of alternative begins in section 3.8 of the SDEIS. The three alternatives considered in comparison were the FCP (a Minnesota diversion without storage); the ND35K (a North Dakota diversion without storage) and the Tentatively Selected Plan, or LPP. As discussed herein, it is questionable, based on prior analysis, that the FCP or the ND35K are practicable alternatives. Under all evaluative criteria applied in the SDEIS, the Tentatively Selected Plan is less effective, more expensive and more environmentally damaging than the FCP or ND35K. For example, the LPP damages the most acres of aquatic habitat, directly impacts the most acres of wetland, takes the more area out of the flood plain than the FCP and impacts the most acres of prime and unique farmland. (SDEIS table 13). The Tentatively Selected Plan will cause significant social disruption to communities south of the diversion structure and tie-back levees ? in the consolidated storage area. (SDEIS table 16.) In the 1% change flood, the Tentatively Selected Plan floods 54,721 acres of land south of the diversion structure and tie-back levees that is not otherwise subject to flooding in such an event (SDEIS figure 32). In the 1% chance flood, the Tentatively Selected Plan will require relocation of the communities of Oxbow, Hickson, Comstock and the Bakke Addition and the relocation or protection of 185 residences and 429 other structures. (SDEIS table 16, figure 39). Though the Federal share of any project will be based either on the NED plan or FCP, the non-Federal costs will be paid by the local sponsors. With regard to the Tentatively Selected Plan, residents of the Fargo and Moorhead as well as the States of North Dakota and Minnesota will pay over $931 million. (Compare SDEIS tables 25 and 26). The Tentatively Selected Plan is the most expensive of those considered in the SDEIS. While cost not the determining factor in any project, where the most expensive plan is also the most damaging and least effective, it should be rejected. Conclusion: The U.S. Army Corps of Engineers is planning a 35,000 acre water storage area and a 36-mile-long diversion channel around Fargo that will cost North Dakota and the Federal government $1.7 billion to construct, with the Federal government?s share limited to $782 million. The projected $1.7 billion cost does not include mitigation and long term maintenance expenses in the years after construction of the diversion channel has been completed. During this country?s time of economic uncertainty, the Corps? project seems not only irrational and impractical, but also downright irresponsible when other, less expensive alternatives to restore wetlands and grasslands along with creating flood storage have proven to be effective and create more and further reaching benefits. The Corps? colossal and esthetically displeasing diversion channel will be not only a massive state and federal expenditure, but also an ecological nightmare with resounding affects for centuries. If cities and communities within the Red River Basin do not want to face even bigger and more expensive problems combined with wildlife habitat destruction and decline a decade from now, the Corps must seriously reconsider their Tentatively Selected Plan. Much of the Red River Basin flooding and associated damage has been a direct result of encroachment into the floodplain and loss of natural storage. These losses of natural storage are best replicated and replaced through distributed storage measures. Poor and marginal farmland and drained areas not currently under production, along with some active and productive farmland can be used as temporary flood storage that would prevent dangerous flood levels. Grasslands and wetlands not only have remarkable abilities to store excess water runoff, but they are also attractive and provide much needed wildlife habitat in a region of the country that continues to have rapid human population increases. In its SDEIS, however, the Corps all but completely ignores these alternatives and certainly did no analysis to compare them to its Tentatively Selected Plan. The absence of substantial and significant information regarding the environmental and other impacts of the Tentatively Selected Plan likewise renders the SDEIS

inadequate on its face and requires that the Corps prepare an additional Supplemental DEIS to fully compare alternatives and to include all information on which the Corps based its decision to adopt the Tentatively Selected Plan. The Corps? failure to include critical impact information in the SDEIS violates NEPA and its own NEPA regulations, is arbitrary and capricious as well as unreasonable. In recent case law, it is determined that ?[w]hile the EIS need not be exhaustive, the existence of a viable but unexamined alternative renders an [EIS] inadequate.? Friends of the Boundary Waters Wilderness v. Dombeck, 164 F.3d 1115, 1128 (8th Cir. 1999). There is no doubt that the Corps? SDEIS leaves many alternatives largely unexamined. We strongly urge the Corps to fully address and consider the use of distributed storage and non-structural techniques for flood control. It is irresponsible for the Corps not to consider more reasonable, but similarly effective solutions that do not have the long-term effects on the tributaries and streams of the Red River. Sincerely, /s/ John C. Kolb John C. Kolb JCK/cmt cc: MnDak Upstream Coalition Direct Dial: 320-656-3503 Email: JKolb@Rinkenoonan.com

2011-06-20_Eldon Hermunslie - As a life-long resident of northern Richland County, farmer for 39 years along the Wild Rice River, graduate and patron of Richland School District 44, and member of Eagle Valley Evangelical Free Church of rural Christine, ND, I am writing to oppose the current LPP as designed by the USACE. I agree that Fargo needs to pursue further flood protection, but why is it legal for the city of Fargo to cause man-made flooding to lands and dwellings not in the flood plain in order to cause development of areas and protection of areas that have been flooded in numerous flood events over many years? Is this not a violation of EO11988? The Richland and Wilkin County Commissions were not consulted in the planning phases and were led to believe there would be no impact to them. It is now clear that the LPP would have devastating impacts to both counties, and they will be forced to fight for their rights, rather than being treated as good upstream neighbors. Have you not considered potential massive flooding outside the diversion due to concurrent flooding by the multiple rivers crossed by this project? This is an unprecedented and untested process, is it not? Impacts south of Highway 46, we were told, would be mitigated individually at the public meeting in Kindred. How can we be confident of fair treatment in Richland and Wilkin Counties? After observing USACE ?technical? forecasts and subsequent miscalculations and upward forecast revisions in 2011 at Bald Hill Dam (Valley City and downstream) and Garrison Dam (Bismarck and downstream), I am suspect of the accuracy and integrity of the environmental impacts of this huge multi-watershed, perhaps the most complex interrelated project of its type ever undertaken by the USACE. I believe Fargo should aggressively pursue building permanent levees/flood walls, etc. to at least a 42.5-ft elevation as announced by their city officials recently. However, I also believe that it is time to take a closer look at other alternatives, such as the Red River Basin Commission?s study and proposals for 20% flow reductions and retention throughout the entire valley, thereby benefiting the entire area. A benefit solely to a few square miles around Fargo would mean a detriment to the rest of the area, both upstream and downstream. Senator Colin Peterson?s proposal to include $500 million in the next farm bill specifically for retention in the Red River Valley needs to be considered and supported. During public comment meetings in May, Aaron Snyder indicated that the USACE would not consider these upstream alternatives. Why not? My farm home and business are located one mile upstream of the Abercrombie gauge on the Wild Rice River, at which point the USACE has ?estimated? a one-inch rise in projected crest during a 100-year event. Based on my aforementioned concerns regarding accuracy of predictions, I am unsure of my security in future flood events as a result of the upstream staging.

However, it is apparent that at least immediately downstream of my location all the way to the Fargo Dam/diversion many or most of my neighbors would be impacted as a result of this catastrophic project. The upstream staging impacts will be devastating to the Richland 44 and Kindred School Districts through depopulation of the area and, therefore, loss of tax base. These are detrimental human and social impacts for which it is hard to determine the huge loss and are forced on the schools with no opportunity for input or consideration. Is this not simply wrong? Eagle Valley Evangelical Free Church is located on a ten-acre parcel that has never had floodwaters even close to its elevation since settlement in the 1880?s; yet it is now in the upstream staging area and will likely require a ring dike. The staging area impacts the northern part of our ministry area by depopulation. Also, it appears that our cemetery will be at least partially flooded. Fargo could show its integrity by being a good neighbor to the entire region. It is time for Fargo to reconsider its plan and to step back and consider being a part of the solution for the entire Red River Basin.

2011-06-20_Karen Hertsgaard - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 June 20, 2011 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. The US Army Corps of Engineers Draft Environmental Impact Statement (DEIS) for Fargo-Moorhead Metropolitan Flood Risk Management will have a negative impact on agricultural production in the entire region. More than 33,390 acres of prime farmland will be impacted at various levels by water held in the staging areas. Generally, crop insurance for damage from this man-made project will not be available. The loss of this productive agricultural land has not been addressed in the DEIS and should be studied and included in the final report. Utilizing the USACE suggestion to tile this land would be very expensive, and again, this cost is not included in the DEIS. This must also be studied and included in the final report as a real cost to be reimbursed to those affected by the project. On the outside chance that a farmer would risk growing crops on this acreage, yield potential on those crops would decrease at a regular rate if spring work were to be delayed. According to research done at North Dakota State University, after the third week in May, small grain crops grown south of I-94 can lose up to 1.7 percent of potential yield per day, and corn planted after May 1 will lose more than 1.1 bushels per acre of yield a day. Also, obviously, a complete crop loss would occur if the flooding were to take place after crops had been planted. These situations would result in real economic loss to producers and must be investigated and included as mitigation costs before this project moves forward. Agriculture is very important to the economic well-being of the Red River Valley and the state of North Dakota. Not only will this project create the costs stated above, it will also negatively impact all the businesses and industries that support and benefit from the agricultural production industry. Sincerely, Karen Hertsgaard Kindred, ND

2011-06-20_gregg Christensen - Good afternoon. As a 29 year resident of the Bakke subdivision (which has NEVER flooded) (#1) I would like to know how the home evaluations were formulted for Bakke, Oxbow and Hickson as part of the total cost for the Diversion. I understand every home was valued at I belive $129,000. The homes in the Oxbow country club range from $350,000 to close to a $1,000,000. The homes in the Bakke subdivision range from $150,000 to $300,000. (#2) I would like an explanation why they were not vlued at their retail

value for the total Diversion costs. (#3) Should the Diversion go through to Congress and get funded by Congress what is the formula for a properties buy out? This wouldn't be a FEMA buyout, it would be a buy out by the City of Fargo, and I want to know what the formula is. As an example, a home valued at $500,000 before the Diversion talk, would be bought out for what if the Diversion gets funded??? The dollar amout to each property HAS to be somewhat higher than the retail value of the property. Why?? There has to be "some pain and suffering" involed with this. Why would I want the retail value of my property just so I have the hassle and expense of moving somewhere when I had NO intentions OF moving....Thank you for your time, Gregg Christensen-217 elm street-Hickson ND-58047

2011-06-20_Marcus Larson - June 20th , 2011 U.S. Army Corp of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 The April 2011 SDEIS does not contain an assessment report reflecting the nesting and feeding habitat of Bald Eagles located in the Hickson, ND and Comstock, MN area. The April 2011 SDEIS does not contain an assessment report reflecting the migratory habitat and feeding habitat of of Water Crane's located in the Richland Country, Hickson, ND and Comstock, MN area(s). Respectfully submitted, Marcus Larson 513 7th St Hickson, ND 58047 701-588-4412 218-790-2025June 20th, 2011 U.S. Army Corp of Engineers, St. Paul District Attn: Aaron Snyder180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact StudyFargo-Moorhead Metropolitan Area Flood Risk Management Classification: UNCLASSIFIED Caveats: UNCALCULATED LOSS OF LIFE; VIOLATION OF EO-11988; UNCALCULATED IMPACTS; UNCALCULATED OUTCOMES; INCORRECT SDEIS DATA Dear Project Manager: Regarding the April 2011 SDEIS: The USACE has been negligent in pursuing ?duty of care? for United States citizens. The USACE has been negligent in providing ?equal protection? for United States citizens in the proposed current and future undisclosed project area(s). United States citizens all possess a fundamental and constitutional guarantee that we are afforded ?substantive due process? in a fair legal proceeding before the government takes away life, liberty or property,which specifically fails regarding the Fargo Dam and Diversion relating to this SDEIS due to the design phase commencing prior to Congressional approval. The USACE has failed in its ?due diligence? in pursuing the aforementioned and has publicly conveyed that Fargo is the project sponsor and is the primary beneficiary of the project. Regarding Uncalculated Loss of Life: The April 2011 SDEIS refers to potential ?loss of life? if temporary emergency measures fail. The USACE is aware of the ?plasticity? of thematerials that will be used in the project?s construction; however, thereis negligence in providing a corollary for ?loss of life? if a USACEdesigned permanent structure fails. Specifically, what would the ?loss oflife probability? be, based on the failure of the Fargo Dam and Diversionat full capacity? Wherein, the majority of Fargo would be in a basinsurrounded by water, with severely impeded evacuation options. (REFER TO:Lower 9th Ward in New Orleans during Hurricane Katrina and recent levee failures in Hamburg, Iowa and Vicksburg, Mississippi). Regarding Violation of EO-11988: Fargo (project?s sponsor) has enjoyed decades of negligent city planning and irresponsible water displacement and will both directly and indirectly benefit by the assistance of the USACE in violating EO-11988. 100 percent of the lowest land that falls inside the currently

proposed project has historically flooded during every flood event. The April 2011 USACE SDEIS will foster significant adverse effects and incompatible development in the flood plains. Fargo?s expansion will be artificially induced into areas of the flood plain which were previously too dangerous to build upon, which could also lead to exponential loss of life and property during future flood events if the Fargo Dam and Diversion were to experience a breach. Surrounding communities upstream, to the west, and downstream of the proposed Fargo Dam and Diversion will bear an undue burden of social and economic losses including, but not limited to, substantial losses relating to the Kindred and Richland Colfax school systems, destruction of numerous generational ?base farm? operations, churches, and the communities of Hickson, Oxbow, Bakke subdivision, Davenport, Mapleton and Prosper, North Dakota and potentially Christine, North Dakota and Comstock, Minnesota. Regarding Uncalculated Impacts: The April 2011 SDEIS does not contain a Bird Strike Assessment for Hector International Airport. ? The probability for ?bird strikes? along Hector International Airport?s southern approach flight path could be increased due to anincrease of migratory birds being drawn to the proposed manmade lakesouth of Fargo, North Dakota. This places a high concentration ofFargo?s population, 8 schools, hospitals and clinics and severalbusinesses in a ?risk zone? of ?bird strikes? and aircraft impactcrash site debris. Other uncalculated risks and costs that have been brought to the attention of the USACE during public meetings but are not included in the April 2011 SDEIS include but are not limited to: ? meteorological changes induced by the proposed staging area; ? increased flood risks to communities east of the project area (the potential for water to be reintroduced into the Ottertail Water Shed that feeds the staging area at the proposed Fargo Dam and Diversion); ? effects of a catastrophic release from Bald Hill Dam, Tolna Coulee or Devils Lake on the currently proposed project; ? relocation of displaced population; ? loss of community cohesion and short/long term social impacts; ? non-accurate property valuation and cost differential to be ?made whole? for takings under eminent domain and increased market prices due to mass induced relocation; ? loss of agricultural production both inside and outside the proposed staging area; ? increased agricultural production costs relating to longer transport distances from farm headquarters; ? carbon footprint impact study relating to longer farm transport distances; ? carbon footprint impact study relating to the destruction of trees in the staging area; ? failure to delineate damage assessments for late planting, non-planting or loss of crops in the staging area where all peril insurance would not cover losses; ? damages to infrastructure: roads, bridges, electrical distribution,wired communications; ? safety and stability hazards relating to the raising of I-29; ? location of compatible detour route alternatives to I-29; ? probability risk of levee, dam and diversion failure and related losses to life and property; ? relocation of cemeteries; ? alternatives that preserve communities, school districts, tax base and land values; ? effects of the Cass 17 tie back dike on the Sheyenne River and community of Davenport, North Dakota; ? effects of the Minnesota side tie back dikes on the community of Comstock, Minnesota; ? access to Kindred, North Dakota during a major flood event. Regarding Uncalculated Outcomes and Incorrect Data: The April 2011 SDEIS does not accurately represent the necessary and escalating cost estimates associated to the Fargo Dam and Diversion (Fargo -Moorhead Metropolitan Area

Flood Risk Management). Incorrect and/or Incomplete Data: ? Land and Damages ? Compensation for Tax Base Loss to impacted School Districts ? Relocations ? Construction ? Volatility of Fuel Costs ? Annual Maintenance Costs ? Per Household Tax Impacts This places taxpayers in an unnecessary and precarious financial position of liability for a project that has not been fully assessed or disclosed.Accurate Annual Maintenance Costs are imperative because the entire project?s security relies on proper maintenance. The SDEIS does not indicate who will have oversight of Fargo to ensure that Fargo assigns individuals qualified to perform inspections and maintenance for a project of this significance and 36 mile length. The SDEIS does not indicate who will have oversight of Fargo to ensure that Fargo only operates the Fargo Dam and Diversion during events exceeding 1 percent (100 year) events. Summary and Proposal: The scope of the April 2011 SDEIS is inadequate. Further study is necessary of all tributaries upstream of Fargo, Moorhead and West Fargo area. A basin wide comprehensive solution is necessary to protect the population that resides within the Red River Valley. The USACE must provide a comprehensive three diversion alternative in conjunction with the Red River Basin Commission?s 20 percent reduction plan and EERC Waffle Plan to adequately address water issues and threats in the Red River Valley. Diversion 1: Divert water from the Sheyenne River west of Kindred,Davenport, Mapleton, Prosper and Argusville, North Dakotaand introduce that diversion into the Red River north of Georgetown, Minnesota. Diversion 2: Divert water from the Wild Rice into the current West Fargo Diversion. Diversion 3: Divert water into the originally proposed Minnesota diversion. Respectfully submitted, Marcus E. Larson 513 7th St Hickson, ND 58047 701-588-4412 218-790-2025

NEW COMMENT ADDED on 2011-06-20 18:01:57: June 20th , 2011 U.S. Army Corp of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 The April 2011 SDEIS does not contain an assessment report reflecting the nesting and feeding habitat of Bald Eagles located in the Hickson, ND and Comstock, MN area. The April 2011 SDEIS does not contain an assessment report reflecting the migratory habitat and feeding habitat of of Water Crane's located in the Richland Country, Hickson, ND and Comstock, MN area(s). Respectfully submitted, Marcus Larson 513 7th St Hickson, ND 58047 701-588-4412 218-790-2025

2011-06-20_John Hertsgaard - How many dollars was credited to the project for the saving of 600 lives?

2011-06-20_Don Cossette Representing the Angie Cossette Family - I am writing this hoping that someone will take notice to what a tremendious impact this project will have on our family.I Don and wife Laureen will have to give up our home.My mother Angela Cossette and sister Marjorie will both lose their homes and my sister and brother in law in Oxbow will also have to sercome to the proposed buy out.The path of this project also puts the home quarter of our land on the wet side by being one mile from the dike'and our other quarter the diversion will cut a diagonal path right through it, pretty mutch rueining the better part of a complete quarter of land,and last but not least my wife's beauty salon business will also be lost.Is that enough impact for you.Please consider not doing this project.

2011-06-20_Larry Ness - Dear Project Manager; I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River valley. I have lived on this farm and actively farmed the land my entire life of 70 years. Our farm/farmstead is located right on the Red River and in all these 70 years we've never flooded on our farmstead even in the record 1997 flood! Now with this plan we would have alot of water/ flooding. My Dad originally farmed it, then I farmed it, and my son is now farming the land. So, it's a generational farming operation. This diversion plan would have a great negative effect on the loss of production from late planting and/or total loss in summer flood. Crop Insurance cannot be obtained for damage from a man-made project. This project would be a huge detrimental effect on this highly productive prime agricultural land and our livlihood. The huge negative effect on our property values would be a devastating loss for us and our community. In regards to putting up dikes to protect farmsteads, in the event of an emergency, we would be unable to get emergency services/vehicles in to reach us in an emergency situation, which puts us at a great risk and in an unsafe environment. This is a big concern for me and my family. The effects of this plan would wipe out and destroy many rural communities of which has been a part of my whole life! I believe alternatives exist that address flooding basin wide. Thank You, Sincerely, Larry Ness

2011-06-20_Rolaine Askegaard - As a homeowner and landowner who would be adversely affected by the "locally preferred" diversion plan in North Dakota/Minnesota, I have a great deal of concerns regarding safety issues that WILL arise if the diversion is built. Having lived on a farmstead north of Comstock, Minnesota for nearly my entire life, I am fully aware of the time that it takes for services, such as ambulances and repairmen, to get to my home WITHOUT the diversion in place. I worry that, if the diversion were to be built, I, along with hundreds of other homeowners in the area, would have restricted access to services such as those listed above. It will be impossible for families living on the "negatively impacted" side of the diversion to receive the care that they need in times of emergency. Furthermore, the infrastructure of the highway systems (Hwy 75 etc) and gravel roads will be severely damaged. How can one say that a gravel road will not "wash out" when water is staged upon it? I have learned from experience that even a heavy rain is capable of washing away gravel from a road, whilst creating gullies, making the road near-impassable for hours or even days. What will happen when water is staged upon gravel roads? Homeowners will be stranded. I am in dismay that issues such as these have not been properly addressed. Simply raising Hwy 75 does not solve the problem, seeing as most farmsteads are located off of gravel roads, not the highway itself. It is an unjust act to not only strip a person's land from it's fertility but furthermore to take away their access to healthcare (such as the ability to be serviced by an ambulance). Perhaps flood protection does need to be put in place, but not at the expense of others' safety. We do not only need to protect the urban areas, we need to protect everyone, including rural citizens, those people who were not previously affected by the flood waters to begin with. If this plan is to go into action, safety issues must be reviewed. Property valuation needs to be secure. The loss of tillable land, crop insurance, and its role in our region's economy needs to be examined. Do not go into this project blind. Please take these comments into consideration before deciding what is the "best" decision for our community AS A WHOLE

2011-06-20_Don Nelson - These comments are in regards to the Supplemental Draft Feasibility Report and Environmental Impact Statement comment period due June 20th 2011. There is a severe flaw in the US Army Corps of Engineers statement at one of the flood meetings that they plan to only hold water in the ?Staging Area? for an extra seven days compared to what is there now. It was said that the water will start being held back into the staging area at a river level of 26 feet. This year the water would have been started to be held back on April 4th and it wouldn?t have been allowed to start running back in until May 9th (the date it hit 26 feet again going back down). So May 9th this year would have been when the water STARTED to run back into the river. This year the water would have been held back for 35 days before it would have been allowed to START running into the river (35 is NOT 7). So now lets say it takes 7 days to run off the staging area. That puts it at May 16th the water would have been gone from the staging area this year. Now lets say there are perfect drying conditions with no rain and it takes 14 days for that land to dry out so now it is May 30th at the earliest something could be planted there. On my family?s land that I am referring to which is located right next to the Red River on the MN side (west of Comstock, MN) this land was planted into wheat on May 3rd this year. Had the dike been up causing the staging area to be used this land would have been planted 27 days later (27 is NOT 7). This is land that is high enough that in 2009 it did not even flood. According to your May 2011 Feasibility Study documents it states that the river gauge at Hickson would be 5.38 feet higher than it was in 2009. That gauge is right next to our land. The building site on this land is also next to the river and in 2009 did not flood and the house was not touched by water. Adding 5.38 feet would obviously change that. Adding that amount of water to land that is so high that it previously has not flooded is completely unjust and immoral. There is nothing that can replace this land and building site that has been in the family for generations. There is no amount of money that can compensate for this. How do you put a price on land that has never flooded but now would flood only because of a man made flood put in place by the US Army Corps of Engineers. Our family is not against Fargo having flood protection of some kind but we are against the use of the Staging Area south of the dike (Tieback Levee on your map). Other alternative measures need to be used rather than this staging area. Letting water run for 60 or more miles and then stopping it all in one spot is not the answer. Especially when almost all of this staging area on the MN side of the river is land that has never flooded before. How can holding this water in the staging area on some of the highest land around that has not flooded before make any sense at all? Please explain this to me and my family. The real estate guy for the Army Corps has a severely flawed formula for determining value of buildings in the Staging Area. He told me you would only get a fraction of the replacement value for a pole barn. This makes no sense. Today we have no need or desire to build a new shed, the current one works fine. But now the Corps comes in and says we are going to add 5.38 feet (in 2009) to your land that has never flooded before so you need to go build a new shed someplace outside the staging area but you will only get a fraction of the replacement value. This number has to be at least replacement value if the Corps has any morals at all. And then a person needs to find land outside of the staging area to put this new shed on which of course is not free land. The Corps states that the cost of mitigation is estimated at 200 million dollars. This cost is obviously off by many, many millions of dollars. One of the Army Corps people even admitted to me that he knew it was off by many, many millions of dollars. Why can?t the true numbers be shown? I was told by Aaron Snyder that it could be 8 years before we are contacted to determine/?negotiate? what the value of land and buildings will be. His justification was that there was no need to do it until the diversion was that far into the building stage of the process. This is not how you

ethically do this. You cannot treat people like this. All of this ?negotiating? needs to be done BEFORE any such diversion would start. Please help me and my family understand how it would make sense to do it any other way. There are several gravesites in the "Staging Area". What is your plan for these gravesites? Some of them are historic. Calling this a Red River diversion is far from the truth. The Red River is being held back after 26 feet. The diversion really only ends up being useful for the Wild Rice, Sheyenne, Maple, Rush and Lower Rush rivers. I look forward to your reply, Don Nelson

2011-06-20_Rachel Ness - I am strongly opposed to the Fargo/Moorhead diversion/dam being proposed by the ACOE. This project that will effect so many people in the Fargo/Moorhead area is being pushed through too fast. As a concerned citizen and taxpayer, I feel the people inside the diversion do not have all the numbers and facts to make an informed decision. There are also many safety issues not being addressed by the Core with this project. For the people being ring-diked or protected with some type of levee in place, what type of emergency response will there be for an ambulance, or firetrucks, when all the county roads are covered with feet of water? There are other retention plans and tools that should be used for protection, and should be studied in further detail. Please consider a different option that helps the entire Red River Basin, as this is a basin wide problem.

2011-06-20_Mitchell Bauske - As the City of Fargo and the Army Corps of Engineers push for the current proposed diversion plan, they need to start thinking more about the innocent communities and farmers that will be adversely affected. Communities like Comstock, Minnesota are hugely affected by this proposal and the farmers around this retention area, or "dam", lose thirty-five thousand acres of the most fertile farm land every spring for a one time mitigation payment. Not only is this wrong, as it takes away the farmer's business and affects these agricultural communities, it also poses safety risks to these communities with all the gravel roads being potentially washed out, heavy industrial construction for years, and even small things like ambulances having access to these communities as well as fish population and ecological problems this diversion can pose. I realize the City and the Corps of Engineers do not have the best interests of the small communities in mind, nor the interests of local farmers, but the least they start doing is slow down on planning the walking trails around the diversion and start planning on what actually matters, like what to compensation farmers for their land, which is their business, and how to minimize safety risks on small communities being affected.

2011-06-20_Beth Askegaard - As a resident of Fargo, I know the importance of providing our city with proper flood protection. However, as a grandchild, daughter and friend of hundreds of people adversely affected by the proposed "locally preferred" North Dakota/Minnesota diversion plan, it is my duty to stand up for what is right. After attending flood meetings with my family, who organically farm 900 acres of land near Comstock, Minnesota, I have acquired a plethora of concerns regarding this diversion plan. Not only will the plan's desired water staging strip farmers of their land, business, and lifelong livelihood, it will have a drastic, negative impact on our region as a whole. There are so many issues that MUST be addressed before moving forward with this plan. Crop insurance and property valuation need to be confirmed. Project funding must be identified: Who is going to pay for this colossal undertaking? How will organic farmers be able to receive organic certification, seeing as contaminated water will be allowed to stand on their land? Most importantly, how will this plan affect the safety of others? It is inevitable that

gravel roads will wash out under the pressure of water on top of them. How will residents be able to leave their houses? How will ambulances be capable of reaching homes in case of emergency? Raising highways (such as Hwy 75) will not solve this problem; most residents are located along gravel roads, not the highway. Not only will this plan harm the economy of the Red River Valley by taking away a sector of one of its most profitable industries, agriculture, it will place many people in danger. I realize that Fargo needs protection, but must it be at the cost of so many? It is of utmost importance to address these MAJOR issues, such as the access to roads which will be safe for travel, before planning recreational activities that the "dam" will provide local residents (as presented in the informational powerpoint at local Army Corps meetings). Please take a step back. The "locally preferred" plan does not serve the best interests of our region as a WHOLE, but rather the interests of a single city. Before going through with this diversion plan, please consider the detrimental impacts that it could pose to our region. Thank you.

2011-06-20_Haley Israelson - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. 6/20/2011 Dear Project Manager: I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I am the proverbial Farmer?s daughter. I am 5th generation living between Hickson and Christine ND. As of April 10, 2011 our land became the Fargo diversion?s flood plain. I live on high ground, have never picked up a sand bag for our home and have been happy to help those who have needed my assistance. I attended school in Kindred ND I was baptized and confirmed in my church in Wolverton, MN. As a Farmer?s daughter we have hauled grain to Kindred, Comstock, Wolverton and Hickson elevators. Hickson?s elevator is gone now but my friends are there and I work nearby at Oxbow ND as I have for many years, I enjoy my co-workers, we are like family. I started my working career at the Christine Mercantile; needless to say there aren?t many people out here that I don?t know. We are our own community within a community there to help each other when needed and share in the fun when opportunity arises. I haven?t seen Fargo flood so I don?t understand why the need to flood me or my friends and co-workers. I don?t understand why I should move from my home to accommodate land that typically floods. I don?t want to give up my friends or my work. I don?t understand why I should give up my plans for my future because someone else assumes that their plans have a greater value then my own. I am opposed to the diversion because you are taking away everything that I know, my memories, my friends, work, co-workers and my home. If you step back and look at it for a 1 in a million chance of flooding I bet it really won?t make sense to you either. Haley Israelson Christine, ND

2011-06-20_David Alan Ness - Dear Corps of Engineers, The proposal to dam the Red River and flood my farm and woods, which has been in my family since 1880 is very offensive to me, and to many others, who are my friends, family and neighbors. To do this to us who currently don't have problems related to flooding, (even though my farm is on the river), in order to benefit those in Fargo who didn't have the sense to build far enough from the river, is ludicrous, costly, and ill-conceived. (Not to mention immoral). It will make a few powerful individuals very wealthy, and it has already destroyed the value of my property(which I resent). I grew up in Fargo Moorhead living a few blocks from the Red River and am fully familiar with the flooding that occurs in town. The vast majority of those who live there are unaffected by the flooding. Futhermore it could be controlled if FEMA would allow permanent dikes. To instead turn the

best farmland in the world into a useless, stinking swamp is beyond reason. My farm is 18 miles south of town on the Minnesota side. My house is on the high bank of the river, built by my Grandfather, 1/2 mile from his father's house.Under your plan, the towns of Comstock, Hickson, and Christine will all be flooded out too. Come to your senses and come up with a better plan that doesn't hurt as many innocent people, please. My Grandparents told me when they were young, the Red River was a clear fast running sand bottom stream (until the 1930's when the Corps put in dams to create some jobs). Why don't take them out and let the river repair itself. and build permanent dikes in Fargo, and leave us alone?? Dave Ness

2011-06-20_Kristi Houska - U.S. Army Corps of Engineers, St. Paul District Attn: Aaron Snyder 180 Fifth Street East, Ste. 700 St. Paul, MN 55101-1678 RE: Supplemental Draft Environmental Impact Statement, Fargo-Moorhead Metropolitan Area Flood Risk Management. Dear Project Manager: I am a current resident of the Bakke Subdivision & the Treasurer/Secretary of the Bakke Home Owners? Association. My husband & I have three boys who are enrolled in the Kindred School District. I am writing in opposition to the April 2011 Locally Preferred Plan (North Dakota Diversion with storage and staging) for flood control in the Red River Valley. I have many concerns on the impact the project will have on my home, family, school, and community. I am requesting you complete further studies on the following: 1. True and Full Compensation of Property 2. Loss of Community 3. Development 4. Funding of Project 5. Tributary Floods Compensation of Property We have been told that our property will be evaluated based on property values prior to the announcement of the diversion. This will be done through an ?independent? appraiser who has been hired by the Corp/Local Sponsors. How is this truly an ?independent? appraiser when they have been hired by the Corp/Local Sponsors to provide them valuations that the Corp/Local Sponsors wants to hear? If they weren?t providing those types of valuations, the Corp/Local Sponsors would not be using them as their appraiser. Even if we, as residents, decide to get a second appraiser?s opinion to come in and evaluate our home, the first appraiser?s valuation is taken into consideration and used to negotiate the final price. We will not be assured true and full compensation of our properties. Many of us in the Bakke Subdivision also have sheds on our properties. Will they be taken into consideration when the evaluation of the home is being given? Not depreciated value; TRUE, untainted value. Loss of Community My family and I have lived in the Bakke Subdivision for almost eleven years. There is no other place I would rather live to raise my family & have my children attend school. When my husband and I were first married we lived in Moorhead and felt as though we were living right on top on our neighbors. We love the open space, the secure feeling, having our church nearby, and friends and neighbors who are our second ?family?. No amount of money can ever compensate for the loss of community and to sacrifice everything we have achieved over the years. Funding of Project We have asked the Corp, Cass County Representatives, and Fargo Representatives whether funding of this project has been determined. In a reply at a meeting in Kindred we were told that Moorhead had committed to 10%. The State of North Dakota had committed $300,000,000. Both of these numbers have been questioned recently. The City of Moorhead refused to sign a Joint Powers Agreement on June 13th with the City of Fargo. Moorhead has also suggested that maybe Cass County would be a more appropriate co-sponsor. State Representatives from North Dakota have also not appreciated being completely uninformed on the possible upstream impacts. The funding for this project is clearly not in place. Does it make sense for the Corp of Engineers or the Federal Government to approve a project that has no funding in place? There is also trust and moral issues when we are being told by the Local

Sponsors commitments by MN and the State of ND have been made and the truth is they have not. Development The key driver of this project is not protecting existing property but protecting property that could be developed. Viable alternatives that would provide protection to current residents have been dropped from consideration because they did not provide for future development. (Southside Flood Control Project 1.5.1.1). This totally goes against Executive Order 11988 which ?requires federal agencies to avoid direct or indirect support of floodplain development where there is no practicable alternative, and then to minimize impacts to the floodplain.? 3.8.3.4.5 The report notes numerous times that the LPP takes more land out of the floodplain than other plans. Is this consistent with EO 11988? This whole area of compliance with EO 11998 needs much more scrutiny. Tributary Floods Effects of the proposed diversion in cases of simultaneous floods on other rivers (such as the Sheyenne) have not been considered, but the Corp acknowledges there would be impacts. ?The study has been primarily focused on the Red River event with coincidental flow events on the tributaries and no models have been developed to assess the exact impact, however it can be said with certainty that there would be impacts.? 3.7.3.2 Why have not more studies been done on the combination of impacts amongst the Red, Wild Rice, & Sheyenne? In order to see true impacts and mitigation costs, these studies need to done. All individuals and businesses directly and indirectly impacted by this project need to be apprised of these issues. This has not happened. Thank you for reviewing my comments and I hope that further studies will be considered. Sincerely, Kristi Houska 111 Plum Tree Road Hickson, ND 58047

2011-06-20_Rick Alm - I am writing in opposition to the Locally Preferred Plan for the diversion with flood storage and upstream staging on the Red River of the North. I fully believe that Fargo needs some sort of flood relief as does the rest of the Red River basin. The most immediate thing that could be done would be to put a gate on the Wahpeton/Breckinridge diversion. This would reduce the amount of water flowing thru the Red River north of those two cities by 2 to 4 feet. I live right on the river near Christine. We had never had to sand bag in the 120 years that this land as been occupied - until 1997. The knee jerk reaction of putting in this diversion has resulted in sand bagging 5 different years since then. These are years that under normal conditions would have resulted in high flood waters but not nearly as high as what has been occuring. The erosion of the river banks has been tremendous since this project went in. Summer flooding which is now quite normal was non-existent prior to this project. Now the plan is to mess with the water flow again. I was going to say that the purposed dam was being put in to save houses that have been built in the last 15 years at the expense of houses and ways of living that have been in place for over 125 years in some cases but if that were the case the dam would be just south of Fargo. What you are doing is flooding out areas that have never seen flood water to save houses that haven't even been built yet. 'Locally Preferred Plan' don't you mean 'Developer Preferred Plan'? I do not live in the 'Ponding Area'. The area that Corp has indicated will be affected. You don't have to look to far in the news today to not have much confidence in what the Corp has to say. In my estimation anyone would be a fool to even think about living north of Wahpeton. Living north of the dam won't be much better. Once it fails either due to under estimation or ice flows it will be a total disaster. The only sensible approach to solving the problems in the Red River Valley is to reduce the flow of water. There are plans out there that can do this. Will they stop flooding completely - no. But if you are going to live in an old lake bed along side a river there are some things that you just have to expect. Spring flooding is one of them. Rick and Laurie Alm Walcott ND

2011-06-20_David Gust - NEW COMMENT ADDED on 2011-06-20 22:11:43: It appears this group of sponsors believe they are entitled to more then anyone else in this country. They want 500 year flood protection. Aaron Snyder himself said " most people are happy with 30 year protection". This group in refusing to consider the plan recommended by the USACE have adopted an all or nothing attitude. As far as I can discern the USA has never funded a project with a cost benefit ratio this low [1.7-1]. With an all or nothing attitude they are entitled to nothing. Is there anyone out there with the political fortitude to put a stop to this ridiculous project?

Fargo-Moorhead Metropolitan Area Flood Risk Management Supplement Draft Environmental Impact Statement National Wildlife Federation Form Letter Comments

The Corps received 7750 copies of the National Wildlife Federation form letter comment during the public review period for the SDEIS. Each letter is archived electronically. Only one copy of the template letter is reproduced in this appendix as an example. The name on the template is redacted, as this example represent multiple copies of the letter from different individuals.

Approximately 170 copies of the form letter contained unique text and these letters are reprinted here.

-----Original Message-----
From: National Wildlife Federation Action Fund [mailto:info@nwa.org]
On Behalf Of [redacted]
Sent: Thursday, June 16, 2011 2:44 PM
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

[redacted]

Classification: UNCLASSIFIED
Caveats: NONE

From: National Wildlife Federation Action Fund on behalf of Rachel Duvack
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:35 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please, do the right thing for future generations. In the end, it is the only thing that matters.

Sincerely,

Ms. Rachel Duvack
3087 W Denver Pl
Denver, CO 80211-2012

From: National Wildlife Federation Action Fund on behalf of Catherine Vaughn
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:32 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

If we don't take care of these animals than we fail our children and their children! Be known as a supporter of wildlife! Thank you.

Sincerely,

Mrs. Catherine Vaughn
13391 Gateway Dr
Fort Myers, FL 33919-8187

From: National Wildlife Federation Action Fund on behalf of donna campbell
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:35 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

It appears that between you and HAARP, everytime you try and "rectify" nature, you create a worse problem. Maybe we should let her superior consciousness do what she is intended to do before we completely destroy the land on which this nation exists. I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. donna campbell
18925 Highway 12 Lot 46
Sonoma, CA 95476-5425

From: National Wildlife Federation Action Fund on behalf of Charles Alexander
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 12:44:29 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Wetlands are great and effective natural flood control agents. They are natural, even free of expense(if we leave them alone) protective barriers. They have tremens benefits for wildlife. In this time of budgetary crisis, we need to preserve ducks and encourage nature to do it's job of flood control.

Sincerely,

Mr. Charles Alexander
PO Box 4752
Lutherville Timonium, MD 21094-4752

From: National Wildlife Federation Action Fund on behalf of Paul Hopkins
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 11:44:52 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

We have lost too many wetlands in this area already. The ditch should be unnecessary.

Sincerely,

Mr. Paul Hopkins
12 Bennett Ln
Unit F
Norwalk, OH 44857-2642

From: National Wildlife Federation Action Fund on behalf of Tammy Williams-Anderson
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:43:38 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

We have time to avert catastrophes resulting from mismanagement of land and resources. We must act now to protect the future of natural systems like water cycles and animal ecology from past and present damage.

Sincerely,

Mrs. Tammy Williams-Anderson
198 N Skyline Dr Spc 16
Thousand Oaks, CA 91362-3423

From: National Wildlife Federation Action Fund on behalf of Paul Cardwell
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:14:04 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The solution to flooding is to retain as much water upstream as possible. You have always tried to send it downstream as fast as possible. You are the main cause of flooding, right up there with the pavement of urban sprawl. Try something that works.

Sincerely,

Mr. Paul Cardwell
1127 Cedar St
Bonham, TX 75418-2913

From: National Wildlife Federation Action Fund on behalf of Jeanne Schlatter
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:34 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Wetlands are very effective for holding water and can alleviate flooding in their own ways.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Jeanne Schlatter
1049 Cambridge Rd
Coshocton, OH 43812-2704

From: National Wildlife Federation Action Fund on behalf of Art Unger
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 12:15:01 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

I do not know exactly where Fargo and Moorhead are. I do know that over a century of walling off rivers and building dams has led to big floods and climate change will make some of them bigger. Please try setting aside wetlands as sponges to prevent flooding. Farms and play grounds can abut the wetlands, since their flooding is less of a problem than flooding of homes and structures.

Thanks,
Art

Sincerely,

Mr. Art Unger
2815 La Cresta Dr
Bakersfield, CA 93305-1719

From: National Wildlife Federation Action Fund on behalf of Justin Lamkin
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 11:15:10 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The Human tide against animals and plants is relentless - please save our Planet, and in doing so, the Humans.

Sincerely,

Mr. Justin Lamkin
PO Box 532
Kittery, ME 03904-0532

From: National Wildlife Federation Action Fund on behalf of Reed Heffelfinger
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:43:30 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

We may want to move forward and look at some of the information that has been known and used successfully for half a century.
Diverting water is NEVER a beneficial thing..... it's only where fools rush in.

Educate yourself and check it out. Its only information.
http://www.scribd.com/opensearch?
language□1□limit□10□num□pages□1□page□3□query□Viktor□Schauberger

Sincerely,

Ms. Reed Heffelfinger
44th ST
Minneapolis, MN 554241025

From: National Wildlife Federation Action Fund on behalf of Mary Mills
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:29 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Restoration is the wisest way, of pot holes, wet lands, grassland. These are natural and beneficial ways to use the water. Diversion is a monumentally destructive, and does little to restore habitat to wild life.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Mary Mills
160 Leif Cir
Crescent City, CA 95531-8321

From: National Wildlife Federation Action Fund on behalf of Patti Johnson
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 4:11:47 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

As engineers you are very intelligent people who could come up with a plan to satisfied all needs,don't take the easy way out,think hard about how you can benefit everyone and everything,what you come up with will be your legacy.

Sincerely,

Ms. Patti Johnson
5 Greer Ct
Perkasie, PA 18944-4121

From: National Wildlife Federation Action Fund on behalf of Ray Marthaler
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 11:14:32 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Don't over develop your plan, go back to basics and help control flooding while helping to restore vital wetlands urgently needed for miratory waterfowl and other species.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Ray Marthaler
3127 N Pelican Dr
Farr West, UT 84404-9355

From: National Wildlife Federation Action Fund on behalf of Raymond Nash
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:45:27 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Yes, we know about the US Army Corps of Engineers and their disastrous work. Look at Louisiana and the bad decisions there. Katrina ring a bell, or the diversion to create a channel for ships, does GO ring a bell, that was a disaster from the start.
Don't let that happen here, let nature do what it has been doing for thousands of years.
I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Raymond Nash
238 E Main St
Westminster, MD 21157-5226

From: National Wildlife Federation Action Fund on behalf of Lee Winslow
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:43:27 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

The potholes and other wetlands in the Dakotas, are major breeding grounds for thousands of waterfowl. They have already lost 50□ of their former territory.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Lee Winslow
1471 N San Francisco St Apt 8
Flagstaff, AZ 86001-1450

From: National Wildlife Federation Action Fund on behalf of Karen Wohrley
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:59 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

THE BEST FLOOD CONTROL IS THE ONE mother nature HAD in place - acres of wetlends. These wetlands should be RESTORED as the most economically AND environmentally friendly protection for this area.

Sincerely,

Ms. Karen Wohrley
15950 SE 170th Ave
Weirsdale, FL 32195-2660

From: National Wildlife Federation Action Fund on behalf of Carol Ballou
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:43:45 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Nature knows the value of wetlands. We seem to keep forgetting this.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Carol Ballou
418 Hedgehog Hill Rd N
Belmont, VT 05730-9774

From: National Wildlife Federation Action Fund on behalf of Chris Grimley
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 11:14:17 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please make sure that you're not doing the same crap as with New Orleans and the Mississippi Delta. What are you guys trying to do? Vuck the whole country into money for big corporate interests? Do you think that's being patriotic?

Sincerely,

Mr. Chris Grimley
52 Shannon Dr
North Wales, PA 19454-4031

From: National Wildlife Federation Action Fund on behalf of Maureen Cleveland-Ryan
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:14:48 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

It is vital that we begin to see the natural and ecological wisdom of using wetlands and protecting those environments and its species to correct the challenges that our changes to the environment have caused. Thank you for saving the environment, essential wildlife balance, and money by using this wisdom to achieve the balance that is needed.

Sincerely,

Ms. Maureen Cleveland-Ryan
80 Austin Dr Apt 131
Burlington, VT 05401-5480

From: National Wildlife Federation Action Fund on behalf of Patricia Abbott
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:52 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

I'm sure that in doing good projects that you can also make sure that you do not harm to the environment and wildlife.

Sincerely,

Ms. Patricia Abbott
264 Ponce De Leon St
Royal Palm Beach, FL 33411-1158

From: National Wildlife Federation Action Fund on behalf of susan rudnicki
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:14:59 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

As a well-read citizen, I am aware of the great re-examination going on nationally regarding our traditional approach to flood control and planning. We must move away from rigid, human designed channel structures with their tendency over time to increase serious problems, and refer more to the ecological models seen in nature which perform services that build and maintain the environment.

The Army Corps has admitted as much in regard to some of the failures seen with the flooding this Spring along the Mississippi. Use the knowledge gained from this and stop trying to "build your way out of the problem."

The Army corps should develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions, which will work in concert with Nature.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. susan rudnicki
804 5th St
Manhattan Beach, CA 90266-6649

From: National Wildlife Federation Action Fund on behalf of Mary Vermeulen
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 10:44:31 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please do not make the same mistakes the the Corps made along the Mississippi River.

Sincerely,

Dr. Mary Vermeulen
44 Overlook Rd
Waynesboro, VA 22980-6533

From: National Wildlife Federation Action Fund on behalf of Larry Manter
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:50 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The fact that it's even being considered is the real crime here, not what would happen if it's implemented (altho some people will burn in hell for that one if it comes to pass). We simply CANNOT surrender any more of our wilderness areas for almost ANY purpose - it's just not RIGHT!

Sincerely,

Mr. Larry Manter
1601 Whitehall Ct
Wheeling, IL 60090-6905

From: National Wildlife Federation Action Fund on behalf of Elizabeth Werner
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:14:39 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

□1.7 billion is a hefty sum. Surely, you can come up with a better and less costly solution for the longtime run.

Sincerely,

Mrs. Elizabeth Werner
1079 North Rd
Shelburne, NH 03581-3212

From: National Wildlife Federation Action Fund on behalf of Pat Musick
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:49 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

Wetlands are natural flood control that has been part of intact ecosystems for millennia. I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Pat Musick
10 Studio Pl
Colorado Springs, CO 80904-4417

From: National Wildlife Federation Action Fund on behalf of Claire Schram
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:14:31 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please work to create a plan that will both restore critical wetland areas and mitigate flooding at the same time.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Claire Schram
4251 S Washington St
Englewood, CO 80113-4757

From: National Wildlife Federation Action Fund on behalf of Barbara J. Nekola
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 10:44:06 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Year after year and decade after decade our country's environment and wildlife are being destroyed and eliminated. I have been so fortunate to enjoy both in my three quarters of a century of life. Younger and young Americans may not have that same opportunity. How sad. It is not too late to rectify this - yet.
Barbara J. Nekola

Sincerely,

Ms. Barbara J. Nekola
603 Houston Acres
Millsboro, DE 19966-1626

From: National Wildlife Federation Action Fund on behalf of Heather Sheets
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:15:32 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Wetlands provide a vital role in nature and in not only providing habitat for many waterfowl but also in holding soil and acting as a filter to clean water.

Sincerely,

Ms. Heather Sheets
16171 285th Rd
Cantril, IA 52542-8015

From: National Wildlife Federation Action Fund on behalf of Paula Powers
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:14:20 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

You only have to look to what happened to the everglades when the army corps of engineers drained the swamp and put in canals to spur development here in Florida, or to look at the changing of the course of the Mississippi river to keep it in a set basin-wetlands destroyed, animals displaced, and, with recent floods, it didn't work too well did it? Please stop messing with nature and leave well enough alone-the environment doesn't exist for us to change it to suit our needs, it exists so that all animals and plants can survive to the enrichment of all.

Sincerely,

Ms. Paula Powers
172 SE 30th Ave
Boynton Beach, FL 33435-8235

From: National Wildlife Federation Action Fund on behalf of D Rhew
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:46 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

We've been down this path in many other places and it's the wrong thing to do.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. D Rhew
405 Hilgard Ave
Los Angeles, CA 90095-9000

From: National Wildlife Federation Action Fund on behalf of Waimea Williams
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:14:25 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

"Just construct a ditch," to solve a problem belongs to the kind of 19th-century thinking that advocated, "Just build a railroad" to get something done. The Army Corps seems caught in this outdated reaction that ignores both expense and environmental impact. So far, a 50□ loss of wetland habitat is a severe blow to any native species, and "constructing a ditch" will aggravate the situation considerably. .

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Waimea Williams
45-539 Pahia Rd
Kaneohe, HI 96744-3318

From: National Wildlife Federation Action Fund on behalf of Jerry Smith
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 10:43:48 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

WHEN PLANNING, ALWAYS REMEMBER: "DUCK, DUCK, GOOSE..." !!!

Sincerely,

Mr. Jerry Smith
5041 Saxon Way
Eugene, OR 97405-3596

From: National Wildlife Federation Action Fund on behalf of Jennifer Heuchert-Mason
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:15:23 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. This proposed plan seems to be a disaster waiting to happen. Have we learned nothing from past, similar proposals that are now causing flooding across the States?

Sincerely,

Mrs. Jennifer Heuchert-Mason
15 Kimball Dr
New Britain, CT 06051-3338

From: National Wildlife Federation Action Fund on behalf of Jay Erb
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:44:31 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Our nation can't fight nature and engineer our way to happiness, we need to use our knowledge of nature to build long term environmentallt sound plans.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Jay Erb
1153 Temple Rd
Pottstown, PA 19465-7360

From: National Wildlife Federation Action Fund on behalf of Anne Geraghty
To: Snyder, Aaron M MVP
Subject: Nature knows best
Date: Thursday, June 16, 2011 10:14:53 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Every year as a high school biology teacher I go over the benefits of wetlands with my student: mitigation of floods and droughts, filtering of water, erosion prevention, important wildlife habitat for residents and migrants, etc

I'd like you to consider the benefits of wetland restoration vs. further channeling of the Red River. In these tough economic times, it makes more sense than ever to do something less expensive with a more satisfactory outcome.

Sincerely,

Ms. Anne Geraghty
1709 Donald Ave
Eau Claire, WI 54701-4714

From: National Wildlife Federation Action Fund on behalf of Charlotte Pisoni
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:14:20 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. With the flooding now occuring along the Missouri River due to the Army Corps of Engineers holding back water behind dams and now having to release all of this water it is obvious that there needs to be better understanding of the flooding caused by poor policies. Your destroying wetlands in my estimation is the wrong way to go.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Charlotte Pisoni
930 Peace Haven Dr
Saint Louis, MO 63125-5064

From:	National Wildlife Federation Action Fund on behalf of William Kavanagh
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Thursday, June 16, 2011 4:13:45 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Enough Is Enough!

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. William Kavanagh
710 S Oak Park Ave
Oak Park, IL 60304-1216

From: National Wildlife Federation Action Fund on behalf of Arthur Chan
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:14:14 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please give preserving our ecology your utmost priority. When our wildlife is gone, they and their crucial roles in our environment are gone.

Sincerely,

Mr. Arthur Chan
3727 Northridge Dr
Concord, CA 94518-1646

From: National Wildlife Federation Action Fund on behalf of Linda Cox
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 10:14:01 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Man has not done a good job "improving" on the flood control provided by nature. Flood plains - real ones - are wet lands and grassland - we need to learn from nature in order to work with her.

Sincerely,

Ms. Linda Cox
1073 Greenwood Ln
Lewisville, TX 75067-5304

From: National Wildlife Federation Action Fund on behalf of Laurel Strassberger
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:15:22 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I'd like to speak in defense of natural wetlands and their part in absorbing floodwaters as well as nurturing wildlife.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Laurel Strassberger
714 Regester Ave
Baltimore, MD 21212-1918

From: National Wildlife Federation Action Fund on behalf of Reed Glenn
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:15:37 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Wetlands are extremely important habitats that insure the health of wildlife and ultimately the planet!

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Reed Glenn
1365b Bear Mountain Dr Apt B
Boulder, CO 80305-6208

From: National Wildlife Federation Action Fund on behalf of Michael Schmotzer
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:13:31 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. We have seen over and over again that engineering the Mississippi River has created more problems; not solved them. We need to restore natural buffer zones to absorb the river; not channel it. Yes, that will affect many people; but so do the failed channelled rivers.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Michael Schmotzer
751 Hillcrest Rd
York, PA 17403-4111

From: National Wildlife Federation Action Fund on behalf of Franziska Wittenstein
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:45:18 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

As someone who raises waterfowl, this issue is near and dear to my heart. I am all too aware of waterfowl habitat loss as well as inbreeding that is harming the species more and more as their numbers steadily fall. It is of the utmost importance to preserve these incredible animals for future generations. Despite what most of us seem to think, humans are not the most important species on this planet. Rather, each individual species, and each individual member of each individual species, has its own important role to play in the Earth's ecosystems, and no role is any less vital or important than another. Each species that we lose is a dire loss and causes untold destruction in our world.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Franziska Wittenstein
PO Box 570
Woodacre, CA 94973-0570

From: National Wildlife Federation Action Fund on behalf of Vic Anderson
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:44:43 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Better yet, reassert 404 regulatory authority over these "isolated" wetlands since filled, their displaced water affects interstate commerce by FLOODING the ENTIRE DOWNSTREAM WATERSHED in/to the Territorial Seas with fill material POLLUTANTS!

Sincerely,

Mr. Vic Anderson
1999 Bradbury Rd
Winter Haven, FL 33880-5225

From: National Wildlife Federation Action Fund on behalf of Bruce Traficante
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:29 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

It is our duty as protector of these rivers to keep them flowing for all wild life, before its too late.

Sincerely,

Mr. Bruce Traficante
220 Castro St
San Francisco, CA 94114-1519

From: National Wildlife Federation Action Fund on behalf of toby dolinka
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:15:18 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Wetlands are so very important for the well-being of the planet. They are the well-spring of new and sustainable life.

Sincerely,

Ms. toby dolinka
1720 Conlon Ave SE
Grand Rapids, MI 49506-4785

From: National Wildlife Federation Action Fund on behalf of Thomas Knecht
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:15:36 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please do the right thing for wildlife and for the environment - that's in our best interest too, in the long run.

Sincerely,

Dr. Thomas Knecht
5671 Merriewood Dr
Oakland, CA 94611-2134

From: National Wildlife Federation Action Fund on behalf of Ruth Hosek
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:13:26 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

All the signs are there - wetlands are needed not a more expensive and potentially disastrous solutions. Thinking smaller can show caring and understanding and intelligence. The evolution of the environment was in increments. Leave the big machinery in the barns.

Sincerely,

Mrs. Ruth Hosek
415 S Adeline Ave
Addison, IL 60101-4401

From: National Wildlife Federation Action Fund on behalf of Goldy Schlegel
To: Snyder, Aaron M MVP
Subject: Please don"t destroy wetlands..Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:24 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Proper wetland management is essential for effective flood control. By protecting the wetlands we not only protect the many wildlife species we share the earth with, but we ultimately protect our own homes, livelihoods and natural resources. So I like to urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Goldy Schlegel
PO Box 1954
Joshua Tree, CA 92252-0859

From: National Wildlife Federation Action Fund on behalf of Bev Griffiths
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:45:00 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Preserving these wetlands is important considering the American Wideon and other waterfoul have lost over 50□ of their wetland habitat to crop productionin the Prairie Pothole region. Please don't take this lightly.

Sincerely,

Mrs. Bev Griffiths
7201 Alafia Ridge Rd
Riverview, FL 33569-4771

From: National Wildlife Federation Action Fund on behalf of David Brown
To: Snyder, Aaron M MVP
Subject: proposed Red River diversion channel
Date: Thursday, June 16, 2011 4:13:45 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed channel to divert Red River flows around Fargo and Moorhead and instead to evaluate less expensive, longer-term solutions.

As a descendant of the European immigrants who displaced the people and animals living in harmony with the land and who have so badly damaged those lands in their egotistical attempt to impose their will over Nature, I'd prefer to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project like the proposed Red River diversion channel, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water-retention systems.

Sincerely,

Mr. David Brown
2445 SW 87th Ave
Portland, OR 97225-4005

From: National Wildlife Federation Action Fund on behalf of Russell Rivenburg
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:44:39 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

II CHRONICLES 35:21 (THE BIBLE): FORBEAR THEE FROM MEDDLING WITH GOD,..., THAT HE DESTROY THEE NOT.

Sincerely,

Mr. Russell Rivenburg
1716 NW 5th St
Chiefland, FL 32626-1715

From: National Wildlife Federation Action Fund on behalf of Judith DiNardo
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:15:01 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. Admired throughout the country as North America's "duck factory," the Prairie Pothole Region sweeps across five Midwestern states into Canada, providing habitat for the American Wigeon and more than 50□ of North America's annual production of migratory waterfowl. But unfortunately, over the past century, more than half the U.S.'s prairie potholes, including those of North Dakota and Minnesota's Red River Basin, have been drained for crop production.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Judith DiNardo
3683 Silvercrest Dr
Stow, OH 44224-3259

From: National Wildlife Federation Action Fund on behalf of Betty A Sabo
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 2:45:46 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Have we learned nothing from the disaster in the wake of Katrina? The destruction of the wetlands there added to this tragedy. Don't make the same mistakes here.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Betty A Sabo
3137 Palmdesert Way
Las Vegas, NV 89120-3460

From: National Wildlife Federation Action Fund on behalf of claudia freeman
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:15:30 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. For the last few decades, it has been disicovered just how much work wetlands do, and how much money they save while doing a better job, at several things besides widgeons. (Check archives of Rocky Mountain Institute.)

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. claudia freeman
116 masonic
Port Hadlock, WA 98339-9599

From: National Wildlife Federation Action Fund on behalf of Richard Van Aken
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:13:25 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Preserving or creating wetlands is a winning policy for both people and wildlife the science says it's so. Besides that we've been down this road of diversion canals and other detrimental engineering projects that have turned out badly elsewhere like the Everglades or New Orleans.

Sincerely,

Mr. Richard Van Aken
68 Murray Rd
Holland, PA 18966-1740

From: National Wildlife Federation Action Fund on behalf of Karen Ray
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:44:54 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

I urge you to develop a flood plan that doesn't drain the wetlands habitat vital to the American Wigeon and other waterfowl.

Sincerely,

Miss Karen Ray
4170 Conner Ct
San Diego, CA 92117-4301

From: National Wildlife Federation Action Fund on behalf of Deni Albrecht
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:44:03 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

Although I live in Northern California, I have several family members who live in South Dakota, Minnesota □Nebraska. Naturally I want my family members to be protected with the best plan available. As a wildlife enthusiast, I would like to see a plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit both humans □wildlife, and would be a less-expensive strategy for protecting all communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Deni Albrecht
177 Valley View Dr
Auburn, CA 95603-5617

From: National Wildlife Federation Action Fund on behalf of Frank Polites
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:15:00 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Are you people crazy? I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Stop trying to kill the planet. Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Frank Polites
4701 Pennell Rd Apt J12
Aston, PA 19014-1827

From: National Wildlife Federation Action Fund on behalf of Carole Tebay
To: Snyder, Aaron M MVP
Subject: Red River basin
Date: Friday, June 17, 2011 10:12:10 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

We need an alternative plan for the Red River Basin that does not cause further habitat destruction. Re-establishing the wetlands whicht would offer communities protection from flooding and be significantly less expensive--and reestablish habitats for the American Wigeon and other waterfowl.

Sincerely,

Mrs. Carole Tebay
4525 River Ranch Rd
Milton, FL 32583-3226

From: National Wildlife Federation Action Fund on behalf of James Roberts
To: Snyder, Aaron M MVP
Subject: Restore wetlands for flood control in the Red River basin
Date: Sunday, June 19, 2011 11:44:59 AM

Jun 19, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I am an avid birdwatcher and waterfowl are among many of my favorites. There has been an alarming loss of seasonal wetlands that these waterfowl depend on. I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions that would provide far more benefit to wildlife.

Please develop an alternate plan that evaluates the use of wetland and grassland restoration as the primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

I believe the Corps has been guilty in the past of developing huge and expensive projects that damage the environment, and I know the Corps has been trying to do better. Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. James Roberts
215 S Ellis St
Palouse, WA 99161-8700

From: National Wildlife Federation Action Fund on behalf of Laura C. Mcintyre
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:44:24 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

An environmentally safe alternative to costly flood control exists. Please consider using wetland and grassland restoration for flood management.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Laura C. Mcintyre
106 Taft Ter
Sykesville, MD 21784-9754

From:	National Wildlife Federation Action Fund on behalf of Gale Heringer-Brock
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Thursday, June 16, 2011 9:44:03 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

We need to create a win win situation for people and wildlife that doesn't cost an arm and a leg and building a diversion channel around two cities isn't the solution. Historically wetland have absorbed flood waters enriching the soil and purifying the water as it drains. Give nature a chance.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Gale Heringer-Brock
1275 Cedar St
Palo Alto, CA 94301-3405

From: National Wildlife Federation Action Fund on behalf of Natalie H Reed
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:36 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. DON'T SPEND ENORMOUS MONEY WE DON'T HAVE!!!

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.THINK CLEARLY!PROTECT OUR ENVIRONMENT AND
OUR CREATURES□OUR LIVES□OUR WORLD BEFORE IT IS TOO LATE!
SINCERELY, NATALIE REED □FRIENDS THROUGHOUT OUR WORLD!

Sincerely,

Ms. Natalie H Reed
2638 Sutter St
Carlsbad, CA 92010-7904

From: National Wildlife Federation Action Fund on behalf of Joel Mulder
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:14:51 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you not to divert Red River flows around Fargo and Moorhead.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an ill-conceived, ill-timed and environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Joel Mulder
4312 29th Ave W
Seattle, WA 98199-1447

From: National Wildlife Federation Action Fund on behalf of Janet Thew
To: Snyder, Aaron M MVP
Subject: save wetlands and money on the Red River
Date: Friday, June 17, 2011 1:44:07 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Why on earth would you spend billions on a big, ugly ditch when we now all know the value of protected wetlands for flood protection? Time to join the 21st century, USACE.

Sincerely,

Ms. Janet Thew
5572 W Saint Francis Cir
Loomis, CA 95650-7917

From: National Wildlife Federation Action Fund on behalf of Kim Lines
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:43:41 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please, this makes all the sense in the world and everyone ends up being a winner. Do the right thing here and improve an area instead of despoiling it.

Sincerely,

Ms. Kim Lines
4631 NW 31st Ave
Ft Lauderdale, FL 33309-3433

From: National Wildlife Federation Action Fund on behalf of Michael Poland
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:14:51 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As we face serious flooding disaster on the Mississippi due to our flawed practices in "flood control", I believe that we should consider restoring wetlands as nature's design works better than any human engineering project, and in the process, protects the ecosystems (as well as our communities closest to the rivers!) better

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Michael Poland
109c Calle Bucare Apt 4a
San Juan, PR 00913-4829

From: National Wildlife Federation Action Fund on behalf of Anne Sims
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:15:10 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please do not destroy any more habitat for our migratory birds.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Anne Sims
10412 Vistadale Dr
Dallas, TX 75238-1631

From: National Wildlife Federation Action Fund on behalf of Catherine Justis
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:43:45 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

In my work, I educate students all over my city about our local Wolf River and the problems wrought by past channelization. I especially emphasize the contrast between the channelized lower river and the unchannelized upper Wolf with its vast, relatively unspoiled wetlands. They are full of wildife, of course, but they also naturally slowed and absorbed the recent severe floods in this area. In the upper Wolf, the floodplain was able to function as it should; it was the lower Wolf, with its downcut river bed, its drained wetlands, and its dyfunctional floodplain - where the flooding was most problematic. Wetlands have many values and protection from floods is one of them. And this is widely recognized by nearly everyone, as demonstrated, for example, by the Wetlands Reserve Program.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Catherine Justis
3754 Philwood Ave
Memphis, TN 38122-4643

From: National Wildlife Federation Action Fund on behalf of David Rudin
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 7:13:49 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

We are living through unprecedented times in terms of climate change and the rate of species facing extinction. Each project and the alternatives that are weighed , are key for the survival of numerous species.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. David Rudin
3620 Saint Charles St
Colorado Springs, CO 80904-1324

From: National Wildlife Federation Action Fund on behalf of Andrea Bowen
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:14:28 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

PLEASE DEVELOP AN ALTERNATIVE SOLUTION AND RESTORE THE GRASSLANDS AND WETLANDS FOR FLOOD MANAGEMENT.

Sincerely,

Ms. Andrea Bowen
403 Dakota St
Lawrence, KS 66046-4715

From: National Wildlife Federation Action Fund on behalf of Christine Kohr
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 9:45:32 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

We are all called to be stewards of our environment and its resources. This includes protection of our natural habitat.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Christine Kohr
554 Lexington St
Waltham, MA 02452-3029

From: National Wildlife Federation Action Fund on behalf of Claudia Hall
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:44:35 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

It amazes me, that educated humans "Think" they are smarter than Nature. When wetlands were formed, Naturally, there was a reason. Then man decided, he needed to change, remove, alter wetlands that are older than man's age. Next, people appear, continually, surprised when water finds its natural path, which it has used for millions of years. Wetland's survive many NEEDED PURPOSES!!!! They allow the wildlife, older than man, to exist □when, properly respected, actually, stop or lessen flooding.

Please, respect our land □ALL of its inhabitants.

Thank You, for reading my comments.

Light,Life,Respect,□Peace,Claudia
Claudia Hall
14865 SW Osprey Dr. □813
Beaverton, Oregon 97007
aliceforest@comcast.net

Sincerely,

Mrs. Claudia Hall
14865 SW Osprey Dr Apt 813
Beaverton, OR 97007-7961

From: National Wildlife Federation Action Fund on behalf of Deborah Filipelli, Ph. D.
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:44:30 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

The following represents my position in strong opposition to the Army Corps of Engineer's proposed flood control plan for the Red River that will be a 1.7 billion, 36 mile-log, 100 yard-wide diversion channel.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Deborah Filipelli, Ph. D.
PO Box 341
The Sea Ranch, CA 95497-0341

From: National Wildlife Federation Action Fund on behalf of J Kristin Hedges
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:14:15 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

We in the U.S. depend on the health and restoration of foreign ecosystems, for our own health. We depend on the oxygen from rain forests in South America and elsewhere; on the health of marine life around the globe; and on the birds of all nations which are collectively necessary for the health of forests and of marine habitat both of which in turn are necessary for climate stability, and so on.

We cannot ask the rest of the world to preserve/restore habitat if we here in the U.S. don't do our part.

Now, in developing a plan for flood damage reduction in the whole Red River basin by restoring wetlands and grasslands, we have a chance to address a severe local problem and also do our part in an international effort to preserve/restore the health of ecosystems.
Because these are my views, I adopt the message below in its entirety, as my own:
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I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. J Kristin Hedges
614 E Capitol St NE Apt 1
Washington, DC 20003-1239

From: National Wildlife Federation Action Fund on behalf of Jamie Silva
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 9:15:11 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

After all the news of how the Army Corps of Engineers created faulty levees fo Louisiana and California here is a chance to do the right thing.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Jamie Silva
1304 Shafter Ave
Pacific Grove, CA 93950-5529

From: National Wildlife Federation Action Fund on behalf of Larry Yox
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:44:03 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I am an avid birder so my focus on problems is oriented to the protection of their habitats. When I see a problem where the solution is beneficial for both wildlife and human interests, I like to make that solution known. Therefore, I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Larry Yox
5176 S Kings Ranch Rd
Apache Jct, AZ 85118-3318

From: National Wildlife Federation Action Fund on behalf of Janet Remington
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 7:41:26 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please include the following among the public comments for the Corps of Engineers proposed project for diverting the Red River.

The vast prairie potholes are a historic stretch of water and grasses created by nature and serving millions of waterfowl and wading birds. Their waters and grasses have long needed restoration. If the purpose of this project is to control floods, then restoring these potholes would be a vastly less expensive, less visually destructive, and environmentally more desirable alternative than diverting the Red River. You haven't listed this alternative in your proposal. Restoring the prairie potholes should be an alternative, and, in fact, the alternative you choose.

Thank you.

Janet Remington
Costa Mesa, California

Sincerely,

Ms. Janet Remington
1164 Boise Way
Costa Mesa, CA 92626-2704

From: National Wildlife Federation Action Fund on behalf of Norman Morley
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:14:06 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Diversion isn't the answer if it calls for digging a ditch. Nature always returns to its original ways. Destroying natures way for short sighted solutions of man, are just blueprints for failure down the road. Besides, the low bidder will get the contract who will then cut corners to increase his/hers profit.

Sincerely,

Mr. Norman Morley
1440 Amador St Apt 3
San Pablo, CA 94806-4052

From: National Wildlife Federation Action Fund on behalf of Lew Sikes
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 1:15:26 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

The floods we've experienced along the Missouri River has proven the folly of channelization.I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions like wetlands.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Lew Sikes
PO Box 122
Grapeview, WA 98546-0122

From: National Wildlife Federation Action Fund on behalf of Mike Alexander
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 8:45:46 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

These animals have a right to live in their natural habitat without us taking them out. They have a say in this as well since they're part of this planet. All they want to do is live and raise their young and we're not helping matters any.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Mike Alexander
PO Box 295
Augusta, ME 04332-0295

From: National Wildlife Federation Action Fund on behalf of Ann Pabian
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:36 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

There are less expensive and superior plans. Other flood plan strategies for the Red River Basin include re-establishing more than 350,000 acres of wetlands that would offer communities protection from flooding and be significantly less expensive--while also re-building habitats for the American Wigeon and other waterfowl. I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

The American Wigeon and other waterfowl have lost over 50□ of their wetland habitat to crop production in the Prairie Pothole region of the United States, an area that includes the Red River.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Ann Pabian
PO Box 6241
Oceanside, CA 92052-6241

From: National Wildlife Federation Action Fund on behalf of Janet Swartz
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:43:13 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

If we can benefit both wildlife and protect human property this could be a win win situation

Sincerely,

Mrs. Janet Swartz
201 Logan Rd
Mansfield, OH 44907-2814

From: National Wildlife Federation Action Fund on behalf of Larry Blood
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 9:13:52 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

It would have helped on the Louisiana coast if we hadn't weakened the coastal wetlands, and wetlands can similarly help alleviate river flooding.

Sincerely,

Mr. Larry Blood
128 Anderson St
Santa Cruz, CA 95060-5808

From: National Wildlife Federation Action Fund on behalf of Rick Siegfried
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 1:15:24 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Choose the health and well-being of our only planet and its inhabitants over greedy corporate interests. Stop the greedy, fascist, right-wing war against the poor, the middle class, the elderly, the disabled, and our only planet. Revolution is brewing.

Sincerely,

Mr. Rick Siegfried
2125 18th St
Eureka, CA 95501-2638

From: National Wildlife Federation Action Fund on behalf of Suzanne Schwinn
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:34 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Breechable levees would be a good idea.

Sincerely,

Ms. Suzanne Schwinn
811 W Kennicott St
Carbondale, IL 62901-1236

From: National Wildlife Federation Action Fund on behalf of Kate Kenner
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:15:00 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

When making plans it is important to consider other species besides ourselves. Everything we do has an impact of the animals and areas around us. I hope you will take this into consideration and plan an alternative to the proposed diversion channel that is already planned.

Sincerely,

Ms. Kate Kenner
31 Woodman St
Jamaica Plain, MA 02130-3801

From:	National Wildlife Federation Action Fund on behalf of Patricia Smith
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Thursday, June 16, 2011 8:44:50 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Wetlands are so important to native wildlife, and they are disappearing at a staggering rate. We must act judiciously to prevent the loss of any more wetlands.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Patricia Smith
6860 Woodgate Ct
Colorado Springs, CO 80918-4634

From: National Wildlife Federation Action Fund on behalf of Lora Zeis
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 1:15:23 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Let us teach our children by example to conserve our wildlife and resources on this Earth. Please do everything in your power to use wetland restoration for this project. Thank you for your time in this matter.

Sincerely,

Ms. Lora Zeis
230 Betral St
Houston, TX 77022-1541

From: National Wildlife Federation Action Fund on behalf of Ann K Brady
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 8:45:34 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, and a Minnesota resident, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. My in-laws live in Fargo and face yearly flooding risks. My brother-in-law and his colleagues in the Air Reserves spend countless hours sandbagging around the Red River every year to prevent flooding. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. It would protect wildlife, restore habitat, and prevent yearly panic in flood-prone communities. Presently, we divert military reserve members to flood duty at great expense. This wasteful spending and inconvenience could be prevented by restoration of wetlands.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Ann K Brady
1238 Thomas Ave
Saint Paul, MN 55104-2540

From: National Wildlife Federation Action Fund on behalf of Christopher Straub
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 8:15:36 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Am not sure why the insurance companies are against draining this natural flood control area. It also is part of the aquifer and climate of the region. Leave it as it is and save money now and later.

Sincerely,

Mr. Christopher Straub
706 Emerald Rdg
Woodstock, GA 30189-5180

From: National Wildlife Federation Action Fund on behalf of Brenda Troup
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:45:52 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Be efficient with money, and mindful of wildlife, and use the natural systems that have been sustainable for centuries.

Sincerely,

Mrs. Brenda Troup
21 Meadow Rd
Bolton, MA 01740-1119

From: National Wildlife Federation Action Fund on behalf of Dwayne Hinton
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 8:14:58 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Wouldn't it be nice, just once, for Americans to not destroy everything they possibly can? I know it would be a nice change to the constant pollution and destruction.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions. Sometimes, looking farther ahead is a good thing. Let's be honest - it's ALWAYS a good thing.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Dwayne Hinton
2503 Torrey Pine Dr
Baton Rouge, LA 70816-1073

From:	National Wildlife Federation Action Fund on behalf of Carol Hatfield
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 8:14:41 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, and an American deeply concerned with the good health of my country, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please always put the health of our land, water, air, and wildlife first.This, in turn, protects the good health of us all.

Thank you.

Sincerely,

Ms. Carol Hatfield
2306 Lawrence Ave
Indianapolis, IN 46227-8636

From: National Wildlife Federation Action Fund on behalf of Patti Higgins
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 7:45:19 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please make it right and restore the wetlands. We need them everywhere!

Sincerely,

Ms. Patti Higgins
5014 Gertrude St
Pittsburgh, PA 15207-1654

From:	National Wildlife Federation Action Fund on behalf of Carla Valente
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 6:14:36 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please "stop and smell the roses." Look at these beautiful winged-ones. Mother Nature. Observe. Preserve. (All rights reserved 2011. Copious U.S.A.).

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Carla Valente
15 Broadbridge Rd
Baltimore, MD 21237-1558

From: National Wildlife Federation Action Fund on behalf of Michael Bull
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 5:44:38 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Admired throughout the country as North America's "duck factory," the Prairie Pothole Region sweeps across five Midwestern states into Canada, providing habitat for the American Wigeon and more than 50□ of North America's annual production of migratory waterfowl.

It is my understanding that over the past century, more than half the U.S.'s prairie potholes, including those of North Dakota and Minnesota's Red River Basin, have been drained for crop production.

In years with exceptionally heavy snows or spring rains, the Red River swells and catastrophic floods result. This flooding is exacerbated by the drainage of thousands of prairie wetlands, which once soaked up thousands of acre feet of water that have now been ditched for agricultural production. To me, this seems undeniably counterproductive.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Michael Bull
3534 Phelps Rd
West Suffield, CT 06093-2922

From: National Wildlife Federation Action Fund on behalf of John Witte
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:43:55 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Stop fucking with nature! Better that you develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead. So I want you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Dr. John Witte
4855 SE Tenino Ct
Portland, OR 97206-0848

From: National Wildlife Federation Action Fund on behalf of Raymond Bilodeau
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:43:51 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, not to mention subject to rarely-occurring events that show their futility against what nature can throw at us. I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems that work with nature, not in a useless effort to prove man is superior to nature. There is not enough money to available for a project to do that in the time available.

Sincerely,

Mr. Raymond Bilodeau
PO Box 93
Worcester, MA 01613-0093

From: National Wildlife Federation Action Fund on behalf of Patricia Brech
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:43:39 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please do not make the same mistake in the Midwest as was made in the Gulf region by destroying wetlands.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Patricia Brech
5813 Richardson Mews Sq
Baltimore, MD 21227-4291

From: National Wildlife Federation Action Fund on behalf of Amy Webb
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:15:15 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

A future for the wildlife living in this area creates a better future for all of us. Thank you for your time and consideration.

Sincerely,

Ms. Amy Webb
355 Calls Hill Rd
Dresden, ME 04342-3668

From:	National Wildlife Federation Action Fund on behalf of Debora Ghoreyeb
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Thursday, June 16, 2011 6:15:05 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please consider the impact on the wildlife rather than what is expedient or "cost effective".

All life is sacred.

Sincerely,

Miss Debora Ghoreyeb
76 Shenandoah Trl
Santa Fe, NM 87508-3611

From: National Wildlife Federation Action Fund on behalf of Phillip J Crabill
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:34 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please think of the lives of future generations and don't destroy the environment they need to enjoy!!

Sincerely,

Mr. Phillip J Crabill
430 Copperas Trl
Highland Village, TX 75077-7256

From: National Wildlife Federation Action Fund on behalf of Larry Lambeth
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:15:03 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Nature had it right with oxbows, small ponds and wetlands to retain and slow runoff. I urge you to stop the proposed diversion channel to divert Red River flows around Fargo and Moorhead by creating less expensive, longer-term solutions.

I support an alternate plan that uses wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a better and less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. Protect property and increase wildlife habitat and water quality with restoration instead of another "big ditch."

Sincerely,

Mr. Larry Lambeth
2635 W Alta St
Springfield, MO 65810-1308

From: National Wildlife Federation Action Fund on behalf of Charles Toll
To: Snyder, Aaron M MVP
Subject: A cheaper and easier flood control option in the Red River basin
Date: Friday, June 17, 2011 12:15:04 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to consider Florida before moving ahead with the proposed channel to divert Red River flows around Fargo and Moorhead.

Here in Florida, we are now restoring wetlands and savannahs as a major flood management tool--in the process retaining critically needed fresh water supplies. Restoring wetlands benefits wildlife while protecting communities from flooding. It is not only a less expensive solution but one that benefits all who love to hunt--or even just observe nature recreationally.

Before investing time, money and effort in an environmentally destructive project, explore the potential for wetland restoration and other non-structural water retention systems to solve your problems.

Sincerely,

Mr. Charles Toll
665 Wall St
Vero Beach, FL 32960-5144

From: National Wildlife Federation Action Fund on behalf of Robert McCombs
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:15 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Putting water in channels rather than letting it spread to be absorbed and deposit soil-building silt is a mistake. I'd have thought that you'd have learned that by now.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Robert McCombs
PO Box 4175
Arcata, CA 95518-4175

From: National Wildlife Federation Action Fund on behalf of Jeannette Hassberg
To: Snyder, Aaron M MVP
Subject: Alternative Flood Control in the Red River basin
Date: Thursday, June 16, 2011 5:13:22 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

The proposed plans for a diversion channel which seeks to divert Red River flows around Fargo and Moorhead are deeply flawed. Please evaluate less expensive, longer-term solutions.

An alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management could be put into place restoring hundreds of thousands of acres for the benefit of wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please look into these measures which rely on the "precautionary principle" and work constructively with natural processes. The fabric of life depends on it!

Sincerely,

Ms. Jeannette Hassberg
52 Majestic Ave
San Francisco, CA 94112-3110

From: National Wildlife Federation Action Fund on behalf of Richard Norman Talley
To: Snyder, Aaron M MVP
Subject: Alternative for Flood Control in the Red River Basin
Date: Sunday, June 19, 2011 9:45:28 AM

Jun 19, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. One of the main benefits of wetlands is their ability to act as sinks for excess water.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Richard Norman Talley
2610 Urbana Dr
Silver Spring, MD 20906-5029

From: National Wildlife Federation Action Fund on behalf of Jan Tullis
To: Snyder, Aaron M MVP
Subject: Alternative Red River flood control is needed
Date: Friday, June 17, 2011 7:44:33 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I am writing to tell youi that I strongly disagree with your proposed flood control project for the Red River. You need to develop an alternative to the proposed diversion channel, that would divert Red River flows around Fargo and Moorhead, and evaluate less expensive, longer-term solutions.

As a geologist and a wildlife enthusiast, I believe you should develop an alternate plan that uses nature's flood control; it would make far mroe sense to restore wetlands and grasslands as a primary tool for flood management. Restoring hundreds of thousands of acres would be less expensive, and would benefit wildlife as well as protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. The Army Corps has undertaken hugely expensive and ultimately counter-productive projects before, and then had to un-do them. Please take the time to think and plan ahead in this instance; utlize the expertise of biologists and geoscientists as well as engineers.

Sincerely,

Dr. Jan Tullis
21 Laurel Ave
Providence, RI 02906-3328

From: National Wildlife Federation Action Fund on behalf of Lawrence F Smith
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:14:51 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

We live downstream from the massive diking systems around Wilkes Barre and when the Susquehanna floods those of us downstream are flooded because waters are diverted away from the flood plains. Let nature do its own thing. Mankind 's tampering is not the answer. And a canal, like the Everglades canal- will just eventually have to be replaced when it doesn't work. History proved that right. The idea you propose is not the answer.

Sincerely,

Mrs. Lawrence F Smith
141 Greenwood Rd
Orangeville, PA 17859-9130

From: National Wildlife Federation Action Fund on behalf of Ann Wasgatt
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:47 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The city I live in has dealt with frequent floods to the point that Roseville, CA no longer has the floods we used to have. The city has been nationally recognized for its work controlling floods - without digging diversion channels or building levees. Wetland restoration has worked here - and the prairie pothole region certainly needs its wetlands restored.

Please investigate wetland and grassland restoration before doing anything as destructive as building a diversion channel.

Sincerely,

Mrs. Ann Wasgatt
308 Alta Vista Ave
Roseville, CA 95678-1702

From: National Wildlife Federation Action Fund on behalf of Susan Harman
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 2:14:19 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

How many more disasters do we need to wake us up? Nature knows best.

Sincerely,

Dr. Susan Harman
4114 39th Ave
Oakland, CA 94619-2206

From: National Wildlife Federation Action Fund on behalf of James A Carpenter
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 12:45:33 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

I'm sure you realize that once a wetland area is gone that it is a final step for that habitat and for the animals that live there. It is such a crucial area for peoples benefit (flood control, cleaning water) as well. Please think about all the reasons why the wetland areas should be restored.

Sincerely,

Mr. James A Carpenter
1122 Lincoln Ave
Pacific Grove, CA 93950-5405

From: National Wildlife Federation Action Fund on behalf of Gail Kilpatrick
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 5:41:22 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Please do not ignore the lessons that nature teaches, again. Wetlands are a natural way to control floods and save wildlife. The same as dunes and other natural barriers and configurations that we humans continue to destroy only to suffer the consequenses.

Sincerely,

Ms. Gail Kilpatrick
238 Elvan Ave NE
Atlanta, GA 30317-1353

From: National Wildlife Federation Action Fund on behalf of Nancy Lowell
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:10 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. Wetlands are Ma nature's way of subduing floods, and I know you guys know that. Don't be pushed or pressured. Please do the right thing.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Nancy Lowell
11717 North Dr
Tampa, FL 33617-1823

From:	National Wildlife Federation Action Fund on behalf of John Carter
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Thursday, June 16, 2011 4:14:46 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The solution is to let the rivers flood the farm land once in a while, or even every spring. This will SAVE MONEY and SAVE TOWNS and CITIES DOWNSTREAM, Saint Lewis, Memphis, Cape Jarado, Vicksburt, New Orleans, etc.

A REALLY DUMB IDEA so that a few AGRA-BUISNESSES get more □□□at the expense of cities and tax payers. Not to mention the wild life.

Sincerely,

Mr. John Carter
22118 W Spruce Dr
Antioch, IL 60002-9376

From: National Wildlife Federation Action Fund on behalf of Robert McArtor
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:45 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Our world is not just for humans, but flora and fauna has an absolute right of protection. Our might must be used to protect those species less able to protect themselves from the well meaning but unjust userpation of their habitat.

Sincerely,

Dr. Robert McArtor
2312 Blythe Rd
Wilmington, NC 28403-8012

From:	National Wildlife Federation Action Fund on behalf of Carolyn Pendle
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 2:14:18 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

I have seen the reductions in potholes and wetlands in this very area -- natural mechanisms for holding lots of water. Re-creation of a more natural solution is a logical solution.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Carolyn Pendle
5406 46th Ct NE
Olympia, WA 98516-6218

From: National Wildlife Federation Action Fund on behalf of Thomasin Kellermann
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 12:45:29 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

I AM NOT AN ENGINEER; I AM ONLY MAKING AN OBSERVATION AS AN AMERICAN CITIZEN. IT SEEMS THAT THE GOVERNMENT HAS A PREDILICTION FOR THOSE PROJECTS THAT ARE BOTH EXPENSIVE AND SOMEHOW "GLAMOROUS."

RESTORING WETLANDS SEEMS LIKE A COMMON-SENSE APPROACH THAT IS FAR LESS DESTRUCTIVE AND WILL COST FAR LESS MONEY.

THIS COURSE OF ACTION WILL TAKE MUCH MORE TIME TO SEE RESULTS, BUT WE THE PEOPLE ARE PATIENT. WE UNDERSTAND THAT RESTORING THE NATURAL FLOW OF ANY RIVER WILL HAPPEN ONLY ON NATURE'S TERMS.

Sincerely,

Ms. Thomasin Kellermann
76 Union St
Bristol, RI 02809-2118

From: National Wildlife Federation Action Fund on behalf of Christina Snyder
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:44:27 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Viable wetlands could bring tourism dollars to help boost the economy, too, though travel through wetland areas should be via craft or vehicles without fueled engines (silent electric ones okay), such that the wildlife that draw tourists aren't disturbed, and continue to proliferate. Wetlands will also help recharge underground aquifers, which we've been mining for irrigation water far faster than it can recharge. When the ancient underground water is gone, the breadbasket of America will become a dustbowl.

Sincerely,

Ms. Christina Snyder
11994 E Pleasant Lake Rd
Manchester, MI 48158-8502

From: National Wildlife Federation Action Fund on behalf of James Shelton
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:41 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

My Parents are visiting the Prarie now where my sister lives. I hope to see these migratory ducks one day too.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. James Shelton
811 Roehampton Ct
Richmond, VA 23236-3727

From: National Wildlife Federation Action Fund on behalf of John A. Ferguson
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 1:44:15 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Small lakes, seasonal ponds, meandering streams ans swamps all serve to slow the flow of rain water during heavy storms and are the best protection against flooding. A diversion channel only speeds the flow of water downstream and makes down stream flooding worse.

This year's flooding has shown all too clearly that upstream draining is the wrong approach and has only exacerbated the situation, It is time to learn to work with nature and not to channel our rivers and streams.

Sincerely,

Dr. John A. Ferguson
1151 Walnut St
Berkeley, CA 94707-2616

From: National Wildlife Federation Action Fund on behalf of Kirsten O"Brien
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 12:16:00 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

The safety of the American people in this region is also best served by restoring wetlands to naturally absorb floodwaters which, as recent events have shown yet again, are incredibly destructive to life and property. While we have engineered solutions to flooding, climate change has brought us to a point where such solutions no longer suffice, and difficult choices have to be made about which communities must be destroyed in a controlled release to prevent total destruction. The best possible solution is intelligent planning, integrating natural processes to protect human habitation with careful planning so that people stop attempting to develop high-risk areas, such as floodplains. Such development can only end in disaster.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Kirsten O'Brien
12487 Gold Hill Ln
Redlands, CA 92373-7486

From: National Wildlife Federation Action Fund on behalf of Emmett Sills
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:44:16 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

I would like to see the United States government stop looking at the destructive practices that are beneficial only to profits for large companies and very wealthy people and begin thinking more in terms of saving our wildlife and natural resources for future generations to enjoy.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Emmett Sills
5340 Copley Cir
Summerville, SC 29485-8787

From: National Wildlife Federation Action Fund on behalf of Judith Maron-Friend
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:45:29 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The less we interfere with what nature is doing the more nature will serve us. In nearly every instance, where we moved into areas and redesigned them to suit our needs without consideration for what is already naturally established, has proven to be disastrous. The levies in Louisiana are a prime example. That area was never meant to be developed to the degree that it has been. Do not create more potential destruction by recreating what nature has already provided. Instead find ways to coexist and sustain what is already in place.

Sincerely,

Mrs. Judith Maron-Friend
123 Abcd
Portland, OR 97220

From:	National Wildlife Federation Action Fund on behalf of James Johnson
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 11:12:26 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

With all the flooding along the Red River of late it makes me wonder if the truth of wetlands being a "shock absorber" for water flow patterns has been totally lost on you.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. James Johnson
7360 Woodshire Rd
Memphis, TN 38125-2752

From: National Wildlife Federation Action Fund on behalf of Michael Kitchen
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:12:23 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Let's do the smart thing this time. Let's restore nature back like it should be.

Sincerely,

Mr. Michael Kitchen
1310 Banbury Rd Apt C
Kalamazoo, MI 49001-4956

From: National Wildlife Federation Action Fund on behalf of Steve Druckr
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 10:12:10 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

YOU KNOW THIS IS NOT ABOUT SAVING ONE SPECIES. IT'S ABOUT SAVING THE WEB OF LIFE. YOU CAN BE A HERO FOR GOD'S CREATION. I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Steve Druckr
1691-320 St.
Sherrard, IL 61281-8503

From: National Wildlife Federation Action Fund on behalf of Janet Stafford
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 9:41:54 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I DON'T KNOW MUCH ABOUT THE WIGEON, BUT IT DOES NOT MATTER. THEY ARE A NATIVE OF THIS FINE COUNTRY, A NATIVE OF THE RED RIVER FLOWS, AND SHOULD BE PROTECTED AND ALLOWED TO REMAIN WHERE THEY CALL HOME. THE WETLANDS, ARE NAMED FOR WHAT THEY ARE. . . WET. . . LANDS. WHO ARE WE TO CHANGE WHAT NATURE CREATED!

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Janet Stafford
14b Zeppelin Ln
Readfield, ME 04355-3780

From:	National Wildlife Federation Action Fund on behalf of Saran Kirschbaum
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 7:41:36 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Wetlands, we know now how important they are and what they do. Too many have been destroyed and those that are left must be protected. Protecting them, protects us in the long run.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mrs. Saran Kirschbaum
1710 Bagley Ave
Los Angeles, CA 90035-4110

From: National Wildlife Federation Action Fund on behalf of Anne Collins
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 4:54:32 PM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

As a biologist and a veterinarian, I have been deeply concerned about our human impact on wildlife and the environment for decades.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Thank you for your attention.

Sincerely,

Dr. Anne Collins
1321 Collins Ln
Manhattan, KS 66502-9511

From: National Wildlife Federation Action Fund on behalf of Lucille Bertuccio
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 2:24:22 PM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Wetlands filter and cleanse water and they create wonderful nurseries for young wildlife of all kinds.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Lucille Bertuccio
815 S Rose Ave
Bloomington, IN 47401-5244

From: National Wildlife Federation Action Fund on behalf of Richard Hiers
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 2:24:11 PM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

Migratory birds are part of our Nation's and our whole world's greatest treasures. We didn't create them. They are given to us by Nature and Nature's God. It is up to us to keep them from coming to harm from human thoughlessness.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Richard Hiers
506 SW 40th Ter
Gainesville, FL 32607-2758

From: National Wildlife Federation Action Fund on behalf of Vivianne Mosca-Clark
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 1:54:12 PM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Since the wet lands that were there are gone, the water needs a place to go, therefore water floods other places. So allowing land to be used to allow wet lands again would solve a lot of these issues, Please think of other ideas besides building huge walls and channels to direct water.

Sincerely,

Mrs. Vivianne Mosca-Clark
3565 E Fork Rd
Williams, OR 97544-9713

From: National Wildlife Federation Action Fund on behalf of Mark Herwig
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 8:34:27 AM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife conservationist and hunter, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

And while you're at it, do the same along the Mississippi River, which is flooding, and the Missouri River, which is flooding, and other rivers devoid of their wetlands.

Sincerely,

Mr. Mark Herwig
1958 Florence St
White Bear Lake, MN 55110-3469

From: National Wildlife Federation Action Fund on behalf of Conor Soraghan
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:13:34 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

PLEASE RESTORE THE RED RIVER BASIN WETLANDS. THANK YOU.

Sincerely,

Mr. Conor Soraghan
Saratoga Ave
San Diego, CA 92107-2336

From: National Wildlife Federation Action Fund on behalf of Heather Lloyd
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 2:33:48 AM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

you can't improve on what nature perfected.

Sincerely,

Miss Heather Lloyd
309 Doone Rd
Fairless Hills, PA 19030-2228

From: National Wildlife Federation Action Fund on behalf of Marie Leven
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Sunday, June 19, 2011 6:15:12 PM

Jun 19, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Didn't the floods in Iowa tell you anything? Fence rows hold back water and provide habitats for ground nesting birds. The potholes and wet lands are natural sinks for excess water. And they can not be moved as they are connected to ground water below. They hold water and excess snow melt and give birds a place to rest

Sincerely,

Mrs. Marie Leven
321 Bellewood Dr
Flushing, MI 48433-1879

From: National Wildlife Federation Action Fund on behalf of Christina M Dudley
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Sunday, June 19, 2011 12:15:36 PM

Jun 19, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

The lives of human beings will be irreparably lessened when all the other living creatures of this planet have been extinguished by our foolishness and folly. Please reconsider this project!

Sincerely,

Ms. Christina M Dudley
10008 Creekwater Blvd
Orlando, FL 32825-7758

From: National Wildlife Federation Action Fund on behalf of Irene Dunny
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Sunday, June 19, 2011 12:15:36 PM

Jun 19, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. The wetlands worked in flood management until we tried to control them. Let them do their work again.

Sincerely,

Mrs. Irene Dunny
17819 Sun Walk Ct
San Diego, CA 92127-1370

From: National Wildlife Federation Action Fund on behalf of Ellie Thorpe
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 6:13:30 PM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Our forefathers, were good for making decisions in favor of more land for development. They thought along the same line, more land more jobs! Several billion dollars later, they were have to fix what they broke! Remember, water tables are recharged naturally through open bodies of water - like wetlands! ! ! More and more areas are having to deal with less and less water; and yes, they did allow developers to drain those bodies of water so they could build and increase their bank stash.

Stop, regroup and get creative. Wetlands are more productive long term and beneficial to an area as a whole - and more cost effective than maintaining man made structures that work against nature. Don't continue making the same mistakes as those from the past. We can't afford to be careless any longer. My kids want a healthy environment.

Sincerely,

Ms. Ellie Thorpe
123 Navarre
Gulf Breeze, FL 32561-4167

From: National Wildlife Federation Action Fund on behalf of Diane Selvaggio
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 5:13:45 PM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

It would seem fairly self-evident that wetlands serve humankind in multiple ways, even if we don't always understand or appreciate them. Flood control is among the more important of these functions - and far more cost-effective than most of our highly engineered attempts to do the same work.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions that employ natural infrastructure to its best advantage.

I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife, which is an economic advantage for the region, and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. While not "conventional" in the engineering world, these methods are highly conventional in the ecological world.

Thank you very much for giving these alternatives the close attention they have long deserved.

Sincerely,

Ms. Diane Selvaggio
5096 Hardt Rd
Gibsonia, PA 15044-8126

From: National Wildlife Federation Action Fund on behalf of Brian De Castro
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 1:13:24 PM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Wetlands are fragile and important ecosystems that need to be protected for their rich and diverse flora and fauna. Thank you for considering my comments.

Sincerely,

Mr. Brian De Castro
34 Mews Ln
South Orange, NJ 07079-1740

From: National Wildlife Federation Action Fund on behalf of Alexandra Keriakedes
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 1:13:19 PM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

I especially ask you to turn in your bibles to the Book of Genesis and be reminded of the gift of our planet and God's admonition that we be good stewards of its riches -- that we not "enrich" ourselves from
its bounty by destroying it for selfish reasons and disregarding the needs
of all other humans, animals, birds, and plant life created at earth's inception. It was NEVER intended to take a backseat to "manunkind's"
selfish, destructive desires.

Sincerely,

□□Ms. Alexandra Susan Keriakedes□□
KrkdSn@aol.com

Sincerely,

Ms. Alexandra Keriakedes
1631 J St
Apt 301
Lincoln, NE 68508-2638

From: National Wildlife Federation Action Fund on behalf of James Sorrells
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 12:13:03 PM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

At this point there needs to be an unprecedented call to action from our country to set an example for the rest of the global community. Our ultimate quest should be to protect God's creatures and preserve them for our children to enjoy. "What a country chooses to save is what a country chooses to say about itself."
Mollie Beattie, Director, U.S. Fish and Wildlife Service 1993-1996

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. James Sorrells
564 Timber Run Ln
Groveland, FL 34736-8205

From: National Wildlife Federation Action Fund on behalf of Robert French
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 6:14:53 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to consider less costly, more wildlife-friendly options to the proposed diversion channel to divert Red River flows around Fargo and Moorhead.

As someone who cares deeply about wildlife and natural environment preservation, I urge you to examine alternatives that would use wetland and grassland restoration to achieve flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a much less costly--environmentally and financially--way to protect communities from flooding.

The proposed diversion channel seems that it would do more of the same approach that's not working and indeed multiplying problems--just push the problem downstream.

Thank you for your time and consideration.

Sincerely,

Mr. Robert French
83 Durfee St
New Bedford, MA 02740-4540

From: National Wildlife Federation Action Fund on behalf of John Cheney
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Monday, June 20, 2011 5:03:59 AM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

You people MUST start getting things done for the good of ALL Americans!

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. John Cheney
6551 Annie Oakley Dr Apt 512
Henderson, NV 89014-2188

From: National Wildlife Federation Action Fund on behalf of Louis C. Harris, Jr.
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 10:12:52 AM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

We continue to abuse our wildlife to the detriment of our well being in the long run. We must learn to make decisions with conservation in mine, not as an after thought.

Thank you for your attention.

Sincerely,

Dr. Louis C. Harris, Jr.
1002 Abington Rd
Cherry Hill, NJ 08034-3904

From: National Wildlife Federation Action Fund on behalf of Suzy Hayes
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 8:42:56 AM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems." THIS IS A CRAZY WORLD....WITH TO MANY OF THE SELF-PROCLAIMED "SUPERIOR SPECIES" CONSUMING THE WORLDS RESOURCES. WE ALL SHOULD HAVE PAYED ATTENTION TO "JAMES LOVELOCK" IN THE 60's. OOPS, PROBABLY TO LATE?!

Sincerely,

Ms. Suzy Hayes
2985 Bedford Ave Apt C
Placerville, CA 95667-4699

From: National Wildlife Federation Action Fund on behalf of Byron Dale
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 5:12:28 AM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

A former hunter, I am now most interested in preserving wildlife for generations to come. I believe it is time for all of us to think about the destruction of the environment before trying to eek out a few more bucks for our own temporary enjoyment!

Sincerely,

Dr. Byron Dale
5765 Capetown Ave
Rockford, IL 61108-6710

From: National Wildlife Federation Action Fund on behalf of Judith Kahle
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Saturday, June 18, 2011 2:11:58 AM

Jun 18, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

Cities in the Napa Valley in California used to have yearly flooding problems. Finally, levees were take out south of the city of Napa, and natural floodplains were once again restored. The result is that flooding has stopped, and wetlands that supported wildlife habitat have been restored. I would like to see an alternate plan for the Red River that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Judith Kahle
343 Wyoming St
Fairfield, CA 94533-5146

From: National Wildlife Federation Action Fund on behalf of Diane E. Wonio
To: Snyder, Aaron M MVP
Subject: Develop an natural alternative for Red River bassi flood control
Date: Thursday, June 16, 2011 7:43:30 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. There are many reasons for using a natural approach, the least of which may be the cost, the most important of which is the proper continuation of the wetlands cycle for numerous species survival.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Diane E. Wonio
PO Box 3755
Galveston, TX 77552-0755

From: National Wildlife Federation Action Fund on behalf of Carlene Petty
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:14:36 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. The catastrophe of Hurricane Katrina should have taught everyone that the natural environment (wetlands) is a much better protection than human engineering (such as levees and diversions).

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems. This would benefit even more inhabitants than the human ones.

Thank you for considering my comments.

Sincerely,

Ms. Carlene Petty
780 Highway □44 West, Lot □50
Shepherdsville, KY 40165-6073

From: National Wildlife Federation Action Fund on behalf of Sue Morem
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:38 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I wouldprefer to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management.Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Sincerely,

Ms. Sue Morem
4620 Vinewood Ln N
Plymouth, MN 55442-2305

From: National Wildlife Federation Action Fund on behalf of D Kessler
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 1:44:06 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.
Every time the CORP. Get involved in flood protection we end up with worse flooding then before thay got involved. STOP the Army Corp. From screwing up yet another river system.

Sincerely,

Mr. D Kessler
PO Box 457
Redway, CA 95560-0457

From:	National Wildlife Federation Action Fund on behalf of Hunter Wallof
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 12:15:53 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

TIME TO STOP KILLING OUR "CANARIES"; WE WILL BE NEXT

Sincerely,

Mr. Hunter Wallof
12340 Sir Francis Drake Blvd
Unit A
Point Reyes Station, CA 94956-9733

From: National Wildlife Federation Action Fund on behalf of Anita Walsh
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:44:38 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

That would be a better solution. The Corps so often harms one thing while fixing another, and this is an opportunity to get it right the first time !

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Anita Walsh
PO Box 1046
Corrales, NM 87048-1046

From: National Wildlife Federation Action Fund on behalf of Jeb P. Brown
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:44:12 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I respectfully urge you to please develop a sound and well thoughtout alternative to the proposed diversion channel to Protecting endangered wildlife like the polar bear, the Canada lynx, and the American pika. Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I also would like to see an alternate plan that evaluates using "Vitally Important and Necessary" wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive and ill-concieved project, I respectfully urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Mr. Jeb P. Brown
509 University Ave Apt 804
Honolulu, HI 96826-5008

From: National Wildlife Federation Action Fund on behalf of Jane Byrd
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:14:22 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

The way I see it, the Corps of Engineers should become our country's foremost ecological engineers. I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding. The Corps can be valued for "not doing" projects as well as for "doing" them.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Jane Byrd
2118 7th St
Berkeley, CA 94710-2318

From: National Wildlife Federation Action Fund on behalf of Charlotte Matthews
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 8:44:38 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

if they die, eventually we die

Sincerely,

Mrs. Charlotte Matthews
26816 Maple Glen St
Murrieta, CA 92563-2545

From: National Wildlife Federation Action Fund on behalf of Joy Schochet
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 1:14:11 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I very strongly urge you to develop an alternative to the proposed diversion channel to divert the Red Riverflows around Fargo and Moorhead. This would be a very expensive project and an environmentally destructive one. We cannot any longer simply go ahead with engineering projects without considering very carefully the environmental impacts such projects would entail. For so many years we have done so, often with catastrophic results which may also be counterproductive. The consequences are frequently dismaying to us and devastating to wildlife. We have destroyed such a large proportion of our invaluable wetlands, which as you know are not just "swamps" but habitats for many plants and animals; they also have many useful characteristics.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Dr. Joy Schochet
828 W George St
Chicago, IL 60657-5114

From:	National Wildlife Federation Action Fund on behalf of andre freheley
To:	Snyder, Aaron M MVP
Subject:	Develop an alternative for flood control in the Red River basin
Date:	Friday, June 17, 2011 11:45:13 AM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

PS from Andre Frehley
Hasn't anyone noticed that there is a reason that nature created these buffers between land and water? So, as usual, our species tries to control and changes things. Take away this buffer and watch the problems start.

Sincerely,

Ms. andre freheley
12200 Heritage Park Rd Apt 300
Oklahoma City, OK 73120-7519

From: National Wildlife Federation Action Fund on behalf of Susan Anderson
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 5:43:39 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

The premise that we can manipulate our way out of the escalating crisis to the wet areas of our home is faulty. We need to restore the natural protections and complexities provided to us by nature rather than create ever large and stronger dykes and diversions. This is not just about wildlife but about humanity.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Susan Anderson
249 A St Apt 43
Boston, MA 02210-1615

From:	National Wildlife Federation Action Fund on behalf of Ruth Stambaugh
To:	Snyder, Aaron M MVP
Subject:	Flood control in the Red River basin
Date:	Friday, June 17, 2011 12:15:56 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

There's a much better way to manage floods than by digging a channel that will hurt wildlife. Please read the following form letter and let it speak for me. Thank you. Ruth Stambaugh

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Ruth Stambaugh
93 Bird Creek Estate Rd
Black Mountain, NC 28711-8622

From: National Wildlife Federation Action Fund on behalf of Holly Eaton
To: Snyder, Aaron M MVP
Subject: Flood control in the Red River basin
Date: Monday, June 20, 2011 3:54:22 PM

Jun 20, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

Please develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

We must not take away more habitat from the American Wigeon and other waterfowl. Please do not destroy the wetlands!

Sincerely,

Ms. Holly Eaton
3780 Tanglewilde St Apt 509
Houston, TX 77063-5159

From: National Wildlife Federation Action Fund on behalf of Leslie Ann Nieves
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:14:09 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

This is essential to the health of this whole planet and all living things. including people!

Sincerely,

Ms. Leslie Ann Nieves
27424 Tampa Ave Apt 305
Hayward, CA 94544-4461

From: National Wildlife Federation Action Fund on behalf of Barbara Inano
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Friday, June 17, 2011 7:11:23 PM

Jun 17, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I want to help save the American Wigeon and other creatures who use and live in the Red River basin.

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

Sincerely,

Ms. Barbara Inano
26818 226th Pl SE
Maple Valley, WA 98038-6040

From: National Wildlife Federation Action Fund on behalf of Helene Whitson
To: Snyder, Aaron M MVP
Subject: Develop an alternative for flood control in the Red River basin
Date: Thursday, June 16, 2011 4:45:52 PM

Jun 16, 2011

Aaron Snyder
Branch, 190 Fifth Street East, Ste. 401
St. Paul, MN 551011638

Dear Snyder,

I urge you to develop an alternative to the proposed diversion channel to divert Red River flows around Fargo and Moorhead by evaluating less expensive, longer-term solutions.

As a wildlife enthusiast, I would like to see an alternate plan that evaluates using wetland and grassland restoration as a primary tool for flood management. Restoring hundreds of thousands of acres would benefit wildlife and would be a less-expensive strategy for protecting communities from flooding.

Before investing huge amounts of money in an environmentally destructive project, I urge you to fully explore the potential for flood damage reduction in the whole basin, using wetland restoration and other non-structural water retention systems.

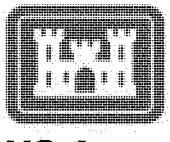
□□□

Appendix U
Supplemental Draft Environmental Impact Statement Public and Private Summarized Comments and Corps Responses

Fargo-Moorhead Metropolitan Area Flood Risk Management

Final Feasibility Report and Environmental Impact Statement

July 2011



US Army Corps of Engineers ®

Prepared by:
U.S. Army Corps of Engineers
St. Paul District
180 Fifth Street East, Suite 700
St. Paul, Minnesota 55101-1678

Appendix U

Supplemental Draft Environmental Impact Statement Public and Private Summarized Comments and Corps Responses

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1.0 Public Comments on SDEIS

1.1 Comments and Responses

The Supplemental Draft Feasibility Report and Environmental Impact Statement (SDEIS) dated April 2011 was published in the Federal Register for a 45 day public review period on May 6, 2011. The review period closed on June 20, 2011. The review period generated a number of questions and comments on the SDEIS and covered a wide range of topics. These comments are provided in Appendix T. To best manage the responses to these comments, the Corps has captured the intent of the various comments by subject matter and then provided a single response when this summarized comment was similar to other comments. The comments have been separated into these categories:

A. Plan Formulation Alternatives
B. EIS Process and Schedule
C. Impacts
D. Modeling Technical
E. Page Specific Comments
F. Coordination of Permits
G. Project Management
H. Miscellaneous

All comments have been reviewed by the Corps. Many comments are unique and many are reiterated in comments by multiple individuals. In an attempt to respond to each comment, all comments have been condensed, paraphrased and repeated only once. These comments appear in the subsequent sections and are categorized as they relate to the planning process. Many of the responses provide a general overview and then direct the reader to the location within the Final Feasibility Report and Environmental Impact Statement where more detailed information can be found. The Final Feasibility Report and Environmental Impact Statement is referred to as the FEIS throughout this Appendix.

2.0 Comment Category A: Plan Formulation Alternatives

A-1 Water Redistribution Alternatives Provide Opportunities for Water Supply
Some comments identified alternative measures that involved redistributing water and snow from the Red River Basin to other areas of the country impacted by drought or experiencing water shortages. The water could be redistributed with pumps, hoses, and trucks, or snow could be packed into bags, trucks, or train cars and moved from the Red River Basin to more dry regions such as Colorado and Wyoming.

Response:
Planning efforts should and do consider a full array of possible solutions and evaluate effects of reasonable alternatives. Any recommended alternative must effectively and efficiently address the identified problem of flooding in the Fargo-Moorhead Metro area. Section 7.5.3 of Appendix O of the FEIS describes how alternatives are compared according to screening criteria to determine the degree to which each alternative meets the planning objectives. Water redistribution was considered in the form of storage alternatives and upstream impoundments; water redistribution to western states was not evaluated in great detail because the costs (efficiency) of transporting snow and water are greater than the benefits that could be provided by this reduction in snowpack. The study team has found that other alternatives, such as diversion channels, are more efficient (provide more benefits at less cost) and more effective (reduce flood risk to a greater degree) than water redistribution alternatives.

A-2 Storage Alternatives – Stand Alone and in Combination
Many comments asked the Corps to consider storage as a flood risk management alternative, either on its own or in combination with other flood risk management measures. Storage refers to any number of measures intended to store flows (discharge) during flood events in order to reduce the peak discharge of the event. Examples of storage measures include retention, detention, reducing drainage (i.e. farm fields), wet dams, dry dams, etc. These comments generally took the following forms:

> The Corps has failed to adequately consider all storage alternatives; the Corps should consider a state line dam and dam on the Wild Rice River south of Wyndmere; the storage being sought by Minnesota Representative Collin Peterson in the Farm Bill must be considered; large acres of undeveloped land could be used for storage; widening and deepening the current Red River channel combined with tile drainage from Wahpeton to north of Fargo would be effective flood mitigation; the Red River 20/20 basin wide retention plan should be implemented.

Response:
The study team has found that storage alternatives, either as stand-alone measures or in combination with others, do not effectively or efficiently address catastrophic flood risk in the Fargo-Moorhead Metro area. Storage alternatives have the potential to reduce flood stages in the local area downstream of a storage site while they significantly increase flood stages upstream within the storage area. The stage reductions produced by flood storage are largest immediately

downstream of the storage area and diminish with distance downstream of the storage area. If several storage sites were created over a large area, the system could have substantial cumulative benefits for relatively small and frequent flood events. However, as described in the FEIS, the amount of storage that could be practicably implemented upstream of Fargo-Moorhead Metro area would not substantially reduce the risk in the Fargo-Moorhead Metro area from large infrequent flood events. Furthermore, a system of flood storage sites would need to be implemented in many small increments over a very large geographic area over an extended period of time. Such a system would impact significantly more acres of land than the recommended plan and would be less effective in reducing flood risk in the Fargo-Moorhead Metro area. The study team has found that other alternatives, such as diversion channels, are more efficient (provide more benefits at less cost) and more effective (reduce flood risk to a greater degree) than storage. While giving full and equal consideration to storage alternatives, the study team has not recommended they be carried forward due to their relative inefficiency and ineffectiveness, and the difficulty in implementing them on a large scale. For further discussion of storage alternatives, refer to sections 8.4.2 and 8.4.3 of Appendix O of the FEIS. The selected plan (LPP) does include approximately 200,000 acre-feet of staging and storage upstream of the diversion channel inlet to nearly eliminate downstream impacts. It should be noted that several other current initiatives are considering flood storage in the Red River Basin, including two Corps of Engineers studies: the Red River Basin-wide Watershed Study and the Fargo-Moorhead and Upstream Area feasibility study.

A-4 Scope of Study – Basin-wide versus Metro Area

Some comments questioned the scope of the study and the focus on the Fargo-Moorhead Metro area instead of a basin-wide study. These comments stressed that flood risk management solutions should be developed from a basin-wide perspective, so as to find a full range of alternatives (including upstream storage), and impacts to areas outside the metro would be fully considered. The comments asked the Corps to enlarge the study area to include all upstream river basins. In order to formulate a full array of alternatives and evaluate all of their effects, it is necessary to utilize a basin-wide study area.

Response:

The problems and opportunities identified in section 2.4 of the FEIS pertain to the Fargo-Moorhead Metro area. Planning efforts should and do consider a full array of possible solutions and evaluate effects of reasonable alternatives. The significant amount of existing flood risk in the metropolitan area warrants evaluating measures that chiefly benefit the metropolitan area. Therefore, the planning objectives of this study are to reduce flood risk in the metropolitan area, and to improve environmental quality, wetland habitat and recreation in conjunction with reducing flood risk, with the constraint of avoiding increasing peak flood stages upstream or downstream of the metro. While alternatives were considered from a basin-wide perspective, and the effects of those alternatives were evaluated basin-wide, those alternatives were formulated with the objective of addressing flood risk in the metro area. The Corps of Engineers and other local, state and federal agencies are studying flood risk throughout the Red River Basin under separate efforts. For a discussion of the study area see sections 1.3 and 4.1 of the FEIS. For a discussion of problems and opportunities and objectives and constraints see sections 2.4 through 2.7 of the FEIS.

A-5 Consideration of Levee Alternatives
Some comments asked about levee alternatives and questioned if these alternatives received adequate consideration. Some asked why levees were implemented in Grand Forks but have not been recommended for Fargo-Moorhead.

Response:
Levees were considered as alternatives in Phase 2; section 5.1.2 of Appendix O of the FEIS outlines the array of measures and alternatives that were evaluated, compared, and screened in Phase 2. Section 3.4.5.1 of the FEIS discusses the factors considered regarding levees. The Fargo area lacks high ground to begin and end levees, and that limits the potential levee height. As such, the largest cost-effective levee plan could only be certified up to the 1-percent chance event. This left an intolerable level of remaining risk, so the levee alternative was dropped from consideration as a stand-alone alternative. The level of risk reduction targeted in this project was guided by a goal set by the non-federal sponsors' Work Group.

A-6 No Action Alternative
Some comments asked why a project was necessary since Fargo-Moorhead has been largely successful in fighting floods. Flood fight strategies have improved over the years and the proposed project is an unnecessary expense.

Response:
A no action alternative, or an alternative with no flood risk reduction measures in place, was considered. Under this scenario, Fargo-Moorhead would continue to rely on emergency flood fighting measures. Section 2.3.4 of the FEIS and sections 5, 7, and 8 of Appendix O of the FEIS describe the no action alternative. The no action alternative does not meet any of the planning objectives. Although Fargo-Moorhead have been successful fighting floods in recent years, it is probable that emergency measures will not always be successful. Failure of emergency measures could result in significant loss of property, and the loss of life will likely also be high given the number of people who choose to fight the flood instead of evacuate. In addition, Fargo-Moorhead spends a significant amount of time, effort, and money in the near-annual flood fights, resources that could be better spent elsewhere with a project in place.

A-7 Diversion Alignment
Some comments asked the Corps to consider alternative alignments for the diversion and/or shifting the diversion alignment. Some suggested shifting the alignment further west or further south and asked if the Corps had considered these alignment alternatives. One comment asked if the diversion alignment might have been different if staging and storage were included in the original design.

Response:
Multiple sizes and alignments for the diversion were considered and each of these alternatives was evaluated, compared, and screened according to the required criteria. The final array of diversion combinations can be found in the FEIS, Appendix O, Section 8.4.3.8. The array of alternatives includes consideration of multiple diversion sizes and alignments. Sections 3.7.3 and 3.7.4 of the FEIS discuss specific requests to move the alignment west and south of the

proposed alignment. Various channel alignments were considered, and the alignment of the proposed diversion channel was selected for technical and policy reasons. The alignment described for the LPP does take into account the upstream storage and staging. The design intent was to benefit as much existing development as possible while minimizing overall impacts to the floodplain and the environment while at the same time minimizing costs.

A-9 Consideration of Floodwalls
Some comments asked about floodwall alternatives and questioned if floodwalls may be able to solve the flooding problems in the Fargo-Moorhead area.

Response:
Floodwalls were considered as alternatives in Phase 2; section 5.1.2 of Appendix O of the FEIS outlines the array of measures and alternatives that were evaluated, compared, and screened in Phase 2. Section 3.4.5.1 of the FEIS discusses the factors considered regarding floodwalls. Floodwalls are typically more expensive than earthen levees, and floodwalls are used where there is not sufficient space to build a levee. Levees and floodwalls were screened out during Phase 2 for the same reasons discussed in Question A-5 above regarding levees. The Fargo area lacks high ground to begin and end floodwalls, and that limits their potential height. As such, the largest cost-effective levee and floodwall plan could only be certified up to the 1-percent chance event. This left an intolerable level of remaining risk, so the levee/floodwall alternative was dropped from consideration.

A-10 Consideration of Levees Combined with Floodwalls
Comments asked about the combination of levees and floodwalls as an alternative. Some comments noted that Fargo has successfully fought floods using emergency sandbag levees combined with floodwalls and questioned if levees and floodwalls could be a permanent solution.

Response:
Levees and floodwalls were considered as alternatives in Phase 2. Comments A-5 and A9 above and the corresponding responses address levees and floodwalls in more detail.

A-11 Locks on the Diversion
Comments asked if the diversion could have a series of locks that control the flow.

Response:
The purpose of the diversion channel is to provide an alternate path for flood water to pass around the highly developed metropolitan area. Adding locks or other structures within the diversion channel to impede flow would make the channel more expensive and less hydraulically efficient.

A-12 Alternatives & Combination of Alternatives
Some comments raised questions about the alternatives studied and asked whether the Corps had explored all alternatives. Some comments asked the Corps to step back and look for other

alternatives to address the Fargo-Moorhead flooding problems. One comment suggested that breachable levees would be a good idea.

Response:
Section 8.4.3 of Appendix O of the FEIS addresses the array of all measures and combinations of measures that were considered. This section of the appendix describes how alternatives and combined alternatives were evaluated, compared and screened. Some measures from Phase 3 were re-visited and some new measures were introduced in response to comments on the DEIS; all reasonable and practical measures and combinations of measures were considered in the FEIS.

A-13 Natural Storage Alternatives
Some comments asked whether the Corps had sufficiently evaluated all water storage alternatives, including storage in natural low spots of sloughs.

Response:
Water storage alternatives such as this were explored (FEIS, Appendix O, Section 8.4). On a basin-wide scale, storage in natural low spots could produce very small flood stage reductions over a large area, and provide some cumulative benefits to the basin. However, this type of storage would not substantially reduce catastrophic flood risk to the Fargo-Moorhead area. The study team determined that storage alternatives were relatively ineffective and inefficient. Other alternatives were found to be more effective at reducing flood risk in Fargo-Moorhead and more efficient in that they could be implemented for a lower cost. A flood storage system does provide some level of flood risk reduction, particularly for the smaller, more frequent flood events; however, the level of risk that remains for the larger, less frequent flood events is not a tolerable level of risk.

A-14 FCP
The FCP is less expensive than the LPP in regards to both initial cost and annual cost. The FCP has a higher benefit cost ratio, and the FCP has a greater chance of being approved by Congress.

Response:
The costs of the LPP and FCP are described in Chapters 3 and 5 of the FEIS. The primary planning objective is to reduce flood risk to the Fargo-Moorhead Metro area. The LPP reduces flood risk to a larger geographic area and a greater number of people than the FCP. Corps of Engineers policy requires that the study must identify an alternative that reasonably maximizes net national economic development benefits, but non-federal sponsors are allowed to request a different alternative. The Assistant Secretary of the Army (Civil Works) approved a request to recommend the locally preferred plan on April 28, 2011.

A-15 Level of Risk Reduction
Some comments asked how the level of flood risk reduction for the project was determined. One comment asked this question: "Why is the Fargo-Moorhead project being designed for a 500-year flood when the Grand Forks-East Grand Forks flood protection system was designed for a 300-year flood?"

Response:
The level of risk reduction targeted in this project was guided by a goal set by the non-federal sponsors' Work Group. The Metro Flood Study Work Group (MFSWG) established the goal of a stage of 36 feet at the Fargo gage during a 0.2-percent chance event, or the 500-year event. Neither the LPP nor the FCP meet the MFSG's original goal; however the MFSWG has accepted the level of flood risk reduction provided by the LPP, which is a stage of 40 feet for the 0.2-precent chance event. The proposed diversion would not remove the entire metropolitan area from the 0.2-percent chance floodplain, but it would enable Fargo and Moorhead to pass a 0.2-percent chance event with emergency floodfighting similar to the efforts conducted during the 2009 flood. See section 7.4 of Appendix O of the FEIS for more details. Minutes from the MFSWG meetings are included in Appendix Q of the FEIS.

A-16 Marshall Diversion
Why can't a plan similar to the Marshall Diversion be developed? The diversion in Marshall is successful at mitigating floods and does not destroy farmlands or towns.

Response: Flood risk management projects are unique, and their design depends on many factors including river slope, flood volume, and the nature of the floodplain at the project location. Therefore, it is not appropriate to directly compare projects at different locations. However, the FCP and the ND35K plan are conceptually similar to the diversion channel at Marshall, Minnesota, in that they would not include upstream staging and storage and would primarily redirect flow around the urban area. The FEIS discusses the benefits and tradeoffs between the FCP, ND35K plan and the recommended LPP which includes upstream staging.

A-17 Wetlands/Grasslands – Stand Alone and in Combination
Many comments asked the Corps to consider wetlands and grassland restoration as a flood risk management and ecosystem restoration alternatives, either on their own or in combination with other flood risk management measures. Many of these comments cited the draining of wetlands for agricultural use as a chief source of increasing flood trends. Comments noted that destruction of wetlands along the Gulf Coast has caused flooding problems. Wetland restoration alleviates flooding and some flooding has stopped in California cities because of wetland and floodplain restoration. Wetland and grassland restoration measures provide flood storage, wildlife habitat, and improve water and air quality. The National Wildlife Federation urges the Corps to formulate an alternative that would include 500,000 acre-feet of storage through wetland and grassland restoration and an additional 500,000 acre-feet of storage through temporary storage utilizing farm fields.

Response:
Opportunities for wetland and grassland restoration do exist in the Red River Basin. Wetland and grassland restoration would typically require large areas of land and would store relatively small volumes of runoff during extreme flood events. Therefore, such alternatives would be less effective in reducing flood stages than other flood storage alternatives discussed in Question A-2 above. An alternative of a combination of 500,000 acre-feet of grassland/wetland restoration and 500,000 acre-feet of storage on farm fields would require placing approximately 10 feet of water on 100,000 acres, which would have immense impacts to property, people, agriculture, and

infrastructure. In addition, significant coordination would be required for operation of the storage sites. Sections 8.4.2 and 8.4.3 of Appendix O of the FEIS contain more information on wetlands and grassland restoration measures.

A-18 Storage and Wetlands/Grasslands Restoration Alternatives Improve Environmental Quality and Benefit Wildlife

Many comments asked the Corps to consider the environmental quality improvements that could be provided by storage and wetlands/grasslands restoration alternatives. Wetlands and grasslands provide habitat for migratory birds, fish, and other wildlife; they improve water quality and decrease storm water runoff; and they contain a variety of native plant vegetation. In addition, wetlands play a role in water supply as they recharge ground and surface waters. Storage and wetlands/grasslands restoration alternatives could provide opportunities to improve environmental quality. Viable wetlands could also bring in tourism dollars to help boost the regional economy.

Response:

Section 8.4.3 of Appendix O of the FEIS considers flood storage alternatives. Flood storage opportunities and wetland and grassland restoration opportunities do exist, and with the right operational scheme, storage impoundments could improve environmental quality. Flood storage alternatives could be effective basin-wide and produce cumulative benefits basin-wide. However, these measures are not the most effective or efficient measures to reduce flood risk to Fargo-Moorhead. Any combination of flood storage systems would be costly and relatively ineffective at addressing the flooding problems in Fargo-Moorhead.

A-19 Flaws in Benefit/Cost Analysis

The process used to analyze costs and benefits is flawed. The negative effects are minimized, the recreation benefits are exaggerated, and the death projections are unrealistic.

Response:

The economic analysis presented in the FEIS uses the standard methodology prescribed by the Water Resources Council's "Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies" and the Corps of Engineers' Engineer Regulation 1105-2-100. Recreation benefits are not used to justify the flood risk management features of the project, but the economic analysis of recreation benefits is included to show that recreation features are economically justified as additional features. Loss of life is not monetized or included in the economic benefits presented in the FEIS.

A-20 Solution to Red River Basin Flooding Problems

The project does not even guarantee to solve the Red River Basins catastrophic flooding problems.

Response:

There is no measure that can guarantee to solve flooding problems; however, existing data and hydraulic modeling indicate that the LPP would substantially reduce flood risk in the Fargo-

Moorhead Metro Area. Even with the flood risk reduction project in place, there will always be residual risk to surrounding communities that can be further reduced through zoning, building codes, insurance and evacuation.

A-21 Waffle Project and Other Storage Alternatives
Some comments asked whether the Corps had sufficiently evaluated all water storage alternatives, including the "Waffle Project." The "Waffle" concept is a basin-wide approach that utilizes upstream water storage areas in existing depressions in the watershed. The existing network of roads and ditches contains the depressions or storage areas. Flood stages in Fargo-Moorhead during the 1997 flood could have been reduced by 3.3 to 4.4 feet if the Waffle Project had been in place. But this data is not considered in the SDEIS.

Response:
The "Waffle" concept was specifically explored as a water storage alternative (FEIS, Appendix O, Section 8.4). On a basin-wide scale, the "Waffle" could produce flood stage reductions over a large area, and cumulative benefits to the basin. However, the "Waffle" would not substantially reduce flood risk to the Fargo-Moorhead area. In addition, the "Waffle" would be costly to implement and could likely not be implemented in a period of less than 10 years. Like other storage alternatives considered, the study team determined that the "Waffle" approach was relatively ineffective and inefficient. Other alternatives were found to be more effective at reducing flood risk in Fargo-Moorhead and more efficient in that they could be implemented for a lower cost. A flood storage system does provide some level of flood risk reduction, particularly for the smaller, more frequent flood events; however, the level of risk that remains for the larger, less frequent flood events is not a tolerable level of risk. Flood storage alternatives, including the "Waffle Project," do not effectively address the identified problem of flooding in the Metro area.

A-22 Re-evaluate Alternative Screening for Reduced Environmental Effects
Appendix O of the SDEIS discusses the alternative screening analysis. Alternatives that have less environmental impacts should be re-evaluated to determine if they could meet the project purpose. Specifically the following should be examined:

- Consider alternatives with a lower, but still acceptable level of flood risk reduction focused on the 1% chance event.
- Examine incremental measures such as small levees, non-structural measures, and/or flood storage that could be combined with the diversion without control structures.
- An additional incremental measure should be evaluated that considers restriction of development within flood prone areas.

Response:
Alternative screening analysis was conducted in Phase 2 of the study and the full array of potential measures to address flood risk in the study area was considered. Nonstructural measures, flood barriers, increased conveyance, and flood storage measures were evaluated. Further re-evaluation of these alternatives was performed during alternative screening analysis #2 in Phase 2 of the study. Section 8.4.3 of Appendix O of the FEIS addresses the array of all measures and combinations of measures evaluated in Phase 4. This section of the appendix

describes how alternatives and combined alternatives are evaluated, compared and screened. Some measures from Phase 3 were re-visited and some new measures were introduced; all reasonable measures and combinations of measures were considered.

Incremental measures such as small levees and non-structural measures do not have a synergistic effect with the proposed diversion; as such, the diversion without control structures is not a feasible alternative with the incremental measures in place. A diversion without control structures is marginally feasible at best and a diversion without control structures is less efficient regardless of other incremental measures in place.

Development within flood prone areas is restricted by city floodplain ordinances based on FEMA maps. The future development in the study area is assumed to be in compliance with local city floodplain ordinances.

A-23 LPP versus Waffle Impacts to Prime and Unique Farmland
The Tentatively Selected Plan will eliminate tens of thousands of acres of prime and unique farmland from operation and place still more at risk of limited production. On the other hand, the Waffle or Flow Reduction Strategy would only "borrow" or "rent" land from willing landowners in the event of flooding and, in most cases, will use natural storage areas to store greater amounts of water.

Response:
The upstream storage and staging areas of the LPP total approximately 39,000 acres. In the upstream staging area, there will be no impact to crop production for most years. The proposed plan does not eliminate farmland in the upstream staging area. Only for the most severe flood events will there be an effect from additional depth and duration. Even with a 1-percent chance spring flood event, the duration of standing water is estimated to only increase 5 to 15 days. The area inside the diversion channel will be at reduced risk for flood damages during all events.

A-24 Valid Planning for Project Purpose
The Corps impermissibly included an additional project purpose of eliminating downstream impacts. The Corps must start over in its planning process to identify a valid NED plan or FCP that meets the additional project purposes of reducing flooding from the five tributaries and eliminating downstream impacts.

Response:
The U.S. Army Corps of Engineers conducts planning efforts in accordance with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, established by the Water Resources Council in 1983. This study has been guided by this planning process though each phase. The general problems and opportunities are stated as specific planning objectives and constraints to provide focus for the formulation of alternatives. These objectives and constraints have been documented since Phase 1 of this study, and remain the same in Phase 4. The formulation of alternatives is an iterative process and plans are evaluated and compared to determine which alternative achieves the study objectives and avoids study constraints in the most effective and efficient manner. Objectives and constraints

are detailed in Section 1.9 of Appendix O of the FEIS. In Phase 4 of the study, three diversion channel alternatives (LPP, FCP, ND35K) were compared and screened in accordance with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. Each of the plans in this final array, including the FCP, was a valid plan that achieved planning objectives and avoided planning constraints to some degree. These plans were screened against multiple criteria and compared to determine which plan was most effective and efficient in achieving study objectives and avoiding study constraints. Section 8 of Appendix O of the FEIS details the planning process during Phase 4 of this study. From the three valid plans considered in Phase 4, the LPP is the selected plan.

A-25 Wetland Storage
Wetlands hold water and alleviate flood stages. They are like sponges that retain water and prevent flooding. Too many wetlands have been lost, and that loss contributes to flooding. Wetland restoration and storage is much less expensive than the proposed plan.

Response:
The study team has found that storage alternatives, either as stand-alone measures or in combination with others, do not effectively or efficiently address catastrophic flood risk in the Fargo-Moorhead Metro area. Wetland storage is discussed in comments A-2, A-13, A-17, A-18, and A-21 above. Efforts were taken to avoid, minimize and compensate for wetland impacts caused by the selected plan and wetland impacts related to the selected plan will be mitigated. An adaptive management and mitigation plan is included in the main report (Attachment 6 of the FEIS). This plan discusses the wetland mitigation, costs, and monitoring that will be conducted post project to ensure the success of the mitigation.

A-26 Prairie Potholes
This project should restore the prairie potholes, the potholes store water and are habitat and breeding grounds for waterfowl. Prairie pothole restoration is not listed as an alternative, when in fact, this should be the chosen alternative.

Response:
Prairie pothole restoration is a form of wetland/grassland restoration and was considered by the study team. See comments A-2, A-13, A-17, A-18, and A-21 for further discussion.

3.0 Comment Category B: EIS Process and Schedule

B-1 Request for Extension
Some comments asked the Corps to extend the comment period on the SDEIS. The city of Oxbow, ND requested an additional 45 days and the National Wildlife Federation asked for an additional 30 days for the comment period.

Response:
The requests for an extension of the comment period for the SDEIS are noted, however, the Corps did not grant an extension. The SDEIS is a supplement to the Draft Environmental Impact Statement (DEIS) that was released for public review and comment in June 2010. Many of the chapters and appendices are substantially the same in the SDEIS as the DEIS. Several public meetings and Metro Work Group meetings open to the public were held prior to the release of the SDEIS. Furthermore, the SDEIS will have been available to the public for review for longer than the required 45 days. While the official public review period began on May 6, 2011, when the notice of availability was published in the Federal Register, the document was publically available on the project website starting April 28, 2011 and was mailed out to agencies and libraries on April 29, 2011. Given the extensive public communication and opportunity for input throughout the study, the Corps did not believe an extension was warranted.

B-2 Request for Assessment
The city of Oxbow, ND requested an assessment of the mitigation, compensation, and relocation costs for the city.

Response:
The Corps concurs that a detailed appraisal will be needed to determine compensation for landowners prior to project implementation. However, the project is only in its feasibility stage at this point and has not yet been authorized by Congress. It is premature to perform a detailed appraisal of each property at this stage in the study. The FEIS includes costs of mitigating for the city of Oxbow based on a gross appraisal. A property by property assessment will be conducted after project authorization, if the project is authorized.

B-3 Alternative Alignments
Will other alignments be considered and if so, how?

Response:
Other alignments can be considered, but the same planning process that has been implemented to develop the currently recommended alignment will be required for any alternative alignment. Another alignment, if considered, may not be approved. A formal request must come from the project sponsors in order for the Corps to consider another alignment. Supplemental National Environmental Policy Act (NEPA) documentation may be required for an alternative alignment.

B-4 Timeline
Some comments addressed the project timeline; some stated that the time table is too rigid and another claimed more time is needed regardless of any time line that has been established.

Response: The Fargo-Moorhead Metropolitan Flood Risk Management Feasibility Study began in September 2008. After the flood in March 2009, the non-federal sponsors and elected officials at all levels of government requested that this study be completed as quickly as possible. The planning process complied with all laws and regulations applicable to federal water resource management feasibility studies.

B-5 Public Involvement
The planning process has lacked fair public involvement. Members of a wide community have been left out of the process.

Response:
Public involvement in this study is fully described in Chapter 6 of the FEIS. Between November 2008 and June 2011, the study team held five public and agency scoping meetings, 18 public informational meetings, and a formal Section 404(b)(1) hearing. Between August 2009 and June 2011, the Metro Flood Study Work Group, representing six local elected boards, held more than 25 meetings that were open to the public. In addition, the study team maintained a project website (www.internationalwaterinstitute.com/feasibility) where the most current public information could be found and public comments could be provided to the Corps.

B-6 Electronic Comments
The computer system does not function as described, is this intended to preclude comment? This must be corrected.

Response:
Numerous comments were received via the International Water Institute (IWI) Website (www.internationalwaterinstitute.org/feasibility) throughout the public comment period. Any problems of which the Corps was made aware were promptly referred to IWI for corrective action. Written comments were also received via U.S. postal service and in person at public meetings.

4.0 Comment Category C: Impacts

C-1 Immediate Mitigation for Upstream Impacts
Some comments asked what can be done for immediate mitigation for homes in the upstream staging area. Some stated that homes could not be sold and relocating to accept a promotion or new employment would be impossible without selling the home; they asked what can be done for mitigation now. Comments stated that market values have decreased substantially and it is not fair to have to wait ten years for a buyout or other mitigation. One comment described the situation as being "in limbo until the completion of the project, unable to sell homes or move on with life for ten years."

Response:
The exact timing of any buyouts, and whether buyouts will even be necessary, is unknown at this time. The Fargo-Moorhead Flood Risk Management Project is only in the feasibility stage, and buyouts are contingent upon Congress authorizing and funding the project. Mitigation for the project cannot begin until the project has been authorized and funded.

Real estate acquisitions are the responsibility of the non-federal sponsors. The non-federal sponsors will establish timetables for real estate acquisitions once the project has been authorized and funded based upon the needs of the project and available resources. Local communities should work with the sponsors to address issues related to the timing of required buyouts. Each affected parcel will be appraised and assessed for impact. Each parcel is unique and distinctive and must have a determination made as to the most appropriate way to mitigate project effects and compensate the owner for damages. For more information on the process for acquisitions please go to: http://www.fhwa.dot.gov/realestate

C-2 Loss of Farmstead
How do you plan to put a market value on farmsteads when the entire farm operation is run out of it? Will farmsteads be relocated, and to where?

Response:
Generally speaking the value of land acquired is the fair market value of the property. The fair market value includes many aspects of the property in question. Earning potential is one of those aspects to be addressed in developing a fair market value. Regardless of the value determined, Public Law 91-646 outlines the requirements that must be followed to ensure a homeowner/landowner is compensated justly. There are programs available to assist when the acquisition of land for a project adversely affects a business. In certain circumstances, farmers and other business owners can qualify for business relocation benefits. Consult with a relocation advisor to determine whether your business qualifies for benefits under Public Law 91-646.

C-3 Impacts to Communities Upstream
Some comments expressed concern regarding the impacts to communities upstream of the proposed diversion. The human cost and impacts on the upstream communities is very high; many families with historical roots and ties in the area will have to relocate and entire

communities may be displaced. The proposed diversion will mean losing homes, businesses, churches, cemeteries, and schools; the institutions that unite rural towns will be lost and the social fabric of these communities will be destroyed. Many cultural impacts are associated with this project. Quality of life in communities upstream of the proposed diversion will be negatively impacted.

Response:
All flood risk management alternatives considered for the study have a variety of impacts; there is no alternative that has no impacts, and there is no alternative that has only positive impacts. Every diversion channel alternative considered provided positive benefits to some areas and resulted in adverse impacts to other areas. The proposed North Dakota alignment with upstream staging and storage will impact many people and communities in the upstream area. These impacts are described in detail in several sections of the FEIS. Appendix D of the FEIS documents community characteristics in the study area and Other Social Effects Factors. In addition, Section 4 of Appendix D of the FEIS provided a detailed Other Social Effects analysis of the alternatives carried forward in the study. Section 5.2.3 (Socioeconomic Resources) of the FEIS outlines potential impacts to communities including public health and safety (Section 5.2.3.1.5), community cohesion and sense of unity (Section 5.2.3.1.6), business and home relocations (Section 5.2.3.1.8), and others.

The FEIS documents the economic value of project impacts and reflects them in the benefits and costs of the diversion channel alternatives. The study includes an analysis of non-structural measures that could be economically justified as part of the project. The study also includes an analysis to identify any impacts that rise to the level of a taking of property under the Fifth Amendment of the U.S. Constitution. The report identifies several measures that could be implemented by others to mitigate downstream and/or upstream impacts, including flood easements, farmstead ring levees, community levees, buyouts/relocations, and other non-structural measures. Existing federal, state and local programs are available to assist in implementing such measures.

C-4 Fairness of Impacts
Some comments addressed fairness and stated that the diversion channel and the upstream impacts are not fair. The people in the Fargo-Moorhead area benefit while the people who live upstream are negatively impacted. The upstream areas are on higher ground and not flooded as frequently as Fargo; it is wrong to send water to these areas that have not been flooded. It is not fair for people upstream to bear this burden, and it is not fair for people in Fargo-Moorhead to benefit at the expense of others. Fargo is not giving anything up, others are making all the sacrifices. This is unacceptable.

Response:
Attitudes regarding fairness and related perceptions are largely subjective and likely to differ widely across various communities and populations. The proposed flood risk management project in the Fargo-Moorhead Metro area does have impacts, and these impacts are subjectively compared, evaluated and judged by many people. Further discussion of social effects can be found in Appendix D of the FEIS.

C-5 Mitigation and Life Style
Some comments questioned the process for home buyouts. As one commenter noted, a buyout would not come close to the value of their property, their golf course membership, and their lifestyle. The living arrangements and lifestyle in Oxbow and other upstream communities are unique, how can these residents be compensated?

Response:
The process of acquiring property for a project is highly regulated. The Fifth Amendment of the Constitution states that private property shall not be taken for public use without just compensation. To address what constitutes just compensation, Congress passed the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 ("Uniform Act"). The non-federal sponsors will be required to follow the Uniform Act in acquiring any lands. The Corps of Engineers will work with the non-federal sponsors to ensure the correct process and procedures are adhered to throughout the process.

Part of the process will be an appraisal, which determines the fair market value of the property. Fair market value is an estimate of the market value of a property based upon what a knowledgeable, willing, and unpressured buyer would pay. The appraisal will attempt to take all objective property features into account when determining fair market value. The fair market value is determined without consideration for the effect the project has had on the value of the land. For more information on the process for acquisitions please go to:
http://www.fhwa.dot.gov/realestate

C-6 Mitigation Options
Comments asked about mitigation options, and one stated "I would like to have something in writing to explain what our options are as homeowners and what to expect from the time table of this diversion." Currently residents are not able to sell or relocate and an explanation is needed to describe options available as well as timing. Residents feel they are left in limbo without understanding mitigation options.

Response:
At this stage in the feasibility study, it is not possible to give specific information on the options for each homeowner. Once the project is approved and funded each affected parcel will be appraised and assessed for impact. Each parcel is unique and distinctive and must have a determination made as to how to mitigate project effects and compensate the owner for damages. For more information on the process for acquisitions please go to:
http://www.fhwa.dot.gov/realestate

C-7 Home Improvements and Investments
Some homeowners questioned if investments to their properties and homes would pay off or wondered if improvements were a good idea at this point. Some asked specifically if it would be worth it to finish a basement or put up new siding on a house.

Response:
The Corps and the non-federal sponsors cannot advise on whether homeowners should make improvements. The project has not yet been authorized or funded by Congress, so any projected impacts may not occur. Any improvements made to homes and property will be taken into consideration when the property is appraised at its fair market value. The fair market value is determined without consideration for the effect the project has had on the value of the land. In general terms some improvements are more beneficial to the overall value of the home than others. For example, a swimming pool will do very little to increase value of the home as opposed to the cost of the pool.

C-8 Loss of Heritage
Some comments talked about loss of family heritage in the upstream areas. In some cases, people had family roots going back several generations; in other cases, people wished to leave land or a home as inheritance to future generations. Others stated the area had been homesteaded and some original buildings were still on the land.

Response: All flood risk management alternatives considered for the study have a variety of impacts; there is no alternative that has no impacts, and there is no alternative that has only positive impacts. Every diversion channel alternative considered provided positive benefits to some areas and resulted in adverse impacts to other areas. The proposed North Dakota alignment with upstream staging and storage will impact many people and communities in the upstream area. These impacts are described in detail in several sections of the FEIS. Appendix D of the FEIS documents community characteristics in the study area and Other Social Effects Factors. Section 4 of Appendix D of the FEIS provides a detailed analysis of the alternatives carried forward in the study and their impacts to the "Identity" social factor.

C-9 Relocating Trees
Some people asked what would happen to trees if they relocated. One asked if fruit trees would be moved. Another noted that hundreds of trees, including trees for hardwood harvesting, cannot be just replaced.

Response:
Generally speaking, the appraisal of a parcel looks to the parcel as a whole for valuation purposes. Each tree is not given a value; the value of the trees as a whole will be considered in the value of the property. Additionally, generally trees are not part of the relocation process and will not be moved from one location to the relocation site. However, the value of the trees and need for trees at the relocation site are all part of the negotiation process. For more information on the process for acquisitions please go to: http://www.fhwa.dot.gov/realestate

C-10 Cemeteries
Many comments asked about cemeteries that would be impacted by the project. How will impacts to cemeteries be mitigated? What are the costs associated with relocating a cemetery? Have all cemeteries in the project area been identified and impacts to the cemeteries fully considered? Will family members be contacted before graves are moved? How can people pay respects to the deceased?

Response:
Additional information regarding impacts to cemeteries has been included in the FEIS. The information that has been added to Sections 4.2.2.4 and 5.2.2.4 addresses the comments and questions related to cemeteries.

C-11 Additional Upstream Impacts
Has a study been done on the impacts further upstream from Fargo (Christine, Colfax, Abercrombie, and Wolverton)?

Response:
The hydraulic model developed in the feasibility study extends from Abercrombie, North Dakota to Emerson, Manitoba. Impacts to areas in Richland County, North Dakota and Wilkin County, Minnesota are described in Chapter 5 of the FEIS. Additional analyses will be completed during the design and implementation phase to evaluate upstream impacts and potential measures to reduce impacts.

C-12 Property Value Assessment
How will property values be assessed and who will make the assessment?

Response:
If a property, or a portion of it, needs to be acquired, the property owner will be notified as soon as possible of the need to acquire the property. A qualified appraiser will be hired by the non-federal sponsors to determine the market value of the property. The appraiser must make a detailed appraisal report of his or her findings. The sponsors forward the report to the Corps of Engineers for review and confirmation of the quality and validity of the findings. Once the market value report is accepted, the property owner will be notified of the findings and the value determined will be the starting point for negotiations. For more information on the process for acquisitions please go to: http://www.fhwa.dot.gov/realestate

C-13 Summer Flood Events and Crop Insurance
How will farmers be compensated for late planting or losses due to summer flood events? Can crop insurance be obtained?

Response:
The Risk Management Agency, a subsidiary of the United States Department of Agriculture, is the agency responsible for crop insurance rules and regulations. All producers will be able to obtain crop insurance in the affected area. However, they may lose coverage for flooding if it is determined that the inability to plant in the spring is due primarily to the project or if induced flooding in the summer is caused by the project. The effects of the induced flooding from the project would be compensated for by way of a flowage easement or other property interest obtained by the non-federal sponsors. The Corps of Engineers and the non-federal sponsors are in contact with the Risk Management Agency to coordinate the effects of the project.

C-14 Upstream Towns Do Not Support this Plan
Upstream towns, townships, and counties have spoken out against a project that would put more water onto their towns.

Response:
The concerns of upstream stakeholders have been noted.

C-15 Outbuildings
Some comments mentioned the process for relocating farmsteads and asked if outbuildings such as shops, sheds, and grain bins would be bought out, moved, or replaced. Compensation must include all buildings on the farmstead, not just the house.

Response:
If a farm must be relocated, the non-federal sponsors will help identify suitable replacement property for the operation. As such, the property owner will be entitled to receive relocation advisory services that include: 1. A full explanation of relocation benefits for the particular situation; 2. A discussion about the operation and what is needed for a successful relocation; and 3. A current listing of suitable properties. Other benefits can include: reimbursement for actual reasonable moving expenses, reimbursement of certain costs to search for a replacement site, and certain costs incurred to re-establish the farming operation. The movement of outbuildings such as shops, sheds, and grain bins will be evaluated on a case by case basis. For more information on the process for acquisitions please go to: http://www.fhwa.dot.gov/realestate

C-16 Ring Levee Qualification
Some comments asked about qualifying for a ring dike as a mitigation option.

Response:
Qualification for a ring levee as a mitigation option is still being determined as mitigation plans are developed. The non-federal sponsors will ultimately determine which properties qualify for a ring levee.

C-17 Ring Levee Impacts on Property Values
How will ring levees impact the value of homes and properties? Will the benefits of being protected by the levee outweigh the liability of being in the storage area?

Response:
Ring levees around a home or building site may affect valuation, aesthetics, safety, and security. The impact on the value of any given home or property will be case specific. Other projects constructed by the Corps of Engineers have resulted in minor positive or negative impacts to property values. Whether a ring levee will be an effective mitigation tool will be determined on a case by case basis and will take into consideration the preferences of the homeowner. Ring levees will not be used when there are significant risks to safety and security.

C-18 Scrap Metal and Other Stored Items
What happens to miscellaneous items (such as scrap metal, and old vehicles) stored on farm land, in sheds, or other outbuildings? Will these be bought out, moved, or abandoned?

Response:
Scrap iron and other stored items are considered personal property and not part of the real property. All personal property is for the owner to do as they wish. As part of the relocation the owner may be entitled to moving costs. Moving costs may be paid by either a fixed payment or on actual reasonable moving expenses. For more information on the process for acquisitions please go to: http://www.fhwa.dot.gov/realestate

C-19 Impacts to Non-Agricultural Businesses
What happens to non-agricultural business in the upstream area? Unlike a farm that could still be operated during a flood year, other types of businesses, such as a research business, could not operate. Non-agricultural businesses will be impacted, including gas stations, mechanics, grocery stores, bars, and banks.

Response:
Owners of properties and businesses that are directly impacted by the project will receive just compensation in accordance with PL 91-646. Unfortunately, no compensation is available for businesses that will only be indirectly impacted by the project.

C-20 Fish Passage
Some concern was expressed regarding the statement that "fish passage at the upstream control weir does not seem to be feasible."

Response:
Fish passage features are included on the Red and Wild Rice rivers to get fish around the control structures in these locations under all but the largest floods. Ideally, fish would also be able to pass upstream at the upper end of the diversion channel. However, the features required to make fish passage possible via the diversion channel would be extremely expensive because of the large difference in water surface elevation above and below the diversion inlet weir near Cass County Road 17. The cost to design and build a fish passage channel around this weir could reach $30 million. The Corps' opinion is that this cost would not be justified by the number of fish expected to reach the upper end of the diversion.

C-21 Impacts to School Districts
Some comments asked how the proposed diversion would impact school districts, including Central Cass School District, Kindred School District, Richland School District and others. One comment requested map projections showing school district boundaries.

Response:
Several approaches are being considered for dealing with impacts in the upstream staging and storage area; impacts to structures will depend on the type of the structure and the expected water level changes that may impact the structure. While some of these approaches may have impacts

to the tax valuation of properties in the school district, the potential loss of tax revenue is not compensable as part of the cost-shared Federal project. The Corps encourages school districts to work with the Metro Flood Study Work Group to ensure that any items that cannot be addressed by the Federal project be discussed at the local level.

C-22 Impacts to Canada
Upstream staging and storage is required to avoid downstream impacts into Canada. The Canadians have built a road that acts as a dam or a levee and restricts Red River flows. The Corps does not need to be concerned about limiting flows into Canada because this road already limits the flow.

Response:
The purpose of upstream staging and storage is to reduce downstream impacts along the entire 260 river miles between Fargo-Moorhead and the Canadian border.

C-23 Accuracy of Maps and Cost Estimates
Some comments questioned the accuracy of the staging area maps and could not locate homes or other specific structures on the maps. Concern was also expressed regarding the accuracy of ground elevation of structures shown on the maps. Since these maps are used to estimate costs, there was also a concern about accuracy of the latest cost estimates.

Response:
The maps are based on the best available aerial photography, topographic data, county property records and preliminary site visits. Although the data is not perfect, it is sufficient for a feasibility level of analysis. As the project moves forward, every affected property will be evaluated by survey teams on the ground. The current cost estimates include contingencies to account for inaccuracies in the estimate due to various factors.

C-24 Existing Sheyenne Diversion Channel
West Fargo is already protected by the existing Sheyenne Diversion Channel, and this project has already been paid for. How will the new diversion impact the Sheyenne Diversion?

Response:
The existing Sheyenne River diversion is really two diversion projects: the Horace to West Fargo diversion and the West Fargo diversion. The Fargo-Moorhead Metro diversion would incorporate and expand the Horace-to-West Fargo channel. From West Fargo north, the Fargo-Moorhead Metro diversion would run alongside the existing West Fargo diversion and be set far enough away so as to not affect the existing diversion. The Fargo-Moorhead Metro diversion would reduce risk in the cities of Horace and West Fargo from Sheyenne River floods more than the current Sheyenne Diversion does, and it will also reduce flood risk from Red River and Wild Rice River flood events.

C-25 Downstream Impacts
Some comments claimed that downstream impacts would still occur and stated opposition to any project that would result in downstream impacts.

Response:
Downstream impacts are nearly eliminated with the proposed diversion channel with upstream storage and staging. All of the flood risk management alternatives that were considered would cause both positive and negative impacts in various locations to various degrees.

C-26 Drainage
Make farmers stop draining their fields, this drainage contributes to the area flood problems.

Response:
Drainage is generally a local development issue and regulated at the local level. It is generally believed that ditching may contribute to smaller summer flood events, however it is unlikely that ditches play a significant role during extreme flood events for which the selected plan is designed.

C-27 Employment Impacts
Jobs will be affected with so many acres of land being impacted by the project. Will I have my job at a grain elevator if the elevator doesn't have any grain to handle due to persistent flooding of the acres in the upstream area? If commuter towns are displaced, the workforce in Fargo may be reduced and existing companies may have to leave the Fargo area.

Response:
Economic impacts of the project are discussed in the FEIS in Chapter 5 and in Appendix C. While some individual jobs may be lost or relocated due to the project, it is expected that the benefits of reduced flood risk will provide a climate supporting business expansion and increased employment opportunities in the Fargo-Moorhead region. Although the selected plan will increase the frequency and duration of flooding within the flood storage and staging areas, the majority of currently farmed acres will continue to be farmable most years.

C-28 Tieback Levee at Highway 17
What are the effects of the proposed tieback levee at Highway 17? Currently the overland Sheyenne River flooding that occurs in this area involves water flowing north and east across Highway 17 until it gets to the Wild Rice River. What are the effects when the levee is built and water cannot reach the Wild Rice River? Kindred, Davenport, and other areas will be at increased risk for flooding.

Response:
Local drainage issues along the entire diversion channel will be addressed in detail during the design and implementation phase. The project will include measures to capture and direct flows along the Highway 17 tieback levee into the diversion channel. The selected plan is not expected to increase flood stages anywhere on the Sheyenne River.

C-29 Studying Upstream and Downstream Impacts
Impacts upstream and downstream need to be further studied.

Response:

The project impacts have been defined in Chapter 5 of the FEIS and summarized in Chapter 3. Detailed impact information can be found in Appendix B Hydraulics.

C-30 Impacts to Tax Revenues
City property values in the upstream areas have decreased; these property values will have negative impacts on the cities by decreasing future tax revenues.

Response:
Several approaches are being considered for dealing with impacts to structures in the upstream staging and storage area, many of which will depend on the type of the structure and the expected water level changes that may impact the structure. While some of these approaches may have impacts to the tax valuation of properties, the potential loss of tax revenue is not compensable as part of the cost-shared Federal project. The Corps encourages cities to work with the Metro Flood Study Work Group to ensure that any items that cannot be addressed by the Federal project be discussed at the local level.

C-31 Appraisals
Appraisals would be made prior to the start of the project date, how is that date determined?

Response:
The timing of the appraisals and property acquisitions will be determined by the non-federal sponsors once the project has been approved and funded. The affected communities will have an opportunity to discuss acquisition timetables with the non-federal sponsors as they are being developed. Properties will be acquired before they are needed for the project. The construction schedule will be one of the primary factors in determining when properties are needed.

C-32 Assessment of Upstream Staging and Storage Area
A thorough assessment is required of the cultural, social, and economic impacts for the proposed upstream staging and storage area. Social effects have not been sufficiently analyzed or addressed, nor have the economic impacts of flooding up to 54,000 acres of agricultural land.

Response:
To clarify, the upstream storage and staging areas of the selected plan total approximately 39,000 acres. Cultural, social and economic impacts upstream and downstream are discussed in Chapter 5 of the FEIS and in Appendices C, D and E of the FEIS. While not exhaustive, the analyses of these impacts are sufficient to assess the feasibility of the project, to make a reasoned choice among the alternatives, and to comply with Corps of Engineers planning regulations and the National Environmental Policy Act (NEPA).

C-33 Soil Analysis
Expert comments in the geotechnical appendices of the SDEIS raise questions about the lack of adequate analysis of soil issues for the project. The true cost of the project cannot be estimated without proper soil analysis.

Response:
Geotechnical investigations have been conducted as part of the feasibility study. All comments generated through the Corps of Engineers' technical review processes have been adequately addressed in the FEIS. More detailed geotechnical investigations will continue during the design phase, but the information in the FEIS is sufficient for feasibility level design and cost estimating, and to make a reasoned choice among alternatives.

C-34 Growth Potential
Growth and development potential will be severely restricted for towns in and around the upstream staging and storage area.

Response:
Chapter 5 and Appendices C and D of the FEIS discuss impacts on growth and development in the study area. It is true that areas in and near the upstream staging and storage area will be significantly impacted, but positive benefits will occur in other parts of the study area.

C-35 Sedimentation
The proposed project will change the constitution of the river and there will be increased sedimentation in the protected area.

Response:
The FEIS includes the USGS report "Sediment Concentrations, Loads, and Particle Size Distributions in the Red River of the North and Selected Tributaries near Fargo, North Dakota during the 2010 Spring High-Flow Event." In addition, Appendix F of the "Red River Diversion, Fargo-Moorhead Metro Flood Risk Management Project, Feasibility Study, Phase 4" prepared by the consulting team (Moore Engineering, Inc., Houston Engineering, Inc., Barr Engineering, Co., and HDR Engineering, Inc.) includes a full exhibit presenting and interpreting this USGS 2010 dataset as well as other sediment/geomorphology datasets available for the study area, upon which an evaluation of the potential impacts on the sediment transport characteristics and geomorphology of the rivers that could be anticipated as a result of the selected plan will be made. The USGS 2010 dataset combined with the Geomorphology Study by West Consultants (2001) clearly show that the Horace-West Fargo diversion has not resulted in large changes on the sediment dynamics of the Sheyenne River; the Horace West Fargo diversion provides an example of the potential maximum impacts that can be expected from the diversion channel alternatives.

C-36 Impacts to Churches, Bars, Establishments, and Other Community Centers
Churches, bars, business establishments, and other public gathering areas will be negatively impacted by the upstream staging and storage area. What compensation will be provided for these buildings? Even if these buildings are not directly impacted, the surrounding communities will be displaced and churches will lose their congregants, bars will lose their patrons, and businesses will lose their customers.

Response:
Owners of properties and businesses that are directly impacted by the project will receive just compensation in accordance with PL 91-646. Unfortunately, no compensation is available for businesses, churches, and community centers that will only be indirectly impacted by the project. Impacts to churches and social networks are described in Appendix D of the FEIS. Section 4 of Appendix D of the FEIS provides a detailed analysis of the alternatives carried forward in the study and their impacts to the "Identity" social factor.

C-37 Soil Stability
The soils in the diversion path are not stable, the I-94 interchange at Veterans Boulevard and I-94 interchange allowing east and west bound traffic into the west end of West Fargo are examples of instability in the area. The soil in the diversion path could not withstand a 500 year event.

Response:
Geotechnical investigations have been conducted as part of the feasibility study. More detailed geotechnical investigations will continue during the design phase, but the information in the FEIS is sufficient for feasibility level design and cost estimating. The selected plan takes soil stability into account and is technically feasible.

C-38 Impacts in Comstock
Comstock will possibly be flooded. What are the mitigation strategies for Comstock, will the area be bought out? How will the grain handling facility (with grain conveyors sitting 12-15 feet in the ground) be handled? If the decision is made to ring dike Comstock, what is the effect on the groundwater? An agronomy center is located at Hwy 75 and County Road 2, and the center handles chemical, seed, and petroleum products. Will this center be relocated or protected, and if protected will access be provided to allow service to patrons south of the most affected staging area?

Response:
Operation of the proposed staging area is expected to result in 1-percent chance flood depths of one to three feet in portions of Comstock, Minnesota. Section 3.13.1.2 of the FEIS states a ring levee would be pursued for Comstock. Details relating to specific structures and businesses will be developed during the design phase

C-39 Inflation Amounts
What is the amount of inflation allowed for this project? Will that amount be cost shared with the Federal government or a cost to local residents?

Response:
The federal share of the Locally Preferred Plan will be capped at the federal share of the Federally Comparable Plan, as discussed in Section 3.14.2 of the FEIS. Inflation on those features that are common to both plans may be cost shared. All costs in excess of the federal share of the project will be non-federal costs.

C-40 Long Term Impacts
The long term impacts to the surrounding areas have not been exhaustively studied.

Response:
There is no requirement to "exhaustively" study long-term impacts. Corps of Engineers planning policy and the National Environmental Policy Act require that the Corps study and consider reasonably foreseeable direct, indirect, and cumulative impacts of the proposed action. Reasonably foreseeable impacts from the proposed action and the other diversion channel alternatives are discussed in Chapter 5 of the FEIS.

C-41 Depreciated Value
Will farmers be paid tax depreciated value for farm buildings taken in the 54,000 acre area affected by upstream staging and storage? How can farmers possibly afford to begin farming somewhere else if they get depreciated value for grain bins and other necessary farm structures? If farm structures are purchased at their depreciated value, this will have serious consequences since farmsteads would have to be rebuilt at new prices.

Response:
To clarify, the upstream storage and staging areas of the selected plan total approximately 39,000 acres. The government is required to pay fair market value for acquired property. At the public meetings, there was some confusion over the meaning of depreciated value. When a property is appraised, the condition of the buildings and other structures are taken into consideration in the value of the property. If a building or structure is in less-than-new condition, it has a depreciated value based on its condition. The concept of depreciated value for appraisal purposes is unrelated to the tax depreciated value. Even if a property has a tax depreciated value of zero, it would still be appraised at the fair market value. It may be possible to relocate structures to the new farm site. The negotiation process will address if relocation of some or all of the structures is a viable option.

C-42 LPP is More Environmentally Damaging and Expensive
The proposed LPP will result in greater ecological impacts than other alternatives. More tributaries, more acres of wetlands, forests, aquatic riverine, and fish tributaries and passages will be affected from the LPP than the FCP. The LPP will have a greater impact on wildlife and fisheries than other alternatives.

Response:
The costs and impacts of the LPP and FCP are described in Chapters 3 and 5 of the FEIS. The primary planning objective is to reduce flood risk to the entire Fargo-Moorhead Metro area. The LPP reduces flood risk to a larger geographic area and a greater number of people than the FCP.

C-43 Impacts to Prime Farmland
Thousands of acres of prime agricultural land will be affected in the upstream staging and storage area and along the diversion path.

Response:
Approximately 6,878 acres of prime and unique farmland would be impacted by the diversion footprint of the selected plan. This impact is considered to be less than significant based on the large quantity of farmland in the project area and the fact that over 90-percent of all farmland is considered prime and unique in this region. An analysis of prime and unique farmland was not conducted specifically for the storage and staging areas; there will be no impact to crop production in those areas for most years. Only for the most severe flood events will there be an effect from additional water and duration. Even with a 1-percent chance spring flood event, the duration of standing water is estimated to only increase 5 to 15 days.

C-44 Incremental Benefits
By starting the project on the north end and working south, are you foregoing incremental benefits for the entire duration of construction? If you started on the south end, couldn't Fargo benefit from whatever control the early stages of the dam diversion can provide?

Response:
If the project was started on the south end there could be potential benefits to Fargo upfront. There could be some technical complications and changes to the operating plan would be needed. The study team will evaluate construction sequencing during the design and implementation phase. Any substantive changes may require supplemental NEPA documentation. Section 3.13.2 of the FEIS describes the design and construction considerations.

C-45 Impacts to Memorial Sites
Memorial sites in the upstream area will be impacted and destroying these locations will damage the value of the memorials. How will you save monuments and memorials and preserve the ability of people to visit the site?

Response:
Mitigation for monuments and memorials will be determined on a case-by-case basis. Relevant issues will be whether the monument/memorial can be relocated, whether it can be protected by a ring dike, and who has control over the site. These issues will be addressed during the negotiations for acquisition. See Section 5.2.3.1.10 of the FEIS for further discussion.

C-46 Devils Lake
How will the proposed project protect Fargo from flooding on the Sheyenne River caused by excessive flows from Devils Lake? That event is more likely than the 500 year flood that is being used to plan this project.

Response:
The selected plan would improve the Fargo-Moorhead Metropolitan Area's ability to withstand excessive flows from Devils Lake.

C-47 Federal Grant Funded Parks
The Oxbow Community Memorial Park (Nadia's Hope Playground) was funded through the Land and Water Conservation Fund. The Oxbow Park District received a LWCF grant of

$40,000 which was matched with $40,000 of local funding. Recreation areas that receive federal assistance through the LWCF must remain dedicated to public outdoor recreation use and must be maintained in perpetuity. If this is not possible, a replacement park must be provided and designated as such through an official conversion process. If conversion is required, North Dakota Parks and Recreation Department must be contacted prior to taking any action. See Section 3.13.12 of the FEIS for further discussion.

Response:
The final disposition of the Oxbow Community Memorial Park will be determined during the design and implementation phases of the project in coordination with the North Dakota Parks and Recreation Department and the National Park Service. Information regarding this park was added to the description of the locally preferred plan in Chapter 3 of the FEIS.

C-48 Emergency Access on Upstream Roads
Many of the residences in the upstream area are on raised land and have not experienced flooding. Who will be responsible to raise the roads in the area so people who live here will have access to fire and sheriff departments and medical assistance as needed? Will residents be forced to leave their homes if emergency vehicles cannot access them? The safety of residents and people needing to use these rural roads has not been adequately addressed.

Response:
Residences will generally not be allowed in areas where the post-project flood depths are three feet or greater. Residences in areas where post-project flood depths are between one and three feet will be considered for ring levees, and access during floods is a concern that will be considered when deciding whether a ring levee is appropriate. There are no local road raises planned as part of the project. It should be noted that the Fargo-Moorhead region has not experienced a 1-percent chance event, so it is not surprising that many areas shown within the existing 1-percent chance floodplain have not been flooded in previous flood events.

Emergency access during floods is an existing problem in the study area. The Minnesota 35K diversion (FCP) and North Dakota 35K diversion (ND35K) would increase the frequency of flooding downstream to varying degrees depending upon location. Increased loss of emergency egress would occur infrequently for relatively short periods of time. The selected plan would have minimal impacts to downstream flood stages, but could have impacts to emergency access upstream. All diversion plans would significantly improve public safety in the Fargo-Moorhead region by reducing the risk to several major medical facilities in the benefitted area and by improving emergency vehicle travel throughout the project area.

C-49 Western Alignment
The western alignment should be considered. The western alignment protects critical infrastructure including the electrical power west of West Fargo and the Raymond interchange, a vital transportation hub. With the currently proposed alignment, three of the crossings over the existing West Fargo diversion will be lost, further disrupting access and transportation. These crossings would not be lost if the western alignment was implemented. The western alignment would impact fewer acres of wetlands. The western alignment would be safer because it is on

higher ground the proposed alignment, there would be less of a need for levees around the channel. The western alignment will preserve the existing West Fargo diversion and the flood protection already provided. Finally the western alignment will allow the city of West Fargo to grow and develop in the future.

Response:
The proposed western alignment was considered and is discussed in Section 3.7.3 of the FEIS.

C-50 Forest Land Mitigation
The 2:1 mitigation ratio is adequate to restore riparian/upland forests removed due to construction activities.

Response:
Comment noted.

C-51 Floodplain Forest Performance Standards
Although they are native species, American elm and green ash are not recommended for use in the mitigation efforts because of Dutch elm disease and emerald ash borer. Mitigation efforts should attempt to focus on establishing other non-host, native tree species. Silver maple is not considered a native species to North Dakota, and quaking aspen, which is a native species, should be considered as a more appropriate substitute for silver maple.

Response:
An adaptive management and mitigation team is in the process of being established and will include the cooperating agencies. As a group the team will carefully select the tree species used in the project. This will include native floodplain forest tree and shrub species, with a goal of diversity. American elm and green ash do have known diseases that will impact them; however, they are trees that are native to the area and very important to the existing floodplain forest. The majority of trees planted will be the other mentioned species, but both green ash and American elm will most likely still be included in the planting plan. There are currently Dutch elm disease resistant American elm being planted for Corps projects; this variety could be available for this project. Emerald ash borer has not been identified in the Fargo Moorhead Metropolitan area yet, and whether it will reach the area remains to be seen. Based on the likelihood of emerald ash borer reaching the area, the number of green ash planted will be closely looked at. As suggested in the comment quaking aspen will be added to the diverse species list.

C-52 Seasonal Flooding on Trees
The Corps should consider timing of inundation and duration of flooding when assessing if additional mitigation areas should be sought for seasonal flooding on trees.

Response:
The timing and duration of the flooding is an important component to consider when looking at how flooding could impact the native tree species in the area. Flooding during the growing season is more problematic to tree health than flooding while trees are dormant. The majority of the flooding that will be induced by the project will be during the months of March, April and

early May, which is considered a period of dormancy for the tree species in the region. Flooding in May that extends into June could have an impact if it is long lasting. Floodplain tree species in the area that would be impacted can survive months of flooding during the growing season as long as their canopies remain above water.

C-53 Diversion Crossings and Road Raises
It doesn't make sense to build the project in an area that has highways that will need to be raised and multiple rivers and railroad crossing. Raising these highways could create dangerous situations in the winter if cars go off the road.

Response:
Diversion crossings and transportation impacts are discussed in the FEIS as well as Appendix C (Economics). More information on the impacts to bridges and other infrastructure, along with a map detailing the location of bridges, can be found in section 5.2.3.1.4 of the FEIS. Sections 3.8.3 and 3.8.4 of Appendix C of the FEIS contains additional details about impacts to rural and public infrastructure. There will be bridges placed at a minimum of every three miles to get around the diversion channel. Standard safety rules, laws and regulations for highway travel with heavy equipment will have to be complied with. Standard safety rules, laws and regulations will be applied to raised highways. There are no local road raises planned as part of the project.

C-54 Road Repairs
Roads in the upstream staging and storage area will be damaged every time they are flooded. How will these roads be maintained and who will pay for it? If people are removed from the staging area, who will be left to pay taxes and maintain roads and infrastructure needed by farmers and commuters?

Response:
Impacts to downstream and upstream infrastructure are addressed in Sections 3.8.3 and 3.8.4 of Appendix C of the FEIS. More information on the impacts to bridges and other infrastructure, along with a map detailing the location of bridges, can be found in section 5.2.3.1.4 of the FEIS. Maintenance of roads will remain a local responsibility.

C-55 Socioeconomic degeneration
Several comments mentioned the issue of socioeconomic degeneration. This project may cause accelerated migration of rural residents. NEPA requires analysis of this socioeconomic degeneration. Aspects of socioeconomic degeneration include people moving away, impacts on local businesses, and impacts on property values. Some residents may be forced to choose between their choice of environment for raising a family and economic pressures to be close to work. The project will impose hardship on some communities.

Response:
The issue of socioeconomic degeneration is discussed in the FEIS in section 5.2.3.1.7 and in section 5.2.3.2.1. This is also addressed in Appendix D of the report.

C-56 Flowage Easements
Flowage easements on farmland will decrease the value of farmland and the landowners will be adversely impacted by this. Are these forced reductions in property values included in the project cost, or is this a cost that must be borne by the property owner?

Response:
The amount paid for a flowage easement is directly related to the amount of impact to the value of the property. The payment to the landowner includes the difference in value of the property without the project and the value with the project. Therefore it is expected that lands subject to a flowage easement have a decreased value and as such the owners are compensated for the decrease in the value of the land.

C-57 Mitigation for School Districts
Kindred School District would be adversely impacted by the proposed project. With nearly 100 employees, it is the largest employer in the District. About 20% of the District's student population lives in areas that would likely be bought out and the loss of this student population would negatively impact the District. The District has committed to construct and finance a new school; however, it may fall short on the financial obligations with the loss of student population. Kindred School District would lose federal educational grant funds, as well as taxable valuations, if the LPP is implemented. The District needs mitigation if the proposed diversion is implemented. Similarly Richland School District could lose 20% of its student population, and suffer economic losses.

Response:
Impacts to schools in the upstream staging area are discussed in Section 5.2.3.1.7 of the FEIS. Shifts in student population from one school system to another are considered regional transfers; as such, there is no gain or loss to the national economy overall. Although the selected plan may have impacts to the tax valuation of properties in the school district, the potential loss of tax revenue is not compensable as part of the cost-shared Federal project. The Corps encourages school districts to work with the Metro Flood Study Work Group to ensure that any items that cannot be addressed by the Federal project be discussed at the local level.

C-58 Fish and Wildlife Service Coordination Act
Under the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the U.S. Fish and Wildlife Service (USFWS) is authorized to provide recommendations to the Corps on federally funded water development projects. The USFWS has recommended the FCP alternative rather than the LPP.

Response:
The Fish and Wildlife Service has been involved in the process from the very beginning of the planning process; they have provided a Fish and Wildlife Service Coordination Act report in which they have made recommendations for this project. Each of those recommendations is addressed in the FEIS. The Fish and Wildlife Service Coordination Act report can be found in Attachment 3 of the FEIS and responses to the recommendations can be found in Chapter 6.

C-59 Impacts in Grand Forks

The analysis provided in the FM Flood Report introduces both a new hydraulic software model (HECRAS unsteady state model) and new flood frequency analysis methodology (shorter duration "wet years" statistical analysis). While this new software was useful, it also causes difficulties to correlate the flows and frequencies with what downstream communities are currently using for regulatory and engineering purposes. For example, Grand Forks' current DFIRM was based on a 2001 hydrology study and the 2003 Regional Red River Flood Assessment Report that was not a HECRAS unsteady state model. In order to reconcile any variations, the Project must include a detailed study of Grand Forks local hydrology and hydraulics with the new software to precisely identify impacts at the local level. Because they have not been precisely identified using the same models, Grand Forks is concerned about the potential impacts, particularly the impacts to the three bridges connecting East Grand Forks and Grand Forks. The highest of these bridges is very near the 50-year event when it needs to be closed, and this closure would have a negative impact to Grand Forks and East Grand Forks.

Response:

Stage hydrographs at the Demers Avenue bridge for the 10-percent and 1-percent chance wet-period flood events show that the peak elevation is slightly higher with the LPP, but the duration of stages above elevation 819 for the 10-percent chance event and above 825 for the 1-chance event are somewhat less (Figure U-1: State Hydrographs of Demers Avenue Bridge). While the hydrology and hydraulics used for the Fargo-Moorhead Metropolitan Area Flood Risk Management study are different from what was used for the Grand Forks' current DFIRM, they are sufficient to conclude that at Grand Forks the LPP will increase peak stages on the order of 0.1 to 0.3 ft for moderate and major floods and but will slightly reduce the duration of the highest stages. The higher stage might be a negative impact for any particular flood, but the shorter duration may be a benefit for any particular flood. The higher stage does not significantly reduce the level of flood risk reduction provided by the Grand Forks / East Grand Forks project and FEMA has stated that Flood Insurance Study updates will not be required for Polk County, MN and Grand Forks County, ND with the LPP.

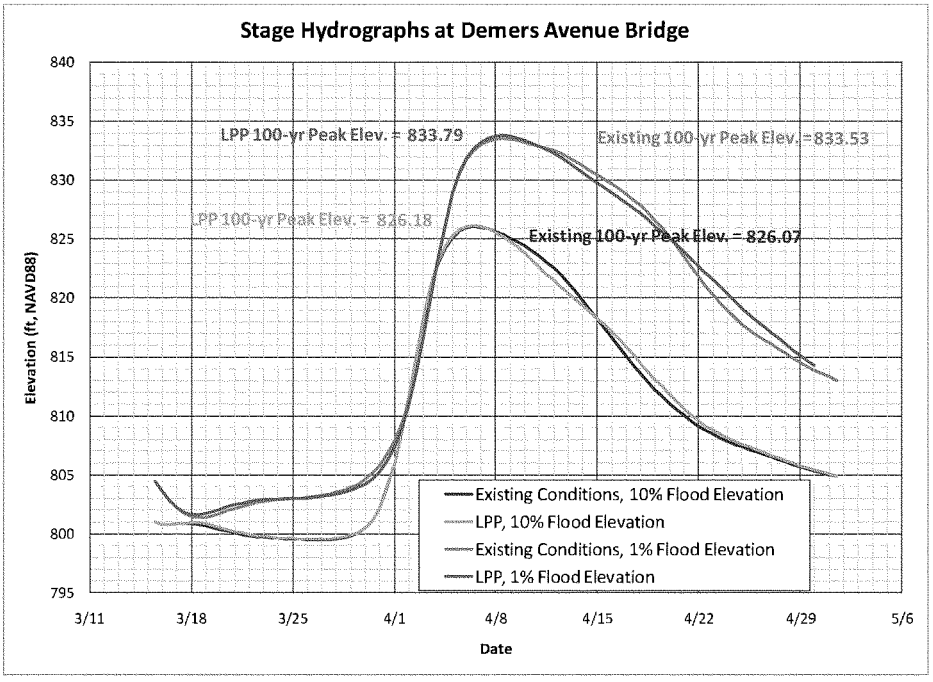

Figure U-1: State Hydrographs of Demers Avenue Bridge

C-60 Impacts to Utilities in Upstream Staging and Storage Area
What are the impacts to utilities in the upstream area? Including Cass Rural Water System, Oxbow and Bakke sewer system, and Cass County Electric? What are the costs of mitigation?

Response:
Utility relocation costs have been included for all known utility lines crossing the diversion channel and other structural features of the project, along with contingency amounts to account for unanticipated costs. Once the design of the project is more finalized, the non-federal sponsors will work with the utilities to determine what specific utility lines will need to be relocated.

Generally, just compensation is considered to be the appraised market value of the property at the time of the taking. However, with utilities, roads, railroads, cemeteries, and other facilities serving a public purpose, there may not be a market value for the property. In that case, the substitute facility doctrine provides that the proper compensation is a functionally equivalent facility. Providing a functionally equivalent facility may involve alteration, lowering, raising, or removal and replacement of the affected facility or part thereof. Several criteria must be met for

the substitute facility doctrine to apply, including that the owner of the facility must have a compensable interest in the property and must have a factual or legal duty to replace the facility.

C-61 Impacts to Aquifers
What will happen to the aquifers? Will stored water leach current and historically used herbicides, pesticides, and other chemicals out of the soil and into the ponded water? Would these chemicals be able to migrate down to the aquifers and would they then impact drinking water? Has the Corps examined soil and water samples from the former grain elevator in Hickson to determine if chemicals are present that may impact the aquifers?

Response:
The soils in the area are typically tight glacial clays. These types of soils are not conducive to transmitting large quantities of water especially over the relatively short timeframe that any proposed diversion would be filled for a high water event. Much of the proposed staging area would be inundated naturally during extreme flood events, and the project is only increasing the depth of inundation. For these reasons it is anticipated that there would be little to no impact to water quality in the aquifers from the diversion channel alternatives. Soil and water sample analysis at specific sites may be performed as needed during the design phase. If necessary, long term monitoring of regional aquifers likely would be the responsibility of the non-federal sponsors as part of Operation and Maintenance.

C-62 Impacts to Power Lines
Are power lines able to go underwater and what is the cost to ensure they will continue to supply electricity? Minnesota Power has a high voltage transmission line that may be impacted by the project, will it be relocated or modified to withstand the effects of elevated water levels?

Response:
Utility relocation costs have been included for all known utility lines crossing the diversion channel and other structural features of the project. Impacts to power lines in the staging and storage areas are expected to be minimal, but this will be verified during the design and implementation phases of the project.

C-63 Project Failure and Loss of Life
If the proposed project were to fail, what would be the "loss of life probability?"

Response:
Safety and potential loss of life associated with a failure of the system are discussed in Section 3.10 of the FEIS and in the Levee Breach and Loss of Life Analysis Report attached to Appendix D of the FEIS.

C-64 Impacts to Walcott Township
The maps in the SDEIS indicated that water could rise up to in the area around the Wild Rice River, including Walcott Township. However, the SDEIS does not consider Walcott Township to be in the staging area. What are the impacts to Walcott Township? Property values, taxes, and access roads would all be impacted.

Response:
The 1-percent chance flood stage at Highway 46 on the north side of Walcott Township is expected to increase one foot or less. Impacts would gradually decrease southward to nearly zero feet at Richland County Road 2. Very little additional acreage is affected by project impacts in Walcott Township, as shown on Figures 65, 67, 69 and 71 in Chapter 5 of the FEIS. All impacted areas outside of the defined staging area will be analyzed to determine if the impacts constitute a taking that would require compensation under the Fifth Amendment of the U.S. Constitution.

C-65 Impacts Outside Staging Area
There will be impacts outside the designated staging area as shown by the red lines on the map. This is misleading and the costs to this additional impacted area are not fully included. These red lines are a best guess only, and that offers little information and little confidence to the public.

Response:
Stage increases for the 1-percent chance event outside the defined staging area are expected to be less than one foot. All impacted areas outside of the defined staging area will be analyzed to determine if the impacts constitute a taking that would require compensation under the Fifth Amendment of the U.S. Constitution.

C-66 Climate Change
Climate change impacts should be modeled and taken into account. The Corps' precipitation projections were calculated without taking into account climate change.

Response:
On 28-29 September 2009, the St. Paul District conducted an Expert Opinion Elicitation (EOE) on increasing flood flows on the Fargo, ND-Moorhead, MN flood risk management project. Six Federal experts and 6 Observers addressed this issue including climate change impacts. For a full account of this proceedings refer to Appendix A-1B. For a full account of the methodology developed to implement the panel's recommendations, see Appendix A-1C. The direct GHG emissions from the project would be limited to those related to construction of the diversion channel alternatives, and would cease upon conclusion of construction. Any impact would not be meaningful.

C-67 Additional Agribusiness Economic Impact
Businesses related to agriculture will experience substantial economic losses. These losses to agribusiness are not included in the SDEIS. Such losses include a reduction in inputs and yields, for both the staging area and the storage area, reduced agricultural production resulting from impacts to general drainage, and other business losses due to limited access on roads in the upstream area. Although summer use of the project would be infrequent, the economic losses and loss of production would be very large. Loss of production means less food produced. Agriculture is the economic engine of the state of North Dakota and the impacts to agricultural have not been sufficiently addressed.

Response:
There will be no impact to crop production for most years. Only for the most severe flood events will there be an effect from additional water and duration. Even with a 1-percent chance spring flood event, the duration of standing water is estimated to only increase 5 to 15 days.

C-68 Cultural Resources
The proposed Fargo Diversion will impact thousands of acres of historical land containing information of past cultures, including historic farming communities and Native American communities. One comment stated that the cultural survey should be redone.

Response:
A Phase I cultural resources survey of the proposed diversion alignments and tieback levees on both the North Dakota and Minnesota sides of the Red River is currently underway. If changes are made to these alignments, any new areas will also be surveyed. A Phase I survey consisted of a walkover of the project area by archeologists to identify and record any surface-visible prehistoric and historic archeological sites. Subsurface testing during the survey involves small hand-dug shovel holes or soil auger holes to identify shallowly buried prehistoric archeological sites and soil cores to identify more deeply buried sites. The purpose of this survey is to locate and record both prehistoric and historic archeological sites and any standing structures over 50 years old. The next step will be to do testing and archival research for any archeological sites found in the selected alignment to determine if they are eligible for inclusion on the National Register of Historic Places. Archival research and interviews on the history of any 50 year old or older structures, including farmsteads, will be conducted to determine if they meet any of the eligibility criteria for listing on the National Register (i.e., the site/building is associated with significant historic events; is associated with important persons; has a distinctive type, period or method of construction, is the work of a master architect, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or has the potential to provide information important to history or prehistory). Finally, any archeological sites and architectural structures listed on or determined eligible to the National Register which will be impacted by the diversion construction will have to have those impacts mitigated prior to diversion or tieback levee construction in that area. Mitigation for eligible or listed prehistoric or historic archeological sites generally consists of data recovery excavation of a portion of the site. Mitigation for historic architectural sites generally consists of large-format photography and measured drawings of any buildings and structures, a scaled planview map of a farmstead layout, and a written history of the site. Native American tribes with historic ties to the Red River Valley are also being consulted regarding locations in the project area which are important to them either currently or historically.

C-69 Wet Cycle and Need for Flood Management
The substantial flooding of recent years does not necessarily indicate a wet cycle or increase the likelihood of future flood events. If you flip a coin and get heads three times in a row, that does not increase the odds of getting heads the fourth time. Each event has 50/50 odds, changing the odds is just playing with the numbers. If the area is in fact in a wet cycle, what happens if it shifts back into a dry cycle by the time the project is constructed?

Response:
Hydrologic methods and assumptions used to support the study recommendation are described in Appendix A, Hydrology, of the FEIS. The study team used the best available information to estimate the probability of future flood events and the associated expected economic damages over the 50-year period of analysis. If the future is actually drier than anticipated, the project will be operated less often.

C-70 Impacts to Organic Farming
Our farm is certified organic and we will not be able to keep our organic certification if our land is flooded and contaminated with water containing chemicals, residue, debris, and seed that is genetically modified.

Response:
The government is required to pay fair market value for any property interest it acquires. The amount paid for a flowage easement is directly related to the impact to the value of the property. The payment to the landowner includes the difference in value of the property without the project and the value with the project. Therefore it is expected that lands subject to a flowage easement have a decreased value and as such the owners are compensated for the decrease in the value of the land. Unfortunately, this may not fully compensate for all impacts on revenue streams, such as organic certification.

C-71 Longer Commutes
Commutes and travel time will be longer as drivers have to go around the diversion. This will have costs, both fuel and lost productivity. In addition, these longer travel times will increase air pollution and vehicle emissions.

Response:
There will be bridges placed at a minimum of every three miles to get around the diversion channel. Standard safety rules, laws and regulations for highway travel with heavy equipment will have to be complied with. The environmental consequences of the diversion channel alternatives are discussed in more detail in Chapter 5 of the FEIS. Diversion crossings and transportation impacts are discussed in the FEIS as well as Appendix C (Economics).

C-72 Wetland Mitigation
Will mitigation wetlands be able to replicate the wetlands impacted by the project? Who will maintain the new wetlands?

Response:
An analysis was completed to describe the form and function of the wetlands to be lost; this information was used for designing the wetland types for the bottom of the diversion channel. An adaptive management and monitoring plan has been developed to ensure that proper form and function is achieved with the new wetlands. The types of wetlands lost are mostly farmed wetland with very poor function ratings. When overall wetland functions are considered the wetland development associated with the LPP is expected to fully offset any losses associated with project construction. Wetlands within the proposed diversion corridor will not be subject to

the regular disking/plowing for agricultural production to which the majority of the existing wetland resources are subject. The replacement of wetland functions lost will be done within the same watershed as the impacts, adequately addressing some of the needs of the watershed.

C-73 Mosquitoes
There is a possibility for increase mosquito habitat and an increased mosquito problem associated with the water in the upstream storage and staging area. The SDEIS lacks a cost and risk assessment for mosquito borne diseases.

Response:
Currently Fargo ND, Moorhead MN and Cass County are part of a mosquito spraying program to combat the mosquito problem; this plan would be adjusted to include any areas where the project would result in mosquito habitat.

C-74 Fish Stranding
If fish stranding occurs and it is not possible to resolve the problem, then nothing will be done. This is unacceptable, something must be done about fish stranding if it occurs.

Response:
If substantial fish stranding is observed following project operation, the Adaptive Management Team (including the sponsor and resource agencies) can discuss actions to remedy the situation. This could include modifying project operations, construction or grading activities in specific problem areas, or if warranted, implementing additional mitigation to address the issue.

C-75 Impacts South of Highway 46
Have complete studies on impacts south of Highway 46 been done? We have seen maps showing impacts of less than a foot ranging to 2.6 feet 10 miles to the south. This seems inaccurate and incomplete; has a credible impact study been done for the area south of Highway 46?

Response:
Impacts have been assessed upstream to Abercrombie, North Dakota. During the public meetings, several maps were presented; some showed impacts (differences between the with-project and without-project condition), while others showed total flood depths. Increases to the 1-percent chance flood stage outside of the defined staging area are less than one foot. One-percent chance flood depths vary significantly depending on the location and ground elevation. See Section 5.2.1.4 in the FEIS for updated information.

C-76 Impacts to Sugarbeet Production
The best time to plant sugarbeets is mid April to early May, and sugarbeets do not tolerate standing water. Sugarbeet production in the upstream staging and storage area will disappear, and there will be many negative repercussions of this including substantial economic losses.

Response:
There will be no impact to crop production for most years. Only for the most severe flood events will there be an effect from additional water and duration. Even with a 1-percent chance spring flood event, the duration of standing water is estimated to only increase 5 to 15 days.

C-77 Total Water Time in Staging and Storage Areas
The plan states that water will be held in the staging area for an extra seven days, however, this is flawed. The plan also states that water will be held in the staging area beginning when the river level reaches 26 feet. In 2011 the river reached that level on April 4th and it did not drop below 26 feet until May 9th. This is 35 days until the water would begin to drain out of the storage area, and it could take an extra seven days to run off the staging area. The area would not have been clear of water until May 16 and then it would have taken an additional 14 days to dry enough to be ready for planting (under ideal conditions) and planting would have occurred on May 30 at the earliest. Without the project, we planted wheat on May 3rd in land that would be in the staging area. With the project in place, that planting would have been 27 days later, not the seven days as described in the plan.

Response:
Staging would actually start when the Fargo gage reading is between 27 and 28 feet. For a typical 10-percent chance (10-yr) event, staging would increase flood durations on the order of 3 to 10 days, depending on the elevation of the land. For a typical 2-percent chance (50-yr) to 1-percent chance (100-yr) event, staging would increase flood durations 5 to 15 days, depending on the elevation of the land. For a typical 0.2-percent chance (500-yr) event, staging would increase flood durations 1 to 11 days, depending on the elevation of the land. This information can be found in Attachment 5, Appendix F, Exhibit D, Figures F-D9 through F-D12. The presence of staging does not mean that all areas below the maximum staging elevation of 922.9 are wet for the entire duration of staging. The information provided in Attachment 5, Appendix F, Exhibit D accounts for the time needed to drain. Drying time would be approximately the same for areas that would get wet under existing and with-project conditions. Drying time does need to be added to areas that only get wet under with-project conditions. Additional modeling work is being done to investigate how the staging frequency and duration can be reduced.

C-78 Sedimentation and Impacts to Fish
The proposed alternative will have a significant effect on the geomorphology, sedimentation and sediment dynamics of the Red River. The diversion channel will substantially affect sedimentation in the Red River and tributaries. Experiences with the Sheyenne Diversion channel make it clear that large changes in sediment dynamics are likely to occur. Sedimentation can reduce storage capacity that leads to flooding. Sedimentation can also have negative impacts on aquatic life that can lead to fish mortality and changes in behavior. Sedimentation impacts and sedimentation mitigation costs must be included in the Final EIS.

Response:
The FEIS includes the USGS report "Sediment Concentrations, Loads, and Particle Size Distributions in the Red River of the North and Selected Tributaries near Fargo, North Dakota during the 2010 Spring High-Flow Event." In addition, Appendix F of the "Red River

Diversion, Fargo-Moorhead Metro Flood Risk Management Project, Feasibility Study, Phase 4" prepared by the consulting team (Moore Engineering, Inc., Houston Engineering, Inc., Barr Engineering, Co., and HDR Engineering, Inc.) includes a full exhibit presenting and interpreting this USGS 2010 dataset as well as other sediment/geomorphology datasets available for the study area, upon which an evaluation of the potential impacts on the sediment transport characteristics and geomorphology of the rivers that could be anticipated as a result of the selected plan will be made. The USGS 2010 dataset combined with the Geomorphology Study by West Consultants (2001) clearly show that the Horace-West Fargo diversion has not resulted in large changes on the sediment dynamics of the Sheyenne River; the Horace West Fargo diversion provides an example of the potential maximum impacts that can be expected from the diversion channel alternatives.

C-79 Wetland Replacement
The Corps' suggestion of replacing wetlands by simulating wetland conditions on the bottom of the diversion channel in a low flow channel is not feasible. Mitigating for wetlands by designing the bottom of the diversion channel as a wetland is not enough. There are not enough acres in the bottom of the diversion to satisfy the necessary mitigation for this project. The SDEIS does not address how these wetlands will be comparable to the previously existing wetlands that were affected by the diversion and does not describe the diversion channel wetlands' functions for surrounding wildlife. A long and narrow strip of wetlands does not provide the same habitat function as a larger contiguous wetland. The wetlands being filled also perform an essential function in flood control efforts. The Final EIS must describe the function of the low flow channel and how it is guaranteed to compensate for wetlands that are affected by the diversion.

Response:
A detailed wetland analysis has been done for the LPP, FCP and ND35K. A summary of this analysis can be found in the FEIS Chapter 5, and the more detailed analysis is located in Appendix F. As part of this analysis, wetlands were delineated and a function analysis was done using the Minnesota Routine Assessment Method (MnRAM) as recommended by the Fish and Wildlife Service for each wetland type. This analysis identified wetland functions, including functions for wildlife and flood control. Using this information the Corps is confident that mitigation within the diversion channel bottom would adequately mitigate for the loss of wetlands. This mitigation not only includes the 10 foot wide low flow channel but also includes the entire 250 foot bottom width of the diversion channel and an undetermined distance up the side slope of the channel. Wetland features will be included during the design of the diversion channel to ensure that different wetland functions are being incorporated into the plan.

When overall wetland functions are considered, the wetland development associated with the LPP is expected to fully offset any losses associated with project construction. Wetlands within the proposed diversion corridor will not be subject to the regular disking/plowing for agricultural production to which the majority of the existing wetland resources are subject. The replacement of wetland functions lost will be done within the same watershed as the impacts, adequately addressing some of the needs of the watershed. An adaptive management and mitigation plan has also been included (Attachment 6 of the FEIS). This plan discusses the wetland mitigation, costs, and monitoring that will be conducted post project to ensure the success of the mitigation.

C-80 Adverse Impacts to Fish and Wildlife
The diversion channel will create numerous problems for multiple tributaries and wildlife and aquatic species. The Final EIS must address the negative impacts to all tributaries and the specific adversities facing wildlife and aquatic life. A plan to mitigate these adversities must be identified and mitigation costs must be included in the Final EIS.

Response:
The adverse impacts to fish and wildlife due to the project are addressed in Chapter 5 of the FEIS. A mitigation plan, including costs and is provided in Attachment 6 of the FEIS.

C-81 Ecological Benefits to Fish and Wildlife
The diversion channel will offer no ecological benefits and will almost certainly have large negative impacts on the region's fish and wildlife and their habitats.

Response:
The diversion channel will be designed with a low flow channel that will pass all flows from the Rush River and the Lower Rush River to the Red River. This low flow channel will be designed with sinuosity that will provide some habitat for the aquatic species that exist within the Rush and Lower Rush Rivers. The channel would be planted with native wetland species on the bottom and the fringe of the side slopes of the channel, with the remainder of the side slopes being planted as a prairie swale type community. Appropriate native seed mixes may be those developed for ditch/swales, sedge/wet meadow or wetland fringe. A buffer strip of 50 to several hundred feet on either side of the diversion channel up to the embankment top would help limit encroachment from agricultural activities and would provide filtering of surface runoff into the diversion channel wetlands.

C-82 Inadequate Analysis
The Corps failed to give a hard look at all reasonable alternatives and did not provide sufficient explanation for the choices made. The Corps did not take a hard look at the southern alignment. The Corps fails to consider all "reasonable" alternatives and "the existence of a viable but unexamined alternative renders an [EIS] inadequate." Friends of the Boundary Waters Wilderness v. Dombeck, 164 F.3d 1115, 1128 (8th Cir. 1999).

Response:
The Corps considered a range of alternatives as described in Appendix O of the SDEIS. Alternatives that provide environmental benefits, such as wetlands and grassland restoration, were evaluated. Sections 8.4.2 and 8.4.3 of Appendix O contain more information on wetlands and grassland restoration measures. Section 8.4.4.3 of Appendix O describes the alternative scenarios for the LPP diversion, including the southern alignment.

C-83 Mitigation Costs for Oxbow
The mitigation costs for Oxbow have not been adequately estimated and will be much higher than the non-federal sponsors can afford to pay. In fact, the total costs for Oxbow buyouts and mitigation may be five times higher than estimated by the Corps, and this makes a southern

alignment less expensive than the proposed LPP. The costs of mitigation are grossly underrepresented, and the SDEIS is similarly inadequate.

Response:
The estimates used to calculate the costs of buyouts in all areas were a gross estimate of costs. A gross estimate is the standard process used in developing potential cost during the feasibility portion of a project. Gross estimates are based on general land sales values in the last 12 months along with local market sale values of other similar properties. With this estimated value a 25% contingency fee was added.

C-84 Cumulative Effects
The analysis of cumulative effects is inadequate, particularly given the size and scope of this proposed project.

Response:
The cumulative effects section complies with the requirements of NEPA.

C-85 LPP and Water Resources Development Act (WRDA)
The Water Resources Development Act obligates the Corps to select the National Economic Development plan, unless it can demonstrate an "overriding" issue to support selection of the LPP. Because of the shift in the articulation of the project's purpose, the LPP is not a feasible selection under WRDA.

Response:
As discussed in Section 2.8 of the FEIS, Federal policy (not any of the existing Water Resources Development Acts) requires the Corps to identify a plan that maximizes net national economic development benefits. Federal policy also allows the Assistant Secretary of the Army (Civil Works) to recommend a different plan based on other concerns. The rationale for selecting the locally preferred plan over the National Economic Development plan is described in Section 3.9 of the FEIS.

C-86 Consolidated versus Distributed Upstream Storage
The Corps dismissed distributed upstream storage as a standalone alternative, and then used that as a justification to fully dismiss distributed storage as a potential feature in a combined plan. None of the reasons cited in the SDEIS for elimination of distributed storage include adverse or beneficial environmental effects. The current proposed plan incorporates consolidated storage, but an adequate comparison between and evaluation of consolidated and distributed storage was not performed. The Corps determined that the diversion channel is necessary, but cannot function as a standalone plan; the desired outcomes can only be achieved in combination with storage. The analysis of the type and location of storage is lacking in the analysis. The Corps needs to consider (1) a North Dakota diversion with distributed storage; (2) a Minnesota diversion with distributed storage; and (3) a Minnesota diversion with the currently proposed consolidated storage.

Response:
Section 8.4.3 of Appendix O of the FEIS discusses the use of both staging and distributed storage in combination with diversion channels. Neither staging nor distributed storage were found to be economically justified when combined with the Minnesota diversion alternatives. Upstream staging is included in the locally preferred plan because the non-federal sponsors chose to use that method to minimize downstream impacts. The greatest benefits of storage are realized immediately downstream of the storage site, so consolidated storage immediately upstream of the North Dakota diversion is a more effective and cost-effective way to reduce downstream impacts than distributed storage is.

The environmental effects of storage are addressed in and Section 3.7.5 of the FEIS and also in Section 8.4.3 of Appendix O of the FEIS. Flood storage, if operated carefully, could provide environmental benefits, though to a smaller degree than restoration projects. Adverse environmental impacts of storage include increased inundation over large areas of land because flood storage impoundments would be designed to allow maximum water storage. To implement the effective storage upstream equal to the 200,000 acre feet in the storage and staging areas would require many sites, which would result in greater impacts to more people, property, agriculture, and the environment. The upstream staging and storage is more implementable from a logistical perspective, will have greater reliability, and will have less overall impacts than distributed storage.

Section 8.4.3.5 of Appendix O of the FEIS describes combinations of Minnesota diversions and flood storage and Section 8.4.3.4 describes Minnesota diversions with staging.

C-87 Bank Stability
The duration of bankfull conditions will be longer under the LPP and the SDEIS provides no support for the conclusion that soil strength conditions would not be substantially changed. The FEIS must provide support for the conclusion that soil strength conditions would not be substantially changed under the LPP.

Response:
Bank failures are extremely common throughout the Red River valley, especially on the outside bends of most rivers. Conditions that most often trigger or exacerbate existing slides are drought conditions, where water elevations are reduced to levels below those that have occurred for many previous weeks, months or even years. The Corps does not dispute that increased durations of water elevations might contribute towards increased bank instability; however, this would most likely occur at the outer face of the lower bank. A modeling analysis could be completed to further assess changes to bank stability under the selected plan. However, there are many variables that influence bank stability, including soil types, precipitation, vegetation presence and type, bank loading, riparian land use, current velocities, changes in water elevation, and several other factors. The modeling analysis of bank stability would be greatly influenced based on what assumptions are made for these many variables. Any modeled changes in stability of the outer face of the lower bank would likely be extremely small, and likely within the error and uncertainty of the model. In addition, the stability of a larger portion of the lower bank and the upper bank would not likely be affected by a small increase in duration of bankfull conditions.

Hydraulic modeling for the selected plan suggests that water above bankfull might occur for about 4.5 days without project, compared to 11.5 days with project for a 10-percent chance event. While this difference could exacerbate slides on the outer face on the lower bank, it would be difficult to reliably model or measure the small incremental difference in bank failure rates for with- and without project conditions. Our conclusions for risks to soil strength conditions, bank stability and failure are based on professional judgment which has developed over several decades of project work in the Red River basin. Section 5.2.1.1.3 of the FEIS describes the effect of upstream staging on upstream geomorphology.

C-88 Fish Passage at the Red River Control Structure
Additional minimization measures must be provided to facilitate fish passage across a larger range of flows through the Red River control structure (i.e. additional fish passage channels) and included in the Record of Decision. Post-operation monitoring over time will indicate if additional mitigation is necessary and assurances must be provided upfront.

Response:
The LPP includes up to eight fish passage channels to provide fish passage at the Red River control structure from the time the project begins to operate, up to approximately 30,000 cfs (as measured at Fargo). The FEIS outlines adaptive management and future mitigation funding. This includes the options available for funding future mitigation.

C-89 Wetland Impacts and Wetland Mitigation
The FEIS must discuss how wetland mitigation will replace functions and values lost at the impacted sites. The FEIS must also discuss the potential for channel bottom wetlands to be influenced by non-native plant species and associated functional decline. This discussion must be in context of Corps mitigation policy. A description of whether perpetual easements or other protections will be placed on the replacement sites should also be provided.

Response:
Wetland areas resulting within the proposed diversion channel were analyzed using the Minnesota Routine Assessment Methodology for Evaluating Wetland Functions (MnRAM), Version 3.3. Based on the design of the diversion channel, a base flow is assumed within the channel bottom in most years, resulting in flow-through/riverine shallow marsh wetlands within the lowest portions and behind the periodic grade controls and fresh wet meadow wetlands dominating the remaining area below the upland slope. Wetland areas will be planted with native seed mixes appropriate for the intended plant communities and managed for invasive species such as reed canarygrass (*Phalaris arundinaceae*) and purple loosestrife (*Lythrum salicaria*).

When overall wetland functions are considered the wetland development associated with the LPP is expected to fully offset any losses associated with project construction. Wetlands within the proposed diversion corridor will not be subject to the regular disking/plowing for agricultural production to which the majority of the existing wetland resources are subject. The replacement of wetland functions lost will be done within the same watershed as the impacts, adequately addressing some of the needs of the watershed.

The wetlands within the diversion corridor are expected to provide at least a "Moderate" level of functionality for *Maintenance of Hydrologic Regime*, *Flood/Stormwater/Attenuation*, *Downstream Water Quality*, *Maintenance of Wetland Water Quality* and *Aesthetics/Recreation/Education/Cultural* functions and values. Of course, the intent of the project itself is for flood damage attenuation, and the standing vegetation will provide for uptake of nutrients as well as longer retention of floodwaters than unvegetated conditions. The base flow in the channel will provide for sustained maintenance of hydrology within the corridor as well as to downstream resources, except in periods of extreme drought. The corridor will be visible from many public vantage points, providing an aesthetic improvement with the native vegetation and a naturalized meandering stream channel.

The wetlands will likely provide a "High" level of function for *Shoreline Protection*, situated as they are along the base flow channel. The naturalized vegetation, left untouched except for management of invasive and woody species, will maintain the streambanks by preventing erosion during the periods of high flow expected within the diversion corridor. Other "High" levels of function provided by the diversion channel wetlands include *Maintenance of Characteristic Wildlife Habitat Structure* and *Maintenance of Characteristic Fish Habitat*. Each of these functions would be enhanced by the standing vegetation and the uninterrupted wildlife corridor provided within the diversion corridor. Only the function of *Maintenance of Characteristic Amphibian Habitat* would be provided at a "Low" level, due to the direct connection to fish habitat from area rivers.

C-90 Indirect Impacts
Indirect impacts are likely, and increased drainage is likely in the form of tile or surface drains. This may impact wetlands very near the project area. The FEIS must provide an analysis of the potential impacts that operation of the alternative will have on wetlands and mitigation must be provided for all impacts.

Response:
A detailed wetland analysis has been done for the LPP, FCP and ND35K. A summary of this analysis can be found in Chapter 5 of the FEIS, and the more detailed analysis is located in the Appendix F. Direct and indirect impacts to wetlands will be mitigated and wetland functions have been incorporated into the design plan. Attachment 6 of the FEIS contains an adaptive management and mitigation plan. This plan discusses the wetland mitigation, costs, and monitoring that will be conducted post project to ensure the success of the mitigation.

C-91 Catastrophic Failure Risk
The FEIS should include an analysis of control structure catastrophic failure risk and provide loss of life estimates in the event of catastrophic failure.

Response:
An analysis looking at catastrophic failure of the tentatively selected plan (LPP) and a loss of life analysis has been done and included in the Final Environmental Impact Statement (Section 3.10.4 and Appendix D of the FEIS).

C-92 Adaptive Management Plan
A mutually agreed upon mitigation and adaptive management plan containing the specific criteria, indicators, thresholds, response actions, costs, and assurances should be required as part of the Record of Decision. Minnesota Department of Natural Resources permits will include similar mitigation provisions.

Response:
A mitigation and adaptive management section has been written and coordinated with the partners and is included as Attachment 6 in the FEIS.

C-93 Impacts to Groundwater
What are the impacts to groundwater? Groundwater will seep into the diversion channel during non-flood events and shallow groundwater in the area is known to contain nitrate-N, total dissolved solids, and trace metals.

Response:
All water well locations have been identified from the Minnesota Department of Health (MDH) or North Dakota State Water Commission websites. Any wells within the proposed diversion footprint will be abandoned per Minnesota or North Dakota state guidelines. As part of the design process the Corps is currently undertaking a study to better define aerial extent and determine phreatic surface of aquifers along the alignments. The final design will incorporate any feasible measures to mitigate or eliminate impacts to the groundwater table. If necessary, long term monitoring of regional aquifers likely would be the responsibility of the non-federal sponsors as part of Operation and Maintenance.

While it is likely that the shallow groundwater in the project vicinity has elevated concentrations of nitrates, dissolved solids, and trace metals, this is true in any intensely agricultural area. It is also likely that some seepage into the proposed diversion channel will occur between flood events; however, seepage is expected to be minimal due to the relatively impermeable nature of the natural soils commonly found in the Red River Valley.

The valley floor is covered with an extensive network of relatively deep drainage ditches. The diversion channel bottom will be planted with wetland species that would be of similar or higher quality to the existing ditches, and therefore the diversion channel should not have a noticeable additional impact on groundwater.

C-94 Crossings over West Fargo Diversion
With the currently proposed alignment, three of the crossings over the existing West Fargo diversion will be lost, further disrupting access and transportation. This will affect emergency vehicles and school bus routes.

Response:
Bridges will be constructed at a minimum of every three miles to cross the proposed diversion channel. There will be four bridges over the channel in West Fargo with the currently proposed alignment; these bridges will provide access for emergency vehicles, school bus routes, and

more. More information on the impacts to bridges and other infrastructure, along with a map detailing the location of bridges, can be found in section 5.2.3.1.4 of the FEIS. Sections 3.8.3 and 3.8.4 of Appendix C of the FEIS contains additional details about impacts to rural and public infrastructure.

C-95 Increased Costs of Homes in Fargo-Moorhead
How will displaced home owners from the upstream staging area be able to afford homes in Fargo-Moorhead, since certainly the increased demand from the many displaced people will increase home costs.

Response:
It is not anticipated that the selected plan will result in substantial changes to home costs. Not all of the displaced people are likely to relocate to Fargo-Moorhead, and not all of the displaced home owners will move at the same time. Given the size of Fargo-Moorhead, any increase demand would likely be negligible.

C-96 Impacts in Northern Richland County
The northern tier of Richland County has been a strong growth area, and this area will be severely affected by flooding as a result of the diversion.

Response:
The 1-percent chance flood stage at Highway 46 on the north side of Walcott Township is expected to increase one foot or less. Impacts would gradually decrease southward to nearly zero feet at Richland County Road 2.

C-97 Impacts of Potential Channel Enlargements
There is a potential for channel enlargement due to the increased duration and frequency of bankfull and higher events. Since channel forming flows are a function of the product of sediment transport rate and flow frequency, changes to either could have adverse consequences for riparian vegetation, channel stability, sediment, and habitat.

Response:
Potential impacts to geomorphology, which includes changes to channel stability and dimensions, have been characterized within the FEIS (Section 5.2.1.1).

C-98 Fish Passage and Impacts on Spawning
Implementation of the LPP will result in no fish passage from the upstream end of the diversion channel into the Red River. Fish that are on a spawning migration and swim the 36 miles to the upper end of the diversion channel will either drop their eggs in the bypass channel where they are not likely to survive; reabsorb the eggs due to lack of suitable spawning habitat; or, and this is unlikely to happen, travel 36 miles back downstream to the Red River, and then migrate 57 miles upstream in the Red River to the bypass channels. Fish passage should be added to allow fish passage out of the diversion channel.

Response:
As outlined in Chapter 5 the FEIS, it is likely that some fish will be drawn into the diversion channel during project operations. However, the number that would migrate to the upper end of the diversion channel is uncertain. The diversion channel is approximately 36 miles long. During coordination for this project, the Minnesota Department of Natural Resources identified that through their experiences, fish movement is substantially impeded within and through long, channelized river segments and ditches. Thus, there remains uncertainty with how many fish might actually migrate to the upper end of the flood diversion channel.

The project team has evaluated the potential for fish passage at the upper end of the diversion channel. Given the many constraints with project design, a fish bypass channel at this location would likely be expensive, potentially on the order of $10 million or more for this specific feature. Given the high cost, and the uncertainty with how many fish might actually migrate up the diversion channel during project operation, the most appropriate way to address this issue is through adaptive management. This impact will be evaluated to better assess what, when and how many fish migrate up the diversion channel during project operations. Once the impact is better understood, mitigation can be proposed, if appropriate. This could include fish passage at the upper end of the diversion channel; improved fish passage at a nearby dam, or some other action. Potential mitigation would need to be balanced with the significance of the impact and cost of potential mitigation measures. These discussions would be held amongst the Adaptive Management Team.

C-99 Wetland Impacts for Various Alternatives
There is no analysis of wetland impacts that would be induced by operation of the various alternatives.

Response:
The wetland analysis provided in section 5.2.1.5 discusses the impacts to wetlands caused by the diversion channel alternatives. The operation of the project was considered in this analysis; no appreciable impacts to wetlands would occur due to operation of the project.

C-100 Zebra Mussels
The Final EIS should acknowledge that there may be some colonization of zebra mussels on the bypass structure which may require periodic cleaning to ensure the gates remain operational.

Response:
The FEIS has been updated to address potential presence of zebra mussels at project structures. See Section 5.2.1 of the FEIS for further details.

C-101 Impacts to Birds
The SDEIS lacks an assessment of impacts to Bald Eagles and Water Cranes.

Response:
The report addresses the impacts to Bald Eagles and Whooping Cranes in section 5.2.1.9 Endangered Species and subsection 5.2.1.9.1 Federal Species.

C-102 Bird Strike Assessment
The SDEIS lacks a "bird strike" assessment for Hector International Airport.

Response:
The selected plan will not appreciably change the migration patterns of migratory birds. This issue was discussed with the U.S. Fish and Wildlife Service and it concurs with this assessment. Also, according to the Federal Aviation Administration's Advisory Circular 150/5200-33B Hazardous Wildlife Attractants On or Near Airports, the agency recommends a distance of five miles between the edge of an airport and any hazardous wildlife attractant. The closest the proposed diversion channel would get to Hector International Airport property is slightly over 6 miles.

C-103 Carbon Footprint
The SDEIS lacks carbon footprint impact studies related to increased farm transportation distances and to the destruction of trees.

Response:
Impacts related to loss of trees have been addressed and these impacts will be mitigated. Further discussion of mitigation for trees can be found in Chapter 5 of the FEIS. Transportation impacts are addressed in Section 5.2.3.1.4 of the FEIS and in Appendix C. A lifecycle carbon assessment is not required as a component of this report, and would not be essential to the reasoned choice among alternatives.

C-104 Road Hazards
The SDEIS lacks an assessment of the hazards related to raising I-29 and an assessment of I-29 detour routes.

Response:
Diversion crossings and transportation impacts are discussed in Section 5.2.3.1.4 of the FEIS as well as Appendix C (Economics). An assessment of the I-29 detour routes is beyond the scope of the FEIS.

C-105 Wolverton Creek
Page 150 the DEIS dismisses the aquatic habitat value of smaller tributary streams, including Wolverton Creek, without justification. Page 271 the DEIS identifies fish passage in Wolverton Creek as being impassible during periods of operation, yet provides no measures to avoid or mitigation this impact.

Response:
The FEIS includes discussions for Wolverton Creek, including specific impacts, in Sections 5.2.1.1, 5.2.1.7, 5.2.1.7.1.5, and 5.2.1.7.5.5 of the FEIS.

Potential impacts to connectivity are identified for Wolverton Creek. It is unclear if this impact is substantial enough to warrant additional mitigation beyond what has already been proposed in the FEIS. As such, no mitigation specific for Wolverton Creek connectivity has been included.

The Corps is considering options to minimize all connectivity impacts through reducing the frequency the project would operate. Potential impacts to connectivity also will be evaluated following project construction. If substantial impacts are identified to connectivity at Wolverton Creek, mitigation measures would be considered. Fish passage features at the Wolverton Creek control structure could be expensive to construct, and would need to be balanced with the observed impacts.

C-106 Induced Development
The Corps did not include the environmental impacts of induced development from changes to the regulatory floodplain. The Corps did not explain how it would minimize impacts on flood plains, including induced development

Response:
The future without project condition indicates that Fargo will continue to grow at a rapid rate. There will be no impacts based on induced growth because the area will grow with or without the project.

C-107 Wetland Fill
The Corps provides only conclusory statements on the type of wetland fill and its chemical constituency, while insisting only minor, short-term environmental impacts will result from the project.

Response:
The analysis is appropriate for the planning stage of the project. Only clean fill free of contaminants will be used in the project.

C-108 Environmental Impacts Upstream
No environmental impact statement has been prepared that addresses impacts to upstream communities.

Response:
Impacts to upstream communities are included throughout the FEIS.

C-109 Impacts to West Fargo Diversion
Will there be a lessening of protection from the West Fargo diversion during construction of the proposed project? Erosion in the West Fargo diversion could increase significantly due to the project.

Response:
The level of flood risk reduction from the West Fargo diversion will not be impacted during construction of the selected plan. Once the proposed diversion is constructed, the West Fargo diversion will only receive minimal flows, which should result in less threat of erosion to the West Fargo diversion. The end result of the selected plan will be a great level of flood risk reduction for the community of West Fargo.

C-110 Water Velocity and Impacts to Fish
The SDEIS does not address how changing the velocity of water in the diversion channel might affect certain fish species.

Response:
The SDEIS and FEIS discuss velocities within the diversion channel as it relates to upstream fish migration at Section 5.2.1.7.5.1.

C-111 Integrity of Highway 17
The Corps did not address the integrity of Cass County Highway 17, including the costs and level of protection it will provide.

Response:
County Highway 17 will not be used as the north/south tie-back levee. A levee will be constructed along the highway and that levee will be designed and constructed to the proper engineering and Corps standards. The elevation of the levee will be set at the same elevation as the 0.2-percent chance flood event for the staging area which is approximately elevation 923.

C-112 Deposition
The rate of deposition of very fine materials is often very high in localized areas. The dam and reservoir would be expected to accelerate these conditions and increase river bank height which is often associated with increased bank erosion. Changes in plant communities and subsequent functional declines can also be expected.

Response:
The data collected by the USGS during the last spring flood in 2011 confirms the estimates presented in the SDEIS, which were based on data collected by the USGS during the spring flood in 2010. We agree that a completely uniform distribution of sediment deposition over the entire flood pool would not be expected, but we also conclude that deviations from such average sediment deposition rates will not be substantial. If the conservative estimate presented in the FEIS (conservative because it is assumed that all incoming sediment from upstream would settle in the flood pool) would be off by one to two orders of magnitude in some localized areas, the sedimentation rates in such areas would be 2-3 inches, which is well within the expected range of sedimentation driven by natural processes during large flood events in a complex riverine system where sediment transport is dominated by very fine material (silts and clays) mobilized in suspension. There are two additional reasons for concluding that localized deposition is unlikely to occur to the extent of creating impacts on the river geomorphology. The first one relates to flow velocities, which under existing conditions are already very low across most of the floodplain, which reflects the flat topography of the Red River valley and its relatively wide active floodplain. Flow velocities in the flood pool when the diversion project goes into operation will be equally low (not zero), hence we do not anticipate important changes in erosion and sedimentation processes in the floodplain. The second reason relates to the existence of five low-head dams between Christine and Fargo, which do not show appreciable sedimentation, and

these dams represent a more tangible and effective blockage to sediment mobilization through the main stem than the control structures will represent. To summarize, sediment deposition upstream of the project would not be so substantial or widespread as to result in meaningful increases or changes in bank heights, bank erosion, or plant communities. Additional information can be found in Section 5.2.1.1.3 of the FEIS.

C-113 Sheyenne River Flow
The LPP has a problem with water flow, in that the Sheyenne River in the last three years has followed Highway 46, County 14, and County 16 to return to the Wild Rice as its emergency spillway. Currently nothing in the project plans addresses that.

Response:
Local drainage issues along the entire diversion channel will be addressed in detail during the design and implementation phase. The project will be designed to minimize impacts to tributaries, especially for smaller, more frequent flood events. The design goal is to not change the one-percent chance floodplain outside of the diversion. See Section 5.2.1.4 of the FEIS for general discussion. Preliminary details regarding drainage along the Sheyenne/Drain 14/Maple/Rush corridor can be found in Attachment 5, Appendix C (Section C.2.10, Section 2.16.8, and Exhibit 3 figures), and in Attachment 5, Appendix F (Section F2.2 and Exhibit F). The analysis presented in Attachment 5 will be refined during the design phase to minimize changes to the one-percent chance floodplain outside of the diversion.

C-114 Water Quality
The design of the LPP will prevent water from following its normal course and refreshing the water in the wetlands, affecting water quality.

Response:
Water quality is discussed in Section 5.2.1.3.2 of the FEIS. The proposed diversion channel would likely have temporary minor impacts on surface water quality. Once the construction has been completed, water quality would likely return to pre-project conditions. To minimize impacts to water quality, a Storm Water Pollution Prevention Plan would be prepared and Best Management Practices as provided by the Environmental Protection Agency would be used.

C-115 American Widgeon
The American Widgeon and other waterfowl have lost over 50% of their wetland habitat to crop production in the prairie pothole region. The prairie pothole region is known as North America's "Duck Factory," and this habitat is being lost. A solution must be developed that will not drain wetlands that Widgeons and other waterfowl depend on.

Response:
The construction of the diversion channel will impact wetlands; however, most of the impacted wetlands are farmed wetlands. The direct and indirect loss of wetlands and wetland habitat due to the project will be offset by the creation of wetlands and wetland habitat. Environmental mitigation actions for impacts from the footprint of the project are based on the concept of offsetting habitat value losses associated with construction.. Section 5.5 of the FEIS contains a

detailed analysis of the mitigation measures and additional mitigation discussion is included in Attachment 6 of the FEIS.

5.0 Comment Category D: Modeling Technical

D-1 Tributary River Flows
How will the tributary flows be impacted? Water will back up on the tributary rivers as it does on the Sheyenne River now. Flooding will occur because of these water backup issues on the tributary rivers.

Response:
The project will be designed to minimize impacts to tributaries, especially for smaller, more frequent flood events. The design goal is to not change the one-percent chance floodplain outside of the diversion. See Section 5.2.1.4 of the FEIS for general discussion. Preliminary details regarding drainage along the Sheyenne/Drain 14/Maple/Rush corridor can be found in Attachment 5, Appendix C (Section C.2.10, Section 2.16.8, and Exhibit 3 figures), and in Attachment 5, Appendix F (Section F2.2 and Exhibit F). The analysis presented in Attachment 5 will be refined during the design phase to minimize changes to the one-percent chance floodplain outside of the diversion.

D-2 Channel Dimensions
What is the width of the channel at ground level and the width of the channel at the bottom of the channel where the channel enters the Red River on the north end of the diversion? What is the depth of the channel from ground level to the bottom of the channel?

Response:
This portion of the channel is shown on Drawing CS403 in Appendix K of the FEIS. The diversion channel downstream of the outlet structure is 250 feet wide at the bottom, approximately 700 feet wide at existing ground level and approximately 32 feet deep.

D-3 Levee Elevation
What is the elevation of the dike from the beginning to the end?

Response:
The typical tieback levee elevation is 928.0 (NAVD 88). The soil disposal piles adjacent to the diversion channel vary from zero to 15 feet above existing ground. Refer to the drawings in Appendix K of the FEIS for additional details.

D-4 Flooding Outside Protected Area
The Maple River Aqueduct will only take a two year event and then spill over into the diversion. How far will the Maple River back up when it cannot flow into the diversion because it is full?

Response:
The goal is to not cause any additional flooding from the Sheyenne, Maple, and Rush rivers, Drain 14, or local flows that will be affected by the LPP or ND35K. For many areas flooding will be reduced since the design water surface profile in the LPP diversion will be lower than it is

in the existing Horace to West Fargo and West Fargo diversions. However, to preserve existing floodplains the inlets to the diversion will not be designed to reduce flooding for the 1-percent chance flows from the Sheyenne, Maple, and Rush rivers, Drain 14, or local drainage areas (for these events the goal is to maintain the existing condition). The current design presented in the FEIS does not completely meet the goals stated above, and does have areas where flooding is worse than the existing condition. Resolving the issue of increased flood stages will be relatively easy in some areas and more of a challenge in others. Details regarding drainage along the Sheyenne/Drain 14/Maple/Rush corridor can be found in Attachment 5, Appendix C (Section C.2.10, Section 2.16.8, and Exhibit 3 figures), and in Attachment 5, Appendix F (Section F2.2 and Exhibit F).

D-5 Ice and Bridges
When spring snow-melt causes high water, the water rises against the Toll Bridge at 12 Ave N and the North Broadway Bridge in Fargo. These bridges are sometimes submerged by water and snow and ice debris piled up against these two bridges and delayed the flow of water out of the Metro area. Why should the diversion be considered when these flow restrictions remain in place?

Response:
A study to better understand potential scenarios involving bridges and an ice study is currently underway (comment and response D-7 below contain further discussion on this study). In addition, the proposed diversion channel would result in reduced flows through the Metro area; with the flow reduction, these bridges would not be such constriction points. Ice impacts are discussed in Section 3.10.4 of the FEIS.

D-6 Ditches
Water backing up on the Red River will impede the efficiency of judicial ditches. Water will back up onto the land that is benefited by these ditches, actually making them useless. Will growers be compensated now that these ditches are useless?

Response:
The ditches will continue to function as they do now during non-flood times. Most flood events that would require operation of the project are expected to occur in March and April when crops have not yet been planted. Impacts outside the defined staging area will be assessed to determine whether any compensation is required under the Fifth Amendment to the U. S. Constitution.

D-7 Ice
Has ice flow been considered? The effect of ice and debris on project operation and performance must be considered as part of the project.

Response:
The effect of ice on project operation and performance is being studied by the Ice Engineering Group at the Corps' Cold Regions Research and Engineering Laboratory (CRREL). Preliminary research and review of historical data indicates that the peak accumulated freezing degree days (AFDD) and maximum ice thickness occurred within a period of 15 days before to 40 days after

the time of peak water stage. On average, the peak water stage occurred 10 days after the time of calculated maximum ice thickness. The small difference in days between AFDD peak and stage peak indicates that the ice deterioration period is very short on the Red River of the North at Fargo.

For the known flood years of 2001, 2009 and 2010, the unified degree-day method (UDDM) predicted ice-out at Fargo before the time of peak water stage is in agreement with observations. The UDDM results do agree with the observations that, for many years, particularly ones with floods, ice-out occurs before or during the peak water stage event.

Addition research and modeling will be addressed through study efforts during the design and implementation phase. The effort includes study of ice at the gated structures, ice in the diversion channel, and the effect of lower flows on ice in the benefited area. The effort also includes the study of similar flood risk management projects under ice conditions (e.g. Winnipeg diversion). Further discussion of ice impacts can be found in Section 3.10.4 of the FEIS. See Appendix B of the FEIS for the draft ice study report from CRREL.

D-8 Basin Wide Maps
Is there a 500 year map of Eastern ND showing how the state and the Red River basin will flood with the diversion and without the diversion? There must be a due diligence of all the rivers at the 500 year flood stage.

Response:
Attachment 5, General Report, Figures 15 through 22 show the difference in flooding extent for the 10-percent chance (10-yr), 2-percent chance (50-yr), 1-percent chance (100-yr), and 0.2-percent chance (500-yr) flood events. Closer views of the river downstream of Fargo-Moorhead can be found in Attachment 5, Appendix C, Exhibit 4. Where red is not seen, the existing condition extent of flooding is equal to or greater than the LPP extent of flooding. Except for the storage and staging areas upstream of the diversion, the extent of flooding is very similar for existing conditions and the LPP. The additional areas flooded upstream of the diversion are due to water being staged so that downstream impacts are minimized.

D-9 Simultaneous Flooding
What is the impact of simultaneous flooding on the Sheyenne River west of Horace Road?

Response:
For the case of high flow conditions on the Sheyenne River while peak flooding is occurring on the Red and Wild Rice Rivers, the capacity of the proposed diversion channel is such that flooding along the Sheyenne River will be no worse than it is under existing conditions. Breakout flows from the Sheyenne River that enter the Wild Rice River basin under existing conditions will be directed to the diversion channel via a new ditch. The exact location and design and location of this ditch have yet to be determined, but it is known that the ditch can be designed to function without inducing additional flooding. More information can be found in Appendix B of the FEIS.

D-10 Additional Drainage Analysis
Richland County Water Resource Board requested analysis of impacts to legal drains in the northern end of Richland County, analysis of impacts on the Wild Rice, Sheyenne, and Red Rivers in Richland County, and analysis on natural drainage systems in Richland County.

Response:
Additional drainage analysis has been conducted and this information can be found in Appendix B of the FEIS. The diversion will be designed to minimize impacts to local drainage. Where the channel intersects existing legal drains, the channel will be designed to accept flow from the drain. In areas between drains, ditches adjacent to the channel will be used to convey drainage to a place where it can enter the diversion channel. Section 3.7.2 of the FEIS includes a figure depicting the channel profile; this chart indicates when flows in the diversion are below existing ground level, flows will enter the diversion. If flows in the diversion are above existing ground level, flows from local drainage will not enter the diversion. Drainage in the summer will likely not be impacted as summer flood events are significantly smaller than spring flood events.

D-11 Structures at Tributaries
The intercept structures for the rivers crossing the diversion are unproven and have not been used elsewhere in the world.

Response:
Aqueducts similar to those proposed have been built throughout the world since Roman times. The Magdeburg Water Bridge over the Elbe River in Germany is a recent example, and several aqueducts were constructed in the 1800's as part of the Chesapeake and Ohio Canal along the Potomac River in the U.S. The proposed conceptual design for the Fargo-Moorhead Metro project is complicated, but not fundamentally unique.

D-12 Ottertail Flooding
What happens with the increased flow of water into the Ottertail River that drains into the Red River? With a diversion on the south end and a dam on the north end and the Red flowing north, isn't it possible that even more flooding will occur?

Response:
The selected plan would have no noticeable impacts on the Otter Tail River. Hydraulic models developed in the feasibility study show stage impacts near Abercrombie, North Dakota of less than two inches for all flood events analyzed. Impacts would decrease upstream of Abercrombie.

D-13 Flood Plain
With regard to the higher flood plain numbers that the Corps is using as part of the cost/benefit justification, do these higher numbers apply only to Fargo proper and areas south or to the whole valley region? If the Corps is successful in convincing FEMA that these numbers are accurate for Fargo, won't the resulting effect be to raise the flood elevation for the valley at large?

Response:
The Corps higher numbers are based on the best available historic information and the Corps Expert Opinion Elicitation (EOE) panel recommendations. However, the Corps has also completed a traditional period of record analysis using the best available data. It is possible that FEMA could make adjustments to the floodplain without the project in place; however, the Corps cannot speculate on the timing of any potential FEMA floodplain revisions.

D-14 White Rock Dam
If the diversion is constructed, how will the operation be coordinated with discharges from White Rock dam?

Response:
At this time, White Rock Dam operations are primarily determined by conditions at Wahpeton, North Dakota and Breckenridge, Minnesota. Flood risk reduction measures are currently being built in Wahpeton-Breckenridge; after those measures are complete, the operation plan for White Rock Dam may be adjusted to maximize its benefits. The potential to coordinate operation of White Rock Dam with the selected plan will be explored during the design and implementation phases.

D-15 Tributary Flow Models
The city of Kindred requested that tributary flow models be completed to assess the exact impact of coincidental flow events on the tributaries.

Response:
The modeling conducted in this study considered both peak and coincidental flows on the Red River and the tributaries. Details of the hydrologic and hydraulic analyses are in Appendix A and Appendix B of the FEIS, respectively. The selected plan is not expected to increase flood stages on the Sheyenne River at Kindred, North Dakota under any event.

D-16 Hydrology
Consistent hydrology should be used. If the wet-dry period analysis is used it should be submitted to FEMA for review and acceptance.

Response:
A summary of the hydrologic analyses carried out in support of the Fargo-Moorhead Feasibility Study is provided as Appendix A of the FEIS. Appendix A is composed of 7 parts. The Appendix includes an executive summary that provides an overview of the hydrological analysis carried out and describes where within the Appendix certain aspects of analysis can be found. Each portion of the appendix also includes a preface describing what information is contained in that particular part of Appendix A.

A panel of experts was convened for an Expert Opinion Elicitation (EOE) in order to address non-homogeneity within the observed hydroclimatic data within the basin. EOE panel members recommended splitting the hydrologic record into a wet period and a dry period. This

recommendation was approved by the USACE Hydrology Review Committee and was adopted for analysis. The rational for doing this can be found in Appendix A-1.

A statistical test (known as the Pettitt test), was used to determine the break point between the wet and dry periods. The procedure involves performing a non-parametric hypothesis test on the difference between sample means for streamflow data in order to identify the break point. An explanation of how the Pettitt Test was applied to streamflow data collected at Fargo, ND can be found in Appendix A-1c on page 5. The results of the Pettitt test for the Fargo streamflow record are shown in Figure 3 of Appendix A-1c. The results support using year 1941 as the break point between the dry and wet periods. The resulting discharge-frequency curves for the full period-of-record for unregulated flows and the wet and dry periods are shown in Figure 4 on page 9 of Appendix A-1c.

The wet period (year 0) hydrology was used consistently in the analysis and design for all aspects of the diversion channel alternatives. The appropriate flood frequency description for any future year is a combination of the dry and wet frequency curves that respects the likelihood of each condition. The year 0 (100% wet) hydrology, year 25 (80% wet, 20% dry) hydrology and year 50 (65% wet, 35% dry) hydrology was used in the economic analysis of the alternatives. Explanations describing how the flow-frequency curves were combined in order to be more representative of future conditions can be found on page 25 of Appendix A-1c. The year 25 and 50 hydrology scenarios were used in the economic analysis to incorporate the possibility that the current wet trend could become dryer in the future. The year 0 hydrology was used to assess environmental and social impacts due to the diversion channel alternatives including downstream impacts. Analysis of the traditional full period-of-record hydrology is shown in Appendix A-1a, but the period of record analysis described in Appendix A-1a was not adopted for either design or economics and is presented for information only.

D-17 Models for County Road 17
Models need to be developed for the flows from the spillway along Cass County 17.

Response:
As the project progresses into the design phase additional modeling will be conducted. Based on the current design, water from the staging area will not exceed the elevation of the spillway for events of up to the 0.2-percent chance event.

6.0 Comment Category E: Page Specific Comments

E-1 Federal/Non-Federal Responsibility
Where are the figures that show what the Corps would be responsible for and what the city of Fargo would be responsible for?

Response:
Project cost sharing is discussed in Section 3.14 of the FEIS.

E-2 Section 6 Correction
In Section 6 of the EIS, the document states the Resource Agency Team includes the North Dakota Game, Fish and Parks (NDGFP). This should be corrected to the North Dakota Game and Fish Department (NDGFD) in this Section and anywhere else it appears in the document.

Response:
Concur and correction has been made.

E-3 Section 1.5.3.16
Some of the dams mentioned were constructed through the NRCS (SCS). This includes the three dams located on tributaries of the lower portion of the Maple River, and the three dams on the Elm River.

Response:
Noted.

E-4 Section 2.7, Planning Constraints
The planning constraint related to EO 11988 should be reworded or additional clarification should be added.

Response:
The planning constraints were set early in the planning process and the constraint as worded is an accurate reflection of the constraint. Discussions on EO 11988 are included throughout the main report and in Appendix O, Plan Formulation.

E-5 Section 3.14.4
A Sovereign Lands Permit is required through North Dakota's Office of the State Engineer, not through the North Dakota State Water Commission. Please note that a construction permit would also be required from the Office of the State Engineer.

Response:
Concur. FEIS includes corrected information. The non-federal sponsors will be responsible for obtaining both the Sovereign Lands Permit and the construction permit from the North Dakota Office of the State Engineer prior to construction.

E-6 Executive Summary
In this section it states that the St. Paul District Engineer recommends the North Dakota East 20,000 cfs diversion channel with upstream staging and storage. It should very clearly state that this is the LPP. Then, throughout the document, there are several sections where the channel capacity of other alternatives is provided in their respective discussions, but not always for the LPP. This makes it less clear to the reader that the LPP is now a 20,000 cfs diversion alternative with upstream staging and storage.

Response:
Comment noted and suggested changes have been incorporated into the Executive Summary of the FEIS.

E-7 Environmental Justice Mapping
The legend and alternative labels on the environmental justice maps on pages 319-330 of the SDEIS should be corrected. The labels do not identify mapping for the SDEIS LPP and the cross hatching for "induced flooding" looks like it may be for the existing flooding data layer for some areas. It may be useful to show both the existing floodplain and the induced flooding on these maps.

Response:
Comment noted. The maps have been updated and included with changes in Chapter 5 of the FEIS.

E-8 Inconsistent Mitigation Ratio
The mitigation ratio for forested areas was reported as 1:1 in the draft report on "Fish and Wildlife Coordination Act" (Attachment 2 of the SDEIS), while the "Discussion of Habitat Loss, Mitigation Needs and Adaptive Management" (Attachment 6) recommends a 2:1 replacement ratio.

Response:
A mitigation ratio of 1:1 replacement for impacted forested areas was recommended by the Fish and Wildlife Service in its Fish and Wildlife Service Coordination Act Report. However, the agency team decided that a detailed HEP analysis should be used to determine the mitigation ratio. The results of this analysis showed that a 2:1 ratio is more appropriate.

E-9 Inconsistent Mitigation Plan and Channel Design
Appendix K shows the channel design and illustrates a trapezoidal channel with a hardened pilot channel. This is inconsistent with the mitigation plan described in Section 5.5.2.3 of the SDEIS which describes the creation of wetlands in a low flow channel. The mitigation features should be formally incorporated into the design. In addition, it should be clarified if there will be enough water to sustain the wetlands mitigation throughout the diversion channel and where the water sources will come from.

Response:
The drawing showing the blow up of the diversion channel in Appendix K was incorrect and has been replaced with the correct drawing that shows the rip rap ends at the toe of the diversion channel bottom. This drawing is in Appendix K C501. Water in the low flow channel will consist of existing drains, some ground water flow, and from precipitation.

E-10 Self Mitigation
Page 53 and page 361 of the SDEIS discuss wetland creation and passive mitigation, the process is described as "self mitigation" and suggests that the diversion channel will eventually develop sufficient wetlands to offset wetland losses. Inclusion of weeding and planting of appropriate wetland species in the design plans and costs is recommended. This will restore wetland values more quickly and reduce the potential for invasive species.

Response:
Planting of appropriate wetland species for either wet meadow or shallow marsh will be recommended and included in the plans and specifications of the project; see Attachment 6, Section 3.3, and Section 5.5.2.3 of the main report. The Operations and Management requirement will include invasive species control to ensure that the plant species that dominate the wetlands are native plant species.

E-11 Prior Reports
The 1996 Federal Tier 1/State Generic EIS titled "Environmental Impact Study of Flood Control Impoundments in Northwestern Minnesota" should be included in Section 1.5.1 of the FEIS.

Response:
Comment noted and the document has been added to list of prior reports in Section 1.5.1 of the FEIS.

E-12 Farmland Analysis
The Farmland analysis in Section 5.2.3.2.7 of the SDEIS did not include farming operations in the staging area.

Response:
Impacts to farmland and food supply are discussed in Section 5.2.3.2.7 of the FEIS, including impacts to farmland in the staging and storage areas.

E-13 Page Specific
Page 151 the current revised lake sturgeon stocking rates are 8,000 fingerlings and 200,000 fry.

Response:
Comment noted and the FEIS has been updated with this information.

E-14 Page Specific
Pages 137&161&163 Christine and Hickson dam modifications are now under construction, not in the planning phase as stated in the SDEIS.

Response:
Comment noted and the FEIS has been updated with this information.

E-15 Page Specific
Page 234 the SDEIS indicates that the 4,450 acre storage area will provide wetland functions after project construction. The FEIS should indicate if this site is needed in addition to the channel bottom wetlands, and if it is needed and planned the suitability of the site in providing wetlands should be discussed in the analysis. Specifically, since topography, drainage, and soils provide the guidance for restoration, each should be considered and described in the FEIS.

Response:
The 4,450 acres of storage area will provide some wetland functions, most likely similar to the farmed wetlands that will be lost. However, these acreages are not needed to mitigate for the loss of wetlands from the project.

7.0 Comment Category F: Coordination of Permits

F-1 Required Permits for the Project
Any construction that impacts highway right-of-ways will require coordination with the Department of Transportation District Engineer to obtain appropriate permits and risk management documents. A construction permit and Sovereign Lands permits would be required from the North Dakota Office of the State Engineer.

Response:
The Corps, the non-federal sponsors, or the construction contractors will obtain all applicable construction permits, Sovereign Lands permits and applicable permits from the DOT to address impacts to highway right-of-ways. Coordination with appropriate agencies is ongoing and will continue as impacts are identified and clearly laid out during design.

F-2 Clean Water Act (CWA) 404(b)(1)
The information provided in the Clean Water Act (CWA) 404(b)(1) analysis does not fully support the conclusion that the LPP alternative (the tentatively selected preferred alternative) is the least environmentally damaging practicable alternative (LEDPA). This alternative impacts substantially more wetlands and riparian areas than the FCP alternative.

Response:
As described in the Clean Water Act (CWA) 404(b)(1) analysis, the FCP is not a practicable alternative to the North Dakota diversion with upstream storage and staging (LPP). During the course of the planning process, it became evident that local stakeholders strongly desired measures to reduce flood risk for the entire Metropolitan area, including the risks from the Red River of the North, as well as the Sheyenne, Wild Rice (ND), Maple, Rush, and Lower Rush rivers. For the DEIS, the non-federal sponsors identified the ND35K plan as a locally preferred plan (LPP) that would reduce flood risk for the both the Red and the five tributaries. Upon further study of the ND35K plan, the Corps determined that it would have widespread impacts to infrastructure downstream and current modeling demonstrates that mitigation for these impacts is not logistically practicable. Therefore, the ND35K plan will not be pursued as an alternative. Following further study of possible alternatives, the non-federal sponsors identified a 20,000 cfs diversion along the North Dakota East alignment, along with upstream storage and staging, as a locally preferred plan (LPP) that would reduce flood risk for both the Red River and the five tributaries. The LPP provides flood stage reductions to a greater geographic area and for approximately 6,250 additional citizens than does the FCP. It achieves this result by reducing flood risk from the Sheyenne River and its tributaries in addition to the Wild Rice (ND) and Red rivers. This added level of risk reduction is not available from the FCP; the FCP is not a practicable alternative to achieve the overall project purpose of reducing flood risk from both the Red River and the five North Dakota tributaries.

F-3 Local Sponsor Comments
The cities of Fargo and Moorhead, the Local Sponsors of the proposed project, support the conclusions of the Preliminary Clean Water Act Section 404(b)(1).

Response:
Noted.

F-4 Practicable Alternatives
Neither the local project sponsors nor the Corps has conducted a meaningful evaluation of practicable alternatives required by the Clean Water Action Section 404(b)(1) or its implementing regulations.

Response:
As described in the Chapter 3 and Appendix O of the FEIS, alternatives for the project have been thoroughly evaluated. For example, upstream retention and storage were eliminated as standalone alternatives in Phase 2, Screening #1, but were expressly retained as alternatives for inclusion in possible combination plans with diversion channels or levees (Section 3.4.6 of the FEIS). As described in Section 8.4 of Appendix O of the FEIS, the Corps considered 384 different combinations of measures during Phase 4. The screening results from previous phases of the study were still valid, meaning diversion channels are the only feasible stand-alone alternatives to address catastrophic floods through the Fargo-Moorhead area. Ultimately, upstream retention and storage were included in the revised LPP to minimize downstream flooding.

F-5 Overall Project Purpose
The articulation of "overall project purpose" in the Clean Water Act Section 404(b)(1) evaluation is a material departure from the purpose identified in the SDEIS. The new articulation of overall project purpose renders all comparable plans involving Minnesota diversions, including the NED plan and the FCP, impracticable for achieving the overall project purpose.

Response:
The purpose and need for an Environmental Impact Statement is a different concept from the overall project purpose for the Clean Water Act 404(b)(1) evaluation. As described in the 404(b)(1) evaluation, the purpose and need for the Feasibility Study and Environmental Impact Statement was established prior to commencement of the study. At that time, a broad purpose and need was identified that would facilitate study of the flooding problems in the Metropolitan area and possible alternatives to manage the risk from the floods. The geographic scope of analysis in the scoping document for the NEPA process included the tributaries. As study of the flooding problems progressed, it became evident that flooding from the five tributaries significantly contributed to the problems experienced in the Metropolitan area. In order to achieve comprehensive flood risk management, a project that would address flooding on the five tributaries was needed. Providing protection from these additional sources within the basin is a legitimate purpose for the project, and is a project outcome the non-federal sponsors of the project strongly support. The Corps is required to take account of the non-federal sponsors' desired outcomes in defining the overall project purpose in the context of the 404(b)(1) evaluation. It is not inconsistent to define the overall project purpose in the 404(b)(1) evaluation differently, and more specifically, than the purpose and need for the project in the NEPA analysis based on a consideration of the non-federal sponsors desired outcomes for the project.

This approach is consistent with the Corps Standard Operating Procedures, which explain that the overall project purpose for the 404(b)(1) evaluation must consider the needs of project sponsors. Therefore, the overall project purpose for the Clean Water Act evaluation includes addressing flooding from the five tributaries, and alternatives failing to meet this purpose are not practicable. In summary, the purpose and need for the Feasibility Study and Environmental Impact Statement was a broad statement intended to facilitate study of the problem. The overall project purpose for the Clean Water Act is informed by that study and is therefore refined based on what was learned.

F-6 Minnesota State EIS Process
The Minnesota Department of Natural Resources (MnDNR) recommends that that permit-level analysis be compiled and provided concurrently with the state EIS process. If it is the Corps' goal to produce a federal EIS which can be used as a state EIS, the permit-level analysis must be included in the federal EIS. A final design report (together with plans and specifications) must be submitted concurrently with the State environmental review process. If the proposer wishes to proceed with a state EIS before permit-level analysis can be provided, the proponent must contact DNR's Public Waters Work Program to discuss options under which the proponent can consent to exceed new goals for issuing permits.

Response:
The Corps recognizes the need for a Minnesota State EIS for this project and has been coordinating with the Minnesota Department of Natural Resources and project sponsors for the development of this EIS. There have been meetings to discuss the project details, scoping of the project, and timing to start the state process. During this coordination, the parties agreed to initiate the state process when the Final EIS was released to the public. The non-federal sponsors will work with the DNR to complete the State EIS and determine an appropriate course of action to address the state's 30-day deadline for issuance of permits following final approval of the environmental impact statement (MN Stat. §116D.04(3a)).

F-7 404(b)(1) Analysis
Recommendation that there be a paragraph addressing costs, logistics, and existing technology for each alternative in the 404(b)(1) analysis.

Response:
The Corps has addressed why the logistics of the ND35K plan render the plan impracticable and has included the required and appropriate analyses in the 404(b)(1) evaluation.

8.0 Comment Category G: Project Management

G-1 Project Cost Sharing and Operation and Maintenance
We need to be clear about the future costs of this project, these costs will be placed on future generations. Maintenance costs could exceed $3 million per year. Who, and at what cost, is going to maintain the project forever including the required bridges over the diversion channel? The local sponsors should assure funding is available for unidentified impacts or project modifications.

Response:
The non-federal sponsors must enter into a Project Partnership Agreement with the Corps of Engineers to construct the Project. This agreement sets the required cost sharing of the Project between the non-federal sponsors and the federal government and requires that the non-federal sponsors be solely responsible for the Operation and Maintenance of the Project. The sponsors are responsible for financing their local share and operation and maintenance costs. It is currently anticipated that the non-federal sponsors will be the cities of Fargo and Moorhead. Mitigation required during project construction will be cost-shared. Mitigation required after the project is constructed and being operated and maintained by the non-federal sponsors will be the responsibility of the non-federal sponsors.

G-2 Cost Effectiveness of Diversion
The diversion would have been operated 21 times out of the last 109 years. At a cost of $2 billion for the diversion this does not seem cost effective.

Response:
Although the project would have been operated only 21 times out of the last 109 years, the majority of the times it would have been operated would have occurred in the past two decades. The area is currently in wet cycle and for this reason the project would have been operated more frequently in recent years. Furthermore, the economic analysis in the FEIS considers the statistical probability of events larger than any historic event that would cause catastrophic damages to the Fargo-Moorhead area. When the expected damages from potential future flood events are compare to the costs, the project is cost-effective.

G-3 Projects Cause Flooding
There was no flooding this spring until the Corps opened the flood gates at Baldhill. For weeks roads and fields were underwater.

Response:
Baldhill Dam and Lake Ashtabula do not cause flooding. Baldhill Dam and Lake Ashtabula provide water storage for flood control and water supply on the Sheyenne River, but when the volume of water flowing into the reservoir exceeds its capacity, the Corps must let water out. The dam was modified in 2004 to raise the floodgates 5 feet. These modifications to Baldhill

dam were implemented specifically for flood control purposes and to reduce flood damages for communities downstream of the dam.

G-4 Project Costs
The costs have gone up, and will keep going up. Additional mitigation and other cost increases are not factored in; the costs of the project will continue to rise. Some comments suggested the project costs will soon exceed $2 billion. There are many costs that are not yet accounted for. This plan is too expensive. The upstream and downstream impacts will cost millions and Fargo and Moorhead will not be able to come up with the funds necessary for the mitigation costs. The sales tax in Fargo will not even cover maintenance, much less mitigation.

Response:
The cost estimates presented in the FEIS reflect the expected costs to construct the features described in the report. Contingencies are included to account for the risks and uncertainties associated with the current level of design detail. The potential exists for both cost increases and cost savings as details are developed during the design phase. Costs are generally presented at the October 2011 price level; for budgeting purposes the project cost will continue to be updated to reflect actual inflation that is experienced during the design and implementation phases. The non-federal sponsors are responsible for providing the non-federal share of project funds; the FEIS does not need to identify how the non-federal funds will be obtained.

G-5 Mitigation for Impacts
Some comments urged the Corps to consider participation in the cost of mitigation efforts for people impacted by the project. One comment requested that the final report include a recommendation for specific funding for mitigation in each impacted community.

Response:
The Corps is responsible for mitigating environmental impacts caused by the selected plan. Mitigation measures, such as property buyouts, for the people impacted by the project are the responsibility of the non-federal sponsors.

G-6 Timeline for Construction and Operation
The timeline with 2 years until construction begins and 10 until the project operates is too long, we are going to lose steam.

Response:
The proposed timeline is based on reasonable estimates for accomplishing the design and construction associated with the project. The estimated construction completion in 2021 assumes that Congressional authorization is obtained in time to begin construction in 2013 and that neither federal nor non-federal funding is constrained during the entire implementation period.

G-7 Project Purpose
Is this project about flood protection for Fargo, or for expansion of the city?

Response:
The project purpose, as stated in Section 2.5 of the FEIS is "to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area."

G-8 Project Funding
Will the project be fully funded or funded annually? If annually funded, what happens when Congress cuts off funds? What happens if the local sponsors cannot raise the funds necessary? There is a concern that the project will be started, but not completed due to funding shortfalls.

Response:
The federal portion of the project will be funded annually through the federal appropriations process. The non-federal sponsors will be responsible for generating the funds necessary to pay the non-federal share of project costs. If either federal or non-federal funds are not available, work on the project will cease. The concern noted in the comment is valid.

G-9 West Fargo Horace Diversion
The residents of West Fargo and Horace have already paid for a diversion and are already protected from flooding. Comments asked if these residents would be reimbursed or if they would have to pay for another diversion.

Response:
The existing Sheyenne River diversion is really two diversion projects: the Horace to West Fargo diversion and the West Fargo diversion. The Horace to West Fargo channel reduces flood risk for events up to approximately a 1-percent chance flood on the Sheyenne River. The West Fargo channel is designed for a much larger Sheyenne River flood event. The Fargo-Moorhead Metro diversion would reduce risk in the cities of Horace and West Fargo from Sheyenne River floods more than the current Sheyenne Diversion does, and it will also reduce flood risk from Red River and Wild Rice River flood events, which the existing diversions do not. Non-federal funding for the proposed Fargo-Moorhead Metro diversion is a non-federal responsibility, and the local jurisdictions must determine how that funding will be obtained.

G-10 Fargo Protection to 42 Feet
Fargo has committed to building levees with protection to 42 feet. If that mitigation to 42 feet were included in the plan, the dam could be made significantly smaller and could affect far less wetlands. In addition, the costs of the proposed plan could be significantly reduced.

Response:
The FEIS considered levee alternatives and determined that they would not be as effective or as cost-effective as diversions. The City of Fargo has not indicated to the Corps any intention to build a consistent line of protection to a 42-foot stage. Section 2.3.4 of the FEIS describes the future without project conditions or the no action alternative. This section notes that the metropolitan communities will continue to use best practices and make minor modifications to enhance their overall flood risk management whenever possible. This includes construction of short sections of levees and floodwalls that do not tie into high ground. If a higher flow could be passed safely through Fargo-Moorhead, it would not eliminate the need for the staging and

storage areas during extreme events, but it would reduce the frequency at which those areas would be needed.

G-11 Executive Order 11988
Protecting land south of Fargo for future development is a violation of EO 11988. How can the project go all the way to Hickson, protecting undeveloped land, and be within the guidelines of 11988? The LPP removes additional land from the floodplain compared to the Minnesota alignment, but then the Corps used EO 11988 as an excuse not to consider the southern and western alignments. The Corps inconsistently applied EO 11988; it states it cannot impact downstream communities because of EO 11988, but also states it cannot move the alignment further south to save upstream communities because of EO 11988.

Response:
Executive Order 11988 is discussed in Section 3.8.3.4.5 the main report and in Section 8.5.3.4.5 of Appendix O of the FEIS. Executive Order 11988 prohibits support of floodplain development if there is a practicable alternative. If no practicable alternative exists, then impacts to the floodplain must be minimized. The results of this study have shown that a diversion channel is the alternative that best meets the project purpose (as stated in Section 2.5 of the FEIS) "to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." There is not a practicable alternative located outside the floodplain and, as such, EO 11988 requires that impacts to the floodplain be minimized. The diversion alignment of the selected plan removes some land from the floodplain and leaves other areas in the floodplain. Various channel alignments were considered, and the alignment of the proposed diversion channel was selected to address flooding from the five tributaries while also minimizing overall impacts to the floodplain and the environment and at the same time minimizing costs.

G-12 Executive Order 11990
The proposed project would violate EO 11990 by failing to minimize wetland impacts.

Response:
The selected plan does not violate Executive Order 11990; efforts were taken to avoid, minimize and compensate for wetland impacts caused by the selected plan.

G-13 Jurisdiction and Representation
What authority does the Metro Flood Group have to make decision that negatively impact people who did not get to vote on their position? Richland County and others are not represented in the Metro Flood Group and residents of these counties did not elect the Metro Flood Group.

Response:
The Metro Flood Working Group (MFWG) was created to advise the elected bodies of the non-federal study sponsors (the City of Fargo and the City of Moorhead) and also Cass County, ND; Clay County, MN; the Cass County Joint Water Resource Board and the Buffalo-Red River Watershed District. The MFWG makes recommendations to its several elected boards, but it has no authority to make decisions on their behalf.

G-14 Fargo Buyouts versus Upstream Acquisition
The Metro Area Flood Group says that Fargo, like the upstream staging and storage area, has been impacted and paid a price with millions of dollars of home buyouts. But the buyouts in Fargo were voluntary and occurred on properties that regularly flooded, the homes and properties in the upstream area are not regularly subject to flooding and the buyouts are going to be forced.

Response:
Comment noted.

G-15 Project Leadership
We need a new leader at the Corps and a new group to replace the Metro Area Flood Group. The existing leadership is biased and does not fully represent the people and areas that will be impacted by this project. People in areas that will be impacted do not trust the existing project leadership.

Response:
Comment noted.

G-16 Dam versus Diversion
The dam was hidden in the plan; people had no idea that a dam was part of the plan because it was just called a diversion. People had to vote on a sales tax before it was disclosed that the plan included a dam south of town. The Corps and the local sponsors withheld information.

Response:
The project design evolved significantly between May 2010 and March 2011, as described in Sections 3.6 and 3.7 of the FEIS and in Appendix O of the FEIS. It was determined in September 2010 that additional analyses were needed to consider measures that would reduce downstream impacts of the ND35K plan. Hydraulic modeling was developed to assess several alternatives, but no definitive results were available prior to mid-November 2010. Preliminary conceptual results were released on November 18, 2010 at the Metro Flood Work Group meeting, and a Metro Flood Work Group meeting was held on December 9, 2010 at the Bennett Elementary School to share additional details with upstream stakeholders.

G-17 Project Cost Sharing with Cost Overruns
What happens if there is a cost overrun on the project? This isn't due to inflation but instead to unexpected complications building the river structures. How does the cost share work in an event like this? Does the project-cost split between sponsor and Corps apply throughout or is there a different formula used to divide the added cost?

Response:
Cost overruns will be looked at individually. For instance, if there is a cost overrun in the cost of excavation or any feature that is part of the FCP, then some of the costs would be cost shared. If there are cost overruns that are due to errors or features that are not part of the FCP, such as the tributary structures, they will be 100% responsibility of the non-federal sponsors.

G-18 Recreation
The proposed project includes recreation features, described as recreational benefits. How are the recreation benefits calculated?

Response:
Recreation features are generally included in flood risk management projects because they provide additional economic benefits to the local communities at relatively small cost. More information about recreational benefits can be found in Appendix M of the FEIS. Section 1.12.6 and Table 7 of Appendix M describe annual recreation benefits.

G-19 Non-Federal Sponsors
What happens if Moorhead steps down as a project sponsor or backs out of the project?

Response:
The project can continue as long as there is at least one eligible non-federal sponsor that is interested and capable of fulfilling the obligations of a Project Partnership Agreement.

G-20 Avoided Costs
What are the project's projected avoided costs resulting from the channel decreasing from 35K to 20K with the upstream staging and storage?

Response:
The cost to construct the 20K diversion is approximately $100 million less than the cost to construct the 35K diversion.

G-21 Potential Project Backlog
Are there other Corps projects pending funding? When will this project begin construction in light of any Corps backlog projects?

Response:
It is impossible to predict with any certainty when construction will begin. Several Congressionally authorized Corps projects are available to receive federal funding. Congress normally provides funding for Corps projects in the annual Energy and Water Development Appropriations Acts. The timing and availability of funding for this project will depend on both the Administration's budgeting priorities and the willingness of Congress to fund Corps projects.

G-22 Itemized Funding
What is the breakdown of funding for this project? Do those that benefit most fund most of the project?

Response:
The funding breakdown between federal and non-federal sources is shown in Section 3.14 of the FEIS. The distribution of costs between the non-federal sponsors must be negotiated between the non-federal sponsors and will not be defined in the FEIS.

G-23 Statewide Protection
This project protects too few people; only Fargo and Moorhead are benefited and the rest of the state remains at risk for flooding. The Red River Basin 20/20 Retention Plan provides statewide protection and needs to be built.

Response:
Statewide protection is not the purpose of this project. The project purpose, as stated in Section 2.5 of the FEIS is "to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area."

G-24 Compatibility with Existing Plans
The FEIS must fully describe any potential conflicts with land use plans, policies or controls.

Response:
The FEIS is in compliance with existing local policies and approaches regarding flood risk reduction. The Corps is a key partner in development of the Red River Basin planning efforts, including coordination with the Red River Basin Commission on the development of a long term basin plan. There are a number of technical papers that have been developed in the basin which list many various measures that could be used to address the flooding problems in the basin, one of those solutions listed is the use of diversions to reduce flood damages.

The LPP has been coordinated with a number of local, state, and federal agencies including the State of Minnesota, State of North Dakota, and FEMA to ensure that the LPP can be implemented and will be able to comply with all current regulations and policies.

G-25 Expedite Project
Each year that passes without a project in place exposes the region to unacceptably high risk of catastrophic loss. Cass County urges the Corps to continue moving the project forward in the most expeditious manner possible.

Response:
Comment noted. As stated in the response to question G-6, the proposed timeline is based on reasonable estimates for accomplishing the design and construction associated with the project. The estimated construction completion in 2021 assumes that Congressional authorization is obtained in time to begin construction in 2013 and that neither federal nor non-federal funding is constrained during the entire implementation period.

G-26 Conditional Letter of Map Revision
An increase in the 1% flood stage is not allowed unless authorized through a Conditional Letter of Map Revision (CLOMR). All impacts to structures must be mitigated. The stage increase must not exceed 0.5 feet unless there are floodway easements and concurrence of the local community. Without mitigation of all existing structures the project does not meet Executive Order 11988. Mitigation costs are not included in the economic analyses.

Response:
The Corps has been working closely with FEMA, the State of Minnesota, and the State of North Dakota to ensure that the project as proposed will be provided with a CLOMR. The proposed mitigation should be sufficient to comply with all current regulations. The Corps will continue to coordinate with the agencies as this project progresses.

G-27 Impacts to Other Communities
The SDEIS is deficient because it omits analysis of the probability that the LPP, once implemented, will effectively preclude further large-scale funding for flood protection to communities outside of the Fargo- Moorhead metro, and the effects such a lack of funding may have on such communities.

Response:
The probability of potential funding for the selected plan or other projects is a political issue that cannot be quantified. The Corps is not required to speculate on such issues.

G-28 Upstream Participation
Upstream communities should have been included in project planning; no mention of this omission is included in the report.

Response:
Significant public participation was included as the project progressed, including a number of public meetings, media contacts, and publications of reports as indicated in Section 6 of the main report, Appendix O, and Appendix Q. As indicated in the report, upstream impacts were not anticipated until it was determined that there were large downstream impacts. The upstream communities were engaged through public meetings on December 9, 2010 at Bennett Elementary School, March 30, 2011 at Kindred High School, May 3, 2011 (Wilkin and Richland County Commission Meeting), May 3, 2011 (Comstock Community Meeting), and May 24, 2011 at Kindred High School.

G-29 Non-Federal Funding
Local sponsors' ability and willingness to pay for their share is uncertain.

Response:
The non-federal sponsors have completed the necessary financial self-certifications to complete the feasibility report and enter into a Design Agreement. These certifications indicate that they are financially capable of moving forward with the selected plan. Additional financial certifications will be necessary prior to beginning construction.

G-30 Technical Literature
The SDEIS failed to consider or mention Technical Paper 11, the RRBC Progress Report, other substantial technical literature, and the flow reduction policy of the Red River Watershed Management Board.

Response:
The FEIS references a number of reports and technical information related to the project, and both Technical Paper 11 and the RRBC Progress Report were considered. These specific documents are not authoritative stand alone reports, but are part of a larger set of documents; as such, these documents were not appropriate for individual reference in the FEIS. Furthermore, both Technical Paper 11 and the RRBC Progress Report acknowledge that local measures, including diversion channels, may be appropriate flood risk management features.

G-31 Southside Project
The SDEIS should have considered the Southside Project as a connected action.

Response:
Section 5.3.1 of Appendix O states that the Southside project was not included, as that project was put on hold indefinitely pending the outcome of this study. The Southside project is also addressed in Section 2.3.4 of the FEIS in the description of future without project conditions. Consistent with guidance found in IWR 88-R-2, National Economic Development Procedures Manual - Urban Flood Damage, it is assumed that the Southside project is not in place for the future without-project condition. The Southside study will resume only if no federal project is recommended to address flooding in the area south of Fargo (as stated in Section 1.5.2.2 of the FEIS).

G-32 Diversion Channel Combined with Storage
If the diversion channel were designed to take advantage of the additional, natural flood attenuation provided by the flood plain, rather than closing it behind spoil levees, less new storage would be required and a smaller diversion channel could be planned. Alternatively, moving the diversion structure further north would allow storage in naturally flood prone areas of the flood plain – again reducing the requirement for new storage.

Response:
Various channel alignments were considered, and the alignment of the proposed diversion channel was selected to address flooding from the five tributaries while also minimizing overall impacts to the floodplain and the environment and at the same time minimizing costs.. The diversion alignment was located to keep flood water out of the Rose Creek watershed by capturing overland flows south of Fargo and to stay south and west of the existing Sheyenne River Diversion control structure at Horace, N.D. The diversion outlet was located downstream of the mouth of the Sheyenne River to maintain natural drainage within the benefitted area.

G-33 Controversy
The Corps did not adequately consider the controversy associated with the project.

Response:
Controversy related to the project is discussed in Section 5.3 of the FEIS. All members of the public, including agencies and private individuals, have been invited to comment on the project and express any and all concerns. All comments, including those related to concerns and controversy, from the public are documented in Appendix R and Appendix T. The Corps has

considered the controversy associated with the project and responses to all public comments are included in Appendix S and Appendix U of the FEIS.

G-34 North Dakota Diversion with Upstream Staging and Storage
The proposed plan presented in the SDEIS (the North Dakota diversion with upstream staging and storage) incorporates radically new features constituting it in effect an entirely new project, requiring a new NEPA alternatives analysis.

Response:
The plan proposed in the SDEIS and FEIS consists of the same basic measures that were analyzed in the DEIS: levees, diversion channels, hydraulic structures and flood storage areas. The proposed plan combines these measures to achieve the stated planning objectives and address specific impacts that emerged during the planning process. A notice of intent to prepare a Supplemental EIS was published in the *Federal Register* on December 27, 2010, and comments on the scope of that effort were accepted until January 26, 2011.

G-35 LPP is Inadequately Described
The SDEIS is deficient in that the LPP is inadequately described. No description is provided as to how the LPP would operate under flood conditions, or of the safety issues its flood water retention and staging components may pose, or of how these safety issues will be addressed in project design or operation.

Response:
The LPP and its operation are fully described in Section 3.13 of the FEIS. Safety and potential loss of life associated with a failure of the system are discussed in Section 3.10 of the FEIS and in the Levee Breach and Loss of Life Analysis Report attached to Appendix D of the FEIS.

G-36 Alternatives
Where a project's purpose and need engages a broad, regional problem, the agency has a duty under NEPA to go beyond its own jurisdictional boundaries and its own regulations in the formulation of reasonable alternatives.

Response:
The purpose and need of the project are captured in the project's primary planning objective, which is to reduce flood risk to the entire Fargo-Moorhead Metro area. Analysis of alternatives and measures was not constrained by the Corps jurisdiction. Section 8.4.3 of Appendix O of the FEIS addresses the array of all measures and combinations of measures. This section of the appendix describes how alternatives and combined alternatives are evaluated, compared and screened. Some measures from Phase 3 were re-visited and some new measures were introduced; all measures and combinations of measures were considered.

G-37 Rejection of Upstream Storage
The Corps' rejection of upstream storage alternatives is inadequate under NEPA as failing to set forth the scientific or technical foundation upon which such rejection is based. The Corps has

failed to identify (1) what flood storage opportunities exist in the Red River basin-wide, (2) what their substantial cumulative benefits are, and (3) how they are ineffective in reducing flooding.

Response:
Upstream storage was thoroughly evaluated and assessed as an alternative. The study team and non-federal sponsors gave fair and equal consideration to all alternatives, and determined that upstream storage did not effectively or efficiently address catastrophic flood risk in the Fargo-Moorhead Metro area. Section 3.4.6.2 of the FEIS discusses storage alternatives that exist in the Red River basin and describes the justification for eliminating these as stand-alone alternatives. Distributed flood storage versus upstream staging and storage is discussed in Section 3.7.5 of the FEIS. Additional information related to flood storage can be found in the report referenced in Section 1.5.1.9 of the FEIS.

G-38 Diversion-centric Thinking
The Corps has impermissibly pre-determined a diversion channel to be its primary and favored approach to meet the project's purpose and need.

Response:
The feasibility report documents that a number of alternatives were considered and steps were taken to ensure that previous screenings remained valid. A diversion channel was the only alternative that was effective and cost-effective in reducing flood risk from very large events.

G-39 Email Communication
The Corps' advancing a rationale for eliminating upstream storage in an email sent subsequent to the release of the SDEIS for public comment renders the alternatives analysis in the SDEIS inadequate.

Response:
The information contained in the emails to the Metro Flood Work Group has been included in the FEIS in Sections 3.7.5 and 3.7.6. This information is also included in Appendix Q of the FEIS.

G-40 Community Engagement
The Corps did not visit or talk to anyone in the staging area.

Response:
When it was determined that there would be upstream impacts from the selected plan, the Corps held public meetings to disclose the information to the public; this information is included in Appendix Q. Meeting were held on December 9, 2010 at Bennett Elementary School, March 30, 2011 at Kindred High School, May 3, 2011 (Wilkin and Richland County Commission Meeting), May 3, 2011 (Comstock Community Meeting), and May 24, 2011 at Kindred High School.

G-41 Updated Costs
The cost of the no action plan has not been updated to reflect extensive buyouts performed by Fargo and Moorhead since June 2010.

Response:
The economic analysis of the plan was completed in Phase 3 of this study as indicated in Appendix C, Economics. Although some buyouts that have occurred recently were not included, it would not have a significant impact on the analysis as the number of properties compared to the entire Fargo-Moorhead area is small. In addition, additional growth that has occurred in the area was also not included since the economic analysis was completed.

G-42 Oversight of Operation and Maintenance
The SDEIS does not indicate who will have oversight of Fargo to ensure appropriate operation and maintenance.

Response:
Section 3.13.5 of the FEIS indicates that the non-federal sponsors will be responsible for all operations, maintenance, repair, rehabilitation and replacement (OMRR&R) of project features. The cost share agreement between the Corps and the non-federal sponsors requires the sponsors to operate the project in accordance with the OMRR&R manual provided by the Corps. Additional information related to the operating plan can be found in Appendix B of the FEIS.

9.0 Comment Category H: Miscellaneous

H-1 Various Communities, Agencies, and Individuals Oppose the Diversion
Several comments spoke out in opposition to the proposed diversion channel, including the following communities and entities: Richland County, City of Christine, Pleasant Township, Oxbow Park District, Kindred School District, Normanna Township, City of Kindred, City of Davenport, Davenport Township, Walcott Township, Colfax Township, Richland County Township Officers Association, City of Comstock, Holy Cross Township, Wilkin County Board of Commissioners, the Bakke Homeowners Association, the National Wildlife Federation, and Red River Telephone Company.

Response:
Comment noted.

H-2 Various Communities, Agencies, and Individuals Support the Diversion
Several comments spoke out in support of the proposed diversion channel, including the following communities and entities: Cass County, North Dakota State Water Commission, City of Fargo, and City of Moorhead.

Response:
Comment noted.

H-3 Acceptance of Impacts
Some comments supported the project in spite of the impacts; one stated "If everybody keeps opposing every proposed plan, there will never be a solution. If sacrificing our home prevents other areas from being flooded, it is worth it."

Response:
Comment noted.

H-4 State Historical Society of North Dakota
The State Historical Society of North Dakota has received and reviewed the SDEIS and noted where cultural resource overviews are discussed.

Response:
Comment noted.

H-5 Acquisition of Mitigation Lands
The North Dakota Fish and Game Department prefers that mitigation for riparian forest impacts includes options such as acquisition of mitigation lands. The Department's philosophy is if public dollars are being utilized for the project then the mitigation should be available for public use. The Department would consider entering into a MOU to manage these properties if they are of adequate size and habitat quality.

Response:
Comment noted.

H-6 Funding for Environmental Mitigation
This project will have negative environmental impacts, and some of the negative impacts may not yet be known. The Corps and local sponsors must assure that funding is available for future modifications to the project or additional mitigation to offset all environmental impacts. The Corps and local sponsors must make a solid commitment prior to project construction that all impacts will be mitigated adequately.

Response:
The Adaptive Management Plan outlines the process for mitigation funding. The cost estimate includes costs for mitigating impacts identified in the FEIS. The cost estimate also includes costs for evaluating impacts prior to and following construction, as well as effectiveness of mitigation actions. This monitoring will be required as a part of the Operation and Maintenance plan for the project. Participation and organization of the Adaptive Management Team also would be required of the non-federal sponsors. Should additional impacts be identified through adaptive management, the non-federal sponsors will have several options available to implement additional mitigation. At this time, there cannot be an absolute guarantee that federal funding would be available to resolve any future mitigation issues. However, the non-federal sponsors may elect to implement mitigation on their own, or pursue financial support, including federal funding, to perform additional mitigation. Any future federal funding would be dependent on federal appropriations.

H-7 Concerns With SDEIS
An acceptable environmental study has not been done.

Response:
Comment noted. The Corps considers the FEIS to be an acceptable environmental study.

H-8 North Dakota State
The State of North Dakota is committed to providing funding to cover one half of the non-federal, non-Minnesota share of the project's cost. The state serves in a support role for this effort. The project scope and footprint will be determined by the Corps and local governing entities.

Response:
Comment noted.

H-9 Local and Regional Flood Risk Management
Local and regional flood risk reduction efforts should be fully integrated into the flood diversion channel project, including local and regional efforts to control development in flood prone areas.

Response:
Comment noted; local and regional efforts are described in Appendix P.

H-14 Alternative Compatibility
The SDEIS should have described the compatibility of the alternatives with the decision making process outlined in the Flood Damage Reduction Mediation Agreement and associated TSAC papers.

Response:
The planning process and alternatives considered are fully described in Chapter 3 of the FEIS and in Appendix O. The planning process used throughout the Fargo-Moorhead Metro feasibility study is prescribed by the Corps of Engineers' Planning Guidance Notebook (Engineer Regulation 1105-2-100). The Corps' planning process is compatible with the process laid out in the 1998 Flood Damage Reduction Mediation Agreement, which primarily addressed planning efforts by Minnesota watershed districts in the Red River Basin. Both processes are designed to ensure that all stakeholders can participate in scoping and conducting the study and reviewing and commenting on the study findings prior to making final decisions. The Fargo-Moorhead study team actively coordinated with federal and state agencies, local water resource jurisdictions, the non-federal sponsors and the general public throughout the study. The Fargo-Moorhead study considered a wide range of alternatives, including those described in the Red River Flood Damage Reduction Work Group's Technical and Scientific Advisory Committee (TSAC) technical papers.

H-15 Request for Materials
One comment asked that all the notes and materials from the public meetings be published for the public to read.

Response:
Comment noted. The information presented at all public meetings is included in Appendix Q of the FEIS.

H-16 Past Mistakes
Mismanagement of land and water resources creates problems and can result in catastrophe. Katrina was a disaster because of Corps of Engineers. Don't make the same mistakes in Fargo that were made in Louisiana, the Mississippi Delta and along the Missouri River. Flooding along the Mississippi and Missouri Rivers was caused by the Corps' failed flood control practices. Look at what happened when the Corps drained the Everglades in Florida, it never works out well to mess with nature. The Corps needs to learn from its past mistakes.

Response:
The concerns expressed in this comment are valid and have been noted. The Corps of Engineers has made an explicit commitment to be a learning organization and identifies continuous learning as a key organizational competence.

H-17 Legacy
This project will impact future generations, and could make the world a better place for the future by protecting the environment. The Corps needs to come up with a less damaging and less costly solution, it's not too late to do the right thing and be a steward of natural resources.

Response:
The project purpose, as stated in Section 2.5 of the FEIS is "to reduce flood risk, flood damages and flood protection costs related to the flooding in the Fargo-Moorhead Metropolitan Area." The selected plan would have significant beneficial impact to current residents and future generations in the Metro Area. Public health and safety will be improved by reducing the risk of loss of life and property damage due to flooding. Community stability will be enhanced in the Metro Area. The project would impact future generations, and for the Fargo-Moorhead Metro Area many of those impacts would be positive. Environmental impacts related to the project will be mitigated as described in Chapter 5 and Attachment 6 of the FEIS.

H-18 Extinction
We are living in unprecedented times in terms of climate change and the rate of species facing extinction. Each project and the alternatives that are weighed are key for the survival of numerous species.

Response:
An environmental analysis was conducted and a discussion of those impacts is presented in Chapter 5 of the FEIS. Additionally, a Clean Water Act Section 404(b)(1) evaluation has been prepared and is included with the main report. Two federally-listed endangered species are listed for Cass County; however, the U.S. Fish and Wildlife Service's records do not indicate any individuals of any of these species within the study area.

H-18 Sustainability
A flood management plan must be efficient with money, mindful of wildlife, and use the natural systems that have been sustainable for centuries.

Response:
Seven Environmental Operating Principles were followed during the entire planning process. The first principle relates to sustainability and the selected plan strives to achieve environmental sustainability by incorporating features to facilitate fish passage, minimize impacts to geomorphology, and minimize any other environmental impacts caused by the project. See Section 9.2 of Appendix O of the FEIS for further discussion of the Environmental Operating Principles.

H-19 Isolated Wetlands
The Corps should reassert Clean Water Act Section 404 jurisdiction over isolated wetlands.

Response:
The Supreme Court has ruled that the Corps does not have jurisdiction over isolated wetlands.

H-20 Contractors
The low bidder will get the contract and will cut corners to increase profit.

Response:
The contracting mechanisms for this project have not been determined. Any contractor will be required to comply with the plans and specifications and will be held to strict quality control standards.

H-21 Ecosystem Services
We must move away from rigid, human designed channel structures with their tendency over time to increase serious problems, and refer more to the ecological models seen in nature which perform services that build and maintain the environment. Stop trying to "build your way out of the problem." Stop trying to change nature.

Response:
The study team fully and equally considered a range of alternative, both structural and nonstructural. The study team has found that structural alternatives, such as diversion channels, are more efficient (provide more benefits at less cost) and more effective (reduce flood risk to a greater degree) than non-structural alternatives such as water storage and wetland restoration. While giving full and equal consideration to a range of alternatives, the study team has recommended that the selected plan be carried forward due to its efficiency and effectiveness.

H-22 Interdependence
When making plans it is important to consider other species besides ourselves. Always put the health of our land, water, air, and wildlife first. This, in turn, protects the good health of us all.

Response:
Seven Environmental Operating Principles were followed during the entire planning process. The second principle relates to the interdependence of life and the physical environment. The feasibility study team coordinated extensively with the appropriate environmental agencies in order to proactively consider environmental consequences so that appropriate measures could be included in the project design and as mitigation where necessary. See Section 9.2 of Appendix O of the FEIS for further discussion of the Environmental Operating Principles.