

**WATER FOR OUR FUTURE AND
JOB CREATION: EXAMINING
REGULATORY AND BUREAU-
CRATIC BARRIERS TO NEW
SURFACE STORAGE INFRA-
STRUCTURE**

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

COMMITTEE ON NATURAL RESOURCES

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

SECOND SESSION

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**OVERSIGHT HEARING ON “WATER FOR OUR
FUTURE AND JOB CREATION: EXAMINING
REGULATORY AND BUREAUCRATIC BAR-
RIERS TO NEW SURFACE STORAGE INFRA-
STRUCTURE.”**

**Tuesday, February 7, 2012
U.S. House of Representatives
Subcommittee on Water and Power
Committee on Natural Resources
Washington, D.C.**

The Subcommittee met, pursuant to notice, at 10:00 a.m., in Room 1324, Longworth House Office Building, Hon. Tom McClintock [Chairman of the Subcommittee] presiding.

Present: Representatives McClintock, Tipton, Gosar, Labrador; Napolitano, Costa, and Garamendi.

Mr. McCLINTOCK. The hour of 10:00 has arrived, and the Subcommittee on Water and Power will come to order. I would ask unanimous consent that the gentleman from Colorado, Mr. Gardner, be allowed to sit with the Subcommittee and participate in the hearing.

[No response.]

Mr. McCLINTOCK. Hearing no objections, so ordered. We will begin with five-minute opening statements by myself and the Ranking Member of the Water and Power Subcommittee.

STATEMENT OF THE HON. TOM McCLINTOCK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. McCLINTOCK. The Subcommittee on Water and Power meets today to consider what steps need to be taken to remove government-imposed impediments to the construction of new dams and reservoirs.

The need for action can be summarized quite succinctly: The Bureau of Reclamation has built over 600 dams and reservoirs in the last century, but two-thirds of them were built in the first 60 years of its existence—more than 50 years ago. With one exception, Reclamation has not built any major dams or reservoirs in the last generation.

And now, under this Administration, the Bureau of Reclamation is actually moving to tear down perfectly good dams to placate the most extreme elements of the environmental left. This shift of purpose is fast becoming a direct and imminent threat, not only to the prosperity of the West, but to our very ability to support our population. For example, California’s 37 million people now rely on a water system built to support a population of just 22 million.

Last year, this Subcommittee focused on the release or diversion of billions of gallons of desperately needed water to meet absurd environmental regulations. But that’s just part of the man-made

drought that is gripping the West. The other part is the panoply of Federal regulations that makes the construction of new storage cost prohibitive.

Last year, California had one of the wettest winters on record. So far this year, it has had one of the driest. Last year, billions of gallons had to be released simply because we had no place to store the surplus water. If the drought continues for another year, we will rue the decisions that denied us the additional storage capacity that would have saved that water.

As we will hear, major projects have been hamstrung because of litigation and regulatory excesses stemming from 1970's-era legislation. Three years ago, this Subcommittee traveled to Colorado, which was in the grips of a chronic water shortage. There we learned that if the Two Forks project had not been blocked in this manner, they would have had no water shortage at all.

Apologists for the status quo tell us the dams are too expensive. They blissfully ignore the fact that it is precisely these excessive regulations—having nothing to do with dam safety—that have needlessly and artificially driven up the cost.

It is true that dams impede the migration of certain species of fish, a problem that is easily and economically addressed through down-stream fish hatcheries. Yet hatchery fish are often not included in ESA population counts, despite the fact there is no more genetic difference between hatchery fish and fish born in the wild than there is between a baby born in the hospital and a baby born at home. Indeed, it was the construction of dams that made possible the year-round cold-water flows so conducive to thriving fish populations. The dams tamed the environmentally devastating cycle of floods and droughts that once plagued these habitats.

Nor will conservation measures such as recycling or rationing address our needs. As we will hear, there are limits to what conservation alone can do to address this shortage, and handing out taxpayer grants for toilet exchanges and rock gardens isn't going meet the next generation's needs. Title 16 recycling legislation in the last Congress cost twice as much as imported water to the same regions.

Conservation is what you do to manage a shortage. It is the government's responsibility to alleviate and prevent that shortage. That means that this generation must summon the common sense and resolve that the greatest generation used to build the infrastructure that we still rely upon today. That means returning to the sound principles of finance that produced this infrastructure: hard-nosed cost-benefit analysis and restoring the beneficiary pays principle that the actual users of these projects pay for them in proportion to their use.

We have squandered enormous amounts of money and precious time proving that the policies of the 1970's do not work, and we are now facing devastating water shortages as the cost of that lesson. It is a generation whose folly resembles Edward Gibbon's description of "decent easy men, who supinely enjoyed the gifts of the founder." Those days need to end now.

It is time to open a new chapter in the history of the West, that a new generation recovered and restored the vision of abundance

of its forebears and finished the job described by the founder of the Bureau of Reclamation as “making the desert bloom.”

With that I yield to the Ranking Member of the Subcommittee.
[The prepared statement of Mr. McClintock follows:]

**Statement of The Honorable Tom McClintock, Chairman,
Subcommittee on Water and Power**

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The need for action can be summarized quite succinctly: The Bureau of Reclamation has built over 600 dams and reservoirs in the last century, but two-thirds of them were built in the first 60 years of its existence—more than 50 years ago. With one exception, Reclamation has not built any major dams or reservoirs in the last generation.

And now, under this Administration, the Bureau of Reclamation is actually moving to tear down perfectly good dams to placate the most extreme elements of the environmental left.

This shift of purpose is fast becoming a direct and imminent threat not only to the prosperity of the West, but to our very ability to support our population. For example, California’s 37 million people now rely on a water system built to support a population of just 22 million.

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But that’s just part of the man-made drought that is gripping the West. The other part is the panoply of federal regulations that makes the construction of new storage cost prohibitive.

Last year, California had one of the wettest winters on record. So far this year, it has had one of the driest. Last year, billions of gallons of water had to be released simply because we had no place to store that surplus water. If the drought continues for another year, we will rue the decisions that denied us the additional storage capacity that would have saved that water.

As we will hear, major projects have been hamstrung because of litigation and regulatory excesses stemming from 1970’s era legislation. Almost two years ago, this Subcommittee travelled to Colorado which was in the grips of a chronic water shortage. There, we learned that if the Two-Forks project had not been blocked in this manner, they would have had no water shortage.

Apologists for the status quo tell us that dams are too expensive. They blissfully ignore the fact that it is precisely these excessive regulations—having nothing to do with dam safety—that have needlessly and artificially driven up the cost.

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Indeed, it was the construction of dams that made possible the year-round cold-water flows so conducive to thriving fish populations. The dams tamed the environmentally devastating cycle of floods and droughts that once plagued these habitats.

Nor will conservation measures such as recycling and rationing address our needs. As we will hear, there are limits to what conservation alone can do to address this shortage, and handing out taxpayer grants for toilet exchanges and rock gardens isn’t going to meet the next generation’s needs. Title 16 recycling legislation in the last Congress cost twice as much as imported water to the same regions.

Conservation is what you do to manage a shortage. It is the government’s responsibility to alleviate that shortage. And that means that this generation must summon the common sense and resolve that the greatest generation used to build the infrastructure that we still rely upon today.

That means returning to the sound principles of finance that produced this infrastructure: hard-nosed cost-benefit analysis and restoring the beneficiary pays principle that the actual users of these projects pay for them in proportion to their use.

We have squandered enormous amounts of money and precious time proving that the policies of the 1970’s do not work, and we now face devastating water shortages as the cost of that lesson. It was a generation whose folly resembles Edward Gibbon’s description of “Decent easy men, who supinely enjoyed the gifts of the founder.” Those days need to end now.

It is time to open a new chapter in the history of the West: that a new generation recovered and restored the vision of abundance of its forbearers and finished the job described by the founder of the Bureau of Reclamation as “making the desert bloom.”

STATEMENT OF THE HON. GRACE NAPOLITANO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mrs. NAPOLITANO. Thank you, Mr. Chair. And I apologize; I have a full-blown cold, so stay away.

I look forward and I really enjoy today’s hearing. I have no objection to the hearing, because it is based on storage.

Evidently, from the testimony I read, the hearing only looks at one side of the coin, which is the new surface storage. It, as you pointed out, doesn’t look at groundwater conservation, the efficiencies like low-flush toilets, recycling, desalination, and of course, one major component, education.

If we are looking for solutions to our water problems, and for certainty for our communities, we must have the full consideration of all options. All of them must be on the table. That includes storage and other alternatives, including increase of recycled water projects.

The Bureau has constructed most of its nearly 200 projects prior to World War II, you are right. No argument about the impact Reclamation projects have had in the West. A combination of changing national priorities and local needs and the development of prime locations for surface storage projects have led us to look at different alternatives. Times have changed.

The Majority will argue that the environmental regulations have hindered construction facilities in the West. That may be so. But then the world has changed. There is a bigger issue here, from moving from study to construction. I don’t hear as much about public-private partnerships or other areas. Even if you move from study to construction, how can we guarantee these communities the billions of Federal-appropriated dollars that are necessary for construction, when of the \$22 billion Reclamation has spent on major projects in the decades, only 25 percent—or 5.2 billion—has been repaid? You are talking about 40-year loans interest free at taxpayer expense. You are asking the taxpayer to subsidize additional burden.

Any authorization of new storage projects will have to compete for funding in Reclamation’s limited budget and add to the Federal debt associated with the water projects. The biggest impediment to dam construction is limited Federal funding.

Again, I don’t hear much on public-private partnerships or the bonding at the local levels, nor of other areas, Native American rights, the aquifer studies for recharge—we only hear the overdrafting wastewater treatment upgrades,—farm water runoff clean-up, and some of those areas that are of great concern to me.

Water managers have already realized they cannot wait to compete for the limited—very limited—Federal dollars or the decades it will take to construct the facility. They need to solve their problems now. For some communities, the surface water storage, like Contra Costa Water District’s Los Vaqueros Project, or the Metro-

politan Water District Diamond Valley Reservoir, done at their own expense. Los Vaqueros 60,000 acre-feet expansion will be on line this spring, project completed on time, on budget, with no litigation. Mr. Brown can speak more to the details of the Los Vaqueros Project.

Water managers are looking for projects that involve limited Federal involvement. Less government, ladies and gentlemen, that can produce water on a faster, more timely scale. This can also be seen in the 53 water recycle projects Congress has authorized since 1992. And they have yielded approximately half-a-million acre-feet. New storage, when appropriated, is not impossible. And California alone has added 5.6 million acre-feet in new groundwater and surface water storage in the last 20 years. And I will repeat, we have cut water usage in the Southern California area by conservation, recycling, and all of the above, using the same amount of water that we used three decades ago with three million more people.

In this environment not all of the water needs in the West can or should be met by new dams or bigger dams. New storage is not always the answer. And the same can be said for water recycling or desalination. What works for one community may not work for others, and we must select the most effective and affordable solutions.

The threat to our water supply is real. We face many challenges like climate change, decreased snowpack, increased demand, and the development of alternative water-intensive fuels like oil shale, and their need for water. To know the right solution for communities is to have all options on the table. Looking for just one surface storage does not provide our water managers with the baseline data they need to serve our communities.

And for the record, Mr. Chair, I have a letter from the Rocky Mountain Farmers Union regarding the need to fund and prioritize aging infrastructure, and also the draft environmental impact statement on the Shasta expansion released yesterday.

Now, thank you, Mr. Chair, and I look forward to this—

Mr. MCCLINTOCK. I assume you asking unanimous consent—

Mrs. NAPOLITANO. Yes, sir, I am.

Mr. MCCLINTOCK. In the record, without objection.

[The letter submitted for the record by Mrs. Napolitano follows:]



February 6, 2012

Dear Representatives Tipton and Napolitano:

We understand that the Water and Power Subcommittee of the House Natural Resources will be holding a hearing on western water issues on February 7th, 2012. We hope that this hearing can focus on water solutions that are cost-effective and that can be implemented in the near-term to help agriculture and the health of our rivers. As you know, our rural communities benefit from a vibrant agricultural sector as well as the jobs generated by recreation and tourism. Healthy rivers and streams are critical to both of these sectors of our economy.

In that regard, we want to bring to your attention the need for the federal government to help local irrigation districts and the state repair and improve our aging irrigation infrastructure. In Colorado, much of that infrastructure is over a century old and is in need of serious repair. We believe these repairs to dams, canals and diversion structures can be done in a way that provides benefits to both irrigators and the streams, as has been demonstrated in many areas of the western U.S. These kinds of projects are the most likely to win strong public support and produce the kind of benefits that will last far into the future.

While new water storage may be needed in some limited situations, it must be done in a way that protects the values we all hold in common: economic efficiency and healthy rivers and streams. Thank you in advance for your consideration of our perspective and we look forward to seeing the results of the hearing.

Sincerely,

Bill Midcap

Bill Midcap
 Director of Renewable Energy Center
 Rocky Mountain Farmers Union
 7900 E Union Ave Suite 200
 Denver CO 80237
 303.283.3528

Mrs. NAPOLITANO. Thank you, Mr. Chair. And again, I see in one of the statements that there is a reference to establishment of banks such as TIFIA. I have said that several times, I think we need a water infrastructure bank in the future to be able to do these projects.

So with that I yield back.

[The prepared statement of Mrs. Napolitano follows:]

**Statement of The Honorable Grace F. Napolitano, Ranking Member,
 Committee on Natural Resources**

Thank you Mr. Chairman.

I look forward and have no objection to this hearing, with its emphasis on storage. This hearing, however, only looks at one side of the coin-it only looks at new surface storage. It does not look at groundwater storage, not efficiencies, not water recycling or desalination.

If we are looking for solutions to our water problems and for certainty for our communities, then we must have a full consideration of all options—including storage or other alternatives like water recycling.

The Bureau of Reclamation constructed most of its nearly 200 projects prior to World War II. There is no argument about the impact reclamation projects have had on the west. A combination of changing national priorities and local needs, as well as the development of prime locations for surface storage projects, has led us to look at different alternatives.

The majority will argue that environmental regulations have hindered construction of new facilities in the west. There is a bigger issue here—from moving from study to construction—and that is cost. Even if you move from study to construction, how can you guarantee these communities the billions of federal appropriated dollars that is necessary for construction??

It is also important to note that of the 22 billion dollars Reclamation has spent on major water projects, only 25% or 5.2 billion has been repaid to the federal government.

Any authorization of new storage projects will have to compete for funding in Reclamation's limited budget AND add to the federal debt associated with water projects.

The biggest impediment to dam construction is limited federal funding.

Water managers have already realized that they cannot wait to compete for the limited federal dollars or the 10 or 20 years it will take to construct a facility. They need to solve their problems now. For some communities that includes surface water storage, like Contra Costa Water District's Los Vaqueros project, or the Metropolitan Water District's Diamond Valley Reservoir. The Los Vaqueros' 60,000 acre-foot construction is expected to be completed this spring, on time, on budget and no litigation. Mr. Brown can speak to more details of the Los Vaqueros project today.

Water managers are looking for projects that involve limited federal involvement that can produce water on a faster scale. This can also be seen in the 53 water recycling projects congress has authorized since 1992.

New storage when appropriate is not impossible, California has added 5.6 million acre-feet in new groundwater and surface water storage in the last 20 years.

In this environment not all of the water needs in the west can or should be met by new dams or bigger dams. New storage is not always the right answer, and the same can be said of water recycling or desalination. What works for one community may not work for others, and we must select the most effective AND affordable solution.

The threat to our water supply is real. We many challenges like climate change, decreased snowpack, increased demand and the development of alternative water intensive fuels like Oil Shale.

To know the right solution for the community is to have all the options on the table. Looking at just surface storage does not provide our water managers with the baseline data they need to serve our communities.

Mr. MCCLINTOCK. Thank you. The Committee is joined by the Chairman of the Committee on Natural Resources, Congressman Doc Hastings of Washington, who I am told is celebrating his birthday today. For some very good reasons, we do not allow singing in this Committee.

[Laughter.]

Mr. MCCLINTOCK. However, I do believe I speak for all of us when I extend the Committee's warmest best wishes to the Chairman, and recognize him for five minutes.

STATEMENT OF THE HON. DOC HASTINGS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. HASTINGS. Thank you very much, Mr. Chairman, for holding this meeting, and for the Ranking Member, I would suggest you take some hot water and honey and something else. That really does help.

Mrs. NAPOLITANO. I would like to have something else.

Mr. HASTINGS. The something else is very good.

Water supply certainty has a profound and direct impact on Central Washington, where the economy is heavily dependent on irrigated agriculture. This region, which I have the honor to represent, is home to two large Federal water projects, one anchored by the Bureau of Reclamation's Grand Coulee Dam. Together, these two projects irrigate more than a million acres of farmland, provide numerous recreation and flood control benefits, and provide over 21 billion kilowatt hours of carbon-free, renewable hydroelectric power to customers throughout the West.

Before these projects were constructed, this area was arid land where little but tumbleweeds would thrive. Today, it is one of the most productive and diverse agricultural areas in the world, providing more apples, pears, cherries, mint, and hops than in any other part of the country. Despite the successes of these projects and others in the West, they have been under constant assault from those with extreme agendas. Regulations and associated litigation have hijacked these projects, to the point where their very purposes have been compromised and the construction of new water storage to continue to meet the needs of those regions is nearly impossible to achieve.

Water users throughout the West have been forced to stand by and watch powerlessly as increasingly burdensome Federal rules based on questionable science and never-ending litigation make it more and more difficult to continue to receive the water they need. Today we will hear from several witnesses who will describe a regulatory system gone awry. They will outline a painfully long permitting process that often takes longer to complete than actual project construction. In one example, permitting process required the examination of 52 project alternatives. To me, that sounds like more than a bit excessive.

Our existing water supply is under strain and the demand is likely to increase. As bad as things are now, they are only going to get worse if the Obama Administration moves forward with their initiative to modify the Principles and Guidelines. The Principles and Guidelines provide standards that are critical in determining how Federal water infrastructure decisions are made and developed. Water users are justifiably concerned about this Administration's efforts to elevate non-structural and environmental elements over economic and safety benefits in the planning phase of project development. This could undermine efforts to build new and rehabilitate old water infrastructure.

My district is representative of much of the West; where water goes, jobs follow. On the flip side, when water does not reach farmers' fields or orchards, jobs are destroyed. Agriculture is Central Washington's leading employer, and is heavily dependant on a reliable water supply.

According to the Washington State Department of Ecology, Washington's 1.7 million acres of irrigated crop land generate approximately \$5 billion in crops sold each year, crops that feed America and the world. It is an area that is one of the most productive agricultural regions in the nation.

It is this generation's turn, as the Chairman noted, to recognize our growing water needs and take steps to meet it. Conservation will undoubtedly continue to play a role to meet our future water

needs, but it alone will not be enough. We must also embrace other water supply options, including building additional water storage. What America really needs an all-of-the-above-water supply strategy.

And with that, Mr. Chairman, thank you for your courtesy, and I yield back.

[The prepared statement of Mr. Hastings follows:]

**Statement of The Honorable Doc Hastings, Chairman,
Committee on Natural Resources**

Water supply certainty has a profound and direct impact on Central Washington where our economy is heavily dependent on irrigated agriculture. This region, which I have the honor to represent, is home to two large federal water projects in the West, one anchored by the Bureau of Reclamation Grand Coulee Dam.

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Despite the successes of these projects and others in the West, they have been under constant assault from those with extreme agendas. Regulations and associated litigation have hijacked these projects, to the point where their very purposes have been compromised and the construction of new water storage to continue to meet the needs of these regions is nearly impossible to achieve.

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The Principles and Guidelines provide standards that are critical in determining how federal water infrastructure decisions are made and developed. Water users are justifiably concerned about this Administration's efforts to elevate non-structural and environmental elements over economic and safety benefits in the planning phase of project development. This could undermine efforts to build new, and rehabilitate old, water infrastructure.

My district is representative of much of the West; where water goes, jobs follow. On the flip side, when water does not reach farmers' fields or orchards, jobs are destroyed. Agriculture is Central Washington's leading employer, supporting 160,000 jobs statewide, and —is heavily dependent on a reliable water supply.

According to the Washington State Department of Ecology, Washington's 1.7 million acres of irrigated crop land generate approximately \$4.8 billion in crops sold each year—crops that feed America and the world. It is an area that is one of the most productive agricultural regions in the nation.

It's this generation's turn to recognize our growing water needs and take steps to meet it. Conservation will undoubtedly continue to play a role to meet our future water needs, but it alone will not be enough. We must also embrace other water supply options, including building additional water storage. America needs an all-of-the-above-water supply strategy.

Mr. McCLINTOCK. Thank you. And it is the custom of this Subcommittee to receive opening statements from other Members who wish to make them.

The Chair recognizes Mr. Costa.

**STATEMENT OF THE HON. JIM COSTA, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. COSTA. Thank you very much, Mr. Chairman, for holding this hearing. I think it is appropriate, given the challenges we face in the West and in California about our near-term and long-term water needs, and surface supply is one, as I have said for many years, of the many water tools that we have in our water management toolbox to solve our long-term water needs. It is how we have historically solved our water needs. There is not one magic solution. It is a combination of solutions.

And I would like to keep my comments for the purpose of my opening statement somewhat focused on California, which I know best, having chaired the Policy Committee in the State Legislature, and having worked on water for almost 30 years.

In California, we have what many of us believe is a somewhat broken water system. And many of the new Members who are not from California will hear more about that. The problem is that we have a water system that was designed for about 20 million people. Today we have 38 million people. Estimated by the year 2030 we could have 50 to 60 million people living within the state. Our current water system is insufficient to satisfy our water needs for our urban cities, our agricultural communities, and to balance the needs to ensure that we can maintain healthy fisheries in an environment and an ecosystem that allows future Californians to enjoy it.

I sense a common thread here. I mean all three of the opening statements talked about the need to use all the water management tools in our water toolbox. What gets difficult as we talk about surface storage supply this morning is where do we get the best bang for our buck.

In California we have attempted to try to make efforts to assess which projects give us the best bang for our buck. The Bureau of Reclamation, under two Administrations now, President Bush's Administration and now President Obama's Administration, has studied three surface projects in California. Shasta actually—which was released today to be very feasible, economically, or to be a very positive potential, raising the dam 18 feet that would provide an additional 150,000 acre-feet of supply annually, plus the economic benefits at a cost of about \$1 billion seem to be very favorable.

We have also looked at enlarging Los Vaqueros, which is an offstream reservoir, for a second time that would extend its capacity.

Temperance Flat, which the Bureau has been studying now for over 10 years, I think needs to do further investigation in the sense that I think the Bureau is limiting the potential benefits of this important reservoir. Because it is not just the water supply, but the ability to move water north and south that Temperance Flat affords.

There are other benefits to this project that I don't think have been fully examined. I urge the Bureau to do a better job in looking at them.

But let's talk about an assessment of needs. Clearly, we know that if we are going to maintain our agriculture economy, be able to provide more water for our cities, and deal with the other needs

that are critical in California and in the West, we have to make an assessment of how much additional acre-feet of water do we need in California over the next 30 years. And then what is the most cost-effective way to get there?

If we used common sense in that fashion, I think we would be better. Let's be realistic. Some projects are—notwithstanding the cost factors, have more political opposition than others. I supported Diamond Lake that was mentioned in Southern California that has been constructed and built. I supported Los Vaqueros that has been built in Contra Costa County. Those are all good surface storage projects. Auburn Dam, that the Chair of the Committee supports, has a lot of opposition. There are reasons why some projects can deal with the permitting and the regulatory process easier than others.

However, the permitting and regulatory system is burdensome. We ought to look at ways in which we can do a better job. Frankly, people who don't want a project for the sake of not wanting a project have lots of opportunities to hold up a project. And clearly, I hope this Committee will look at all of the aspects and factors as we look at surface storage supply being a part of our long-term solutions to providing water for not only California, but for the West. Clearly, we need to make the same kind of investments that our parents and our grandparents made in the 20th century. And I think that is the challenge we face today.

I look forward to listening to the witnesses' testimony. Thank you very much.

Mr. MCCLINTOCK. Thank you.

The Chair recognizes Mr. Tipton of Colorado.

STATEMENT OF THE HON. SCOTT TIPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. TIPTON. Thank you, Mr. Chairman. I would like to particularly thank you for convening this important hearing today in terms of something that, for the West, is of critical importance since it is the lifeblood of our communities, and that is our ability to be able to store water.

And I would like to be able to submit for the record a letter that I received from the Grand Mesa Water Conservancy District in Cedar Ridge, Colorado, that actually speaks to some of the issues that the Ranking Member had talked about, in terms of being able to work with existing structures.

Mr. MCCLINTOCK. Without objection.

[The letter submitted for the record by Mr. Tipton follows:]

GRAND MESA WATER CONSERVANCY DISTRICT

P.O. BOX 129
CEDAREEDGE, CO 81413

February 6, 2012

Congressman Scott Tipton
218 Cannon House Office Building
Washington, DC 20515

Re: Congressional Hearing on Western Water Storage

Dear Congressman Tipton,

The Grand Mesa Water Conservancy District (District) would like to have the following experience and issues logged into the public record at the hearing February 7, 2012 entitled "Water for Our Future and Job Creation: Examining Regulatory and Bureaucratic Barriers to New Surface Storage Infrastructure." The District serves an area encompassing the Grand Mesa and Surface Creek Valley, Delta County, Colorado. As a taxpayer funded water conservancy district, it is mandated to monitor and preserve the water sources and tributaries supplying this precious lifeblood to our diverse area. The interests currently served are municipal, agriculture, recreation and recently several inquiries from the energy field (hydroelectric and fossil fuel energy). In the fall of 2008, the District board of directors voted to embark on a plan to rehabilitate breached reservoirs on the Grand Mesa National Forest within its jurisdictional boundaries. As of this date, the District has completed approximately 35% of the Peak Reservoir project and 5% of the Blanche Park Reservoir Project. Note, due to weather conditions, site work is limited to the months of July through October.

The District has encountered a laundry list of regulations and studies that has taken several years to wade through. The agencies involved are the US Forest Service and The Army Corps of Engineers. When the first project, the Peak Reservoir was started, the US Forest Service gave us an outline of the studies required to be completed and told us that they could not address any of these studies until maybe the next year. If we were interested in seeing our project move forward, the District should consider hiring a private firm qualified and approved by the Forest Service to complete the work. There were a couple of the studies that the Forest Service, personnel were required to complete. The District contracted with an approved firm to complete the work which was done summer of 2010. The District was then billed by the Forest Service for the work despite that fact we hired private contractors thus double payments. With the Army Corps, they do not do anything on the ground. They require the applicant to hire qualified services to address the list of concerns the Corps has which is always subject to change. The District was able to take aggressive action with a company that had experience working on the issues at hand. To complete this leg of our project took until spring of 2011. It was determined that there had to be mitigation due to the wetland plants along a tiny stream that ran through this empty structure. With all the permits finally in hand, the spring of 2011, financing in place, contractor hired, work was set to begin July of 2012. Remaining was a timber cruise involving

approximately 150 trees. The timber turned out to be of no economic value, but the District was charged \$6,000 for the right to remove them. Incidentally the Forest Service Timber personnel held up this entire project until late August because they did not have time to deal with our project. With the seven weeks of lost time, the construction was not able to be completed and over this winter, one of the grants that was held for this project was canceled. Part of the excess material from this project is scheduled to be used in the rebuilding of the Blanche Park Reservoir.

The District began the process to rebuild Blanche Park with the US Forest Service and the US Corps of Engineers during the fall of 2010. The engineering reports revealed that there would be enough excess material from the Peak Reservoir project to supply the needs for Blanche Park thus eliminating the need to disturb any surface area of the reservoir footprint except the dam structure. As before, the District hired a private firm to deal with the studies allowed by the Forest Service. The application for the project with the Forest Service was filed January of 2011. There was not even an acknowledgement received until January 2012 when a bill arrive for the work we had all ready completed. This project is being built on a "1891 Easement" however the access road has disappeared during the course of time. The District engineer has spent seven months attempting to identify a new access to the site and we still do not have a USFS accepted route. The distance is less than 2000 feet. The hope is that the permits can be secured for this project allowing us to move material a mile and a half from the Peak project to the Blanche Park project. If this cannot be accomplished, the excess material will have to be stockpiled and moved later, thus doubling the cost.

The District considers these huge tasks of studies and reviews as necessary if the District were building large reservoir structures. The Peak Reservoir project holds 35 acre feet of water on less than five acres. The Blanche Park Reservoir project hold 115 acre feet of water with only the dam site being disturbed. Despite the fact, these are small projects, the security these projects offer to the water supply of our service area is very important.

I hope these two examples provide insight to the frustration that is endured to accomplish any type of activity on the Federal Lands. Also, there are two very important issues that have faced our reservoir owners. First, the required studies and permits make what was simple repairs to the reservoirs a multi-year undertaking. Secondly, these are owned privately or under small corporations that do not have the financial ability to cover the costs of studies and permits now required. Most owners would have the ability to cover the cost of an actual repair but the cost incurred for now required engineering and studies have tripled what the actual cost should be. The District made a study in conjunction with the Grand Mesa Water Users Assn. of the water storage capacity that is currently under restriction for deferred dam maintenance and found 3800 acre feet of water storage is in jeopardy of being lost due mainly to cost of repairs. This figure represents approximately 15% of the total capacity of water storage on the Grand Mesa.

Please consider the damage these policies and regulations are placing upon our constituents living in the Surface Creek Valley, Delta County, Colorado

Respectfully Submitted,
Austin M. Keiser, President

Mr. TIPTON. I would like to note in particular on this letter that they do point out that it has been bureaucratic interference out of Washington, D.C. that is driving up costs, slowing up projects with a limited amount of time to be able to actually rehabilitate some of these reservoirs.

And in this one particular case, we are putting at risk better than 3,800 acre-feet of water storage, and it is being lost mainly due to the cost of repairs being driven by the bureaucracy that simply make no sense. So I thank you for submission of that.

Mr. Chairman, water storage is the precursor for multiple-use water management in arid regions such as the Third Congressional District of Colorado that I represent. Achieving improved water storage meeting growing populations is met not only by best man-

agement practices, but also by the development of new water infrastructure.

Prudent water storage can help aid agriculture, residential use, hydropower production, and environmental protection. The natural cycle of rivers in the West is one of boom and bust, surplus and drought. But with proper water storage, economic cycles do not have to be boom and bust. Recreational opportunities can be reliably provided, and water can be allocated where it is best needed to meet environmental species protection goals, and support our farm and ranch communities.

As such, there is no need to see water storage as a partisan issue, or one that divides the interests of water users, but as the means by which the greatest good for the greatest number of water users can be met.

It is my hope that today's hearing will be a productive step in highlighting some of the shortcomings of the existing water storage regulatory framework, and how it can be streamlined to better support jobs and communities that depend on the availability of water.

Again, Mr. Chairman, thank you for conducting this hearing.

[The prepared statement of Mr. Tipton follows:]

**Statement of The Honorable Scott Tipton, a Representative
in Congress from the State of Colorado**

Thank you Mr. Chairman for convening today's hearing, and thanks to the panelists for being with us today to examine this very important issue. Water storage is the precursor for multiple use water management in arid regions such as the Third Congressional District of Colorado. Achieving improved water storage to meet growing populations is met not only by best management practices but also by the development of new water infrastructure. Prudent water storage can help aid agriculture, residential use, recreation, hydropower production, and environmental protection. The natural cycle of rivers in the West is one of boom and bust, surplus and drought. But with proper water storage, economic cycles don't have to be boom and bust, recreational opportunities can be reliably provided, water can be allocated where and when it is needed to meet environmental and species protection goals, and we can support our farm and ranch communities. As such, there is no need to see water storage as a partisan issue, or one that divides the interests of water users, but as the means by which the greatest good for the greatest number of water users can be met.

It is my hope that today's hearing will be a productive step in highlighting some of the shortcomings of the existing water storage regulatory framework, and how it can be streamlined to better support jobs and communities that depend on the availability of water.

Mr. McCLINTOCK. Mr. Garamendi?

Mr. GARAMENDI. I would like to hear from the witnesses, so I will forgo my opportunity.

Mr. McCLINTOCK. Thank you. The Chair recognizes Mr. Gosar.

**STATEMENT OF THE HON. PAUL GOSAR, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF ARIZONA**

Mr. GOSAR. Mr. Chairman, thank you very much for convening today's hearing and providing me the opportunity to make a few remarks. While I would prefer the friendly confines of rural Arizona, I am glad to be back here in Washington, D.C. and building on our successes in this Committee.

The Colorado River is a fundamental component of our regional economy. The over 20-plus major dams built on the Colorado serve multiple purposes such as maintaining a year-round steady flow of

water and a stable water supply; producing an abundance of clean, renewable hydropower production; providing recreational opportunities; and facilitating many environmental protections.

Hydropower facilities like the Hoover Dam, the Parker Dam, and the Glen Canyon Dam are vital power resources for consumers in the Western states, keeping our electrical bills low and the economy growing.

The Central Arizona Project delivers water to 80 percent of my state's population. The \$10.3 billion agricultural industry in my state would not exist without the irrigation of over 800,000 acres of agricultural land via our state's water infrastructure. Additionally, recreation and tourism industry related to the river supports nearly 800,000 jobs in the seven Colorado River states, including 82,000 jobs in Arizona. In other words—this infrastructure is our lifeblood and we need more of it throughout the West.

Given the overwhelming benefits, one would think that the Federal Government would be focused on maintaining our current infrastructure and expediting the development of new surface storage. Instead, the Obama Administration is taking actions that compromises existing infrastructure and is standing in the way of development.

For example, the Glen Canyon Dam, located in Northern Arizona, lost a third of its hydropower generation—over 400 megawatts, or enough power for almost half a million homes—due to an environmental experiment. This experiment had an average economic cost of nearly \$50 million per year, totaling more than \$435 million for the 9-year study period. The cost of replacing that power the dam could have produced is borne by the customer, not my constituents.

Last summer, this Committee held an oversight hearing on the potential job loss and economic impacts of proposed EPA mandates on the Navajo Generating Station. Beyond the thousands of good-paying tribal jobs, the Navajo Generating Station is critical to Arizona's water supply because it provides 95 percent of the power for the Central Arizona Project, that infrastructure that delivers more than 500 billion gallons of Colorado River water to 80 percent of the state's population.

By the Obama Administration's own report released last month, its mandates on the NGS would increase water rates for millions of Arizonans, ranging from 16 percent increased rates for agricultural users and Indian tribes to a 7 percent increase for municipal and industrial users. These estimates are all based on the assumption that the mandates will not force the plant to shut down, which is contrary to testimony heard directly from the plant owners in the House Natural Resources Committee.

All these devastating economic impacts would be imposed on our weak economy for an uncertain environmental impact, per the Administration's own report. It is clear the Administration should abandon these nonsensical regulatory mandates and focus on policies that will stimulate our economy, not further damage it. The Federal Government needs to get back to working with people, not working against them.

I look forward to hearing from today's witnesses. These hard-working Americans, the people on the ground dealing with the reg-

ulations and the bureaucrats that prevent them from doing their jobs to the best of their capabilities. And they have an important story to tell.

I am committed to pushing policies that reduce the planning time, the regulatory permitting costs associated with the development of new Federal and non-Federal dams and reservoirs, and fighting unnecessary regulatory actions that compromise existing infrastructure. These efforts will reduce U.S. dependence on foreign energy production, ensuring a safe and stable water supply, and facilitating badly needed local job growth in communities throughout the West.

Thank you.

[The prepared statement of Mr. Gosar follows:]

**Statement of The Honorable Paul A. Gosar, a Representative
in Congress from the State of Arizona**

First, I would like to thank Chairman McClintock for convening today's hearing and for providing me the opportunity to make a few remarks. While I much prefer the friendly confines of rural Arizona, it is good to be back here at the Subcommittee on Water and Power in 2012. I look forward to building on our subcommittee's successes from last year.

The Colorado River is a fundamental component of our regional economy. The over twenty-plus major dams built on the Colorado River serve multiple purposes such as maintaining a year round steady flows of water and a stable water supply; producing an abundance of clean, renewable hydropower production; providing recreational opportunities; and facilitating many environmental protections.

Hydropower facilities like the Hoover Dam, Parker Dam, and Glen Canyon Dam are vital power resources for consumers in the Western states—keeping our electrical bills low and the economy growing. The Central Arizona Project delivers water to 80 percent of my state's population. The \$10.3 billion agricultural industry in my state would not exist without the irrigation of over 800,000 acres of agriculture land via our state's water infrastructure. Additionally, recreation and tourism industry related to the river supports nearly 800,000 jobs in the seven Colorado River states, including 82,000 jobs in Arizona. In other words—this infrastructure is our lifeblood and we need more of it throughout the West.

Given the overwhelming benefits, one would think that the federal government would be focused on maintaining our current infrastructure and expediting the development of new surface storage. Instead, the Obama Administration is taking actions that compromises existing infrastructure and is standing in the way of development.

For example, the Glen Canyon Dam, located in Northern Arizona lost a third of its hydropower generation—over 400 megawatts or enough to power almost half a million homes—due to an environmental experiment. This experiment had an average economic cost of nearly \$50 million per year, totaling more than \$435 million for the nine-year study period. The cost of replacing that power the dam could have produced is borne by the customer, my constituents.

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It is clear the Administration should abandon these nonsensical regulatory mandates and focus on policies that will stimulate our economy, not further damage it.

The federal government needs to get back to working with the people, not against the people.

I look forward to hearing from today's witnesses. These hardworking Americans—the people on the ground, dealing with the regulations and bureaucrats that prevent them from doing their jobs to the best of their capabilities—have an important story to tell.

I am committed to pushing policies that reduce the planning time and regulatory permitting costs associated with the development of new federal and non-federal dams and reservoirs and fighting unnecessary regulatory actions that compromises existing infrastructure. These efforts will reduce U.S. dependence on foreign energy production, ensuring a safe and stable water supply, and facilitating badly needed local job growth in communities throughout the West.

Thank you.

Mr. McCLINTOCK. Thank you.

The Subcommittee welcomes Mr. Gardner of Colorado, and is recognized for five minutes.

STATEMENT OF THE HON. CORY GARDNER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. GARDNER. I thank the Chairman for the opportunity to join the Committee in this important hearing, and thank Ranking Member Napolitano as well for the opportunity to be here.

I represent Colorado's Fourth Congressional District, which is just the opposite end of the state from my colleague, Mr. Tipton, from Western Colorado. It is a district that was once represented by Wayne Aspinall, who served as Chairman of the House Insular Affairs Committee for a number of years, and whose passion it was to add additional water storage to Colorado and to the West. In fact, many of the projects that we utilize today to their full extent were created by this Congress and Wayne Aspinall, the U.S. Congress and Wayne Aspinall. And the work that we are continuing to rely on today is work that happened several generations ago under the leadership of people like Wayne Aspinall.

By 2050, my home state of Colorado will need an additional one million acre-feet of water to meet all of our agricultural and industrial municipal demands. Conservation alone cannot meet these demands. We have an obligation to prepare this country's future generations by storing more water. This hearing is critical to understanding the Federal barriers that inhibit local communities and states from developing new dams, reservoirs, and storage systems.

If you walk into the capital at Colorado, right in the middle of the rotunda there is a poem written on the wall. And to paraphrase the beginning of the poem, it says something to the effect of, "Here is a land where history is written in water." And that is so true of all of our western states. If we are going to continue to thrive as a western economy, though, whether it is business or agriculture, every industry depends on an ample water supply. And if our economy is going to expand and create additional jobs, then we are going to need more water.

The Fourth Congressional District of Colorado is 11th highest producing agricultural district in the U.S. Congress. Farmers and ranchers know the importance of water. Lack of supply has caused thousands of wells to be shut down, hundreds of thousands of acres to be dried up, and water to become increasingly more expensive. Many of the projects that have been on the books over the past sev-

eral years could have avoided, if they had been built, some of the shutdowns that Colorado has experienced over the past several years.

One project in particular that I would like to bring to the attention of the Committee is the Northern Integrated Supply Project, or NISP.

NISP would construct a water storage reservoir off stream of the Poudre River in Colorado. This proposed project would ensure the river flows year round by diverting water to a reservoir during periods of high flow, and sending water back to the river during periods of low flow. The project is popular with the majority of those in Northern Colorado and Northeastern Colorado, but it is still stuck in the permitting process, the Federal bureaucracy. It has received a barrage of attacks from outside interests who think that it would harm agriculture. And yet, every single group in agriculture in Colorado supports the project.

The opportunity we have with conservation cannot be understated. Conservation is an important part of our water needs. But it cannot complete the picture. We also need and will require additional water storage.

I believe there is a three-pronged solution to our water needs in the West: storage, conservation, and partnership, that partnership that can exist between the Federal Government and the state and local governments. But that partnership should never be driven by the Federal Government, but instead driven by local water users and local solutions. But conservation cannot take the place—cannot replace—the need for additional water storage.

And so I thank the Chairman for this hearing today. I thank the witnesses for being here today, and certainly appreciate the opportunity to participate in today's hearing.

[The prepared statement of Mr. Gardner follows:]

**Statement of The Honorable Cory Gardner, a Representative
in Congress from the State of Colorado**

Thank you, Mr. Chairman. I would like to thank Chairman McClintock, Ranking Member Napolitano, and my other colleagues on this committee for allowing me the opportunity to participate in this hearing.

The issue before this committee today presents many challenges to all members of Congress and especially members from the west. Water is arguably our most valuable resource. By 2050, my home state of Colorado will need an additional 1 million acre-feet of water to meet all of our agricultural and municipal demands. Conservation alone cannot meet these demands. We have an obligation to prepare this country's future generations by storing water. This hearing is critical to understanding the federal barriers that inhibit local communities and states from developing new dams, reservoirs and storage systems.

Water is an economic driver. In order to attract more growth to the western United States—either in business or agriculture—every industry depends upon an ample water supply. If our economy is going to expand and create jobs, it is going to need more water. As we work to attract more jobs to the West, the people who work those jobs are going to need water. If agriculture is to remain vibrant, it too must have water.

My congressional district is the 11th highest producing agricultural district in the United States. Farmers and ranchers know the importance of water. Lack of supply has caused sales and leases to become increasingly more expensive. The additional water storage that Colorado requires can only be realized by rethinking the way the Federal government works. Whether through adverse permitting requirements, the NEPA process, ESA restrictions or costly litigation—the federal government keeps pushing the problem down the road and inhibiting our states from doing what they need to do. If we do not act fast, many farms will suffer from agricultural dry-up

costing jobs and ruining our communities. Throughout the West there are periods of dismal precipitation and prolonged drought. New water storage infrastructure can alleviate the burden placed on agriculture during these periods.

One project in particular I would like to bring to the attention of the committee is the Northern Integrated Supply Project or NISP. NISP would construct a water storage reservoir off stream of the Poudre River in Colorado. This proposed project would ensure the river flows year round by diverting water to a reservoir during periods of high flow and sending water back to the river during periods of low flow. The project is popular with the people of the Front Range of Colorado. Yet, NISP is still stuck in the permitting process at the Army Corp of Engineers and continues to be delayed because of the regulatory barriers that water projects go through. Not to mention, NISP has received a barrage of attacks from outside interest groups. One of the most recent attacks was the rumor that it would hurt agriculture in Northern Colorado, yet every major agricultural organization in the state supports NISP moving forward. This hearing today will shed light on the misinformation that is circulating regarding water storage projects. Misinformation often leads to costly delays that simultaneously hurt our economic growth and deprive our people of the water they so desperately need.

There is truly enough water for everyone and we can meet both our agriculture and municipal usages. I am tired of seeing farmers sell their water rights because of the scarcity in our water supply. We need to rethink the Federal government's role in water storage and redefine the missions of the various agencies from the Army Corp of Engineers, to the Environmental Protection Agency and the Bureau of Reclamation. If the state of Colorado was to build every water storage project on the books today, the state would still fall short our of expected future water needs. This needs to change. I am ready to get to work on this issue. I thank the committee for allowing me to participate, and I thank the witnesses for being here. I yield back the balance of my time.

Mr. McCLINTOCK. Great, thank you very much. If there are no other opening statements, thank the witnesses for their patience, and we will now proceed with their testimony.

That testimony in writing will be incorporated in full in the hearing record, so I would ask that the witnesses keep their oral statements to five minutes, as outlined in the invitation letter pursuant to our rules.

We use timing lights here, as you may have noticed. When you begin to speak, you will have five minutes. It will be showing a green light. And, just like driving, when you get down to that yellow light, speak very, very fast, and at—when the red light hits we will take your picture and send you a ticket.

I will now recognize Pat O'Toole, President of the Family Farm Alliance from Savery, Wyoming to testify.

**STATEMENT OF PAT O'TOOLE, PRESIDENT,
FAMILY FARM ALLIANCE, SAVERY, WYOMING**

Mr. O'TOOLE. Yes, sir. Thank you, Mr. Chairman and Ranking Member Napolitano. Thank you very much for this opportunity. And I have to tell you that this is such a great opportunity for all of us to look at one of the most crucial issues that there is, not only in the West, but for our country.

We have submitted—the Family Farm Alliance, we represent farmers and ranchers in the 17 Western states. And our reputation is being problem solvers. We have listed a lot of what we think are solutions to this issue. But if you would allow me to just talk personally about some of my experience, our family ranches on the Colorado-Wyoming line. The fellow that—the great-grandfather that started the ranch in 1881 was right on the state line. And so I graze cattle and sheep in Mr. Tipton's district and feed lambs in

Mr. Gardner's district. But I am a Wyoming resident, and I spent some years in the Wyoming Legislature.

Our community had two—still has two—authorized projects that were on the—what was called the Carter Hit List in 1972, or in the early 1970s, and those projects were never built. The State of Wyoming and our community worked very hard to build storage, and we have so far built 25 percent of that original 100,000 acre-feet. It saved us during the end of the last drought cycle, later water for irrigators. But we also created 25 miles of fishery.

And I think that the testimony that you all have made about the multiplicity of benefits for water is exactly where we need to go. And I don't—really, water is a non-partisan issue that we have to figure out, the great challenge that we have in our generation.

I have been asked to participate in several processes on policy. One is called AGree. It is an eight-year project on how are we going to deal with food policy issues. And it has been chilling to have the best scientists and the best analysts tell us that we have to produce at least 70 percent more food in the next 40 years for a growing world and national population. It is the economic engine of our country.

I know we all remember the debate about could we allow our manufacturing to go overseas. We allowed that to happen. If we don't gear up on infrastructure and a long-term vision, we can allow our agriculture to go the same way. And I think it is so crucial that committees like this, with all of the incredible expertise that you all represent take advantage of the opportunity to look at multi-use facilities that are strategic all over the West. Those of us in rural communities know they are there.

And I have spent an awful lot of time working with our community on permitting issues. Our—in our testimony we talk about the 19-year permitting of the 25 percent of those authorized projects. It was a devastating process. And I would tell you, from a solution-based and experience base, we have to get all of the Federal permitters and all the state permitters in rooms together and solve these problems one by one and go forward, because what happens in the process is you have a round table of Federal and state agencies that permit individually without any kind of unification.

In Wyoming, there was a visionary atmosphere 30 years ago where we came up with the philosophy of using non-renewables to fund renewables. That meant that oil, gas, coal, uranium, all the things that are produced in the great bounty of Wyoming funds renewables, which is water, wildlife—if you go to a Wyoming high school and graduate, you get a free ride to the University of Wyoming, because of those dollars being put into renewables.

Water—we have our funding mechanisms, and yet we found ourselves—and still find ourselves—in the same situation, where we cannot move forward as quickly as possible. And those are state dollars. You know, they are used for years and years and years of permitting. I myself have sat in some of those meetings, and it was so frustrating, because it was obviously an intent to be an impediment.

In Colorado, for example—and those of you that are from Colorado know that John Stulp, who was Commissioner of Agriculture, has spoken very articulately about the 500,000 to 700,000 acre-feet

of ag water that could go from ag to other uses in Colorado. That story is all over the West. And I would just tell you that when we made these decisions—and the Chairman referred to the Two Forks Decision—that meant that agriculture was the reservoir for growth for Denver. And that is what has happened, and that is what will continue to happen, unless we have the courage to go forward.

I am here because my kids are working today. You know, I represent real people in a real situation that know about water storage and its benefits. And I applaud you all for having this very bold hearing. Thank you very much.

[The prepared statement of Mr. O'Toole follows:]

Statement of Patrick O'Toole, President, Family Farm Alliance

Chairman McClintock, Ranking Member Napolitano and Members of the Subcommittee:

Thank you for the opportunity to appear before you to examine regulatory and bureaucratic challenges that delay or halt the development of new water supply enhancement projects in the Western United States. My name is Patrick O'Toole, and I serve as the president of the Family Farm Alliance. The Alliance advocates for family farmers, ranchers, irrigation districts, and allied industries in seventeen Western states. The Alliance is focused on one mission—To ensure the availability of reliable, affordable irrigation water supplies to Western farmers and ranchers.

Water users represented by the Family Farm Alliance use a combination of surface and groundwater supplies, managed through a variety of local, state, and federal arrangements. For the most part, however, our members receive their primary irrigation water supplies from the Bureau of Reclamation (Reclamation). In essence, we are Reclamation's customers. Western family farms and ranches of the semi-arid and arid West— as well as the communities that they are intertwined with—owe their existence, in large part, to the certainty provided by water stored and delivered by Reclamation projects.

My family operates a cattle, sheep and hay ranch in the Little Snake River Valley on the Wyoming-Colorado border. I am a former member of Wyoming's House of Representatives and I served on the federal government's Western Water Policy Review Advisory Commission in the late 1990's. I currently serve on the Advisory Committee for AGree, a new initiative that brings together a diverse group of interests to transform U.S. food and agriculture policy so that we can meet the challenges of the future. I also served over the past two years on a Blue Ribbon Panel intended to provide leadership for a project to support the development of the Natural Resource Conservation Service's (NRCS) Program and Policy Statement as a part of the process mandated by the Resource Conservation Act (RCA). The topic of this oversight hearing is not only tremendously important to the Family Farm Alliance, it also is immediately relevant to me and other Wyoming water users, and to farmers, ranchers and rural communities all over the West. I would like to start my testimony with an overview of the big-picture challenges Western farmers and ranchers face as they strive to feed our country and the appetite of a rapidly expanding world population. I will explain why it is preferable to develop new water infrastructure to protect our diminishing farm population over policies that encourage competing demands to transfer water away from agriculture. Certainty in Western Water policy is essential to the farmers and ranchers I represent, and that is why a suite of conservation, water transfers and other demand reduction mechanisms must be balanced with proactive and responsible development of new water infrastructure. This testimony will acknowledge the environmental impacts that can accompany new storage projects, but also point out that typical Westerners are strongly supportive of new projects, especially if those projects can minimize moving water away from farmers and ranchers. And finally, I will conclude with a discussion that suggests the proper role for the federal government to play— particularly the Bureau of Reclamation—when it comes to participating in new storage projects in these cash-strapped times.

Western Family Farmers and Ranchers Support Water Supply Enhancement Projects

Family Farm Alliance members rely on traditional water and power infrastructure to deliver irrigation supplies. Our membership has been advocating for new

storage for over twenty years, and we have provided specific recommendations to Congress and the White House on how to streamline restrictive federal regulations to make these projects happen. Water conservation and water transfers are important tools for improving management of increasingly scarce water resources. However, our members believe these demand-management actions must be balanced with supply enhancement measures that provide the proper mix of solutions for the varying specific circumstances in the West.

Supply enhancement should include rehabilitation of existing facilities and construction of new infrastructure. Rehabilitation measures should focus on maximizing the conservation effort through increased delivery efficiencies, construction of re-regulation reservoirs to minimize operational waste, and construction of new dams and reservoirs in watersheds with inadequate storage capacity to increase beneficial use and provide operational flexibility. Additional groundwater supplies should also be developed, but in a manner where groundwater use falls within the safe yield or recharge parameters of the aquifer. Conjunctive management of surface and groundwater supplies should be encouraged.

The Board of Directors of the Family Farm Alliance in 2005 launched an aggressive and forward looking project that pulled together a master data base of potential water supply enhancement projects from throughout the West. Our goal was to gather together ideas from around the West and put them into one master data base. The types of projects contained in the resulting Western Water Supply Enhancement Study database are not imposing dams like China's Three Gorges project. Instead, they are supply enhancement projects that range from canal lining and piping, to reconstruction of existing dams, to integrated resource plans. There are also some very feasible new surface storage projects. The benefits from these projects include providing certainty for rural family farms and ranches, additional flows and habitat for fish, and cleaner water and energy.

Along with basic information included on a CD-ROM, the database that was generated from the compilation of the survey has a Global Information System (GIS) element and includes pictures, maps and a description of up to 500 words for each project or proposal. GIS format technology is embedded that permits viewers to see a map of 17 Western states and then "drill down" to see map details of a project area.

The Importance of Protecting and Enhancing Reliable Agricultural Water Supplies

Agriculture holds the most senior water rights in the West and is considered a likely source of water to meet growing municipal and environmental demands. Unfortunately, severing water from agricultural land makes the land less productive. Period. Policy makers should be wary of putting additional, focused emphasis on agricultural water transfers, particularly in the context of growing domestic and global food security and scarcity concerns.

Right now, we are in danger of losing a generation of farmers. Nationally, the median age of active farmers in America has never been higher, with the percentage of farmers under 50-years-old continuing to plummet. More than half of today's farmers are aged between 45 and 64, and only 6 percent of our farmers are younger than 35.

Further, the number of farms is declining throughout the West. USDA attributes the decline in the number of farms and land in farms to a continuing consolidation in farming operations and diversion of agricultural land to nonagricultural uses.

Meanwhile, Americans are paying a substantially lower amount of their disposable income on food. According to the World Bank, families in 28 other high-income countries pay 10.2 percent of their disposable income on food compared to 6.2 percent for families living in the United States. For the average American that's a difference of \$3,820 per year and represents real dollars that are available to purchase consumer goods other than food. A 2011 report by Cardno-ENTRIX examined the relative affordability of food in the U.S. as compared to 28 other high-income countries. That report found, on a percentage basis, other high-income countries spend about 64 percent more in disposable income on food and non-alcoholic beverages compared to the U.S.

At a time when average Americans are feeling the pinch in their pocket books, the foundation of our country's ability to provide safe and affordable food and fiber is at risk. Ironically, it is because Western irrigated agriculture has been so adaptive and successful at providing plentiful, safe and affordable food that it is now jeopardized—nobody believes there can be a problem. The last Americans to experience food shortages are members of the Greatest Generation and their parents. For the most part, they have left us, taking with them the memories of empty supermarket shelves. When the issue has never been personalized, it's easy to be complacent.

The U.S. needs a stable domestic food supply, just as it needs a stable energy supply. The post 9/11 world of terrorist threats makes the stability of domestic food supply even more pressing. Outgoing Secretary of Health and Human Services Tommy Thompson put it bluntly when he said, “I cannot understand why the terrorists have not attacked our food supply, because it is so easy to do.” Further, Thompson said he worries “every single night” about threats to the American food supply.

This isn’t just a matter of domestic security; it’s also a global concern. Last year, the Global Harvest Initiative (GHI) released its Global Agricultural Productivity (GAP) Report, which measures ongoing progress in achieving the goal of sustainably doubling agricultural output by 2050. For the first time, the GAP Report quantifies the difference between the current rate of agricultural productivity growth and the pace required to meet future world food needs. The report predicts that doubling agricultural output by 2050 requires increasing the rate of productivity growth to at least 1.75 percent annually from the current 1.4 percent growth rate, a 25 percent annual increase.

When water tied to domestic agricultural lands is transferred elsewhere, those lands will no longer be as productive. Policy makers need to understand how this limits our ability to feed the world.

The Argument for Emphasizing New Infrastructure, Not More Water Transfers

We often see bold general statements of water transfer proponents about the potential for agricultural water use efficiency to free up water that can be used for in-stream flows. However, those statements are usually followed up by a list of the factors that make it a difficult proposition. Those include re-use deficiencies when water is removed upstream in the system, water rights that protect water users from water being taken away if they conserve water, and transactions that move water between presumably willing buyers and willing sellers, but have the effect of taking land out of production. All of those issues are dealt with directly in a major report released last year by the Center for Irrigation Technology (CIT) at Fresno State. The report, “Agricultural Water Use in California: A 2011 Update”, refutes some long-standing beliefs about agricultural water usage and confirms others. The full report is available at <http://www.californiawater.org>. The CIT report and others have reached a similar conclusion: the only large potential for moving water from agriculture to other uses will come from fallowing large swaths of farmland.

There is growing recognition that states and local governments must consider the impacts of continued growth that relies on water transfers from agriculture and rural areas and to identify feasible alternatives to those transfers. For example, a 2006 report released by the Western States Governors Association (WGA) states “there is understandable support for the notion of allowing markets to operate to facilitate transfers from agricultural to municipal and urban use as a means to accommodate the needs of a growing population. While such transfers have much to commend them, third party impacts should be taken into account, including adverse effects on rural communities and environmental values. Alternatives that could reasonably avoid such adverse impacts should be identified.”

The Family Farm Alliance is working with Western Governors Association and the Western States Water Council to develop a report on successful and unsuccessful agricultural-to-urban water transfers to determine how transfers can be accomplished in a manner that avoids or at least mitigates damage to agricultural economies and environmental values, while at the same time avoiding infringement on private property rights.

There will be nothing done with water in the West without there being winners and losers. Cities may expect to buy water from farms, but that is not a long term solution as global food shortages make farming a crucial national need.

A multitude of unique solutions exist for Western communities wrestling with growing urban water use. The Northern Colorado Water Conservation District is currently seeking to develop new offstream storage to protect agriculture as urbanization sweeps into Northern’s traditional service area. Farmers in the Klamath Irrigation Project (CALIFORNIA/OREGON) are paid through an environmental water bank to temporarily fallow land or pump groundwater in place of using Klamath River water. On the other hand, unsuccessful implementation of Central Valley Project Improvement Act water transfer provisions in California suggests that water markets cannot be legislated.

If we don’t find a way to restore water supply reliability for irrigated agriculture through a combination of new infrastructure, other supply enhancement efforts, and demand management—our country’s ability to feed and clothe itself and the world will be jeopardized.

Improved conveyance and storage projects provide the best flexibility to manage and move water in the West. The retention of existing water supplies and the development of critically needed new supplies are of the utmost importance. Drought and population growth have accelerated the arrival of inevitable water shortages. Supplies are already inadequate for the growing demands, but very few plans exist to develop supplies to meet increasing needs. At the federal level, we are told that the big dam-building era is over. This may indeed be true, but it is also plainly and painfully true that there isn't enough water to meet the needs of agriculture, urban growth and the environment. Increased conservation and efficiency can help, but they are only part—a small part—of the solution. And buying and bullying water away from farmers isn't the solution either. Meeting the current and future water needs of the West will require a thoughtful combination of means, not the least of which is the creation of new storage.

Demand Management vs. Supply Enhancement

Water conservation (i.e. “demand management”) is often seen as the solution to water supply issues. In fact, in the past fifteen years, tremendous agricultural conservation efforts have been undertaken throughout the West, from installation of high technology drip irrigation systems in California's Central Valley, to tens of millions of dollars spent on improving on-farm water use efficiency in the Klamath Basin. On the other hand, relatively little progress has been made on the “supply management” end of things. While development has occurred on conjunctive management and groundwater banking projects—which will be discussed in more detail by some of my fellow witnesses—development of new surface storage projects have virtually ground to a halt in the past 30 years, especially if any sort of federal nexus exists for proposed projects.

Western farmers and ranchers have long taken a progressive approach to water management. Farmers are already investing in upgraded irrigation systems. For example, between 2003 and 2010 San Joaquin Valley farmers invested almost \$2.2 billion in upgraded irrigation systems on over 1.8 million acres of farmland. Those investments helped improve water use efficiency and food production and helped fuel portions of the rural economy at a time when water supply cuts were increasing unemployment. And, these sorts of efficient farm practices have led to increased economic value and production. A report by the California Department of Water Resources¹ shows that the value of California farm products doubled during the 40-year period from 1967 and 2007 while at the same time, applied water decreased by 14 percent. Other research by the California Farm Water Coalition showed that the volume of farm production between 1967 and 2000 rose approximately 89 percent with only a two percent increase in applied water per acre. These indicators support assertions that farmers in general are improving water use efficiency in significant ways over time.

While conservation is surely a tool that can assist in overcoming water supply problems, it cannot be viewed as the single answer to water shortages. For example, conserved water cannot always realistically be applied to instream uses, as it will more likely be put to beneficial use by the next downstream appropriator or held in carryover storage for the following irrigation season. Also, in urban areas, further tightening of water conservation measures, in essence, “hardens” those urban demands. Some degree of flexibility must be embedded in urban water conservation programs to allow these areas to employ more restrictive water conservation measures during drought periods. Without having the ability to save water during drought periods via drought conservation measures, the resulting hardened demand will force urban water managers to more quickly look to secure water from other areas; namely, agriculture and the environment. So, clearly, mandated or “one size fits all” conservation programs are doomed to failure in light of the drastically different circumstances of water users across the West.

Farmers and ranchers will continue to do all they can to save water. However, water saving cannot be expanded indefinitely without reducing acreage in production. At some point, the growing water demands of the West—coupled with the omnipresent possibility of drought—must be met. The members of the Subcommittee must understand that in the West, the water needed to meet these demands will either come from developing new water supplies. . .or it will be taken from agriculture.

Environmental Impacts of Storage Projects

Obviously, there will be environmental concerns associated with any new surface water storage projects. However, we believe it is possible to address those issues and

¹The DWR report is available at: www.farmwater.org/DWR_Econ_Efficiency.pdf

move forward with storage projects that will ultimately have broad support from a number of different stakeholders. Individual surface storage proposals must be evaluated and the associated benefits and risks must be viewed in a net, comprehensive manner. While some storage critics focus on perceived negative impacts associated with new facility construction (e.g. loss of habitat, disruption of “natural” stream flow patterns, and potential evaporative losses), these perceived impacts must also be compared to the wide range of multi-purpose benefits that storage projects can provide. Also, although water is lost to evaporation in surface reservoirs that serve agricultural, environmental and urban uses, there is very little “wasted water” associated with moving and applying irrigation water. Water not directly consumed through evapo-transpiration often serves other purposes, such as replenishing groundwater, buffering soil salinity and supporting riparian vegetation.

Properly designed and constructed surface storage projects provide additional water management flexibility to better meet downstream urban, industrial and agricultural water needs, improve flood control, generate clean hydropower, provide recreation opportunities, and—create additional flows that can benefit downstream fish and wildlife species.

Some people and organizations oppose dams and Reclamation’s proud history of dam construction as a matter of dogma. They have no flexibility in their position when it comes to surface storage. But experience teaches us that solving complex problems requires a great deal of flexibility. It also requires the collective efforts of reasonable, well intentioned people who may come at the problem from entirely different perspectives. Surface storage isn’t the solution in all cases, but dismissing it out of hand serves no good purpose by eliminating potential solutions to some vexing water supply issues.

Creative, successful solutions can be found by motivated, unthreatened parties. The holders of water rights approach the Western water supply problem with much at risk, and with much to offer in the form of practical experience managing the resource on a daily basis. Incentives that create reasons to succeed will do more good for the environment in a shorter period of time than actions that rely on threats of government intervention.

Political Support for New Water Projects

Colorado State University (CSU) in 2009 completed a West-wide (17 states) that found—throughout the West—strong citizen support for water going to farmers and also strong support for building new water infrastructure. The report provides very interesting findings that underscore Western householders support for water storage projects and irrigation over environmental and recreational water needs in times of shortage. Three focus groups were used to develop a multi-faceted questionnaire. An Email invitation to an internet survey yielded 6,250 municipal household respondents in 17 Western states.

Among Western respondents to the CSU poll, the most popular strategies for meeting long-term needs are to build reservoirs and reuse water, whether it is on private lawns or public landscapes. The least popular alternative is to buy water from farmers. When addressing long-term scarcity, respondents preferred reservoir construction and reuse systems over other acquisitions and, in particular, are not in favor of water transfers from agriculture.

This new information flies in the face of arguments made by some environmental activist groups and editorial boards of certain Western urban newspapers, who insist that the public shares their view that dams are outdated, monstrous aberrations that should be destroyed. The findings in this report should further convince our political leaders to ignore the naysayers and stand up for farming and new water supply enhancement projects.

Appropriate Role of the Federal Government in These Endeavors

The federal government should adopt a policy of supporting new efforts to enhance water supplies and encouraging state and local interests to take the lead in the formulation of those efforts. Local interests have shown enormous creativity in designing creative water development projects; my fellow witnesses on this panel will provide you the best sense of the range of creativity that can be generated at the local level. While onstream storage should not be seen as unacceptable, offstream storage, groundwater banking, and countless other forms of water development should be encouraged as a matter of federal policy and law. Local problems call for local solutions.

The existing procedures for developing additional supplies should also be revised to make project approval less burdensome. By the time project applicants approach federal agencies for authorization to construct multi-million dollar projects, they have already invested extensive resources toward analyzing project alternatives to

determine which project is best suited to their budgetary constraints. However, current procedure dictates that federal agencies formulate another list of project alternatives which the applicant must assess, comparing potential impacts with the preferred alternative. These alternatives often conflict with state law. Opportunities should be explored to expedite this process and reduce the costs to the project applicant.

The example of the permitting history of the Little Snake River Irrigation Water Supply Project, High Savery Dam and Reservoir—attached to this testimony—best illustrates this matter.

In addition, the current mitigation procedure for federal agencies should be reviewed to determine the feasibility of clarifying and standardizing mitigation requirements. Currently, requirements for one project become the standard for all subsequent projects. Since no two projects are the same, federal agencies tend to impose increasingly severe mitigation requirements on new projects. The end result is that applicants end up spending tremendous amounts of money for potentially uncertain mitigation.

The example of the city of Buffalo, Wyoming,—attached to this testimony—illustrates the point. For 8.8 acres of wetlands impacts, the cost of mitigation amounted to approximately \$1 million. This is in excess of \$100,000 per acre. The primary reason for these costs was that the United States Army Corps of Engineers required a 5:1 ratio for wetland mitigation. The 5:1 ratio is not a scientifically based figure, but rather an arbitrary figure developed by the agency. After 3 years and significant expense, the city finally was forced to accept this ratio in order to proceed with the project.

Another possible solution is the creation of mitigation banking. Under such an approach, applicants faced with excessive mitigation costs would be allowed to pay a reasonable sum per acre to a regional mitigation bank or set aside mitigation lands as a condition to implementation of their project. The federal government should encourage the creation and use of public and private mitigation banks.

1. The Bureau of Reclamation's Recent Role Relative to Advancing New Storage Projects

The Bureau of Reclamation's once active role in building new dams and reservoirs has diminished significantly over the last three decades. Construction of large dams, in general, has become virtually impossible in recent decades due to new societal environmental priorities, and related passage of numerous federal laws that create litigious uncertainty and tremendous regulatory obstacles for proponents of new dams.

Shortly after the Alliance's data base was released (and submitted to the Congressional record in April 2005), the Bureau of Reclamation did submit a report to Congress that identified nearly one thousand potential hydroelectric and water supply projects in the Western United States that have been studied, but not constructed. The report was required by the Energy Act of 2005. The 2005 Alliance and Reclamation efforts show that, in most areas of the West, water resources are available to be developed. Environmentally-safe and cost-effective projects exist. They await the vision and leadership needed to move them to implementation.

2. Why the Bureau of Reclamation and Other Federal Agencies Need to Improve Regulations and Streamline Permitting of New Projects

The Family Farm Alliance believes that without new sources of water, increasing urban and environmental demands will deplete existing agricultural supplies and seriously threaten the future of Western irrigated agriculture. The often slow and cumbersome federal regulatory process is a major obstacle to realization of projects and actions that could enhance Western water supplies. Here are just a few reasons why Reclamation and other federal agencies (particularly fisheries agencies) need to find ways to streamline regulations and permitting requirements:

- Planning opportunities and purposes for which a project may be permitted are restricted, which narrows the planning horizon, and makes it impossible to plan for projects with long-term benefits;
- The alternatives proposed for assessment by the National Environmental Protection Act regulators are frequently inappropriate, unrealistic, difficult-to-implement, and often in conflict with state law. The permitting process stalls, and costs increase to the project applicant;
- Federal regulators take a long time making decisions on projects, and at times they seem unable to even make decisions. As a result, projects are postponed and money is wasted as additional studies and analyses are conducted;
- Applicants end up spending tremendous amounts of money for potentially uncertain mitigation;

- Rather than doing things concurrently, conflicting agency permit requirements can add time to the project planning and implementation process and increases greatly the potential for last-minute surprises that could endanger the proposal or require significant additional work.

We pledge to continue our work with federal agencies and other interested parties to build a consensus for improve the regulatory process.

3. *Future Federal Funding of New Water Supply Enhancement Projects*

Even before the advent of the challenging economic times we now live in, we witnessed a progressive cutback in federal water supply funding. We understand that those who benefit from new water supply infrastructure should help pay for that infrastructure. However, policy makers need to understand that, for the most part, new water supplies are not being proposed to meet the expanding needs of agriculture. On the contrary, we are seeing a move in the opposite direction, where agricultural lands are going out of production and being lost to expanding urban development. Water that was originally established for agriculture and the communities it supports is now being reallocated to meet new growing urban and environmental water demands. The growing number of urban water users in the West and the public interest served through improved environmental water supplies should naturally be part of equitable financing schemes.

Most water supply entities are willing to make investments to meet human and environmental needs, but they need to know up front that the federal government will honor its part of the bargain. This means that the federal government should enter into meaningful contracts that protect the expectations of the non-federal parties, and concepts like the “No Surprises Rule” under the Endangered Species Act must be validated and expanded.

The President and Congress will prioritize whatever federal funds are available to meet existing and future needs. As for the rest of the capital, it must come either from state and local governments or from the private sector. If the federal government cannot fund the required investments, it should take meaningful steps to provide incentives for non-federal entities to fill the void, and remove barriers to the new ways of doing business that will be required.

Local and state interests have shown enormous creativity in designing creative water development projects. For example, my home State of Wyoming has initiated its Dam and Reservoir Program, where proposed new dams with storage capacity of 2,000 acre-feet or more and proposed expansions of existing dams of 1,000 acre-feet or more qualify for state funding. Wyoming water managers and policy makers recognize that dams and reservoirs typically provide opportunities for many potential uses. While water supply is emphasized in the Wyoming program, recreation, environmental enhancement, flood control, erosion control and hydropower uses are also explored as secondary purposes.

In this time of tight budgets and huge overseas spending, the federal government must adopt a policy of supporting new projects to enhance water supplies while encouraging state and local interests to take the lead in the implementation of those projects.

Conclusion

Family farmers and ranchers require certain water supplies as a base condition of their existence. We cannot continue to wish away the reality that there is not enough water to meet our needs in drought years, and 20 years from now, if something is not done, every year will essentially be a drought year. We cannot continue long-term hypothetical processes that focus primarily on continued conservation and downsizing of Western agriculture.

We believe that it is possible to meet the needs of cities and the environment in a changing climate without sacrificing Western irrigated agriculture. To achieve that goal, we must expand the water supply in the West. There must be more water stored and available to farms and cities. Maintaining the status quo simply isn't sustainable in the face of unstoppable population growth, diminishing snow pack, increased water consumption to support domestic energy, and increased environmental demands.

Modern, integrated water storage and distribution systems can provide tremendous physical and economic flexibility to address climate transformation and population growth. However, this flexibility is limited by legal, regulatory, or other institutional constraints, which can take longer to address than actually constructing the physical infrastructure.

The Family Farm Alliance wants to work with this Administration, Congress, and other interested parties to build a consensus for improving the regulatory process. The real reason the Alliance continues to push for improved water storage and con-

veyance infrastructure is not to support continued expansion of agricultural water demand (which is NOT happening in most places). Instead, we seek to mitigate for the water that has been reallocated away from agriculture towards growing urban, power, environmental and recreational demands in recent decades. If we don't find a way to restore water supply reliability for irrigated agriculture through a combination of new infrastructure, other supply enhancement efforts, and demand management—our country's ability to feed and clothe itself and the world will be jeopardized.

We need to clearly determine how much new water is needed for new uses, and then find ways to support those uses in a sustainable way that doesn't hurt irrigated agriculture. New infrastructure is one such way; the construction of additional water supply infrastructure may allow more efficient management and enable greater cooperation between traditional and non-traditional water users.

Western irrigated agriculture is a strategic national resource, and the role of the federal government in the 21st Century should be to protect and enhance that resource. Federal agencies have a role to play in infrastructure development, but interference with or duplication of state authorities must be minimized.

Attachment List:

1. Permitting History of the Little Snake River Irrigation Water Supply Project, High Savery Dam and Reservoir
2. City of Buffalo, Wyoming Case Study

**Attachment 1: Permitting History
of the Little Snake River Irrigation Water Supply Project
High Savery Dam and Reservoir**

Introduction

Permitting is a major step in any project that requires federal agency action; it can be the most perplexing and confusing step in project development. Projects requiring federal actions must go through the National Environmental Policy Act (NEPA) assessment process, which in itself is not a permitting process but is of utmost importance concerning whether required permits will eventually be issued. Due to extensive/thorough NEPA screening requirements and alternative evaluations, projects often lose direction and focus during this process.

NEPA was enacted in 1969 to promote informed decisions and public disclosure of federal actions. Through NEPA assessments other laws such as the Endangered Species Act, Clean Water Act, Fish and Wildlife Coordination Act, and the National Historic Preservation Act come into play. These laws and acts require permits or clearances from a number of agencies, and make coordination of the NEPA process the driving force for project permitting. This was especially true for the Little Snake River Irrigation Supplemental Water Supply Project.

The following sections discuss major events that occurred during permitting of the Little Snake River Irrigation Water Supply Project and present conclusions and lessons learned from this process. The history and conclusions presented are a compilation of information from legislative reports, project studies and personal recollections.

History

The Little Snake Irrigation Water Supply Project began as the Sandstone Dam Project and now is commonly referred to as the High Savery Dam and Reservoir Project. The Sandstone Dam Project began as mitigation for the Cheyenne Stage I, II and III projects and to provide additional water storage for industrial development. The Wyoming Legislature authorized the Cheyenne Stage I and II projects in 1979 and 1980 and also instructed the Wyoming Water Development Commission (WWDC) to look at the feasibility of developing storage in the Little Snake River Basin to address in-basin agricultural, recreational and municipal needs.

Studies were initiated to evaluate dam and reservoir sites in the basin and the Sandstone site was selected as the preferred site. In 1984, the legislature authorized a project in the Little Snake River Basin to mitigate and alleviate any water supply shortages caused by the Cheyenne Stage I and II projects. Sandstone Dam was to impound 52,000 acre-feet of water behind a 200-foot high structure. The reservoir would have had a 32,000 acre-foot annual yield with 12,000 acre-feet allocated for irrigation and 20,000 acre-feet allocated for future industrial development.

After several years of study, the permitting process for the Sandstone Project was initiated in 1986. An application for a Clean Water Act, Section 404 Permit (404 Permit) was filed with the U.S. Army Corps of Engineers (Corps), which initiated the NEPA assessment process. The project was of a scale that an environmental im-

pact statement (EIS) was necessary; the Corps was the lead agency for the NEPA review and for preparation of the EIS. The draft EIS and biological assessment (for assessment of impacts to endangered species) were published in January 1988. Six action alternatives and the no action alternative were evaluated. The six action alternatives included four reservoirs, a ground water development alternative and a water conservation alternative. The preferred alternative, for the state and the sponsor, was the Sandstone Dam and Reservoir Project. All of the alternatives were sized to allow storage of 12,000 acre-feet of irrigation water and 20,000 acre-feet for future industrial development. A supplement to the Draft EIS was published in April 1989 to support need for storage of 20,000 acre-feet for future industrial use. Work continued on the EIS process during 1989 and 1990.

On December 14, 1990, the WWDC received notice from the Corps' Omaha District Office that they were recommending denial of the 404 Permit for the Sandstone Project. Their denial was based upon the lack of an acceptable federal "purpose and need" for the 20,000 acre-feet of water reserved for industrial purposes. The WWDC and then Governor Sullivan disagreed with the decision and requested that the permit be issued. The decision was elevated to the Corps Division Engineer. In 1991, the WWDC was notified that the Division Engineer upheld the District Engineer's recommendation that the 404 Permit be denied for the 52,000 acre-foot project. However, the Corps noted that it would be prepared to reopen consideration of the application if use of the reservoir yield could be clearly defined.

During 1991, the Little Snake River Basin Planning Study was authorized by the WWDC and legislature. This study was completed in October 1992. One task of the study was to evaluate potential reservoir sites to determine whether any were capable of meeting the supplemental irrigation water needs in the Little Snake River Basin. At the request of the Savery-Little Snake Water Conservancy District (District), a downsized version of the Sandstone Project was included among the alternatives.

The Commission recommended construction funding for a smaller Sandstone Dam and Reservoir project; this downsized version would possess a water storage capacity of 23,000 acre-feet, which would yield 12,000 acre-feet per year of supplemental irrigation water. Legislation was approved during the 1993 session to provide \$30,000,000 to construct the project. The project purpose, as defined by the legislature, was to serve as an agricultural, municipal and domestic water supply; the project was to also increase recreational opportunities, provide environmental enhancements, and serve as mitigation water for shortages caused by the Cheyenne Stage I, II, and III trans-basin diversion water supply projects.

Additional studies were conducted in 1993 to determine the suitability of the Sandstone site. The report concluded dam construction at the Sandstone site was technically feasible. In 1994, the WWDC began the permitting process for construction of a smaller project, including a downsized Sandstone Dam and Reservoir project and several other potential alternatives. The downsized Sandstone Dam was the preferred alternative. Since the scope of the project had changed, the results of the draft EIS published in 1988 could not be used. The WWDC entered into an agreement with the Corps and contracted with Burns and McDonnell to complete a new third party EIS.

The Corps advised the WWDC, District and valley residents in January 1995 that a 404 Permit could be issued only for the least environmentally damaging alternative. That summer the Corps indicated that the least damaging practicable alternative was a combination of two alternative reservoirs (Dutch Joe and Big Gulch); therefore, a 404 Permit would not be issued for the Sandstone Dam alternative. The Corps had narrowly defined the purpose and need for the project as supplemental late season irrigation water supply. The Corps' definition conflicted with the Wyoming legislation that authorized funding for the project; the Wyoming Legislature stipulated that recreation, environmental enhancement, municipal water supply, supplemental irrigation, and mitigation for past and future trans-basin water projects were all legitimate purposes for the project.

In August 1995, the WWDC director and project manager explained to the WWDC and Select Water Committee of the Wyoming Legislature reasons why the EIS was stalled, which was largely attributable to the lack of support for alternatives other than the Sandstone site. The WWDC and the Select Water Committee concluded that alternatives to the Sandstone Dam and Reservoir should be considered if there was a clear consensus of support for other alternatives. Public meetings were held in the Little Snake Valley in August, October and December 1995 for the purposes of discussing project alternatives. It was apparent that a majority of those attending the meetings preferred the construction of Sandstone Dam, since they believed that the Sandstone site would provide more multiple use benefits than the other alternatives. This majority also disagreed with the Corps decision not to include other

project purposes, which were mandated by the legislature, within the Corps' purpose and need analysis.

The WWDC supported the position expressed by a majority of the Little Snake Valley residents and directed the WWDC staff to further pursue changing the purpose and need section of the EIS to include state legislature's mandated purposes, particularly recreation. The lack of agreement between the state and the Corps, concerning the project's purpose and need, resulted in further delay of the project.

In 1996, The WWDC contracted with Burns and McDonnell to complete an analysis of need for additional flat-water recreation in the Baggs, Wyoming area. The study concluded that there wasn't a need for additional flat-water recreation in the area. Other studies were commissioned to keep the project moving forward; but study results also did not support the Sandstone alternative. The Corps reaffirmed their position that the project purpose could only be for supplemental irrigation water supply. Further, the Corps indicated verbally and in writing that the project should provide 12,000 acre-feet of water on a firm basis 8 out of 10 years. The Savery-Little Snake River Water Conservancy District had requested a firm 12,000 acre-foot yield 10 out of 10 years.

Adding to other problems, the Sandstone Dam alternative was the most costly project (about \$48 million). The Dutch Joe alternative was nearly \$10 million less costly. The High Savery alternative was the least costly at about \$30 million. Environmental impacts were greatest at Sandstone but appeared to be significant at the Dutch Joe and High Savery sites as well. A meeting to discuss the project, attended by representatives of the Corps, other federal agencies, several state agencies, the Governor's office, representatives from the District, other representatives from Carbon County, the WWDC, and the Select Water Committee, was held on November 19, 1996. The Corps stated that given the available data, the Sandstone site could not be permitted because the Dutch Joe site was the least environmentally damaging alternative. They indicated that the High Savery Project might be permitted if it could be shown that impacts to big game winter range at Dutch Joe were more environmentally damaging than the wetland and stream channel impacts at High Savery. A meeting was held in Baggs on December 5, 1996 and the irrigators and Little Snake Valley residents supported a motion to change the project name from Sandstone to the Little Snake Water Supply Project. Work completed in 1995 and 1996 resulted in a delay to the project but set the stage for the eventual construction of the High Savery Dam and Reservoir alternative.

The permitting process was put back on track in 1997 and three alternatives were selected that would meet the specified need for the project, which was to supply 12,000 acre-feet of supplemental irrigation water to the users in the Little Snake River Valley 8 out of 10 years. The alternatives studied were a downsized Sandstone Dam and Reservoir, Dutch Joe Dam and Reservoir, and High Savery Dam and Reservoir. High Savery became the preferred alternative. The final studies were completed during 1997 and 1998 and the Draft EIS was published in August 1998. The Fish and Wildlife Coordination Act report was also released in August 1998.

Public meetings were held and comments were taken on the draft EIS in the fall of 1998. Disagreements between the WWDC, the WGF, the U.S. Fish and Wildlife Service and the Corps on how best to address the DEIS comments delayed the completion of the Final EIS until October 1999. The U.S. Fish and Wildlife Service issued the Biological Opinion in July 1999 to satisfy the consultation requirements of Section 7 of the Endangered Species Act. In order that a Record of Decision (ROD) could be issued, work began in earnest in 1999 to mitigate the project's adverse environmental impacts. Numerous meetings were held with the Wyoming Game and Fish Department, WWDC, USFWS, Savery-Little Snake Water Conservancy District and Corps to resolve differences and finalize the plan.

The Final EIS, completed in October 1999, identified the High Savery Project as the preferred alternative. Several comments were received but none were significant. These few comments were eventually addressed in the Corps' Record of Decision (ROD). However, the project was further delayed because the Corps was concerned about issuing the ROD and 404 Permit before cultural resource preservation and management issues were resolved.

Efforts to comply with the National Historic Preservation Act, which protects cultural resources, were also underway at this time. A number of site visits, conference calls, and meetings were conducted to discuss cultural resource issues with interested Native American Tribes, the Wyoming State Historic Preservation Office (SHPO), WWDC and the Corps. There were a variety of tasks undertaken to satisfy the requirements of the Tribes and SHPO. Several cultural sites had to be evaluated and protection plans developed. One site required excavation and interpretation. This work was conducted during 1999 and 2000. A final Programmatic Agreement

to protect and manage cultural resources on the High Savery Site, which took over a year to negotiate, was eventually signed in early December 2000.

The plan to mitigate the adverse impacts to wetlands, uplands and riparian areas proved to be extremely controversial, which further delayed the project. Three drafts of the plan were completed and debated by all parties involved. In October 2000 a final draft plan was presented to the Corps by WWDC. This plan was finally approved in December 2000 after a meeting with the Corps at their District headquarters in Omaha, Nebraska.

The ROD was issued December 14, 2000, approximately one-year and two months after the final EIS was released. The 404 Permit for High Savery Dam and Reservoir was signed December 20, 2000. These steps completed the permitting portion of the project and advanced the High Savery Project toward construction.

Conclusions and Lessons Learned

It could be concluded from the Little Snake Supplemental Irrigation Supply Project (High Savery Project) history that 14 or more years might be required for permitting reservoir projects. However, that may not be correct. During the time the High Savery Project was being permitted several other reservoir projects within Wyoming were designed, permitted and constructed. Sulfur Creek Reservoir Enlargement near Evanston was initiated in 1984 and constructed in 1986. Design of the Twin Lakes Enlargement for the Sheridan water supply was started in 1988, permitting was begun in 1992, and construction started in 1996 and was completed in 1998. A 404 Permit application was submitted for the Tie Hack Dam and Reservoir Project above Buffalo in February 1994, the permit was issued in March 1996 and the project was completed in 1997. A 404 Permit application was filed in November 1996 for the Greybull Valley Dam and Reservoir. The permit was issued in June 1998 and the project was completed in 2000.

We often learn more from mistakes than we do from successes; in this regard there are a number of lessons that can be gained from the Sandstone/Little Snake Supplemental Irrigation Water Supply Project/High Savery Dam and Reservoir permitting process. The determination of purpose and need under federal guidelines restricts planning opportunities and purposes for which a project may be permitted. The state's acceptance of a project that yields less than a firm supply should be questioned. This acceptance results in less utility for the state and for the project's beneficiaries. A better approach would be to maximize the basin's available hydrology or at least meet the firm-yield requirements of the sponsor. If the basin hydrology cannot provide the firm yield, the decision to construct the project should rest with the state and sponsor and should not become a reason for permit denial by the Corps. Further, the state should encourage its Congressional delegation to sponsor legislation that would allow the state's legislative and planning process to be considered in establishing purpose and need for construction of dam and reservoir projects.

If Congress is unwilling to expand the state's role in establishing the purpose or need for a project, the project sponsor and the state must work within existing guidelines to maximize opportunities. Working within either existing or expanded federal guidelines would facilitate the NEPA analysis, from which all other permitting processes will tier. The 20,000 acre-feet of water storage for future industrial development that couldn't be definitively described in the early Sandstone Project was a permitting problem. There was no specific purpose or need described for the 20,000 acre-feet of industrial water. Therefore, the Corps felt that justification for building a reservoir having this extra capacity and additional adverse environmental impact was unwarranted. However, it is incumbent on the state and potential project sponsors not to lose sight of future demands for water that may only be addressed by constructing new dam and reservoir projects. The challenge will be to convince regulators, during the permitting process, that the benefits of constructing a proposed future project outweigh the adversities; consequently, there is a justifiable "purpose and need" for the project.

Developing a reasonable range of alternatives is also very important in project planning and the NEPA process. Alternatives must meet the need and purpose for the project and must be capable of being implemented. It is important to use the NEPA process to help determine the most appropriate alternative from the set of reasonable alternatives. Although the Sandstone Project started with a set of alternatives the one seriously considered was the Sandstone Dam and Reservoir alternative. When the Corps determined that the Sandstone alternative could not be permitted, the permitting process stalled because other alternatives had not been seriously considered. Even after the project was downsized to match the need, the State, District, and valley residents wanted to maintain the Sandstone alternative as the preferred alternative. This caused permitting delays.

The permitting process did not proceed until a reasonable range of alternatives was developed. Once a reasonable range of alternatives, including the High Savery alternative, was developed, the project moved forward to a conclusion within an acceptable timeframe. In other words, the alternative site and project evaluations undertaken in 1996 put permitting back on track in 1997. The state successfully secured the permit to construct High Savery in December 2000.

Cooperative efforts are important for moving projects through the NEPA and permitting processes. The WWDC and local sponsors should become cooperating agencies in the NEPA process if possible and if not, should be allowed to serve on the project EIS interdisciplinary team. The Corps wasted a great deal of time making decisions on the project and at times seemed unable to make decisions. These delays not only postponed the project, they resulted in wasted money. Disagreements at the state and local level also contributed to delays, and led to additional costly studies and analyses.

Establishing working relationships with the agencies involved in the NEPA process and permitting is important to keep the project on schedule and to avoid costly delays and disagreements. It is impossible to eliminate all problems associated with permitting dam and reservoir projects, but good cooperation and communications between agencies and groups, with an understanding of each participant's expectations, will help in problem resolution.

Dam and reservoir projects are complex and often controversial, a dedicated local sponsor or project proponent and a documented "purpose and need" are minimum requirements for success. The primary reason the High Savery Dam was permitted and constructed is the persistence and perseverance of the Savery-Little Snake Water Conservancy District and the residents of the valley. The sponsor's and the state's staying power prevailed in the end.

Attachment 2: City of Buffalo, Wyoming Case Study

The example of the city of Buffalo illustrates the enormous difficulties and expense associated with obtaining federal regulatory clearance requisite for constructing even small and non-controversial water projects. The mitigation associated with this project illustrates the unreasonable approaches being taken by federal agencies as a condition of obtaining needed federal permits. Within Wyoming there are rarely two projects which have the same or equivalent mitigation imposed on them. Rather, it appears that as time passes, each new project has more severe mitigation imposed on it that then becomes the standard for all subsequent projects. This mitigation "ratcheting" creates enormous costs and tremendous uncertainty as has been the city of Buffalo's experience.

The Buffalo Municipal Reservoir Project is developing a small municipal supply storage reservoir in the Clear Creek Basin west of Buffalo. Buffalo's existing water supply is diverted from Clear Creek about 6 miles west of the city. After project completion, releases from the reservoir will supplement Clear Creek flow when the direct flow cannot fulfill Buffalo's water supply requirements. The project is being funded in part by the Wyoming Water Development Commission, a state agency.

A Level 11—Phase I report was completed in March 1989. The report concluded that the preferred development option included a dam and reservoir at the Lower Tie Hack site on South Clear Creek, a tributary of Clear Creek. The recommended reservoir size is 2,425 acre-feet and the estimated cost of the dam and reservoir is \$10,650,000. The reservoir will inundate approximately 60 acres in total, including 8.8 acres of wetlands. In addition, the report indicated that installation of a \$975,000 hydropower generation unit at the downstream end of the city's water supply pipeline could be economically advantageous. The hydropower unit is addressed as a separate project, but construction of both components is required if the total project is to be economically feasible. The report also noted that the feasibility of the project would depend on the successful transfer of Buffalo's existing 1933 water right filing for 1,640 acre-feet from Little Sourdough Creek to the dam site. This transfer was accomplished in 1990.

The process of permitting this facility began in the early summer of 1992. The arduous and expensive process of obtaining final permits was not completed for nearly 4 years. The Forest Service special use permit was issued on February 23, 1996, and the U.S. Army Corps of Engineers Section 404 permit was issued on March 5, 1996. During the course of the nearly 4-year long ordeal, nearly \$1 million was spent in efforts directly related to obtaining the necessary federal permits.

The mitigation for the 8.8 acres of wetlands has cost in excess of \$1 million. The primary reason the costs for mitigation to the City of Buffalo were so high is that the US Army Corps of Engineers required a 5:1 ratio for wetland mitigation. The 5:1 ratio is not a scientifically based figure, but rather an arbitrary figure developed

by an individual within the agency. The City agreed to accept the ratio so that they might proceed with their project.

Mr. McCLINTOCK. Thank you.

We will now hear from Mr. Thad Bettner, General Manager of the Glenn-Colusa Irrigation District from Willows, California.

Welcome.

STATEMENT OF THAD BETTNER, GENERAL MANAGER, GLENN-COLUSA IRRIGATION DISTRICT, WILLOWS, CALIFORNIA

Mr. BETTNER. Thank you, Chairman McClintock, Ranking Member Napolitano, and members of the Subcommittee. It is a pleasure to be here before you today. My name is Thaddeus Bettner. I am the general manager of Glenn-Colusa Irrigation District, the largest district in the Sacramento Valley, and one of the largest districts in the State of California. I am also a registered engineer in the State of California.

Notwithstanding the seniority of our water rights, which date back to the 1880s, securing new storage is critically important to GCID and all water users in the Sacramento Valley. I want to focus on three issues in my verbal testimony today: one, why we need additional storage; two, our experience in working with the Sites Reservoir project; and three, going forward, how the Federal Government could help advance new storage projects.

New storage is vitally important because the Central Valley Project, which we have one contract with, and our diversions are closely intertwined. Both the CVP and the State water project have lost storage capacity and yield, as well as operational flexibility. That yield and flexibility has eroded over time, due to increased contractual obligations, increased water demands to meet both the needs of endangered species, and also the Federal wildlife refuge system.

Currently, the CVP is looking at four projects, as Congressman Costa said: Sites Reservoir, which I will speak of today; Shasta Expansion; Temperance Flat; as well as Los Vaqueros, all projects that we support.

We do not need much in the way of additional storage or water supplies in the Sacramento Valley. But without new storage, the pressure on our existing supplies will continue to grow. The state's population, as already said today in testimony by Members, continues to increase, as well as the reallocation that the environment increases.

As far as Sites is concerned, GCID is one of 7 local agencies that joined together in August of 2010 to form the Sites Project Joint Powers Authority, which is a cooperative agency, along with the Bureau of Reclamation and the Department of Water Resources. Growing concerns and the delays and costs associated with the Sites Project, as well as a need for a local voice, led to the formation of the Sites JPA.

Since Fiscal Year 2002, Reclamation has spent approximately \$12.7 million studying—Sites Reservoir study and feasibility study, and DWR has spent millions more in addition to that. Unfortunately, despite the significant expenditure of time and effort, we find ourselves in a place where it is difficult to articulate the bene-

fits of the project and environmental context, and how the costs and how the benefits would be allocated within the project.

Nonetheless, we do know that Sites—the 1.8 million acre-foot total storage project for Sites would generate an average annual yield of 400,000 to 600,000 acre-feet of new water in both the dry and critical year, and in addition will generate nearly 900,000 acre-feet of additional storage in Shasta, Orville, Folsom, and Trinity Reservoirs through system integration. The slide that is up on your screen shows the different types of benefits that would accrue. And this slide shows, in the months through the months in October and September. So this would be the end of storage, or additional storage that would be added at the end of the water year to those different reservoir projects. So we see system integration as vitally important.

In terms of how we reduced regulatory and bureaucratic barriers, I would like to highlight three. First, agencies with the environmental review process for new supply projects should be required to develop a simpler approach to alternatives analysis. In the case of Sites, Reclamation DWR investigated 52 different project alternatives. However, we now have 3 configurations that we are currently looking at. And incredibly, these were the same three configurations looked at in the 1960s.

Second, NEPA should permit project costs to be considered in open fashion before the environmental review process is complete. We need to make certain that projects can make it through the environmental review process, have beneficiaries public and private, and someone can afford to pay for them.

And third, lead Federal agencies should determine very quickly in the process how they are going to participate in a project. Will they simply be a project participant, or will they actually be constructing the project? In my mind, that is one of the most vital decisions that needs to be made early on in the process.

Finally, we need to look at—Congress should explore more methods of highly leveraging limited Federal funding in order to do more with less. Specifically, Congress should authorize Reclamation to provide innovative financing similar to the TIFIA program. Under TIFIA, the Federal Government helps finance large-scale projects and helps to leverage local funds to build those projects. The water infrastructure version of TIFIA would greatly benefit a wide variety of large-scale water supply projects like Sites.

I would encourage this Committee to give any such propose—careful consideration to that proposal. And I will take any questions. Thank you very much.

[The prepared statement of Mr. Bettner follows:]

**Statement of Thaddeus Bettner, PE, General Manager,
Glenn-Colusa Irrigation District**

Thank you Chairman McClintock, Ranking Member Napolitano, and Members of the Subcommittee; it is a pleasure to appear before you this morning. My name is Thaddeus Bettner, and I am the General Manager of the Glenn-Colusa Irrigation District (GCID), the largest irrigation district in the Sacramento Valley and the third largest irrigation district in the State of California. GCID covers approximately 175,000 acres in Glenn and Colusa Counties, and is located about 80 miles north of Sacramento. Our district contains a diverse working landscape including a variety of crops such as rice tomatoes, almonds, walnuts, orchards, vine seeds, cotton, alfalfa, and irrigated pasture. Just as important, we convey water to three Fed-

eral wildlife refuges totaling more than 20,000 acres, and also deliver water to more than 50,000 acres of seasonally flooded wetlands. GCID is a Sacramento River Settlement Contractor and diverts water directly from the Sacramento River through the largest flat plate fish screen in the world. GCID's Settlement Contract was first entered into in 1964 and it resolved disputes with the United States related to the seniority of GCID's rights over those of the United States and, in fact, allowed the US Bureau of Reclamation (Reclamation) to obtain water rights from the State Water Resources Control Board for the Central Valley Project. GCID's water rights originated with a filing in 1883 for 500,000 miner's inches under 4 inches of pressure, one of the earliest and largest water rights on the Sacramento River. Other Sacramento River Settlement contracts were also entered into among water right holders on the Sacramento River and Reclamation.

Notwithstanding the seniority of our water rights on the Sacramento River, securing new storage is critically important to GCID, Sacramento Valley water users and the state as a whole. In this context, I want to focus on three issues: (1) why we need additional storage in the Sacramento Valley; (2) our experience working to advance Sites Reservoir, an up to 1.8 million acre-foot capacity offstream north-of-the-Delta reservoir; and, (3) going forward, how the federal government can help advance new storage projects.

The Importance of Storage

New storage is vitally important to GCID and all of Northern California because the federal Central Valley Project (CVP), which our water diversions are intertwined with, and the State Water Project have both lost water supply yield and operational flexibility. That yield and flexibility has eroded over time due to increased contractual obligations and increased water demands to meet the needs of endangered species and the state and federal refuge system.

We do not need much in the way of additional water supplies in the Sacramento Valley, but without new storage, the pressure on our existing water supplies will continue to grow. The State's population continues to increase and the reallocation of water to environmental uses is expanding. This reality continues to play itself out, especially given that no new investments in the development of additional water supply or storage have occurred. For water users north of the Delta, in the area of origin, the ever-increasing demand for water, coupled with no new storage, represents a threat to the vitality of irrigated agriculture in the Sacramento Valley, our local environment including the protection of the Pacific Flyway, and our groundwater system which sustains our rivers, creeks and streams. A strong agricultural sector and healthy environment depend heavily upon a certainty of water supply. Disrupt that certainty, allow the strain on existing water supplies to persist, and investments in agriculture will not be as readily forthcoming. That lack of investment translates into a dim future for agriculture and continued instability in water supplies, which will threaten the economic health of the state as a whole.

The Sites Experience

The North-of-the-Delta Offstream Storage (NODOS) investigation is a feasibility study being carried out by the California Department of Water Resources (DWR) and Reclamation, in partnership with local interests. The study emanates out of the CALFED Bay-Delta Program's Programmatic Environmental Impact Statement/Report Record of Decision. One of the alternatives under consideration includes three configurations of a dam and reservoir located about 10 miles west of the town of Maxwell, California, and otherwise referred to as Sites Reservoir.

Since Fiscal Year 2002, Reclamation has spent approximately \$12.7 million on the Sites feasibility study alone and DWR has spent many millions more. Unfortunately, despite this effort and the many promised benefits that would result from the Sites project, we still find ourselves in a place where it is difficult to clearly articulate the benefits of the project, the costs, and how the project will be funded. The funding to date has allowed the agencies to complete a number of important reports, such as a project scoping report produced in 2002, an Initial Alternatives Information Report completed in 2006 and a Plan Formulation Report finalized in 2008. The agencies are scheduled to release a draft Environmental Impact Statement/Environmental Impact Report (EIR/EIS) under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) and a draft Feasibility Report in the summer of this year, if the Administration approves the administrative draft in a timely fashion. However, the scheduled completion date for the final EIR/EIS and Feasibility Report is another year away, with a scheduled Record of Decision being issued by the end of 2013. We are hopeful that these dates can be met, but they will depend on funding to complete the work and the political will to make key decisions, at both the federal and state levels.

While part of the delay is certainly due to the complexities associated with multiple state and federal agencies being involved in the project, other delays are attributable to shifting environmental requirements. For example, delays in completing the Sites project environmental review process are attributable in part to changes in operational conditions described in the Central Valley Project Operations Criteria and Plans (OCAP) Biological Opinions (BOs) in 2004/2005 and then again based upon a Biological Opinion from U.S. Fish and Wildlife Service regarding the Delta Smelt issued in 2008. In both instances, DWR and Reclamation had to go back and remodel the project, based on the revised BOs. As Reclamation's Mid-Pacific Regional Office noted in a letter to "Interested Parties" in May 2009, "Changes are continuing so rapidly that our studies and reports are not keeping pace."

This new information did not, in fact, change the fundamentals of the project. The fundamentals of the project remained sound, but the process stalled, in spite of the best efforts of Reclamation and DWR, further increasing costs and further delaying the availability of the many benefits a Sites Reservoir will provide.

Growing concerns about the delays and costs associated with the Sites project as well as the need for a local voice, led to the formation, in August of 2010, of the Sites Project Joint Powers Authority (Sites JPA). The Sites JPA, which includes Glenn County, Colusa County, Reclamation District 108, Glenn-Colusa Irrigation District, the Tehama-Colusa Canal Authority, Maxwell Irrigation District and Yolo County Flood Control and Water Conservation District, was formed with the stated purpose of establishing a public entity to design, acquire, manage and operate Sites Reservoir and related facilities to improve the operation of the state's water system. The Project would also provide improvements in ecosystem and water quality conditions in the Sacramento River system and in the Bay-Delta, as well as provide flood control and other benefits to a large area of the State of California. The formation of local JPA's was included as a key provision in the 2009 California Water Package Water Bond legislation for the purposes of pursuing storage projects that could be eligible for up to 50% of project funding for public benefits.

As the Sites JPA began working with Reclamation and DWR, the JPA took a common sense approach. The JPA worked with Reclamation and DWR to put together what we refer to as *Foundational Formulation Principles*. In other words, first identifying the needs of the water operations system and then designing the project that would meet those needs. We conceived a project that would be integrated with the system we already have, but one that would also operate effectively regardless of future operational changes, such as conveyance to south-of-Delta exporters. The JPA wanted to maximize the benefits associated with our existing infrastructure, and provide as much benefit as possible to both the existing state and federal water projects at the lowest feasible cost.

We approached the Sites project with the goal of making the best possible use of limited resources, and in the end, we believe we have identified a project that is both affordable and will provide significant benefits. It maximizes ecosystem benefits consistent with the State water bond, which states that at least 50 percent of the public benefit objectives must be ecosystem improvements. Other benefits include water supply reliability, water quality improvements, flexible hydropower generation, recreation and flood damage reduction. In short, we approached the Sites project with the goal of generating water for the environment while improving state-wide water reliability and regional sustainability in Northern California, and we believe we have achieved that goal.

One of the greatest environmental benefits of the project is a greatly expanded cold water pool that would be created in upstream reservoirs. Flow modifications to manage river temperatures, habitat conditions and flow stability would be greatly enhanced with a constructed Sites Reservoir.

A 1.8 million acre-foot capacity Sites Reservoir, for example, would generate an average annual yield of 400,000 to 640,000 acre-feet, in dry and critical years, and in addition would provide nearly 900,000 acre-feet of additional storage in Shasta, Oroville, Folsom and Trinity Lakes during the operationally important months of May through September through the system integration and operation.

Our experience with the Sites project has revealed at least three bureaucratic and regulatory challenges. First, the environmental review process that Reclamation is forced to deal with through existing federal law does not support the common sense approach that the JPA has attempted to pursue on the Sites project. Under NEPA, a great deal of time and money is expended on studies and analysis of multiple inferior alternatives to the original purpose and need statement, only to use the EIS process to eliminate these lesser alternatives and arrive back at the project that you originally proposed as the solution with the greatest benefit for the dollars expended.

In the case of the Sites project, Reclamation and DWR initially investigated and considered 52 alternative reservoir sites before identifying Sites Reservoir as the preferred location for an offstream, north-of-Delta storage reservoir. That iterative screening process was completed in 2008, yet some have recently suggested that even that process was carried out too quickly and perhaps the agencies should have taken even more time to examine still other sites before narrowing the list to three separate storage configurations at the Sites location. Ironically, the three configurations being evaluated today in the EIR/EIS are very similar to the project originally envisioned in the 1960's.

Second, although the Sites project would provide significant benefits in any operational environment, the environmental review process does not accommodate the real-world requirement that any new water supply project be flexible in, and responsive to, a constantly evolving regulatory environment. As noted above, any changes to the operating criteria for the federal and state water projects resulted in a requirement to develop new models to reflect those changes, when, in fact, the Sites project benefits remained constant regardless of the new demands for environmental water.

Finally, under NEPA, the costs of alternatives are not considered until after the environmental review documents are completed. In our view that is just not a practical way to develop a project. In the case of water supply, you can end up with a project that no one can afford, sacrificing any opportunity for even incremental storage benefits. The process must consider project costs, both the total costs and how the project is going to be paid for, earlier in the process.

Recommendations for Advancing New Water Storage Projects

Reduce Regulatory and Bureaucratic Barriers

In his 2011 State of the Union Address, and again in August 2011, President Obama called for further steps to enhance the efficient and effective permitting and environmental review of infrastructure development “through such strategies as integrating planning and environmental reviews; coordinating multi-agency or multi-governmental reviews and approvals to run concurrently; setting clear schedules for completing steps in the environmental review and permitting process; and utilizing information technologies to inform the public about the progress of environmental reviews as well as the progress of Federal permitting and review processes.”

All of these are worthy goals, but in water resources development, at least in California, there is little evidence that these goals are actively being implemented and turned into new practices.

Our experience with the Sites project suggests the following steps to reduce regulatory and bureaucratic barriers are worthy of consideration:

1. **Statutory Directives.**—Adopt statutory directives for all relevant departments and agencies to work with the states and local water supply agencies to make it a priority to improve the efficiency of the regulatory and permitting processes associated with water supply projects. Attitudes are important in the agencies, and even without mandatory deadlines, statutory directives would encourage the agencies to make it a priority to streamline the environmental review process.
2. **Statutory Deadlines.**—Establish statutory deadlines where appropriate for the completion of the environmental review process. For example, federal agencies should expeditiously review and approve administrative drafts that then can be publicly released as a draft Environmental Impact Statement (EIS). Once a draft EIS is released, the agencies should be required to establish a timeframe within which the EIS and even a Record of Decision will be finalized.
3. **Greater Coordination.**—Require all federal agencies with a role in preparing and reviewing NEPA documents for water storage or water resources projects to coordinate their reviews concurrent with one another. Earlier and better coordination is essential to resolving conflicting standards and avoiding unnecessary project delays.
4. **Alternatives Analysis.**—Agencies with a role in the environmental review process for new water supply projects should be required to develop a simpler approach to alternatives analysis. Streamlining this process can save money and time without sacrificing the legitimate need to thoroughly explore project alternatives or project sites that will cause the least negative environmental impact.
5. **Costs.**—NEPA should permit project costs to be considered in an open fashion, before the environmental review process is complete. Currently, Reclamation relies upon Feasibility Studies to examine the costs and allocation of benefits. We need to make certain that the projects that make it through the environ-

mental review process have beneficiaries, public and private, that can afford to pay for them.

6. **Federal Role.**—Lead federal agencies should determine their role in a project as soon as practicable. In water storage projects, as with other major infrastructure projects, there is growing interest in public-private partnerships and non-federal water supply development, in general, that may rely upon a combination of public dollars, private equity, government-backed financing and the like. If Reclamation is a customer for the benefits of a project rather than the developer of the project that should also create an opportunity to further streamline the regulatory and environmental review processes.
7. **Budgeting.**—Regulatory and environmental streamlining means that more funding resources may be needed upfront to enable agencies to accelerate the review process and establish realistic schedules. Our experience with Sites suggests that Reclamation's relatively modest budget requests over the years for the Sites study process, at a minimum, did not permit the study to proceed on an optimum schedule. This does not mean the agencies need to spend more overall, however. Limited funds should be prioritized to support completing the study and review process in a timely fashion.

Innovative Financing –Water Infrastructure Finance and Innovation Act (WIFIA)

Finally, Congress should explore methods of highly leveraging limited federal funding in order to increase its impact and, in effect, do more with less. Although federal funding for water infrastructure projects is already leveraged in the form of local matching requirements for federal grants, this leverage can be increased by developing innovative, market-based financing tools that provide significant financial savings for localities while shifting the bulk of financial risk from the taxpayer to the private sector.

Specifically, Congress should authorize Reclamation to provide access to long-term, low interest credit assistance modeled after the highly successful Transportation Infrastructure Finance and Innovation Act (TIFIA) program, which has been operated by the Department of Transportation (DOT) since 1998. Under TIFIA, the federal government helps finance large-scale and costly infrastructure projects by leveraging each dollar of federal funding into \$10 of credit assistance and \$30 of infrastructure investments. The \$122 million authorized for TIFIA, the level authorized in the last transportation reauthorization bill, has allowed the program to provide \$1.22 billion in credit assistance and help finance \$3.66 billion in transportation infrastructure improvements annually.

The program provides eligible applicants with access to long-term, up to 40-year, financing at low interest rates. Currently, the TIFIA interest rate is 3.14 percent for a 35-year repayment period (the program provides for a five-year window after substantial completion of a project where no repayment is required). On large projects, like the Sites project, which is currently estimated to cost \$3.2 billion, every saved tenth of an interest point would translate to millions of dollars in local savings.

Under TIFIA, projects are selected by DOT for funding based upon the extent to which they generate economic benefits, leverage private capital, and promote innovative technologies, among other objectives. Projects do not need to be congressionally authorized to be eligible for TIFIA financing, however, under current law, TIFIA financing is limited to no more than 33 percent of total project costs. Efforts are underway to raise this ceiling to 49 percent of total project costs, and that is something that we would support in any similar WIFIA program authorization.

The TIFIA credit program offers three separate forms of financing for eligible transportation projects. The program can offer direct loans that offer flexible repayment terms to cover construction and capital costs of a project. TIFIA can also provide loan guarantees to enable institutional investors, such as pension funds, to make loans to the project sponsor. Finally, TIFIA can offer lines of credit to projects to represent contingent sources of financing, in the form of direct federal loans, to supplement project revenues and make it easier for the project to attract financing from the private sector.

Finally, I would simply note that TIFIA enjoys strong, bipartisan support and it is noteworthy that both the House and Senate versions of the transportation reauthorization bill, including the bill that was released last week by Chairman John Mica, recommends increasing the annual TIFIA authorization level from \$122 million to \$1 billion annually. Both bills similarly recommend raising the ceiling on TIFIA-eligible financing to 49 percent of total project costs. This will allow the program to provide \$10 billion annually in long-term, low cost credit assistance.

Again, a water infrastructure version of TIFIA would greatly benefit a wide variety of large-scale water supply projects, like Sites, and I encourage the Committee to give any such proposal careful consideration.

Thank you for the opportunity to testify. I look forward to answering any questions you may have.

Mr. MCCLINTOCK. Thank you for your testimony.

The Chair now recognizes Mr. Jerry Brown, General Manager of the Contra Costa Water District from Concord, California to testify. Welcome.

**STATEMENT OF JERRY BROWN, GENERAL MANAGER,
CONTRA COSTA WATER DISTRICT, CONCORD, CALIFORNIA**

Mr. BROWN. Thank you, Mr. Chairman, Ranking Member Napolitano, members of the Subcommittee. I would like to thank you for this opportunity to discuss what it takes to build new surface storage, and submit to you that my testimony can be equally applied to building any large water supply project in today's world.

My first message is that the 100,000 acre-foot Los Vaqueros Reservoir completed in 1997 is a model for what it takes to build new surface storage. Following severe drought years in the 1970s and 1980s, the CCWD Board of Directors determined that CCWD could not wait for the State and Federal Government to solve its problems. In 1988, CCWD customers approved a \$450 million bond measure to build Los Vaqueros Reservoir.

Even as an offstream reservoir, the project included measures to protect sensitive Delta fish species. The CCWD Board ensured that a net environmental benefit was provided to the Delta with this project. As evidence of the success, only one Delta smelt has been taken at Los Vaqueros in almost 15 years of project operation, and CCWD's intake is in the same vicinity as the unscreened export pumping facilities.

My second message is that the 160,000 acre-foot Los Vaqueros Reservoir expansion provides further evidence that the model works. Studies on the expansion were initiated as part of CALFED. In March 2004, 62 percent of CCWD customers voted in favor of the measure and to move forward with the expansion project.

Reservoir expansion alternatives up to 275,000 acre-feet were examined in the final EIR/EIS, which was approved by both the CCWD Board and Reclamation in 2010. The CCWD Board decided to move forward on the initial phase of expansion up to 160,000 acre-feet, and construction began in 2011. The initial phase of expansion is being funded by CCWD. The project also has the potential to provide benefits to other local water agencies.

My third message, while there are added regulations and constraints as compared to previous areas of dam construction, successful implementation of large water projects is still possible. For LV and LVE, comprehensive public and stakeholder outreach was implemented. This goes way beyond websites, newsletters, legally required public hearings. Over 65 public meetings and hundreds of informal meetings were held with stakeholders to provide project information and to identify and address concerns. As evidence that issues were successfully addressed, only 60 comment letters were received on the draft EIR/EIS, and the final EIR/EIS was completed without legal challenge.

Redirected impacts to others must be avoided, and affected stakeholders, including fish and wildlife agencies, need to be involved in the project development. CCWD and Reclamation developed a coordination agreement that ensures that operation of the expanded reservoir will not injure other CVP contractors, and that ensures CCWD's objectives will be met in a way that actually helps the CVP in its operations.

More recently, CCWD has worked closely with East Bay MUD to jointly develop new drought supply solutions involving Los Vaqueros as an alternative to enlargement of the onstream Pardee Dam.

Like many projects, there were numerous options for the expansion of Los Vaqueros, ranging from 160 to 500,000 acre-feet. The sizes that moved forward were, one, affordable for the need; two, allowed further expansion at reduced cost; and three, avoided over-sizing. There is no doubt that more is better. But more right now is not always best for right now. A 275,000 acre-foot expansion for CCWD alone did not meet the good business practices test. A lot of that storage would be unused now, and it would be put—and it would put a financial burden on ratepayers.

However, the 160,000 acre-foot reservoir was sized for right now. It is affordable. Its capacity will be used. It provides flexibility so CCWD can use some of that capacity to help other Bay Area water agencies. And it is easily expandable to 275,000 acre-feet. To be successful, a solid business case must be made, even if it means staging the project to deal with uncertainty.

December 2014 is the current schedule for preparation of the Federal feasibility study for the reservoir expansion up to 500,000 acre-feet. Recent studies have identified greater needs for surface storage, as well as opportunities for regional cooperation. Future expansion of Los Vaqueros is consistent with the co-equal goals of the Delta Plan. It meets the public benefit requirement within the California water bond. And CCWD is continuing to work with Reclamation and DWR to complete analysis necessary to identify the most cost-effective alternative for future reservoir expansion.

I would like to thank the Committee for this opportunity, and I would be happy to answer any questions.

[The prepared statement of Mr. Brown follows:]

Statement of Jerry Brown, General Manager, Contra Costa Water District

Chairman McClintock and Members of the Subcommittee:

On behalf of the Contra Costa Water District (CCWD), I would like to thank the Committee for this opportunity to discuss what it takes to build new surface storage and submit to you that my testimony can be equally applied to building any large water supply project in today's world.

CCWD serves water to over 500,000 people in eastern and central Contra Costa County. Among CCWD's customers are a number of large industries of national importance, including oil refineries, chemical plants and steel mills. CCWD diverts all of its water supply from the Sacramento-San Joaquin Delta in Northern California and delivers it via the Contra Costa Canal, which is owned by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) and was the first part of the Central Valley Project (CVP) built by Reclamation in the 1930s. CCWD is one of the largest Municipal and Industrial CVP water supply contractors and operates the Contra Costa Canal under a contract with Reclamation. CCWD has worked closely with Reclamation on both water operations and capital projects for over seventy years.

Because CCWD is located in the Delta, at the hub of California's water supply system, CCWD is intimately involved in state-wide water planning, and has been

an active participant in all the major Delta activities of the last thirty-five years, including the 1976–77 and 1987–1992 droughts, the Bay-Delta Accord of 1994, the CALFED effort, and into the present era of the Bay-Delta Conservation Plan and the Delta Stewardship Council's Delta Plan.

The experiences of CCWD over the past 20 years are evidence that new surface storage infrastructure can be built. Almost one billion dollars have been invested in new assets in the ground by CCWD during this timeframe. Most significantly and with regard to the focus of this hearing, in 1997, CCWD completed 100,000 acre-feet of new, off-stream surface storage at Los Vaqueros Reservoir, and is currently constructing the enlargement of that reservoir to 160,000 acre-feet. In addition, CCWD completed several Delta water quality projects on behalf of CALFED, and CCWD is replacing the four mile long, earth lined portion of the Reclamation owned Contra Costa Canal with a large diameter pipeline. That project will improve water quality, help Reclamation meet Delta water quality standards, and reduce the risk of floods in the Delta from a failure of the canal embankment that was not designed to meet current levee standards for flood protection and earthquake safety. Other projects successfully undertaken by CCWD include constructing significant upgrades and expansions of our water treatment plants, constructing two new Delta intakes with state-of-the art fish screens that improve water quality and reliability for our customers, and, together with Reclamation, constructing fish screens at our oldest water intake to the Contra Costa Canal at the western end of the Delta.

CCWD has undertaken all these projects during an uncertain period when completing water projects in the Delta or its watershed has been extremely difficult. CCWD did not complete all of these projects alone. Our partnership with Reclamation, and with state agencies including the California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB), has been instrumental in these accomplishments. CCWD and Reclamation have worked closely to achieve the construction and enlargement of Los Vaqueros Reservoir. CCWD and Reclamation are continuing the feasibility study for a further expansion of Los Vaqueros Reservoir, up to 500,000 acre-feet. A number of Bay Area water agencies have expressed interest in Los Vaqueros for their current and future drought storage needs. By building on these partnerships, CCWD believes that future storage projects can be successful.

The 100,000 acre-foot Los Vaqueros Reservoir was completed in 1997; it is a model for what it takes to build new surface storage.

Following severe drought years and associated periods of very poor Delta water quality in the 1970s and 1980s, the CCWD Board of Directors determined that CCWD could not wait for the state and federal governments to solve CCWD's problems. In 1988, CCWD customers approved a local bond for \$450 million to build the Los Vaqueros Reservoir. Throughout development of the reservoir project, CCWD worked with other Bay Area water agencies to explore partnership opportunities, but these agencies were not able to commit to a partnership in the project implementation and CCWD moved forward with securing new water rights and constructing the 100,000 acre-foot reservoir on its own. As it turned out, the need for storage did not diminish and at the time the reservoir was being completed, CCWD, working with others in the CALFED program, found that future expansions of the reservoir could be accommodated.

Water conflicts were just as chaotic at the time the original Los Vaqueros Reservoir was being planned and constructed as they are now. California was in the midst of a severe drought, delta smelt and winter-run salmon were being listed under the Endangered Species Act, and processes were underway to require additional flows for fishery protection in the Delta and San Francisco Bay. The primary purpose of the original Los Vaqueros Project was to provide a consistent level of high quality drinking water and adequate emergency storage in case of earthquakes, Delta levee failures, and other disasters. CCWD was able to turn that purpose into an asset during the permitting process. As an offstream reservoir, the project purposes also included design and operational measures to protect sensitive Delta fish species and the CCWD Board of Directors ensured that a net environmental benefit was provided for the Delta with this project. Since the reservoir has been operational, CCWD customers have enjoyed consistently high quality water and improved emergency readiness, all while CCWD contributes to improved Delta fishery conditions. As evidence of the significance of this point, only one delta smelt (a larva) has been taken at the Los Vaqueros intake in almost 15 years of project operations, and CCWD's intake is in the same vicinity as the unscreened export pumping facilities. A key point here is to recognize that, to be successful, a project must be developed to provide a net environmental benefit to ensure sustainability, as opposed to maximizing extraction without concern for impacts on the natural system.

The 160,000 acre-foot Los Vaqueros Reservoir Expansion will be completed in 2012; it provides further evidence that the model works.

Studies on the expansion of Los Vaqueros Reservoir were initiated following the completion of the CALFED Record of Decision in May 2000 with funding provided by Reclamation and DWR. In 2001, CCWD entered into the Los Vaqueros Memorandum of Understanding with several local, state, and federal agencies participating in the expansion studies to document the common understanding for open and transparent evaluation of project alternatives. In March 2004, 62 percent of CCWD customers voted in favor of Measure N and authorized the expansion project to move forward.

While the reservoir expansion studies were ongoing, CCWD and Reclamation prepared an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) to evaluate the stand-alone benefits of a new CCWD intake in the Delta to further enhance water quality and operational flexibility of an expanded Los Vaqueros Reservoir. The Middle River Intake Project was approved and construction was completed in 2010 with additional financial support from DWR and the SWRCB in recognition of statewide benefits from the new intake. Like the Los Vaqueros Project, CCWD's operations with this intake provided an additional reduction in CCWD's impacts to Delta fisheries through timing of operations that measurably reduced impacts and the screening of local agricultural intakes. The addition of a new intake also mitigated for impacts on CCWD water quality which would be incurred due to a reservoir outage during a multiple year construction period while the reservoir is enlarged.

Reservoir expansion alternatives up to 275,000 acre-feet were examined in the Final EIS/EIR prepared jointly by CCWD and Reclamation in 2010. The larger reservoir alternatives were determined to improve water quality, provide drought supply, and protect Delta fisheries. However, decisions on local agency partnerships continued to lag behind statewide decisions on Delta conveyance solutions while local and state funding remained limited. The CCWD Board of Directors decided to move forward on an initial phase of expansion up to 160,000 acre-feet and construction began in 2011. Although the initial phase of expansion is being funded by CCWD to improve drought supply and water quality, the project also has the potential to provide benefits to other local water agencies. CCWD is continuing to work with potential local water agency partners in the initial expansion project to explore short term and long term opportunities to improve drought supply. As with the Middle River Intake and the original Los Vaqueros Project, the operations with the expanded reservoir also provide benefits to Delta fisheries.

What it Takes to Build Large Water Projects: listening to and adjusting for the interests of partners and stakeholders, not redirecting impacts, providing net environmental benefits, and having a strong business case.

Over the past two decades CCWD has found that, while there are added regulations and constraints as compared to previous eras of dam construction, successful implementation of large water projects is still possible. The hurdles may seem insurmountable, but it is possible to get permits and approvals, identify funding, and construct projects on schedule and within budget. Some of the key elements that have been part of CCWD's "recipe for success" are described below.

Broad Stakeholder Involvement. CCWD developed comprehensive public and stakeholder outreach plans at the early stages of project development. The approach goes way beyond web sites, newsletters, and legally required public hearings. For the Los Vaqueros Reservoir Expansion Project, CCWD held over 65 public meetings and hundreds of informal meetings with stakeholders to provide project information and to identify and address concerns. It is not sufficient to simply hold public meetings without addressing the issues raised: the meetings were used to hear concerns and develop solutions that were then incorporated in the project to address those concerns. CCWD formed both a Customer/Stakeholder Feedback Group and an Agency Coordination Work Group to keep key stakeholders and agencies informed well ahead of the release of the Draft EIS/EIR. CCWD spent many hours developing relationships with the media, legislative staff, water agencies, environmental groups, and other stakeholders to resolve issues. The evidence that issues were successfully addressed is that only 60 comment letters were received on the Draft EIS/EIR for the project (a large fraction of which concerned the desire for more bicycle trails in areas unrelated to the project), significant opposition was avoided, and the Final EIS/EIR was completed without legal challenge.

CCWD also focused on building and maintaining strong working relationships with local, state and federal agencies throughout the development of the reservoir and Delta intake projects. These partnerships provided access to state and federal funding when possible but they also enhanced coordination with the CVP and State

Water Project customers. As a result of the partnerships, CCWD and Reclamation worked together to develop a coordination agreement that ensures that operation of the expanded reservoir will not injure other CVP contractors and that ensures CCWD's objectives will be met in a way that actually helps the CVP in its operations. This agreement was instrumental in building trust and creating a project that did not just ensure no harm to others, but actually provides benefits to others.

More recently CCWD has worked closely with the East Bay Municipal Utility District (EBMUD) to jointly develop new drought supply solutions involving Los Vaqueros Reservoir that are included in their December 2011 Draft Revised Program EIR for EBMUD's Water Supply Management Program 2040 as an alternative to enlargement of the on-stream Pardee Dam.

Avoidance and Mitigation of Environmental Impacts. CCWD found early on that modern water projects need to go beyond avoidance of impacts and basic mitigation techniques. CCWD develops projects that avoid redirected impacts to others and invites the affected stakeholders to review project analyses well in advance of publication of a Draft EIS/EIR. This transparency and technical collaboration results in the most creative and effective project design. Again, it is not sufficient to simply show the analysis to others: listening to their concerns and addressing them in a way that is satisfactory is essential. The previously mentioned coordination agreement with Reclamation is an example: it started as a way to directly address concerns of potential harm but actually concluded as a way to provide mutual benefits. Where impacts cannot be avoided, such as inundation of habitat due to reservoir inundation, CCWD developed comprehensive mitigation strategies to enhance regional habitat assets and provide habitat corridors to maximize environmental benefits. CCWD worked closely with the fish and wildlife agencies, independent environmental experts and environmental and land use stakeholder groups to apply practical experience as well as the latest scientific information.

Making a Strong Business Case. Like many projects, there were numerous options for the expansion of Los Vaqueros Reservoir, ranging from 125,000 acre-feet to 500,000 acre-feet. Each size range fit a particular need or set of needs and had its own costs. The sizes that moved forward 1) were affordable for the need; 2) allowed further expansion at reduced cost to a higher level; and 3) avoided unused capacity. These are important factors. There is no doubt that "more is better" but "more" right now is not always best for right now. A 275,000 acre-foot expansion for CCWD alone did not meet the "good business practices" test: a lot of that storage would be unused now, although it would put a financial burden on ratepayers. However, the 160,000 acre-foot reservoir was perfectly sized for "right now": it is affordable, its capacity will be used, it provides flexibility so that CCWD can use some of that capacity to help other Bay Area water agencies on a short or long term basis, and it is easily expandable to 275,000 acre-feet. The simple fact is that opposition to a project is generated when a proponent cannot make a good business case, or a project alternative that does the same job at lower cost with fewer impacts is available but not selected. To be successful, a solid business case must be made, even if it means staging the project to deal with uncertainty.

Future Expansion of Los Vaqueros Reservoir up to 500,000 acre-feet

The Los Vaqueros MOU was recently extended through December 2014 to coincide with the current schedule for preparation of a Federal Feasibility Study for reservoir expansion up to 500,000 acre-feet. Recent studies have identified even greater needs for surface storage as well as additional opportunities for regional cooperation. Future expansion of Los Vaqueros Reservoir is consistent with the co-equal goals of the Delta Plan (it is included in the Draft Delta Plan) and it meets the public benefit requirements of the proposed California Water Bond currently planned for November 2012. CCWD is continuing to work with Reclamation and DWR to complete engineering, operations, environmental, and economic analyses necessary to identify the most cost-effective alternative for future reservoir expansion.

What is Required to Move Forward on Future Reservoir Expansion

Moving forward with the next stage of expansion will require adequate funding for completion of the Federal Feasibility Study, decisions on Delta conveyance, regional cooperation and participation in project development, partnership and cost share agreements, continued outreach and stakeholder coordination, resource agency engagement and support, and strong leadership and advocacy. Patience, endurance, and hard work will continue to be required given the long lead time for major surface storage projects.

Mr. MCCLINTOCK. Great. Thank you for your testimony. The Chair is pleased to yield to the gentleman from Idaho, Mr. Labrador, to introduce our next witness.

Mr. LABRADOR. Thank you, Mr. Chairman and Ranking Member Napolitano, for convening this important hearing today. I want to welcome my good friend, Norm Semanko, who is the Executive Director and General Counsel for the Idaho Water Users Association. And I welcome him today and thank him for testifying at this hearing.

Today's topic is a high priority of our state. Reducing the burdensome regulations that the Federal Government has imposed is critical to the vitality of our nation. The American people continue to be strapped by the bureaucracy and the many layers of protocols and other hindrances that continue to cause our Federal deficit to skyrocket. I commend the Chairman for convening this hearing today so we can shed some light on existing statutes that should be modernized. I believe that protecting our environment can be done in a manner which doesn't impede our economic growth. It is time that we improve our regulatory structure so that we can continue to prosper as a nation.

And I look forward to listening to your testimony today.

**STATEMENT OF NORM SEMANKO, EXECUTIVE DIRECTOR AND
GENERAL COUNSEL, IDAHO WATER USERS ASSOCIATION,
BOISE, IDAHO**

Mr. SEMANKO. Thank you, Chairman McClintock, Ranking Member Napolitano, members of the House Water and Power Subcommittee, and certainly Congressman Labrador, thank you for the great job that you continue to do representing Idaho, water users included. And thank you all for the opportunity to be here.

When you look back in Western history, the Federal Government was not a barrier to water development. It was a catalyst. First came the Carey Act in 1894, encouraging private investment in water storage and delivery projects. Then, beginning in 1902, Reclamation commenced building water development projects across the West. These water projects led to homesteading and important developments in the West, and promoted the economic development of the West.

Today, however, the emphasis in Reclamation projects has shifted from construction of dams and reservoirs to the operation and maintenance of existing Federally owned facilities. Without new sources of water, increasing urban and environmental demands will deplete existing agricultural supplies and seriously threaten the future of Western-irrigated agriculture drying up farmland and the rural communities dependent on the agricultural economy.

Increasingly, state and local governments, as well as private interests, are stepping forward to advance the possibility of new storage projects. Unfortunately, Federal environmental laws such as the Clean Water Act, the Endangered Species Act, NEPA, and others continue to be used to threaten previously developed water supplies and to prevent any future water development for countless farms, ranches, and cities, and not just in the West.

One key concern voiced by water users in the West relates to the administrative policy-making occurring within EPA and the U.S.

Army Corps of Engineers that will make it even tougher to accomplish what is already a daunting challenge.

For example, EPA Region IV is implementing new guidelines that focus on proposals that contemplate developing additional storage capacity due to projected future demands. These guidelines were developed to inform local governments and water utilities of the actions EPA expects them to take “in order to eliminate or minimize the need for additional capacity before consideration of a water supply reservoir project on a stream or river.”

Before EPA considers a water supply reservoir as an alternative to address the need for additional water capacity, the water utility must take actions to ensure that, to the maximum extent practicable, they are implementing sustainable water management practices. While these guidelines have been adopted only by Region IV, we don't know yet if similar standards will be proposed for the Western United States.

The Endangered Species Act provides numerous barriers significant enough to doom a water project. In most cases, only the courts can intervene. And in the past, many have used the courts for the very purpose of scuttling a particular project. In the California Bay Delta, as well as the Klamath Project in Oregon and California, the ESA was used to physically shut off water to irrigated agriculture and other water users to protect ESA-listed fishery resources, using science that has been shown by the National Academy of Science in both cases to be questionable.

In my home state of Idaho, 487,000 acre-feet of Federally developed water supplies have been supplied annually in an attempt to meet river flows downstream annually to comply with Federal Endangered Species Act requirements with little if any benefit to listed salmon stocks.

More Federal and state, local coordination is needed in order to progress—for progress to be made on projects that enhance water supplies to meet unmet demands. In settling the cases of the past, there have been onerous requirements put on water users. We are hoping for a different outcome in Idaho.

Our state is taking the leading role in pursuing the possibility of new water storage projects in cooperation with the Corps of Engineers. The Idaho Water Resource Board has authorized studies of both raising Arrowrock Dam on the Boise River and building a completely new dam, Galloway, on the Weiser River, both tributary to the Snake River. The Arrowrock raise, which would nearly double the existing storage space to 600,000 acre-feet, would provide additional water supplies for the growing Boise region, as well as needed flood control space and environmental enhancements. The Galloway Project, which could provide as much as one million acre-feet of storage, could provide important benefits for downstream fish, while at the same time freeing up water in other parts of the Upper Snake River Basin for other important needs.

Looming on the horizon for both of these Idaho projects is the ESA. The Boise River includes a dubious designation for bull trout critical habitat, all but guaranteeing a tricky section 7 consultation with the Fish and Wildlife Service. And for the Arrowrock raise, downstream and fish listings will require additional section 7 consultations with National Marine Fishery Service.

For more than 100 years, Western water policy has stood out as one of the modern era's great successes. Sound Federal policies are needed going forward that will encourage and enhance continued investment in new water supply enhancement projects, rather than risking diminished domestic food production and weakened urban and industrial growth. Western-irrigated agriculture is a strategic and irreplaceable natural resource, and we must continue to protect and enhance it.

Thank you for the opportunity to testify today.

[The prepared statement of Mr. Semanko follows:]

**Statement of Norman M. Semanko, Executive Director & General Counsel,
Idaho Water Users Association, Inc., Boise, Idaho**

Chairman McClintock, Ranking Member Napolitano, and members of the House Water and Power Subcommittee, my name is Norm Semanko and I am here on behalf of the Idaho Water Users Association (IWUA). I am the Executive Director and General Counsel of IWUA, and I appreciate the opportunity to provide testimony today on the important topic of the need for new water storage and the development of new water supplies in the Western U.S. and the many regulatory challenges we face in trying to build new water projects today.

IWUA is a statewide, non-profit association dedicated to the wise and efficient use of water resources. IWUA has more than 300 members, including irrigation districts, canal companies, water districts, municipalities, hydropower companies, aquaculture interests, professional firms and individuals. Our members deliver water to more than 2.5 million acres of irrigated farm land in Idaho. We are affiliated with both the National Water Resources Association and the Family Farm Alliance.

When you look back in Western history, the federal government was not a barrier to water development—it was a catalyst. First came the Carey Act in 1894, encouraging private investment in water storage and delivery projects, in exchange for the patenting of up to a million acres of federal land in each state. This led to several successful projects, including the construction of Milner Dam on the Snake River and two other private dams that together provide water to approximately 400,000 acres of irrigated ground in the south central region of Idaho.

Then, beginning in 1902, the federal Bureau of Reclamation (Reclamation) commenced building water development projects across the West. In Idaho, the early projects included Minidoka, Arrowrock and Owyhee Dams, to name just a few. Most of the large water storage facilities we currently depend upon for our water supplies in the West came about as a result of Reclamation's construction years.

These water projects led to homesteading and important settlements in the West, and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee Dam on the Columbia River.

Today, Reclamation is the largest wholesaler of water in the country, bringing water to more than 31million people, and providing one out of five Western farmers with irrigation water for 10 million acres of farmland, producing 60% of the Nation's fresh vegetables and 25% of its fruit and nut crops.

Reclamation is also the second largest producer of hydroelectric power in the western United States. Reclamation's 58 powerplants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and producing enough electricity to serve 3.5 million homes.

The total Reclamation investment for completed project facilities is approximately \$11.0 billion. The Family Farm Alliance, a Western irrigated agriculture advocacy organization whose Advisory Committee I serve on, has estimated that over \$60.0 billion in economic benefits are provided to the U.S. economy annually as a result of the irrigated agriculture and dependent rural economy developed in the West, with \$12 billion of annual economic value provided by the initial \$11 billion investment in Reclamation projects.

Today, however, the emphasis in Reclamation programs has shifted from construction of dams and reservoirs to the operation and maintenance of existing federally-owned facilities. Reclamation's redefined official mission is to "manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public".

Reclamation's efforts to develop and manage water today are centered on water conservation and improved management in stretching existing supplies to meet the

many burgeoning water demands of growing cities and environmental laws and regulatory requirements. Reliance on our aging water storage facilities, many built at the turn of the last century, has never been more acute. But shrinking federal budgets due to efforts to reduce the national debt have and will continue to all but eliminate the traditional federally-constructed water storage project.

Yet, as a result of increased demands for existing water supplies, interest in new storage projects continues to increase at the local and state level to replace these lost supplies. Without new sources of water, increasing urban and environmental demands will deplete existing agricultural supplies and seriously threaten the future of Western irrigated agriculture, drying up farmland and the rural communities dependent on the agricultural economy. Increasingly, state and local governments, as well as private interests, are stepping forward to advance the possibility of new water storage projects.

Unfortunately, federal environmental laws such as the Clean Water Act (CWA), the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) have been, and continue to be, used to threaten previously developed water supplies and to prevent any future water development for countless farms, ranches and cities, and not just in the West. Even in the Southeastern U.S., where significant droughts have in some years all but dried up water supplies for cities, farms, energy providers and the environment in the past, these federal laws are being used to control, if not eliminate the construction of water storage facilities vital to the economic and environmental survival of the region.

We also understand that there can be significant barriers to local, state and private development of additional storage in our Western watersheds as a result of the implementation of federal laws and regulations.

My testimony will focus on three major areas of concern on potential barriers to the planning and development of new water storage facilities in the West and how we can work to reduce or eliminate these barriers:

- Federal regulation under the Clean Water Act and the Endangered Species Act;
- Administration environmental policies and processes; and,
- The changing federal role in water infrastructure development.

Clean Water Act

One key concern voiced by water users in the West relates to administrative policy making occurring within the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) that will make it even tougher to accomplish what is already a daunting challenge: the obvious need to develop new water supplies to meet the growing water demands.

Anti-Storage Bias

For example—EPA Region 4 (which covers the Southeastern U.S.)—is implementing new guidelines that focus on proposals that contemplate developing additional storage capacity due to projected future demands. These guidelines were developed to inform local governments and water utilities of the actions EPA expects them to take “in order to eliminate or minimize the need for additional capacity before consideration of a water supply reservoir project on a stream or river.” EPA will also use these guidelines to evaluate water demand projections for new or significantly increased public surface water withdrawals or public ground water supply wells which are being reviewed through the National Environmental Policy Act or EPA programs.

The Clean Water Act permit process requires a clearly stated project purpose, which for water supply reservoirs includes a projected demand analysis to support additional water capacity needs, and an analysis of alternatives. Before EPA considers a water supply reservoir as an alternative to address the need for additional water capacity, the water utility “must take actions to ensure” that, to the maximum extent practicable, they are implementing “sustainable” water management practices, which consist of effective water management, water pricing for efficiencies, water use efficiency measures, and watershed approaches.

According to EPA Region 4, these measures “are designed to help an applicant eliminate the need for, or reduce the impacts to aquatic resources from future water facility expansions including the construction of water supply reservoirs.” The EPA guidance further states: “Any applicant for a reservoir project will be expected to conduct an extensive analysis using this approach in developing their water demand projections and alternative analysis and provide a thorough discussion of reservoir needs after analysis of these measures.”

While these guidelines have been adopted only by Region 4, we don’t yet know if similar standards will be proposed for the Western U.S. In August 2010, Colorado

Governor Bill Ritter sent a letter to EPA Administrator Lisa Jackson describing the cooperative/collaborative efforts regarding the Chatfield Reservoir Reallocation Project, which involved numerous interests representing municipal, environmental and agricultural entities and would result in an additional 20,000 acre-feet of storage space for consumptive uses in the Denver metro area. Although the U.S. Army Corps of Engineers supported the proposed reallocation plan, in June EPA Region 8 staff stated they would deny it, and recommended that the ultimate decision be elevated to higher levels in Washington, D.C., even though the preferred project alternative was simply a reallocation of flood space to active storage within an existing storage facility.

"I am greatly concerned that a disagreement between two federal agencies could result in denial of a project so important to Colorado and fifteen of our communities," Gov. Ritter wrote Administrator Jackson. The governor also asked that EPA proceed with "a thoughtful and transparent process that does not prejudge a project but instead balances important civic and environmental needs."

In a turn of events during October of 2010, the EPA Region 8 Administrator announced that EPA was now "comfortable with the approach taken by the Corps in the preliminary draft CWA 404(b)(1) analysis". While this was good news for project proponents, it took months of hard work and direct action by the Colorado Governor himself before EPA stood down from their initial position of no new water storage. Many projects with similar benefits may not be so lucky.

Water Quality Standard Setting

Setting water quality standards is usually a state responsibility, and EPA should not usurp that important role. Updating water quality standards, especially for nutrients, could prove both controversial and costly, as "numeric" nutrient pollution standards have not been universally used and/or accepted. Yet, EPA has shown a preference for such standards in Florida and other states where they have taken a more aggressive role, despite the absence, in many cases, of any proven nexus between the regulated parameters and the identified designated water body use being protected.

Significant progress has been made since enactment of the landmark Clean Water Act and Safe Drinking Water Act almost forty years ago. The enhanced quality of our surface waters and the greater safety of our drinking water are testaments to decades of environmental protection and investment. Of course, other challenges remain, and EPA has indicated that it intends to "work more aggressively" to reduce and control pollutants that are discharged from industrial, municipal, agricultural, and stormwater point sources and nonpoint sources. Agency actions along these lines could become significant impediments to any new water resource development projects.

Endangered Species Act

The ESA provides numerous barriers significant enough to doom a water project. In most cases, only the courts can intervene, and in the past many have used the courts for the very purpose of scuttling a particular project. In the California Bay Delta, as well as the Klamath Project in Oregon and California, the ESA was used to physically shut off water to irrigated agriculture and other water users to protect ESA-listed fishery resources, using science that has been shown by the National Academy of Science in both cases to be questionable.

In my home State of Idaho, 487,000 acre-feet of federally developed water supplies have been supplied annually in an attempt to meet river flows downstream annually to comply with federal endangered species requirements, with little, if any, benefits to listed salmon stocks. This water could have been used to produce crops, recharge our aquifers, or provide for growing cities and industries.

While we need to develop more water storage in the areas of the West where the ESA drives conflict, pitting competing demands against each other for the same water source, that very statute could also be used to prevent the development of water supplies necessary to meet its own requirements for additional streamflows for listed species.

More federal, state and local coordination is needed in these circumstances in order for progress to be made on projects that can enhance water supplies to meet unmet demands. On the Santa Ana River in Southern California, for instance, the U.S. Fish and Wildlife Service recently "settled" an ESA-driven court case challenging the Service's decisions over critical habitat (habitat deemed necessary for the very survival of a species listed by the ESA as threatened or endangered) for the listed Santa Ana Sucker.

In settling the case with the environmental plaintiffs, the Service greatly expanded critical habitat in the area of the river that included many miles of essen-

tially dry river bed located directly below the Seven Oaks Dam, a Corps facility authorized to protect this area from high river flows during flood periods. The water districts in the area, which have seen reductions in water supplies imported from the California Bay Delta due to ESA restrictions, have been developing their own in-basin water supplies by perfecting water rights on the Santa Ana River resulting during a flood event. The districts are applying to the Corps for a change in release patterns from the Dam in order to store flood waters in the groundwater aquifers under their water right for later use in the basin.

According to the Service, the area was deemed critical habitat to protect gravel recruitment to downstream spawning areas in the river, again using science that is less than robust. In order to move that gravel, streamflows would need to exceed levels that would cause serious flood damage downstream on the Santa Ana River, where millions of people live—Orange County, California—contradicting the very purpose of the federal flood control project and negating the development of crucial in-basin water supplies by flushing water away from the water districts' water storage project.

In Idaho, our state is taking the lead role in pursuing the possibility of new water storage projects, in cooperation with the Corps of Engineers. The Idaho Water Resource Board has authorized studies of both raising Arrowrock Dam on the Boise River and building a completely new dam, Galloway, on the Weiser River, both tributary to the Snake River. The Arrowrock raise, which would nearly double the existing storage space to 600,000 acre-feet, would provide additional water supplies for the growing Boise region, as well as needed flood control space and environmental enhancements. The Galloway project, which could provide as much as one million acre-feet of storage, could provide important benefits for downstream fish while at the same time freeing up water in other parts of the Upper Snake River Basin for other important needs.

Looming on the horizon for both of these Idaho projects is the ESA. The Boise River includes a dubious designation for bull trout critical habitat, all but guaranteeing a tricky Section 7 consultation with the U.S. Fish and Wildlife Service for the Arrowrock raise, while downstream anadromous fish listings will require additional Section 7 consultations with the National Marine Fisheries Service for both projects.

The heavy-handed approach taken by the Service on the Santa Ana River, and the potential for similar confrontations across the West, will continue to threaten water supply enhancement projects unless cooperation and collaboration can be instituted as the new paradigm. Many times, endangered aquatic species can be managed and protected without resorting to the scientifically unjustified reallocation and inefficient use of water originally developed for irrigation and urban uses. Collaborative efforts such as habitat conservation plans or other resource management tools can protect species and water supplies, but it takes willing parties, and a cooperative attitude, to work together outside of the courtroom to accomplish these goals.

Administration Policies

The often slow and cumbersome federal regulatory process is a major obstacle to realization of projects and actions that could enhance Western water supplies. We must continue to work with federal agencies and other interested parties to build a consensus for improving the regulatory process, instead of using administrative channels that create new obstacles.

Watershed Planning

The EPA has included, through its strategic planning process, provisions that drive the development of state watershed implementation plans. We are concerned with how these plans may impact existing and ongoing watershed planning efforts being conducted at the state and local levels, many of which include plans for new storage facilities. Thousands of watershed councils exist throughout the West and they are engaged in a variety of water conservation and environmental restoration projects which could be derailed or delayed by the imposition of new federal planning requirements.

Water users are active participants in these efforts and have a large stake in ensuring that these regional projects continue. It is unnecessary and a waste of public resources for EPA to develop and impose new watershed planning programs, especially if storage components are affected by federal top-down planning efforts. In addition, EPA needs to be cognizant of the difference between water quality regulation under the Clean Water Act and water resource management which is conducted pursuant to state law.

Also, the current process of rewriting the federal *Principles and Guidelines*, now known as *Principles and Requirements*, by the Administration through the Council on Environmental Quality (CEQ) will impact future storage projects by enhancing the “value” of environmental impacts and mitigation. Many times, environmental process and mitigation requirements already account for between 30% and 50% of a water supply development project’s total cost, and by adding additional emphasis on environmental impacts these new “requirements” can drive a project’s cost beyond affordable levels.

In a time when our nation is struggling to return to the path of economic prosperity, we cannot support the creation of a new federal watershed planning program, particularly for those states that have existing, productive watershed programs in place. Federal participation should be channeled through existing state programs, rather than creating uncertainty through cumbersome new federal requirements which threaten to derail important water quality and water conservation projects already underway. And the principles for analyzing water projects from the federal perspective must not inflate the costs of a project by overvaluing environmental impacts.

NEPA Reviews

NEPA is used throughout the federal government whenever a federal decision is made committing resources to a water project, including awarding a CWA permit for construction under federal and state laws. NEPA has traditionally been implemented in a very “stove-pipe” sort of manner, with each federal agency addressing the process individually for the same project, and with very little coordination or communication.

In implementing NEPA in a manner that can allow water projects to move forward, the federal agencies need to do a better and more consistent job of defining and characterizing cumulative impacts for a project. As it currently stands, the characterization used by agencies to define cumulative impact is many times unreasonably subjective, sometimes leading to superfluous challenges to the NEPA process that can delay the process and increase costs.

These agencies must eliminate redundant environmental review processes. Projects subject to NEPA analysis should only have to proceed through the environmental review process once. For example, if NEPA is completed on a water resources infrastructure project by one agency (e.g., the Bureau of Reclamation) then a second process should not be imposed by another agency on the same project (e.g., the Corps of Engineers when they consider an individual Clean Water Act Section 404 permit). Many times the alternatives proposed for assessment by federal NEPA regulators are inappropriate, unrealistic, difficult-to-implement, and often in conflict with state law.

In addition, federal agencies not directly involved in a project’s NEPA process often end up attempting to “veto” the final analysis Record of Decision at the eleventh hour, causing untold days and weeks of delays and additional costs involved in resurrecting a defensible project. This approach is inexcusable as these agencies are all part of one federal government and should act accordingly, coordinating efforts and concerns from the beginning of the process, not at the very end.

On December 7, 2011, CEQ released draft NEPA guidance that outlines the following principles for agencies to follow when performing NEPA environmental reviews:

- NEPA encourages simple, straightforward, and concise reviews and documentation;
- NEPA should be integrated into project planning rather than be conducted after planning is complete;
- NEPA reviews should coordinate and take appropriate advantage of existing documents and studies;
- NEPA reviews should use early and well-defined scoping to target environmental reviews to appropriate issues and avoid unnecessary work;
- Agencies should develop meaningful and expeditious timelines for environmental reviews; and
- Agencies should target their responses to comments to appropriate issues raised.

While the overall philosophy embedded in the above principles seems appropriate, it is difficult to see how the proposed guidance will actually change the status quo. There appears to be nothing in the CEQ draft guidance that is likely to have any impact on how agencies approach their NEPA responsibilities. A more direct linkage to “pilot” NEPA efforts could give stakeholders and Congress a way to set goals, track successes and showcase innovations in implementing these principles, but

short of clearly identified and coordinated efforts that include benchmarks and outcomes, these principles may or may not be heeded by the agencies.

Innovative Financing

As I indicated earlier in this testimony, the traditional federally constructed and funded water supply project is no longer practical or affordable, given the need to reduce the nation's debt. States, local government and private interests are increasingly stepping forward to fill the void. But that doesn't mean the federal government cannot be a partner in supporting water supply projects in the future. State, local and private entities can and will step up to pay for future water development projects, but the cost of federal requirements for such projects must be reduced to affordable levels.

If the federal government and Congress are no longer willing or able to fund the construction of water supply development projects, then they should not expect the local beneficiaries to pay for expensive mitigation and environmental enhancement components usually required by federal agencies in permitting construction of these facilities.

Obviously, the federal laws that govern environmental oversight and permitting will not be rolled back anytime soon; therefore, the federal government should work to develop additional tools that can be helpful in financing these projects to meet local, state and federal needs and requirements. Innovative financing tools, such as longer-term, low or no-interest loans and loan guarantees to enhance and leverage additional private financing, can be useful in expanding the availability of funding for water storage projects.

Conclusion

For more than 100 years, Western water policy has stood out as one of the modern era's great successes. Water supply developments took large areas of the West that were considered uninhabitable and made them so, while producing an agricultural economy envied by the rest of the world. Today, we still enjoy the fruits of the investments our forefathers made in water storage and delivery infrastructure. Our challenge will be how we meet the continuing challenges of maintaining these aging facilities, the needs of growing populations (both water supply and food production), and the ever-increasing environmental requirements and restrictions of federal laws and regulations.

Sound federal policies are needed that will encourage and enhance continued investment in new water supply enhancement projects, rather than risking diminished domestic food production and weakened urban and industrial economic growth. Relying on agriculture to be a "shock absorber" to soften or eliminate impending water shortage is not smart planning. Western irrigated agriculture is a strategic and irreplaceable national resource, and we must continue to protect it by developing additional sources of manageable water supplies to meet future demands.

Thank you for the opportunity to testify today.

Mr. McCLINTOCK. Great, thank you for your testimony.

Our final witness is Mr. Michael Gabaldon, Director of Technical Resources for the Bureau of Reclamation from Denver, Colorado to testify.

STATEMENT OF MICHAEL GABALDON, DIRECTOR, TECHNICAL RESOURCES, U.S. BUREAU OF RECLAMATION, DENVER, COLORADO

Mr. GABALDON. Thank you, Chairman McClintock and Ranking Member Napolitano, and members of the Subcommittee. I am Michael Gabaldon. I am the Director of Technical Resources for the Bureau of Reclamation out of Denver, Colorado. And thank you for the opportunity to testify today. My written statement has been submitted for the record, and I will summarize a few points and emphasize others in my verbal testimony.

Reclamation is a water supply agency. We provide water, irrigation water, to more than 10 million acres, and drinking water to more than 31 million people on an average year. We have 245 mil-

lion acre-feet of storage, of surface storage, in our inventory. And that is in about 350 reservoirs throughout the West.

As stated in my testimony, Reclamation is still actively studying surface water storage where it makes sense. In fact, we have 19 storage feasibility studies going on right now underway in the West, and those are in various stages of—in the process. More are in the Pacific Northwest region, some are at the appraisal level, not requiring congressional action. Others are feasibility studies with long legislative history. No one really knows how many of those are going to get to actual construction; a lot of additional steps are still required, are still ahead of those studies, not least of which congressional action for the ones that are found to be feasible. As stated on page two of my testimony, most of the easy projects were built a long time ago.

And, as the Subcommittee is very aware, the bar has been set pretty high for projects today, as we have already heard. What is known is that Reclamation management and recreation activities result in an annual impact to the national economy of about \$55 billion, which supports nearly about 416,000 jobs every year. Not bad for an agency that only has \$1 billion of appropriated funds.

Reclamation is the largest water supplier in the country. We are proud of the traditional mission, and we see it continuing in the long term. Reclamation's mission today includes many new priorities. To illustrate that fact I would point out that since 1990 Congress has enacted just 13 Reclamation surface storage studies or construction projects. But in the same period Congress has added to Reclamation's assistance portfolio 53 locally owned water recycling projects, 12 rural water projects, 13 river restoration projects with their own specific legislation, a national drought relief program, and a national desalination program, and various other authorities.

Reclamation is up to the challenge. But it is a testament to the fact that real-world water managers and their representatives in Congress believe in a number of different ways to get water to people who need it. Surface storage is just one piece of the puzzle. I know that some members of the Subcommittee, as well as my fellow witnesses here today are keenly interested in four large surface storage projects underway in California. Several of them have been mentioned already: the Upper San Joaquin River Basin Storage Project; Los Vaqueros expansion north of the delta storage; and Shasta Dam enlargement.

I have talked to staff at our Mid-Pacific region on those projects, and have—some of our technical staff in Denver are playing a very direct role on those studies. I will try to answer as many questions about those studies as I can, but my day-to-day job is in Denver.

I will also point out I am an engineer, I am registered both in New Mexico and Colorado. I have worked as an engineer. I started my career with the Bureau of Reclamation at Ridgeway Dam as a construction engineer. I have been—I have designed some elements of the Animas-La Plata Project. I have worked on dams at Ochoco Dam in Oregon, and also the Minidoka replacement powerplant. So I am very familiar and very aware of storage and how important storage is to our portfolio. I am not a NEPA process expert or a

planning expert. So, in some cases, as questions come up in those areas I may have to respond to questions for the record.

To sum it up, Reclamation is committed to surface storage where it is practical, where it is physical, legal, and financial conditions make sense for that storage project. It is part of our past, it is very much part of our past. It is very much part of our present and our future. And we are happy to talk to the Subcommittee today. Thank you.

[The prepared statement of Mr. Gabaldon follows:]

Statement of Michael Gabaldon, Director of Technical Resources, Bureau of Reclamation, Denver Technical Center, U.S. Department of the Interior

Chairman McClintock, members of the Subcommittee, I am Mike Gabaldon, Director of Technical Resources at the Bureau of Reclamation (Reclamation) in Denver. I am pleased to provide the views of the Department of the Interior (Department) on the role of new surface storage in Reclamation's water resources planning.

Understanding what goes in to creating new Reclamation surface storage requires an understanding of Reclamation's history. Reclamation was authorized with the signing of the Reclamation Act of 1902 by President Theodore Roosevelt. The Act's first words created a source of funding within the U.S. Treasury, and declared its purpose to be "the examination and survey. . .and the construction and maintenance of irrigation works for the storage, diversion, and development of waters for the reclamation of arid and semiarid lands in the said States and Territories. . .". With the enactment of the Reclamation Act, the United States set about the creation of dozens of projects that ultimately did far more than just provide water for irrigated agriculture. Power supplies, municipal water, new economies and eventually whole cities grew up around Reclamation projects in places like Boise, Idaho; Spokane, Washington; Las Vegas, Nevada; Casper, Wyoming; El Paso, Texas and many other places.

For decades during the early 20th century, Reclamation surveyors and engineers scoured the 17 western states for the best dam sites, working to bring water to as many farms as possible. Wide distribution of the public domain was a goal established earlier by the Homestead Act of 1862, which had offered virtually free land to families in parcels of 160 acres. The language of the Reclamation Act of 1902, before subsequent amendments, provided wide discretion to the executive branch to withdraw land, study and construct projects. With an emphasis on rapid growth and development, Reclamation labor and contractors built or modernized nearly half of our current dam portfolio in the first 38 years of Reclamation's existence, with 231 dams complete or under construction by 1940.

In Reclamation's early years, Congressional interest in projects was intense and development proceeded briskly. However, limitations in technical understanding and different societal priorities at the time, resulted in little or no consideration being given to environmental impacts, or the rights of native Americans. As a result, many of the early Reclamation projects brought unintended consequences that would be mitigated and litigated for decades, continuing into the present day.

With enactment of the Federal Water Project Recreation Act in 1965 (Public Law 89-72), the process of authorizing and constructing large Reclamation dams changed dramatically. Section 8 of the Act stated, "Effective on and after July 1, 1966, neither the Secretary of the Interior nor any bureau nor any person acting under his authority shall engage in the preparation of any feasibility report under reclamation law with respect to any water resource project unless the preparation of such feasibility report has been specifically authorized by law. . .". The rate of Reclamation projects authorized had ebbed and flowed over the years, but with enactment of PL 89-72, projects now required more Congressional action before proceeding. Some began to think that Reclamation's heyday was over, and with the enactment of the Recreation Act, after 1966, all surface storage projects would require individual Congressional authorization before proceeding, a requirement that continues to remain in force.

Today, with more than 100 years of additional Congressional direction on top of the 1902 Act, the current mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. Reclamation still studies, constructs and maintains large surface storage projects, when authorized by Congress, and in fiscal year 2012, Reclamation has a construction budget of more than \$180 million for a variety of projects. But surface storage in the construction budget

has been joined by dam safety, and the modernization or repair of infrastructure built years ago. For many reasons—political, economic, social—the construction of traditional surface storage projects is undertaken on a much more limited basis than in decades past. And new societal priorities and advancements in scientific knowledge support increased focus on ecosystem restoration, adverse impact mitigation, efficient management, rural water, wastewater reclamation, and conservation. These priorities have become central parts of the Reclamation mission today, and some of them yield significant quantities of new water supply in a very cost efficient manner.

There are roughly three dozen Reclamation dam projects¹, project features or other storage facilities across the West that were authorized by Congress but, for one reason or another, were never funded or constructed. The stories vary, but the most frequent reasons center around economics or an inadequate potential water market associated with the given facilities. In other cases, environmental, safety or geologic challenges came to light during a project's development, and rendered its construction, completion or operation unfeasible. Political opposition often contributed, leaving the facilities "on the books" awaiting further action, but with external events and new priorities passing them by.

In Washington State, Reclamation and the Washington Department of Ecology studied the Black Rock Reservoir surface storage site for nearly five years during the 2000s, with the aim of securing existing irrigation supplies, improving fish habitat and meeting future municipal and industrial needs. In the end, construction costs approaching \$8 billion, a poor cost benefit ratio, and concerns about seepage that could mobilize contaminants at a nuclear waste facility rendered the Black Rock Reservoir site infeasible. Reclamation, in partnership with Washington State, continues to evaluate other water supply strategies, including surface water storage options, in the context of an integrated plan for the Yakima River basin.

In California, the Auburn Dam surface storage reservoir was studied and actually entered construction, but has never been completed. It was authorized in 1965 as a multi-purpose facility by Public Law 89-161, and after the completion of studies and design, Reclamation commenced construction in 1972. In 1975, a magnitude 5.7 earthquake occurred about 50 miles northwest of the dam site near the state of California's Oroville Dam. Reclamation halted construction and eventually concluded that while the Auburn facility could be re-designed to withstand likely seismic activity, the resulting costs exceeded the Congressional cost ceiling, and dramatically changed the project's economics. As of this date, Congress has not passed legislation to amend the project authorization or increase the cost ceiling. And the California State Water Resources Control Board cancelled Reclamation's water rights permits for the project in 2008.

As indicated, not every proposal for new surface storage pans out. Nevertheless, Reclamation has not abandoned surface storage proposals, or the role of surface storage in a diverse portfolio of water management solutions. We continue to study them in areas where conditions are viable, and Congressional authorization exists, and where the prospective environmental benefits outweigh the impacts.

In May of 2011, Reclamation's Mid-Pacific Region provided a briefing to staff of this Subcommittee regarding four surface storage studies underway in California which, as currently configured, could provide 3.75 million acre-feet of new storage if they are authorized, funded and constructed. They are a raise of the existing Shasta Dam; expanding the existing Los Vaqueros Reservoir; construction of a new off-stream facility north of the Delta (NODOS, known locally as Sites Reservoir); and the construction of a new on-stream facility on the Upper San Joaquin River. The studies, authorized under separate legislation, were funded historically as part of the joint state and federal CALFED Bay-Delta Surface Storage Investigations Program¹ and federally under the California Bay-Delta Restoration Program in the

¹Narrows Dam and Reservoir, Charleston Dam and Reservoir, East Mesa Flood Detention Dike, McDowell Mountain Tunnel, Orme Dam and Reservoir, Powerplant, Pumping-Generating Plant, and Canal, San Pedro Aqueduct, San Pedro Pumping Plant, Lower Colorado River Water Salvage Project, Moapa Valley-Muddy Creek Project, Virgin River Dam, Dikes, and Reservoir, Auburn Dam, Folsom South Canal (not fully completed), County Line Reservoir and Folsom-Malby Conduit not completed, Allen Camp Dam and Reservoir, Lookout Diversion Dam, Swifts Corral Dam and Reservoir, Paiute Dam and Reservoir, Paiute-Lead Lake Canal, Allerman Canal Enlargement and Extension, Watasheamu Dam, Reservoir, and Powerplant, Carson Canal, West Fork Dam and Reservoir, Palmer Lake, East High Canal with regulating Black Rock and Michigan Prairie Dikes, Crooked River Diversion Dam, Harper Dam and Reservoir, Yoder Dam and Reservoir, North Side Unit Pumping, Sexton Dam and Reservoir, Teton Dam and Power and Powerplant, Dayton Dam and Reservoir, Animas Mountain Dam and Reservoir, Loma Extension Division, Norwood Tunnel, Larrabee Dam and Reservoir.

¹<http://www.water.ca.gov/storage/CALFED%20Progress%20Report%202010/index.cfm>

President's budget request for the past seven years. Work will continue in the current fiscal year to bring the studies closer to completion.

Each of the California studies is taking place in an environment of relentless operational and environmental change, with new biological opinions, litigation of those biological opinions and court-ordered analysis under the National Environmental Policy Act, considerations about climate change, and widely varying hydrologic challenges inherent in California water. As of today, Contra Costa Water District has nearly completed a small expansion of Los Vaqueros Reservoir, and continues to study an even larger expansion for the future. In addition, the Mid Pacific Region has just released a Preliminary Draft Environmental Impact Statement and Draft Feasibility Study Report for enlarging Shasta Dam. Public draft reports for a new off-stream storage facility in Northern California are expected within the year. While complex and time consuming, Reclamation believes that the expertise it provides in these studies remain an extremely important contribution to California's long-term water future. We are committed to seeing the studies through to completion.

At the same time, Reclamation has underway 12 studies² of major river basins in the west under the WaterSMART Program, authorized by the SECURE Water Act in Public Law 111-11. All of these major Basin Studies will consider structural and non-structural options to supply adequate water in the future. This will include consideration of potential new surface storage needs, as directed in the Act at Section 9503(b)(4)(e).

New Reclamation surface storage has come on line in Colorado with the filling last year of Ridges Basin Dam/Lake Nighthorse, built pursuant to Public Laws 100-585 and 106-554. These laws adapted the overall Animas-La Plata (ALP) project, envisioned years prior, into a negotiated settlement of water rights claims by the Southern Ute Indian and Ute Mountain Ute Tribes in southwest Colorado. The ALP is designed to supply an average of more than 111,000 acre-feet of water to four user entities including the tribes in Colorado, and three more in New Mexico³ via a pipeline currently under construction that will supply water around Shiprock, NM. The capacity of Ridges Basin Dam/Lake Nighthorse is 120,000 acre-feet.

New Reclamation surface storage is also online in southeastern California, with completion in 2010 of the Drop 2/Warren H. Brock surface storage reservoir about 30 miles east of El Centro. In 2005, in cooperation with Imperial Irrigation District, Coachella Valley Water District, San Diego County Water Authority and Metropolitan Water District of Southern California (MWDSC), Reclamation completed a study that identified several potential alternatives to improve system efficiency on the Lower Colorado River, and this project was the preferred option. In December 2006, Section 396 of Public Law 109-432 directed Reclamation to "design and provide for the construction, operation and maintenance of a regulated water storage facility...at or near the All-American Canal."⁴ With funding provided by Southern Nevada Water Authority, MWDSC, and Central Arizona Water Conservation District, in exchange for water credits, work began in 2008 and was finished on time and under budget. The 8,000 acre-foot facility conserves previously non-storable flows estimated to be 70,000 acre-feet per year on average. In 2011 it beat expectations, conserving 121,000 acre-feet.

Clearly, surface storage projects still happen, but many of the best sites have been built. And as explained above, they compete for funds with dozens of other Congressionally-mandated priorities. New storage projects proceed to completion on a more limited basis than in decades past. However, we believe that the diversity of 21st century water challenges in the West calls for a diversity of solutions, including surface storage projects, that are appropriate, environmentally and economically sound, and in the interest of the American public.

This concludes my written statement. I am pleased to answer questions at the appropriate time.

Mr. McCLINTOCK. Thank you for testimony. We will now begin with questioning, and I will yield five minutes to myself to begin.

Mr. Semanko, we heard from the Ranking Member that the problem isn't excessive regulation in building new dams, it is simply lack of money. What is your view of that?

² <http://www.usbr.gov/WaterSMART/bsp/studies.html>

³ <http://www.usbr.gov/uc/progact/animas/faq.html>

⁴ <http://www.usbr.gov/lc/region/programs/drop2reservoir.html>

Mr. SEMANKO. Well, I think, Mr. Chairman—thank you for the question—I think it is a combination both. Certainly in Idaho we have seen leadership from the Idaho Resource Board working with our Federal partners. And I think both the Ranking Member and Mr. Gardner talked about public-private partnerships and about Federal-state-local partnerships. And that is what we need, going forward. We have always had that in the West. That is why I wanted to point out the Carey Act, because originally Congress's goal was to encourage the private sector to invest, then the Federal Government stepped in—

Mr. MCCLINTOCK. Isn't that the way we used to finance dams? There would be a revenue bond either issued by the state or by a local entity, or money would be funded by the Federal Government, and then that money would be repaid by the users of these facilities in proportion to their use?

Mr. SEMANKO. Mr. Chairman, absolutely. And over the years, the—

Mr. MCCLINTOCK. Do you think we need to get back to that process? For example, the Ranking Member rightly criticized the use of taxpayer funds to subsidize these projects. Again, they used to be paid for entirely by users. In fact, Title XVI is paid entirely by taxpayers, which is probably the reason why we see these projects coming in, averaging twice the cost of imported waters, because the people that are actually using that water aren't actually paying for it, it is being paid for by general taxpayers.

Mr. GABALDON, you said that there are 19 studies moving forward right now of dam sites. How many are you actually building right now?

Mr. GABALDON. Those are—the 19 that I mentioned are studies.

Mr. MCCLINTOCK. How many are you actually building?

Mr. GABALDON. We are not building any of those 19.

Mr. MCCLINTOCK. You are not building anything right now. That is the problem, is you guys spend countless dollars and endless time studying, and you are now spending absolutely no time or funding to actually construct these facilities.

But let me ask you this. How many dams are you studying currently for removal?

Mr. GABALDON. We are—as far as the original question, we are recently finished a couple of projects, of storage projects, the Animas-La Plata that I mentioned. We filled that last year—

Mr. MCCLINTOCK. Yes, that is the only one this generation that is a major reservoir built by the Department of Reclamation. Now, answer my question, please. How many dams are you currently studying for removal?

Mr. GABALDON. For removal we are looking at Klamath removal. The other project that I am aware of that is looked at for removal purposes is the one up in the Olympic Peninsula, Elwha Dam.

Mr. MCCLINTOCK. And, by the way, are either of those for safety purposes?

Mr. GABALDON. The one—no, no.

Mr. MCCLINTOCK. No, of course not.

Mr. GABALDON. No—

Mr. MCCLINTOCK. Mr. Bettner, California currently has one of the lowest precipitation levels on record, which is quite a change,

as I mentioned, from last year, when we had one of the wettest years on record. During that period, did Reclamation spill a lot of water, simply because of a lack of capacity?

Mr. BETTNER. Yes. The answer is yes. I can't give you a definite amount from the last two years. I know for one example this year, even though it is dry, Reclamation is currently releasing about 100,000 acre-feet to provide water to—for temperature control, for winter run. That water is being lost to the ocean right now. If we had a project like Sites, we could actually pick up that water and we would be reusing it in this dry year. So we see some benefits, even in a dry year, for new reservoirs and system reoperation.

Mr. MCCLINTOCK. If the current drought continues, what do you—how do you anticipate this lost water to impact the people of your region?

Mr. BETTNER. Our region, there will be—some of our water users will experience a cut on the west side of the Sacramento Valley, and it would probably mostly accrue to users south of the delta.

Mr. MCCLINTOCK. Mr. Semanko, I know that Idaho is studying several new water storage projects. How is the Endangered Species Act going to affect those projects?

Mr. SEMANKO. Terribly, I am afraid. We have a—I don't know how else to say it—a bogus designation of critical habitat on the Boise River. The bull trout are not really threatened. Our Governor is leading the way in working with Fish and Game and U.S. Fish and Wildlife Service to see if we can get those fish delisted. But if that critical habitat designation stays in place, we are going to have a hard time.

And also, the downstream flow requirements for fish make it very tricky, and section 7 consultations will be required for both the Galloway And the Arrowrock raise, so they will be very—

Mr. MCCLINTOCK. And don't these dams also provide an enormous array of environmental benefits?

Mr. SEMANKO. Mr. Chairman, absolutely. Recreational, environmental, fisheries, local fisheries, wetlands—if you took those projects out, you would eliminate Lake Lowell, all of the recreation that is throughout the Boise and the Payette Basin. So, yes, absolutely.

Mr. MCCLINTOCK. Great, thank you. The Ranking Member is recognized for five minutes.

Mrs. NAPOLITANO. Thank you, Mr. Chairman. To Mr. Gabaldon, in a recent news article it was mentioned that the—with the exception of Animas-La Plata, a project in southwestern Colorado, Rec has not built any large dams and reservoirs over the last generation. Is this accurate?

Mr. GABALDON. As I stated before, the Animas-La Plata, we also have the Drop Two Reservoir on the Colorado River. That is another project, and that is a project that we worked with the Sierra, Nevada Water Authority along with metropolitan—

Mrs. NAPOLITANO. And while you are at it, will you tell us what—I am sorry to interrupt, but my time runs—what is the water savings and what was the Federal expense on that one?

Mr. GABALDON. Federal expense? The funding was put up by those entities I was just mentioning, Southern Nevada, Central Arizona Project.

Mrs. NAPOLITANO. So zero to the taxpayer.

Mr. GABALDON. Zero to the taxpayer in that case, yes.

Mrs. NAPOLITANO. And the savings in water?

Mr. GABALDON. Savings of water, we anticipated about 80,000 acre-feet, 70,000 to 80,000 acre-feet per year. Last year it actually yielded about 100,000 acre-feet of water.

Mrs. NAPOLITANO. And compared to traditional dam projects, how does that compare?

Mr. GABALDON. Compared to traditional—

Mrs. NAPOLITANO. Cost versus yield.

Mr. GABALDON. Animas-La Plata is 120,000 acre-feet of water, and that cost half-a-billion dollars. So, I mean, just a comparison there.

Mrs. NAPOLITANO. OK. Then the third question would be if it produces that much, what message should we get from the comparison of one project locally without Federal money, versus a Federally funded project? What is the takeaway message on that?

Mr. GABALDON. As I stated in my testimony, I think the takeaway message is that the Bureau of Reclamation, we are still in the business of looking at everything we possibly could do to get water, conserve water, stretch water—new technology to storage, to conservation, to water conveyance. It is all part of that—

Mrs. NAPOLITANO. All of the above.

Mr. GABALDON [continuing]. As was mentioned earlier.

Mrs. NAPOLITANO. All of the above?

Mr. GABALDON. All of the above.

Mrs. NAPOLITANO. And how much water has been brought online, due to the Reclamation's various conservation actions? And how does this compare to a traditional dam project? And I am talking about WaterSMART.

Mr. GABALDON. WaterSMART? The Secretary's goal for WaterSMART is 490,000 acre-feet of water for 2012. So, just to put that in perspective.

Mrs. NAPOLITANO. Mr. Brown, Los Vaqueros Reservoir was also one of the projects identified in CALFED, And is currently being studied by Reclamation. Recently you have moved forward to expand the facility yourself. Why?

Mr. BROWN. Well, primarily because the 160,000-foot raise is what we needed to meet our customer needs And provide Bay Area reliability.

Mrs. NAPOLITANO. OK, but you are moving forward to—was it the funding issue, also?

Mr. BROWN. Well, the amount of money was \$100 million for the extra 60,000 acre-feet, and that is what we were able to afford with our rate payers paying.

Mrs. NAPOLITANO. Thank you. To any of you, I have not heard anybody mention Native American water rights, and how that would affect anything concerning this topic.

Mr. SEMANKO. I might—Ranking Member, I might offer that not very many years ago, in 2004, Congress approved the Nez Perce Water Rights Agreement. And a key part of that was assuring that there were water rights available both for the Native American tribes and for other folks. And, as part of that agreement, there was a recognition that we may need additional storage going for-

ward, and that additional storage may actually provide supplies for everyone across the board. You don't have to fight over the pie if you have other pies and cakes and cupcakes for everyone. So that was a key part of that agreement approved by Congress in 2004.

Mrs. NAPOLITANO. But many of the traditional tribes do not get to be at the table, unfortunately, and that is what I am finding out.

Now, the percent of recycled water, I agree, to us in California—to me in California it is very critical. Does anybody figure out how much percentage it may take to put at the table with the rest of the other efficiencies to be able to create more water? And I am talking about real water, not paper water.

[No response.]

Mrs. NAPOLITANO. Anybody?

Mr. BROWN. In our service area, about 10 percent of our demand is met with recycled water. And we are an advocate of cost-effective recycling. Not all recycling is good recycling. There is some that—discharges that are already being beneficially used by their downstream users. So it just depends on the project, and it depends on the use.

Mrs. NAPOLITANO. And also—and one of the things I have learned is sometimes the water runoff from the farms is also contaminated with pesticides and fertilizers, which does more damage to the rivers and areas.

Mr. Semanko, the Nez Perce Settlement also allows for more waterflows for fish, not just ESA?

Mr. SEMANKO. Ranking Member, that is exactly right. The 487,000 acre-feet was the agreement to settle their claims in the Snake River Basin adjudication and to provide some assurances under the Endangered Species Act. That was the subject of the consultation with the Bureau of Reclamation And NOAA fisheries. Yes, very much so.

Mrs. NAPOLITANO. So it wasn't just ESA. Thank you, Mr. Chair—

Mr. McCLINTOCK. The gentlelady's time has expired. Mr. Tipton.

Mr. TIPTON. Thank you, Mr. Chairman. I appreciate the Ranking Member bringing up the Animas-La Plata Project. And, Mr. Gabaldon, when that project was built, that is probably one of the last—it was stated to be one of the last big projects to be built. Wasn't that fulfilling the commitment that we had made to fulfill Indian water rights in the State of Colorado?

Mr. GABALDON. Yes, it was. It was a settlement agreement.

Mr. TIPTON. To be able to do that. Wasn't that project downsized?

Mr. GABALDON. It was downsized.

Mr. TIPTON. Significantly to Animas-La Plata Lite.

Mr. GABALDON. Yes.

Mr. TIPTON. In your estimation, for Animas-La Plata, the McPhee Project over Montezuma County, being able to store that water, wasn't that beneficial, in terms of some of the commentary that we have heard in regards to the Endangered Species Act, to be able to actually maintain river flows?

Mr. GABALDON. I don't know. I am trying to think of the plumbing in my head. I am not sure how that would have affected the river flows, so I would have to answer that question for the record.

Mr. TIPTON. Some of the releases—I live there. That has actually been the case, in terms of what we have been able to see.

I am a little curious, Mr. Gabaldon, in regards to the Bureau of Rec had partnered with CSU, Colorado State University, spending \$229,000. And the objective of the study was to provide information to our state agencies and water users about the potential of agricultural water transfers to address increasing urban needs.

I am just—it seems to me that is common sense. We saw Denver growing, as Mr. O'Toole noted. Why were you spending money on such a study?

Mr. GABALDON. I am not familiar with that study. Again, I will have to answer that one for the record. We often spend money just to study to look at what the best alternatives are in some situations. That is probably the case here. But, like I said, I will have to get that for the record.

Mr. TIPTON. OK. And would it be unreasonable—and, Mr. O'Toole, you might want to jump in on this as well—1950, 1960, the U.S. Census noted that we had 130 million Americans. Mr. O'Toole had spoken to the need to have increased agricultural production to the tune of 70 percent to meet the growing worldwide population. But just in our country we have grown from 130 million Americans to better than 300 million Americans right now. Every one of them probably wants to take a bath, or going to need one. And we are going to have to be able to have water to be able to grow those crops.

Wouldn't it be a sensible solution, when we have, as the Chairman had noted, great snowpack years in California like we had last year, and even in Colorado, to be able to store more of that water, just to be able to plan for the future?

Mr. GABALDON. Absolutely. It would be fantastic if we could do that. As I stated earlier, we would need congressional authorization to build those projects, to raise dams, et cetera. So—and I stated earlier I am an engineer, I have built dams. So I would more than—would like to see more of those.

Mr. TIPTON. You are an engineer. And a lot—you build things, you want to be able to make them work. Do you see ways to be able to streamline this process? Because we heard a variety of testimony that was going on in terms of redundant regulations, road blocks that are being put up, increasing costs.

I have a great concern in my district for our farm and ranch community, for senior citizens on fixed incomes. We are unnecessarily increasing water costs, which becomes a back door tax increase on struggling Americans that are trying to be able to provide for their families. Do you have some recommendations on how we can streamline this process?

Mr. GABALDON. There is—the processes are founded in law, founded in regulations. It has been mentioned earlier the Endangered Species Act, the Clean Water Act, NEPA, et cetera. Those are the law, that is the law of the land. We need to comply with them, just as—

Mr. TIPTON. But as you noted, there are regulations in there that can certainly be addressed from administrative levels.

So, Mr. O'Toole, would you like to jump in on this?

Mr. O'TOOLE. Yes, sir. And let me say in the last month I took a trip through the Navajo Nation from Cortez, Colorado down through—into Arizona, and have met with the head of farming for the Navajo Nation. They have now the capability to go from 70,000 to 110,000 acres of irrigated land. It is all infrastructure.

And I think a hearing like this is so important to understand that we have to make a recommitment to that commitment we made generations ago. It is important to have rural infrastructure. The light—the Animas-La Plata Lite that you referred to, sir, that would have had the ability to expand many acres in Colorado, if the original vision had been completed.

And I think we went through a period where we kidded ourselves that we could live without infrastructure. We can't. The Platte River Dams were built during the Roosevelt Administration, not Franklin. They are 100 years old.

Mr. TIPTON. OK—

Mr. O'TOOLE. The infrastructure has to be dealt with, and we have to have new storage to be able to complete our vision.

And the numbers in this think tank thing that I have been asked to participate in went from—in the year that I have been there—from 9.2 to 9.6 billion—

Mr. MCCLINTOCK. I am sorry, Mr. O'Toole, I am going to have to cut you off.

Mr. O'TOOLE. Yes—

Mr. MCCLINTOCK. Time has expired, plus. Mr. Costa?

Mr. COSTA. Thank you very much, Mr. Chairman. Mr. O'Toole, your family has been farming for generations. My family has been farming for three generations. I farm today. We both obviously support additional surface storage supply.

But let me ask you, as a farmer—I mean I—all my farmers look very closely at the bottom line, to stay in business. And per acre-foot on how much we pay for our water is part of the bottom line. There is an old proverb that says—goes something like this, that, you know, you don't care what color the cat is, as long as the cat catches mice. We know we need additional water. Do you care so much about this project versus that project, or do you care most about what the cost per acre-foot is to the farmer?

Mr. O'TOOLE. Let me give you two answers. One is that Family Farm Alliance, from a perspective of our over 17-state look at the West, we think that storage that may not be for agriculture but keeps water from being transferred from agriculture is one critical part. But clearly, the cost of water is—the bottom line is if you are a farmer, the guy that rules your world is the bankers. And you have to make that payment—

Mr. COSTA. No, I know. But I mean getting back to the cost of water is what my farmers care the most about.

Mr. O'TOOLE. Yes, sir.

Mr. COSTA. Mr. Bettner?

Mr. BETTNER. Yes?

Mr. COSTA. The cost per acre-foot, since this is what I am talking about right now, on Sites would be approximately how much on the current funding plan that you have?

Mr. BETTNER. Right now it is estimated—well, at least the Bureau has estimated—about \$300 per acre-foot.

Mr. COSTA. \$300 per acre-foot.

Mr. BETTNER. Right.

Mr. COSTA. And when you blend that with existing water supplies, it makes it more affordable when you look down the road, I guess.

Mr. BETTNER. That is true. But the other things we are also looking at is, is the project properly designed, are the most recent construction techniques And cost involved in that estimate, have you looked at the right financing mechanisms?

Mr. COSTA. Right.

Mr. BETTNER. And so, really, you know, what it costs, how you pay for it—

Mr. COSTA. And this innovative funding methodology you think would go a long ways toward getting you to a more cost-feasible project?

Mr. BETTNER. Exactly. I mean you have to know how—what it—how much it costs, and who can afford to pay—

Mr. COSTA. Mr. Brown, for the expansion of Los Vaqueros, the additional from 100,000 acre-feet to 275,000 acre-feet, how much per acre-foot are you talking about?

Mr. BROWN. It is about \$300 an acre-foot.

Mr. COSTA. About the same as Sites. Mr. Gabaldon, I want to ask you. You talked about the projects that we are looking at. But has there been an attempt to assess how many acre-feet of water we will need in California or in other parts of the West, in terms of just a total to sustain the population growth and to maintain an agriculture economy?

Mr. GABALDON. We haven't studied that aspect of it. But that is certainly information that is out there, widely available.

Mr. COSTA. Let me get a little more local. I will come back to that with a letter. But the Bay Delta Conservation Habitat Program that I am very hopeful will get to some decision points this summer, under the conveyance program assessment I am told that part of the hangup with your study of Shasta being raised, Sites, Los Vaqueros, And Temperance is talking about whether or not the conveyance program assessments have to be complete. What does that mean, in your view?

Mr. GABALDON. The conveyance assessments, we are studying the conveyance—the operational side of that conveyance process. We now have some experience under our belt on that. We have now been in operations for a few years with that conveyance. So with that information we are taking another look at it, reformulating—

Mr. COSTA. Well, I think you have to take another look. Why is it the Bureau can't determine the feasibility of Temperance Flat or Sites until there is certainty in the Delta? I mean I think both of those projects, frankly, stand alone but could enhance issues with regards to environmental restoration.

Mr. GABALDON. I agree with that, that there is a whole lot of components you need to look at there. And there are some situations where they stand alone. In this situation we are looking at all those together. And perhaps they could be separated and looked at separately, so—

Mr. COSTA. Much has been talked about in the studies, and I said in my opening statement these studies have gone through two and sometimes three Administrations. What is the shelf life of a study?

Mr. GABALDON. Something this complex, with relentless operational, environmental issues associated with them, they could go for 10 years, 20 years.

Mr. COSTA. So if you completed something—and I know my time has expired, Mr. Chairman, but just—

Mr. MCCLINTOCK. Yes, it has.

Mr. COSTA. If you completed something in 2005, how long is it good for, 10 years? Fifteen years?

Mr. GABALDON. That is probably a decent estimate.

Mr. COSTA. Great.

Mr. MCCLINTOCK. Thank you.

Mr. COSTA. Thank you.

Mr. MCCLINTOCK. Mr. Gosar?

Mr. GOSAR. Mr. Bettner, I am a dentist by trade, so I am a poor impersonation of a politician. But I understand business, and that is where I want to go with this one. The Administration has talked about most of their money has been allocated for upkeep and stuff like that. So I want to look at the private equity markets, and how we get them involved here.

In the current environmental process, how do you see this working? You know, time to me is money. So give me an outline of how do you see us working this through.

Mr. BETTNER. Well, I think we work it through the same way we actually do our local projects. You know, a lot of it is trying to figure out what do we need, what can we afford, how are we going to pay for it, how does that affect our rate-payers, in terms of recollecting those costs? And then, from there, we actually do the environmental documentation, based on that project, looking at alternatives. And then, if we need to, we may have to mitigate for those—that project.

So, we set up—that way we actually address the financial side up front, versus right now the way it is set up is you have to do all the environmental work up front, and you never really get to how do you pay for it. And if you do, sometimes it becomes unaffordable. So you have lost all that time, you lost all that money.

And then, when we have talked to the private markets about how to finance a project like Sites, they want to know, well, is this going to—can this project go or not? And if you can't give them, you know, the say of, yes, we can get this thing built, they are going to take their money and go somewhere else. And so, trying to keep them interested in a project is vitally important.

Mr. GOSAR. So it is a time variable, right? The longer the time variable, there is a cost. Right?

Mr. BETTNER. Exactly. I mean, yes, from not only just trying to get the investors to invest in the project, but they are also holding their money out while you are trying to get studies done, design, and construction. So the more you can shorten up that window, the more you can get more people willing to invest in the project.

Mr. GOSAR. So, you know, from the environmental aspects of these studies, I know what Mr. Gabaldon said, that these studies are good for 10, 20 years. But they are really not, are they?

Mr. BETTNER. No. I mean they are not. I mean the other big concern is not just the time, but the problem is if you go into the project from an environmental review standpoint saying, "This is a way you may operate and build it," but in the end, once you decide what your financing is, and what beneficiaries want the water—including the environment, if you have a different project that comes out of that financial look, you may have to redo all your environmental documentation because your project has changed.

Mr. GOSAR. So how much of your cost would be, you know, a typical project cost for mitigation for environmental permitting?

Mr. BETTNER. Well, I can go back to, for example, one of our recent projects. We put a flat-plate fish screen on our diversion structure about nine years ago. It was a \$40 million project. We spent \$15 million in all the environmental work, permitting, and mitigation. So almost a third of the project.

Mr. GOSAR. Mr. Semanko, could you give me an idea of what your cost would be, environmental aspects and permitting?

Mr. SEMANKO. Yes, Mr. Gosar, I will have to get that to you for the record. It is substantial, though. It is almost a show-stopper for our projects.

Mr. GOSAR. And it is an ever-evolving door, is it not?

Mr. SEMANKO. Absolutely. The longer the permission process goes on, the permitting process, the higher the cost scope, particularly given the favorable costs we have right now.

Mr. GOSAR. So, going back to you, Mr. Bettner, in your opinion, what type of reforms to the existing law do we in Congress need to implement to streamline this? We need rules. Don't get me wrong. We need rules and regulations and hold them accountable. But what kind of streamlining do you see us needing?

Mr. BETTNER. I mean I think first, really—and, you know, I think Reclamation needs to define its role. I think you have a staff of employees at Reclamation we work with that do a good job, but they are also bound by existing law. And if they went into a project, for example, not as "We are going to build this project," if they went in versus "We are going to help support this project, we may help with permits, but we are not going to be the builder, financier, operator of the project," that changes their role dramatically. And from there you actually can get to construction feasibility, in my mind, a lot quicker.

As far as permitting goes, the other thing we like to have is right now you almost have to go consult individually with each agency through your process. There is really no joint consultation set up, unless—

Mr. GOSAR. So you highlight for me—this process is linear. You got to do point one first, then the next one, then the next one. Why can't we have a project manager doing them all at the same time?

Mr. BETTNER. Yes, I mean, to—in my mind, that would be a great role for Reclamation, if they could be the one that actually went out and did a joint consultation on it. That is part of their role, but maybe that is the role that they should fulfill. Giving them congressional direction like that would be very helpful.

If they are not in the business of wanting to build projects, finance them, let's construct the right role for them, and they have the staff to get it done.

Mr. GOSAR. Imagine that, multi-tasking. Last question. We really need to have litigation reform, do we not? Particularly in the—

Mr. BETTNER. You know what? I can't—I am an engineer. I try not to—if my attorneys—if I start talking, my attorney, he will get mad at me. So I am not going to—I can't answer that one.

Mr. GOSAR. Mr. Semanko?

Mr. SEMANKO. Yes.

Mr. GOSAR. Thank you. My time is up.

Mr. MCCLINTOCK. Thank you. Mr. Garamendi?

Mr. GARAMENDI. Mr. Chairman, thank you for the hearing. And for the witnesses, thank you for your presentations.

Mr. O'Toole, in your written testimony you said there would be nothing done with water in the West without being winners and losers, and therein lies the problem. Most everything that occurs, there are winners and there are losers. And the task at hand is to find a way in which there are winners and winners. It becomes very, very complex. I would like to try to get to some solutions here.

One of the issues, it seems to me, is funding at every level. At the Federal level, the Bureau of Reclamation has a very limited budget, and it stretches that budget out among projects across the entire West, the result of which is that they are unable—I should ask this as a question.

Let me make the statement and then put a question mark at the end. It seems to me that they are unable to focus sufficient attention on individual projects so that things can move forward rapidly. Is that the question, Mr. Gabaldon?

Mr. GABALDON. That is correct. There is competing projects, competing issues that we have to deal with in our budget. We do get, as I mentioned earlier, about \$1 billion average in the appropriations. And with that, within that, we have a lot of safety of dams issues, we have a lot of competing issues there.

Mr. GARAMENDI. Now, one of the reasons you have so many issues to deal with is that we tell you to deal with so many issues.

Mr. GABALDON. That is right.

Mr. GARAMENDI. I mean these are congressional directives. We say, "Do this," "Do that," and then we don't give you enough money to get it done rapidly. And so, this is something that we should be paying attention to, both in projects, as well as with the appropriations.

And associated with that, the question has been appropriately raised here as to coordination. Now, this is something that we could do here, with regard to directive. We could set priorities. Instead of all of us having our own individual priorities and telling the Bureau of Reclamation, "Get them all done," we could set priorities and we could require coordination. We don't. And, therefore, don't be surprised that it doesn't exist. Insufficient money, insufficient direction, and too many things to do with too little money. That is our problem, and we create it, and we could change that.

Second, Mr. Bettner, you raised, I think, a very interesting point about financing. For some 15 years there has been before the Con-

gress an infrastructure bank which could finance cash flow projects such as Sites Reservoir. You did come up with a different proposal which you call a water infrastructure financing innovation act. I would like you to expand on that. You did it in about 15 seconds. Could you take a little longer? Because this too is a challenge that could be ours, if we chose to solve problems instead of just ruminating.

Mr. BETTNER. Sure. Thank you. Yes, and I apologize, I was running out of time there. But, you know, we have looked at what has been done under the Transportation Infrastructure and Finance Act, and that was really kind of what we looked at as really the outline, potentially, of how it could work for water.

But under that system, you know, you have basically about \$10 of credit assistance—for every \$10 of credit assistance you get \$30 of investment in infrastructure. And what we are saying is that we don't think it is likely that, you know, if we come to Congress with a \$3 billion project in 7 years, that potentially you are going to say, "We found money and we are going to fund it."

So, we have taken the approach of, you know, really it needs to be—we need to go to the private side, we need to look to them to help finance the project. But if there was some Federal mechanism to basically provide some backing to those long-term investments, that would allow them to come forward and be more willing to make investments to the project at a potentially lower interest rate, as well.

Mr. GARAMENDI. Essentially a loan guarantee program?

Mr. BETTNER. Exactly, exactly.

Mr. GARAMENDI. Now, you know, if we want to do something besides just yak back and forth across these various hearings we could focus on innovative solutions such as this one that you have just recommended.

The other issue that I really would like to get to is how we are going to finance all of these projects. The loan guarantee program is a way, but it will not sufficiently address every project, because there are multiple uses of a project, and therefore, multiple payers. This is one of the problems that holds up most every project, is who is going to pay for it.

Now, that gets to be a very complex situation. But at the outset, you don't know that until you know what the project is going to look like and where the beneficiaries might be. We need to turn our attention to that mechanism of how to determine who is going to pay for it early on in the project.

I will let it go at that, as a challenge for us—

Mr. MCCLINTOCK. The gentleman's time has expired. He will have to let it go at that. But we will have another round.

Mr. Labrador?

Mr. LABRADOR. Thank you, Mr. Chairman. Mr. Semanko, Norm, you discussed the proposed Boise River Arrowrock, which would increase storage space, water supplies, and provide environmental enhancements. I understand that you are concerned that the U.S. Fish and Wildlife Services designation of the Boise River as a critical habitat for the bull trout may impede the project's progress. How serious of an impediment is the Fish and Wildlife Service's

critical habitat designation for the project? And what steps can be taken to alleviate it?

Mr. SEMANKO. Well, Congressman Labrador, it is a serious potential impediment. Arrowrock is an early generation Reclamation project. And interestingly, the Corps of Engineers is the one that has the feasibility study authority on the Boise River, and who the Idaho Water Resource Board has been working with.

Under section 7 of the Endangered Species Act, any time there is a proposed Federal action there has to be consultation, both with regard to the impact on the fish that are listed themselves, and the critical habitat that has been designated. So the inquiry with the fishery service will be what kind of impact would inundation of an additional 3,000 acre-feet have, another 5 or 6 miles of riverine habitat inundated have. And that is a serious consideration.

As I mentioned briefly, Governor Otter is not impressed with the critical habitat designation. The water user community certainly is not. This has been an ongoing saga for 20-some years. The Boise River was not included in critical habitat a few years ago. And then there was a lawsuit that was conveniently settled, And the new critical habitat designation included this, notwithstanding the fact that there are significant economic impacts associated with the critical habitat designation that, under the Endangered Species Act—that is one of the few places in the Act where economics come into consideration. The Service certainly could have found that the critical habitat designation was not necessary.

So, we have reserved the opportunity to litigate that issue, frankly. But, more importantly, the Governor, working with the Fish And Wildlife Service hopefully, And certainly with our Idaho Department of Fish And Game, are beginning the assessment through the recovery planning process of whether these fish have, in fact, been recovered, whether they can be delisted. And if they are delisted, then there would be no more critical habitat designation.

So, that would be a roundabout way of eliminating that consideration. But, absent that, we would have to work through the Idaho Water Resource Board and the Federal agencies would have to work through the consultation process under section 7, which is, of course, subject to potential citizen lawsuits, as well.

Mr. LABRADOR. Considering that Idaho is one of the few states in which the state doesn't have the authority to issue permits, what avenues will users have to object or challenge a permit?

Mr. SEMANKO. With regard to the Clean Water Act, that is certainly a concern. I know that the Legislature—I believe today at a hearing, which you are very familiar with that process, as a former legislator—is considering taking over the Clean Water Act permitting program, the MPDS program. Really, it is very difficult. We—you are basically—your resort is to challenging EPA in the Federal district court, and that is no cake walk. So it is a very difficult process. Even our DEQ in Idaho has very limited influence on the process.

Mr. LABRADOR. How much do environmental permitting and mitigation add to project costs?

Mr. SEMANKO. Congressman, as I mentioned to Mr. Gosar, I would have to get exact figures. But it can be a deal breaker. It depends on whether a categorical exclusion can be identified,

whether EA is sufficient, or whether you have to go through the full-blown EIS process. If the section 7 consultation is involved, all of those different variables add to the cost. So it can be astronomical. In all cases it is going to be significant enough to be a potential show-stopper.

Mr. LABRADOR. I am going to ask you a question that may throw you off a little bit, and you may not have an answer for this.

But I don't know if you have watched on MSNBC there has been a series of ads where some of the political talkers talk about projects like the Hoover Dam and, you know, you have one of the political talkers are talking about how America is so great because we could do projects like the Hoover Dam. And every time I see that ad I think of the hypocrisy of some people. And I think. Could we build the Hoover Dam today? And would there be any impediments to building the Hoover Dam if—in today's environment? I don't know if you have an answer to that, but—

Mr. SEMANKO. If you ask the gentleman to my left whether we could build Hoover Dam again today, I haven't seen one built lately.

But I can tell you that one of my favorite sayings from former Commissioner John Keys is, "We are building new dams all the time. We are replacing and existing dams." And that is the one thing that we have to make sure that we continue to do, in addition to looking at additional storage.

Mr. LABRADOR. Thank you.

Mr. MCCLINTOCK. Thank you. Mr. Gardner?

Mr. GARDNER. Thank you, Mr. Chairman. And, Mr. Gabaldon, what is the number one priority of the Bureau of Reclamation?

Mr. GABALDON. Our—I go back to our mission. That is to deliver water and generate power. That is what we are about.

Mr. GARDNER. And what is the number one way that you are able to deliver water?

Mr. GABALDON. Through working with irrigation districts, working with our stakeholders, and conveying water from point A to point B, from where it is abundant to where it is needed, i.e., storage, i.e., Central Arizona project comes to mind. We are also doing new technology, we are also doing conservation, all of those, to get to what our main priority is, of delivering water.

Mr. GARDNER. In terms of delivering water and finding new water, what is the number one way in which you accomplish that? Is it—how would you rank, say, water storage as compared to conservation?

Mr. GABALDON. I would have to go back and look at the portfolio, as far as how much water we have, conservation-wise, how much water we are yielding from those projects. Right now I would rank storage pretty high up there, if not at the top. That is what we did—

Mr. GARDNER. As in—

Mr. GABALDON [continuing]. Dams in the western—

Mr. GARDNER. You believe the number one focus of Bureau of Reclamation to meet—what you said in the mission statement—is water storage?

Mr. GABALDON. I would hate to rank those, but I mean, if—that is where we have a lot of our water right now.

Mr. GARDNER. If that is the case, then how can we help encourage the Bureau of Reclamation to push water storage even more?

Mr. GABALDON. I think—

Mr. GARDNER. In an expedited fashion?

Mr. GABALDON. Yes. The feasibility studies we are doing now in California, the projects we mentioned, we have several of those through every region, except Great Plains Region, we don't have any there.

But in upper Colorado we are looking at El Vado Reservoir. In New Mexico we are looking at some projects in—

Mr. GARDNER. How do we get from looking at them to doing them?

Mr. GABALDON. We need a congressional authorization.

Mr. GARDNER. Congressional authorization? That is the only thing that is holding you back?

Mr. GABALDON. Not—I mean we have all the requirements that gets to that—i.e., feasibility studies, feasibility reviews, complying with the laws, NEPA, et cetera, that are part of the feasibility of the planning projects. So, yes, all those get to the process of getting a project authorized.

Mr. GARDNER. And the reason I ask that question, that series of questions, is in my conversations with Colorado water users, it seems that the one thing they come back to me and they say is it feels like the Administration is no longer following—the Bureau of Reclamation is no longer following the desires of local water users, the desire of local conservation district conservancy offices, but instead is pushing a mentality that is more toward conservation only, and away from water storage. And that is throughout all of the departments in government or agencies that are working with the western water agencies, whether that is the EPA or Bureau of Reclamation or the Corps of Engineers.

Mr. O'Toole, in your experience, do you think the agencies that you work with, your members work with, see the focus on water storage that was mentioned by the Bureau of Reclamation?

Mr. O'TOOLE. Actually, I think that it has been years since we have really had the debate that is beginning here. We indicated in our testimony that the Family Farm Alliance asked seven years ago for Bureau of Rec potential projects. We have that on a database.

You know, I think we are reinvigorating because we understand the multiple needs for more storage. And so that debate has been reinvigorated. But I think over the last few years—the last few decades, really—we diminished our appetite, to our demise, to our—you know, really, not to the benefit of both farmers and growth in the West.

Mr. GARDNER. Mr. Gabaldon, I believe in Mr. O'Toole's opening statement, in his written statement, he mentions several different regulations or practices that are interfering with the ability to streamline permitting, or that are blocking new projects. I would really be interested in getting the Bureau of Reclamation's take on those.

And I am sure you may not have had time to study it, but it is on page 10 of his written testimony under heading 2, where it talks about the 5 different points that they have identified that are im-

pediments to new projects. And if you could get back to me, Bureau of Reclamation get back to me on your opinion of these five points that he raises, I would certainly appreciate it, and then perhaps share that with the other members of the Committee.

And then, Mr. O'Toole, you mentioned that—in your opening statement, that the easiest way for municipal, industrial, and others to find the water that they will need is through the buy-up and dry-up of agricultural land.

Do the others on the panel agree with that statement? Mr. Bettner?

Mr. BETTNER. Yes. I would say if things don't change, it looks like the problems are going to be solved on the back of agriculture. That seems the direction that it is going.

Mr. GARDNER. Mr. Brown?

Mr. BROWN. I think balance is the key.

Mr. GARDNER. But do you think—I agree with you, balance is the key. But I mean, do you think that the easiest way to achieve water now is the buy-up and dry-up of agricultural land?

Mr. BROWN. I think there is a market of willing sellers out there. And if they are willing to sell, then there are buyers that will buy the water.

Mr. GARDNER. I will take that as a yes. Mr. Semanko?

Mr. SEMANKO. The willing sellers in Idaho are very limited, and that is why you are seeing a progression toward looking at building additional storage, not so much for agriculture, but for the municipal demands.

Mr. MCCLINTOCK. Great, thank you. I am going to have to cut you off there, but we are going to do another round, starting right now.

Mr. Gabaldon, I want to get the record clear on this. The New Melones Dam was completed in 1979. It was 2.4 million acre-feet of storage capacity. Animas-La Plata was 120,000 acre-feet, about 5 percent of the capacity of the New Melones. Has the Bureau of Reclamation, since the New Melones, constructed any dam with a capacity of more than a million acre-feet?

Mr. GABALDON. No, Mr. Chairman.

Mr. MCCLINTOCK. Has it constructed any dam with capacity more than 500,000 acre-feet?

Mr. GABALDON. Not since then, Mr.—

Mr. MCCLINTOCK. Has it constructed a dam with a capacity above 250,000 acre-feet?

Mr. GABALDON. Animas-La Plata was the last one, and that was 120,000.

Mr. MCCLINTOCK. Five percent of the capacity of New Melones. So I will correct my statement of in this generation, from 1979, Reclamation has not completed a single major dam, if you define that as over 250,000 acre-feet of storage capacity, which would be about one-tenth the capacity of the New Melones.

Mr. GABALDON. I don't know if the numbers are accurate. I assume they are. I can say that, had we had the authorization to do those, we would certainly be building.

Mr. MCCLINTOCK. No, I think you would certainly be studying them, which is the problem, and I think that gets to the crux of this matter.

The cost of Sites, Mr. Bettner, was estimated at 300 acre-feet?

Mr. BETTNER. The cost or the yield? I am sorry, what—

Mr. MCCLINTOCK. No, for yield. The cost was 300—

Mr. BETTNER. Oh, yes, about \$300 per acre-foot, correct.

Mr. MCCLINTOCK. OK. And your estimate was that, generally speaking, about a third of the project cost is regulatory in nature?

Mr. BETTNER. Well, I was talking about projects that we—our fish screen project. I can't speak to right now what we think the regulatory cost—

Mr. MCCLINTOCK. Just the actual construction. What would the cost be of—just for the actual construction of that dam?

Mr. BETTNER. The dam itself is only about half-a-billion dollars— or about \$500 million. But then you have other facilities that go along with it, a couple pipelines—

Mr. MCCLINTOCK. OK, that is exactly the question I was getting at. Half-a-million—or half-a-billion dollars, you said—actually to build the dam.

Mr. BETTNER. But there are other parts of the project, the pipeline—

Mr. MCCLINTOCK. Exactly—oh, no, no, I understand.

Mr. BETTNER. Parts of the infrastructure—right.

Mr. MCCLINTOCK. The conveyance and infrastructure is one thing.

Mr. BETTNER. Right, right.

Mr. MCCLINTOCK. But how much, in addition to that, to meet all of the regulatory requirements?

Mr. BETTNER. Well, we—one of the positives about the project is we haven't identified a lot of environmental issues with the site itself. So we are expecting, actually, the cost of mitigation to be fairly low. Where we see the permitting action is we have a project that is going to meet multiple benefits, including the ecosystem. And part of that is we have to get permits from the wildlife agency.

So, if they see the project as a benefit, we hope that our permitting process goes fairly—

Mr. MCCLINTOCK. Would you consider a project that costs \$1,600 per acre-foot to be economically attractive?

Mr. BETTNER. No.

Mr. MCCLINTOCK. Would it surprise you that this Congress, in the prior session, approved a bill that came in at exactly that cost, a Title XVI recycling bill?

Mr. BETTNER. I am not familiar with that, but—I can't speak to that.

Mr. MCCLINTOCK. Mr. Semanko And Mr. Bettner, with respect to the Endangered Species Act, both of you said that that is a major cost amplifier of these projects. Suppose we simply required that a hatchery fish be included in the ESA counts. How would that affect your projects?

Mr. BETTNER. For our project, we are actually trying to enhance existing wild runs of fish. So we have four different runs on the Sacramento River, and so we see this—our project is trying to enhance the existing runs. Some of those are hatchery fish. But we see the wild runs as being just as significant.

Mr. MCCLINTOCK. Mr. Semanko?

Mr. SEMANKO. We would, Mr. Chairman, potentially see the fish that we are concerned about delisted, the salmonids, in particular.

Mr. MCCLINTOCK. Mr. Semanko, you mentioned the categorical exclusions being a cost saver of—it is my understanding the Administration, through the Council on Environmental Quality, is proposing new EPA guidelines for implementation of categorical exemptions. How would that affect your projects?

Mr. SEMANKO. Mr. Chairman, we have not had a chance to look at that. I will tell you that categorical exclusions, in my 18 years of practice, are more something that I read about during law school than I have seen practical application of on the ground. It is very difficult to find a categorical exclusion that works, from my experience. So I am hopeful this will improve that, but I have had not had a chance to look at that.

Mr. MCCLINTOCK. OK, thank you. I will yield back and recognize the Ranking Member.

Mrs. NAPOLITANO. Thank you, Mr. Chair. I really was looking at my Blackberry, because it was a mention of the use of water to develop oil shale. And—

Mr. MCCLINTOCK. Excuse me for interrupting. Will the Clerk please reset the clock? Sorry.

Mrs. NAPOLITANO. And the—I will mention the comment from the Director of Renewable Energy Development for the Rocky Mountain Farmers Union, who states, “We are really concerned about the impacts on water. We cannot gamble away our water on oil shale speculation. We cannot risk our farm economy.” That is another component to be able to take—to keep in mind as we are moving along and trying to, how would I say, remove a lot of the regulations by government on water. This is one other one that I am very concerned about.

Mr. Semanko, on the Arrowhead Project in Idaho, you mentioned the critical habitat impact as an impediment. But isn't it true there is a state designation, the Boise River, that it is a natural river? So both Federal and state regs apply?

Mr. SEMANKO. Madam Chair, that is correct. And the Idaho Water Resource Board is the one that made that designation. And, fortunately, it is not a Federal Wild Scenic designation, so the Idaho Water Resource Board can change that, and is looking at changing that.

Mrs. NAPOLITANO. OK. Then one of the other things that I would like to ask Mr. Gabaldon, the CALFED storage studies take—have taken a long time. Why?

Mr. GABALDON. There is a—I mentioned some of those earlier.

Mrs. NAPOLITANO. Quickly.

Mr. GABALDON. Relentless operational and environmental changes. We constantly are getting hit with litigation there. There is new biological opinions that go into litigation. So every time one of those happens, we need to take another look at those things.

Mrs. NAPOLITANO. Thank you. Mr.—

Mr. GABALDON. That is just one reason.

Mrs. NAPOLITANO. Mr. Brown, how important was the cooperation with other agencies—and I am talking about state, local, and Federal—to the success of the expansion? How did you attain that cooperation?

Mr. BROWN. It is very critical, particularly the Bureau provided significant support in getting permits and approvals from the various agencies, as well as state Department of Water Resources, the state Control Board.

How did we achieve that cooperation? Largely through working to secure the funding that was needed to support the staff that would provide those resources.

Mrs. NAPOLITANO. Thank you. Mr. O'Toole, on page 11 you indicate that those who benefit from new water supply infrastructure should help pay. And you go on to state, "In the country we are seeing a move in the opposite direction, where ag lands are going out of production, and being lost to expanding urban development."

Are you implying that we have to look at ag versus people? Because cities cannot control who moves into their city. And most of them do not set any parameters for builders to say, "OK, you can only build five units or five homes."

Mr. O'TOOLE. I really think that pitting each other against each other is not what is happening. The reality is there is a limited supply, and the money goes to the highest bidder in many cases.

My thought process, Madam Chairman, is that the discussion about the need to produce food, and the importance of rural communities, has to be integrated into our long-term vision of what America we want. And we believe that storage can help ameliorate those pitting against each other.

Mrs. NAPOLITANO. Right. And I totally agree. But storage is only part of the portfolio that we need to look at, especially if it is above ground, where you have the evaporation rate only 15 to 20 percent. And if we have more warm weather and drought conditions, that is going to be worse.

Mr. O'TOOLE. Absolutely. And, Madam Chairman, I understand this Committee is the Natural Resources Committee. One of the other huge inputs is the energy development in the West. And I saw where the State of Utah just released 59,000 acre-feet for some—nuclear fracking has a water cost. Every part of the Western economy has a water cost. Our message is that it seems to be always agriculture who is giving up water for those other needs.

Mrs. NAPOLITANO. Thank you for that answer. And, Mr. Chairman, I take a little exception to your comment about comparing the fish, the wild fish versus hatchery fish, to children born at home versus the hospital. You are not a mother. I yield back.

[Laughter.]

Mr. McCLINTOCK. Whereas I am eternally grateful of that every day.

Mr. Tipton?

Mr. TIPTON. Thank you, Mr. Chairman. And, Mr. Gabaldon, just from a Colorado perspective, could you maybe speak to the importance a little bit in terms of recreation and water storage?

Mr. GABALDON. Recreation? What—recreation?

Mr. TIPTON. Yes. How many people recreate from Reclamation facilities in Colorado each year? Do you have any—

Mr. GABALDON. I don't—

Mr. TIPTON [continuing]. Estimates on that?

Mr. GABALDON [continuing]. Know in Colorado. Certainly you build a reservoir—you build a dam, you have a reservoir, you are

going to have ample opportunities for recreation, from boating to fishing to—

Mr. TIPTON. So it is positive.

Mr. GABALDON. Yes.

Mr. TIPTON. And that is part of Reclamation's core mission—

Mr. GABALDON. It is.

Mr. TIPTON [continuing]. As well?

Mr. GABALDON. Very positively.

Mr. TIPTON. And with—and I am going to go back to a question I had asked earlier, just as a point of clarification. Does the Bureau of Reclamation facilities, do those help stabilize water flows to be able to make rafting possible?

Mr. GABALDON. Yes. We are not in the business of releasing water for—

Mr. TIPTON. Specifically for that—

Mr. GABALDON. Right.

Mr. TIPTON [continuing]. But it does help stabilize it during a season, which—

Mr. GABALDON. It would.

Mr. TIPTON [continuing]. Probably also helps endangered species for instream flows and—

Mr. GABALDON. Absolutely, absolutely—

Mr. TIPTON [continuing]. Those sorts of things, as well.

Mr. GABALDON. Yes.

Mr. TIPTON. Great. You know, one thing I would like to be able to speak to—and Representative Napolitano And I visited on this a little bit—when it comes to some of the fracking issues, when you get into Colorado, at least, you have to be able to own your water. We have a priority-based system that is regulated by the State. It is not a freeflow free grant that actually exists in that. So that ought to give you a little bit of comfort, I think.

And, Mr. O'Toole, I would like you to maybe address something that I think is critical. When we are talking about conservation for water, are you seeing it in the farm and ranch community, that they are making efforts to actually conserve and make highest and best use of the water that they have available?

Mr. O'TOOLE. Well, when our community is—still looking at some other storage. And we integrate—as I said, we created 25-mile fishery hatching for Upper Colorado endangered fish in the reservoir. We did build—those are integrated into our long term.

I would tell you that I—in a relationship I have on migratory birds with a committee that works on those, it is interesting to know the highest bird count since 1955 is now. And when you dig down on why, it is because of irrigated agriculture. And whether it be the Central Valley or Klamath or the rice—

Mr. TIPTON. Right.

Mr. O'TOOLE [continuing]. North of San Francisco, it is an integrated process. And our bountiful wildlife populations have an awful lot to do with agriculture.

Mr. TIPTON. You bet. Now, and is it your observation that our farmers and ranchers are trying to get the highest, best use out of their water as well, using some different practices in irrigation?

Mr. O'TOOLE. Well, in our family's ranch, we integrated our irrigation and our fishery. We have a fishery that my daughter man-

ages. It is another income source. We have created an important bird area in our White Heron area, which is—you know, I can tell you that with elder birder, don't get in front of them when they see a new bird.

But there is all kinds of opportunities to integrate what we all know, and that is the most valuable resource is water. And if done right, it is a multiplicity of opportunities.

Mr. TIPTON. I don't want to put words in your mouth, but I would just like to hear your opinion. And Colorado and probably elsewhere, you know, there is an old saying that money doesn't follow water, water follows money. And that lends itself to your comment that we are seeing more water being directed into urban areas.

When I look at my district right now, Las Animas County, Otero County, we have literally seen areas dried up, in terms of farms that are going to have to be able to produce the food to be able to feed the people that choose to live in those cities.

Would it be a fair representation of your views that in order to be able to create a win-win, to be able to feed the people, to be able to grow the cities, that it is in our best interest to be able to store more water?

Mr. O'TOOLE. The one example I would say quickly is South Park, that transferred its water to the urban areas and the Eastern Slope in 1998. Storage would have been much preferable to that just transfer.

And I think we reduce our viability by not looking at the whole picture. And for a couple of decades we haven't looked at the whole picture. I think that is why this hearing, I think, is so important. We are going to expand our opportunities to look at a whole variety of ways to do all the things that we think are valuable.

Mr. TIPTON. Well, thank you. I appreciate your comments. And I noted you had said it has been years since we have had a debate, the debate that is beginning here today. And, Mr. Chairman, I again want to applaud you for holding this hearing. Thank you.

Mr. MCCLINTOCK. Well, I want to thank you for suggesting it. Mr. Costa.

Mr. COSTA. Thank you again, Mr. Chairman. Mr. O'Toole, I want to thank the Family Farm Alliance for the work you do on an ongoing basis as it relates to our water resources throughout the West. And you play an important role.

Mr. Bettner, I want to go back to where my line of questioning was before. Do you think that we need to have all the answers with regards to the Bay Delta Conservation Plan before we can decide whether or not Sites or Temperance Flat are feasible?

Mr. BETTNER. Well, I mean we think, obviously, the Bay Delta Conservation Plan and some form of conveyance to the Delta is important for California.

Mr. COSTA. So do I.

Mr. BETTNER. And I think what we need to do is—and what we have done for Sites, and I am sure our friends are looking at Temperance Flat, as well—is you should be able to have a scenario where those projects can work with or without conveyance. And we have looked at Sites. We have configurations—

Mr. COSTA. OK.

Mr. BETTNER [continuing]. Of tradeoff for benefits that can work under—

Mr. COSTA. All right.

Mr. BETTNER [continuing]. Scenario.

Mr. COSTA. Yes, that is good. Mr. Brown or Mr. Bettner, is there anything you would recommend to the Committee in a short, concise statement, as to where we ought to focus our efforts on a bipartisan basis?

Mr. BROWN. I think one of the keys is just recognizing that the Bureau's role is changing in the development of surface storage, and they are going from an agency that builds dams to one that helps locals build dams. And that is the most critical focus, I think.

Mr. COSTA. And so we ought to try to facilitate that process and make it work better?

Mr. BROWN. Yes. And another point I want to make is that, you know, this ag versus urban issue, it is not really an ag versus urban issue in California. We are trying to capture surplus flows. It is the flows that the Chairman spoke about in his opening remarks that we are trying to catch before it goes out to the—

Mr. COSTA. Yes. Well, I think agriculture and the urban water users have worked closer in the last several years—and I have been working with them for 20-plus years—than they have in the past.

Mr. Gabaldon?

Mr. GABALDON. Gabaldon.

Mr. COSTA. Yes. I want to go back to the studies. Your time lines for—and I want to commend the Bureau for—and Mr. Connor—for getting the report out this week on Shasta. When is the time line for the completion of the Shasta study? Because, as I look at this right now, between 2002 and 2008, you have spent—2001, excuse me—\$130 million on your studies through those fiscal years. What is your time line for completion?

Mr. GABALDON. I don't have that date with me, that time line.

Mr. COSTA. Would you get that to the Subcommittee?

Mr. GABALDON. I will be glad to do that—

Mr. COSTA. I think we all want to know that. All of us from California sure want to know that.

With the interim report out this week on Shasta, when do you look for the completion of the one on Shasta? Do you know the answer to that question?

Mr. GABALDON. I will provide that for the record.

Mr. COSTA. OK. And also then with Sites, as well as with Los Vaqueros And Temperance Flat.

Mr. GABALDON. We will be glad to provide the whole—

Mr. COSTA. All right. I am curious. You know, I mean we have a sort of a ongoing debate around here for 10 years or longer about what the causes of climate change are. I hope no one debates, though, that climate does change. It has historically changed for millions of years, going back to the Ice Ages.

I am wondering with the transition, what seems to be a transition—last year 174 percent above average snowpack in the Sierra, and December of last year and one of the lowest recorded rainfalls in California in history since we have been keeping records, and January hasn't been much better—although we are getting some

rain today—with these wide swings, does that change how we manage our reservoirs? And to ensure—because most projects that are built out of either a combination of water supply, flood control, hydroelectric power, and with these wide variations, I am wondering. Can we realize a supply that historically these reservoirs have provided?

Mr. GABALDON. We definitely look at those from an operational standpoint. The climate change could be debated, yes, it has been debated.

Mr. COSTA. Yes, I don't want to go there.

Mr. GABALDON. From a water—

Mr. COSTA. But it is—it does change.

Mr. GABALDON. From a water manager and from an engineer's perspective, we know that the water is coming off earlier, off the mountains, off the snowpack. So we are adjusting our operations to meet that change, if you will.

And also, there is more demand. On the demand side there is more—the agricultural season is a little bit longer. So we are making all those and—factoring all those into our day-to-day operations.

Mr. COSTA. And to be able to forecast. I mean, as Mr. O'Toole said, farmers go to their bank for their annual crop loans. Unless you can depend upon a water supply, the banker is not going to loan you money. It is that simple.

Mr. GABALDON. Yes, that is right. So we are looking at those operations.

Mr. McCLINTOCK. Thank you. Mr. Gosar.

Mrs. NAPOLITANO. Mr. Chair?

Mr. McCLINTOCK. If you—the Subcommittee is pleased to welcome Mr. Salazar back.

Mrs. NAPOLITANO. Secretary of Agriculture.

Mr. SALAZAR. How are you, sir? Good to see you. I wanted to say hello to all my great colleagues. Keep up the good work.

Mr. McCLINTOCK. And now, sorry, Mr. Gosar. Please restart the clock.

Mr. GOSAR. Well, I want to go back to my friend and colleague, Mr. Tipton. The real adage is, "Whiskey is for drinking, and water is for fighting over." That is the real thing about the West, and that is how important it is.

I also want to underscore about the conservation that ranchers and farmers do. I mean we have been proactive about that. You know, from the farmers that use low—infuse tape emitters, you know, in growing crops down in the South, in Arizona. It is absolutely incredible. To the innovations that Arizona has spearheaded, to even go further with storage, underground storage. We actually have water banking. We work with California and Nevada. It is very integrated, and it is very proactive.

And that is where the other thing I want to go with, is that, you know, the needs for agriculture are very different in some cases than they are for drinking. You know, for our recycled gray water. You know, we need to put more influence on recapture and cleaning, to utilize that as a resource in reclamation. Plants need things like phosphates and calciums that we particularly don't want, but they help grow plants.

You know, Mr. Gabaldon, can you tell me, as a percentage, what the cost of your studies is when you look at litigation?

Mr. GABALDON. You mean the impacts of litigation on—

Mr. GOSAR. On your studies.

Mr. GABALDON. Well, that is going to vary dramatically, depending on the nature of the litigation. And I can certainly get some information to you on what—maybe some technical projects and what the litigation costs were associated with that.

I know I was area manager in Albuquerque, and I was actually named in a lawsuit, an endangered species, and the lawsuit cost not just to reclamation but to stakeholders like the Rio Grande Conservancy District, to the State of New Mexico, to the City of Albuquerque, to Santa Fe, et cetera, were significant. I don't know what exactly those numbers were, but it is going to vary from project to project.

Mr. GOSAR. And it is rising over time, the further we go down 2000 to 2010, the costs are increasing. Right?

Mr. GABALDON. I don't—

Mr. GOSAR. So, with your experience, could you tell Mr. Bettner that he is kind of dreaming, if he is going to expect the kind of streamlining process with the environmental aspects in his project?

Mr. GABALDON. I—from my experience in Albuquerque, front and center in the middle of that, all I can say is that there were some costs associated with that litigation.

Mr. GOSAR. So, if we—and Mr. Semanko, if we go to these categorical exclusions, you know, for the managers, do you see that opening up more opportunities for litigation, more opportunities for litigation to hit from that perspective?

Mr. SEMANKO. You know, I am not sure, Mr. Gosar, if it would open up more opportunities for litigation. I think it would provide more certainty if you knew, up front, as a project manager, that something may fit into a categorical exclusion. I think it would be better for the agency folks if they knew that something could fit into a categorical exclusion.

Unless you changed the underlying citizen sue provisions and the incentive for folks to bring lawsuits because they get awarded attorneys fees, et cetera—you know the story—you won't eliminate that dynamic. But categorical exclusions could provide an avenue, a safe harbor, if you will, more certainty for folks moving forward with projects if they knew that there would be a more streamlined NEPA process.

Mr. GOSAR. Mr. Bettner, what would you say?

Mr. BETTNER. Well, you know, in California we have categorical exemptions that we have that may be akin to what you may be talking about from a Federal level. And we call—when you do that through a state process, you can do what they call a “notice of exemption.” But you still have to file that, you still have to put it out for public review. And somebody can still challenge you on the assumptions you made, as to whether that—you actually complied with the exact exemption or not.

So, it could hold some hope, but I am not sure it necessarily shortens the potential for somebody, you know, filing a lawsuit that you didn't do it correctly.

Mr. GOSAR. How do you feel about that, Mr. O'Toole?

Mr. O'TOOLE. Many of the farmers that were impacted by the Delta smelt decisions in the process on endangered species, that was a very troubling time for us. What is—our family has won awards on sage grouse management and other conservation issues. And I am proud of that.

But I can tell you that looking down the road at the settlements that Interior has made with Center for Biological Diversity, for example, on expansion of more endangered species, I don't see how we move forward unless we have resolved that, philosophically. We—many projects aren't being done, not because they aren't the right ones, but governments are looking and saying, "We just can't afford the time. We have to try to do things that aren't as efficient." That isn't the right way to run a business.

Mr. GOSAR. Yes. It is the same thing we find in our forests. Thank you.

Mr. MCCLINTOCK. All right, thank you. Mr. Garamendi?

Mr. GARAMENDI. This hearing and the debate going on here is, I don't know, the 27th year, the 30th year of it. And it is not going to get resolved. But we do have an opportunity, it seems to me, to make some significant progress, at least in California. And my familiarity with some of these other projects, we could also.

It is going to come down to, in my view, the Federal Government deciding how it wants to spend money. Many of these projects are simply held up for lack of Federal funding and, discussed earlier, the issue of the Bureau of Reclamation being stretched thinly across many, many projects, and stretching things out because of that. We ought to set some priorities.

We do know that in California, with the recent completion of the initial investigation of the Shasta Dam, that it is a viable project, at least as we know it today. We also know that the Sites Reservoir is a viable project. What is going to hold us up a long, long time is figuring out who is going to pay for it. How much is environmental down the river? How much of the benefit goes to the exporters? That is the Delta exporters. How much goes to north of the Delta? And that is going to take a long time for both of these projects.

Now, Mr. Chairman, if you really want to build dams, these are two viable dams that are ready to go. But we will be held up for lack of funding through process everything from the detailed engineering to ultimate financing of it. So if you have \$4 billion sitting somewhere and you want to appropriate it and you want to build dams, you can build these dams probably very quickly, and you can get past the litigation and all of those issues. But if we are going to continue to cut Federal budgets on infrastructure projects, which is what we have been doing, then don't expect these projects to move swiftly forward.

And, by the way, I believe the New Melones Dam was built by the Army Corps of Engineers. Is that correct, Mr. Gabaldon?

Mr. GABALDON. Yes.

Mr. GARAMENDI. It was not a Bureau project. Maybe your point still remains. But for the record, let us get accurate.

With regard to moving forward, it comes down to what we do here. We could set up a financing mechanism—actually, the infrastructure bank would probably be somewhat cheaper than the loan

guarantee program that Mr. Bettner has proposed, but either one could move projects more quickly forward.

Now, how do we score that here? We would probably score it at the potential total risk, total loss, not as to what the actuarial loss might be. So, we also have the potential for an infrastructure bank. These are ways we can fund projects. We can sit here in Committee and talk forever. But if we want to really do something, we need to find the money.

Both of those are viable ways of dealing with it, a loan guarantee or an infrastructure bank. We ought to move forward with legislation on both of those if we want to build projects. If we want to build projects beyond that, then we are going to have to come up with Federal money. Or not. And we are out of that game. If the Federal Government wants to get out of the way, as happened in the Los Vaqueros Reservoir, OK. But let's not go around and around and around and leave the Bureau of Reclamation out there, not knowing whether it is going to go left or right or build or not build.

So, Mr. Chairman, as you move this Committee forward, please try to get to the heart of the matter. Please try to get to the heart of the matter. Is the Majority in this House willing to put the money up to build the projects? Last year you cut the budgets. You cut the budgets. You can't expect these projects to go forward without the money to support the projects. If you want the Federal Government out of it, then state so and let the local governments, state And irrigators And so forth, move it forward. But you got everybody caught between Never Never Land.

So, we are going to deal with the budget very shortly, \$4 billion and you will build some great dams in California. Do you have \$4 billion lying around?

[No response.]

Mr. GARAMENDI. I guess I will just not ask questions of the gentleman down there, but rather to state the case as I see it from here. I yield back my time.

Mr. McCLINTOCK. If the gentleman will yield before he yields back his time, I would answer by suggesting that he read the full written testimony, in which the witness has provided many cases where funding was available but the project was held up because of regulatory excesses.

And I would also commend to the gentleman consideration of restoring the beneficiary pays principle to these projects, at which point we could free up enormous amounts of money. That is the way it ought to be done. Your constituents should not be paying for water projects in my district, nor vice versa. The projects should be paid for by the users of the water in proportion to their use. And I thank the gentleman for yielding—

Mr. GARAMENDI. Mr. Chairman, that is a—exactly what we ought to be talking about. We ought to be talking about exactly that issue, of the beneficiary pay issue. And because we go around and around on that, and because we are unwilling to come to a definitive decision early in the process, projects go around and around. It happens every day. It is happening to the projects that are out there. I will guarantee it is going to happen with the Shasta.

Mr. McCLINTOCK. The gentleman has correctly stated the history of the last 30 years, but I am afraid we are out of time.

Mr. GARAMENDI. Well, it seems to me that the discussion you and I are having here is the central issue. And to spend time on that central issue is well worth—

Mr. McCLINTOCK. Again, I would warn the gentleman that the testimony that we—the Subcommittee has received goes far beyond that, and points to the regulatory excesses that are actively blocking these projects, even when they are funded. That is also a central part of the issue.

And with that, I am afraid we are going to have to conclude. I want to thank the Members for their time, I want to thank the witnesses for some extraordinarily helpful testimony to the Subcommittee's work. And if there is no further business, the Committee stands adjourned.

[Whereupon, at 12:13 p.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[The prepared statement of Mr. Denham follows:]

**Statement submitted for the record by The Honorable Jeff Denham,
a Representative in Congress from the State of California**

My state of California is known around the world for having "good" weather year round. That may be true for San Diego, but my district is in Northern California where seasons do exist in the weather patterns. There are times when California is in a drought and water resources are scarce. And, then there are times, like this past year, where sufficient water falls from the skies and down to the lakes, rivers, wells, and onto the farm land.

It will prove evident this year, and especially next year in California that our need for increased water storage is long overdue. As my district annually endures hot summers, it is critical to have water resources available. The ability to store more water when it is plentiful in the winter is the only way to avoid severe drought conditions in the Central Valley when the temperatures rise through the summer.

Over the years and partly due to the drought periods and the need to provide water to a rapidly growing population and farms led to an innovative and complex water storage and delivery system. As a result, the state of California and the federal government jointly operate two water projects to capture and convey water from where it falls to where it is in demand.

My district depends on this water for farming and the sustainability of local communities. As water becomes scarcer in the Central Valley, the unemployment numbers rise to extreme levels.

To begin to resolve some of the unacceptable unemployment issues in my district, I have introduced a bill, H.R. 1604, that can increase the reliability of water resources and renew an investment in water storage and conveyance infrastructure. H.R. 1604 would streamline redundant environmental review processes that waste time, money, and deters investment in water projects.

When the cost of the environmental review alone makes a water storage project a bad investment for the welfare of human life, the regulations have reached an extreme point that stifles our ability to provide for future generations. We can begin to provide better security in water supply and electrical generation if we commit to these infrastructure projects.

Lest we all forget, that a tangential benefit to developing more water storage is the ability to produce and generate more renewable electricity. So, in an effort to go "green" the pursuit of more storage, conveyance, and hydroelectric power is only prudent.

Now there are uncompromising environmental regulations that do not recognize the renewable aspect of hydropower to its full potential in favor of other, more costly technologies. These costs are always borne by the consumer; further stretching already thin family budgets during this economic down turn.

If we can start to streamline regulations and remove burdens on necessary water storage projects, we will not only create construction jobs but also farming, scientific, and engineering jobs.

The creation of jobs today through these projects is very important, but I do not want to completely overshadow the benefits that come from pursuing and completing infrastructure projects that will benefit generations to come.

Everyone likes to point out that Hoover Dam is a project that America once strived for, and I agree. However, I believe that we still strive to develop infrastructure for the future and the biggest hurdle that we have to overcome is our own regulatory overreaches.

**Statement of David J. Guy, President,
Northern California Water Association**

Mr. Chairman and Members of the Subcommittee. My name is David Guy. I am the President of the Northern California Water Association (NCWA), which represents water suppliers and local governments throughout the Sacramento Valley—the northern part of California’s Great Central Valley.

NCWA and water resources managers throughout the Sacramento Valley are committed to advance the economic, social, and environmental sustainability of the Sacramento Valley by enhancing and preserving its water rights, supplies, and water quality for the rich mosaic of farmlands, refuges and managed wetlands, meandering rivers that support fisheries and wildlife, and cities and rural communities in the region. These ongoing sustainability efforts advance the new California policy in Water Code § 85021 “to improve regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects and improved regional coordination of local and regional water supply efforts.”

We appreciate the Subcommittee convening a hearing on the important topic “Water for our Future and Job Creation: Examining Regulatory and Bureaucratic Barriers to New Storage Projects.” We associate with and fully support the testimony provided by the Glenn-Colusa Irrigation District at the hearing, and we offer the following testimony to highlight the Sacramento Valley and the related opportunities presented by the Sites Reservoir.

The ability to view the Sites Reservoir in a manner different from traditional projects presents a unique opportunity for the State of California to meet important (albeit elusive) policy objectives around the Bay-Delta and the Central Valley and to accomplish these objectives in a way that will provide water supplies to enhance California’s economy and the environment.

The Foundation for New Water Storage

Water resources managers in the Sacramento Valley are undertaking aggressive efforts to foster regional sustainability in the Sacramento Valley with respect to water supplies; yet they are continually facing greater operational constraints in managing these supplies.

To better understand these operational constraints in the Sacramento Valley, water resources managers in the region have joined together to commission various technical studies and reports focused on hydrology, salmon life-cycles, and models for water operations in the region. For purposes of today, we recommend *Efficient Water Management for Regional Sustainability in the Sacramento Valley*, which is available at www.norcalwater.org. The report builds upon decades of continually improving water use efficiency in the Sacramento Valley at the farm, refuge, district, and basin level. The technical report provides a foundation to further evaluate improved water management opportunities in the Sacramento Valley and the trade-offs that will need to be considered in making future management decisions. The report highlights many of the operational constraints that water resources managers face every day in making management decisions in the flow-through system in the Sacramento Valley, as well as the challenges in serving water for all the various beneficial uses—farms, refuges, fisheries, recreation and cities and rural communities.

In this light, what has become apparent over the years is that with each advance in water use efficiency technology and the implementation of a new water use activity or program, the marginal potential efficiency in the region diminishes and the likelihood for adverse consequences—primarily for environmental values—increases. While water use efficiency is an integral part of a water resources portfolio, responsible and sustainable water management increasingly requires more sophisticated consideration of the various trade-offs resulting from water use efficiency actions or

programs and an acknowledgment that increased efficiency in certain situations may adversely affect water supplies for beneficial uses. As a result, water resources managers are dedicating tremendous resources to better understand and thus manage water resources in the Sacramento Valley to assure that the region remains in balance with respect to its water resources.

At the same time, the two major projects in the region—the Central Valley Project and State Water Project—have both reduced their water supply yields and operational flexibility due to increased water demands and more regulatory constraints. This in turn has further constrained the ability to manage water within the Sacramento Valley for the various beneficial uses. It is these constraints and a better understanding of these constraints by water resources managers that provides the backdrop for the importance and need to further explore surface storage in the Sacramento Valley.

Integrating Sites Reservoir into the Central Valley

The Sites Reservoir is a proposed off-stream storage project located approximately ten miles west of Maxwell in the Antelope Valley. The proposed reservoir would have a storage capacity of 1.8 million acre-feet. The ability to view Sites differently stems in part from its location within or adjacent to the Glenn-Colusa Irrigation District (GCID) and districts within the Tehama-Colusa Canal Authority. This allows the reservoir to be filled during peak flow periods by conveying water into the reservoir through wheeling arrangements involving existing facilities.

As such, Sites Reservoir can be integrated with local interests within the Sacramento Valley so that it is operated and managed in conjunction with various direct diversion rights, other surface water resources (including Shasta Reservoir) and groundwater resources. Proceeding with integrated water management will provide direct and indirect benefits that include reliable and certain supplies of irrigation, municipal and industrial and environmental water of suitable quality for beneficial uses in the Sacramento Valley. This also includes flexible hydropower generation, recreation and flood damage reduction.

This integrated management, in turn, will provide greater flexibility in managing the system for the benefit of the Bay-Delta and areas that rely upon water from the Delta. Sites Reservoir integrated into the Sacramento Valley thus provides the ability to operate the existing water system in the Central Valley in a more flexible manner to maximize system-wide benefits.

Moreover, when looking at the Sites Reservoir in tandem with other facilities and groundwater management in the Sacramento Valley, the water supply benefits are compounded. For example, a 1.8 million acre-foot capacity Sites Reservoir would generate an average annual yield of 400,000 to 640,000 acre-feet, in dry and critical years, and in addition would provide nearly 900,000 acre-feet of additional storage in Lakes Shasta, Oroville, Folsom and Trinity during the important months of May through September through the system integration and operation.

In sum, Sites Reservoir will generate water for the environment, while improving statewide water reliability and regional sustainability in Northern California. This additional water supply upstream of the Bay-Delta during these critical times will thus provide significant benefits to the State of California.

Achieve Co-Equal Goals

The California Delta Reform Act in 2009 declared the over-arching policy to “achieve the co-equal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.” Many of the agency proposals in California to solve the Bay-Delta favor one of the co-equal goals over the other or they create, either directly or indirectly, clear winners and losers with respect to the allocation of water supplies. By its location upstream of the Delta, Sites Reservoir, as part of the integrated management described above, can provide direct benefits to the Delta ecosystem by maximizing the amount and timing of water available for the Bay-Delta, including improvements in Delta water quality. With respect to the co-equal goal of a more reliable water supply, water will be available for the mosaic of water uses in the Sacramento Valley, and there will be a more reliable water supply for water users within the Delta, as well as water users south of the Delta. Sites Reservoir thus provides an opportunity to change the dynamic in the Bay-Delta debate and provide management flexibility in the system in such a way that can truly achieve the co-equal goals.

Thank you Mr. Chairman and Members of the Subcommittee for convening this hearing and for the opportunity to provide this testimony. If you have any questions, please call me at 916-442-8333.

