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THE NEED FOR RENEWED INVESTMENT IN CLEAN WATER INFRASTRUCTURE

(110–1)

HEARING

BEFORE THE

SUBCOMMITTEE ON
WATER RESOURCES AND ENVIRONMENT

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

JANUARY 19, 2007

Printed for the use of the
Committee on Transportation and Infrastructure

U.S. GOVERNMENT PRINTING OFFICE

34–773 PDF WASHINGTON : 2007

For sale by the Superintendent of Documents, U.S. Government Printing Office
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January 12, 2007

MEMORANDUM

TO: Members of the Subcommittee on Water Resources and Environment

FROM: Subcommittee on Water Resources and Environment Staff

RE: **SUMMARY OF SUBJECT MATTER**: Hearing on the Need for Renewed Investment in Clean Water Infrastructure

PURPOSE OF HEARING

The Subcommittee on Water Resources and Environment is scheduled to meet on Friday, January 19, 2007 at 9:30 a.m., to receive testimony on the nation's wastewater infrastrueture needs and the importance of a renewed commitment to addressing these needs. The Subcommittee will hear from representatives of Federal, State, and local governments, and other stakeholders, on the importance of investment in wastewater infrastructure.

BACKGROUND

The Subcommittee on Water Resources and Environment has jurisdiction over water quality and wastewater infrastructure programs administered by the Environmental Protection Agency (EPA) under the Federal Water Pollution Control Act, commonly known as the Clean Water Act. Title VI of the Clean Water Act provides for the establishment and capitalization of Clean Water State Revolving Loan Funds (Clean Water SRF) to aid in funding the construction of wastewater treatment works and other wastewater infrastrueture around the nation.

To a great extent, improvements in water quality since the passage of the 1972 Clean Water Act have resulted from a significant investment in wastewater infrastructure improvements throughout the country. Since 1972, the Federal government has provided more than $82 billion for wastewater infrastrueture and other assistance, which has dramatically increased the number of Americans enjoying better water quality and improved the health of the economy and the environment. During the same time period, overall investment in the nation's wastewater infrastructure – from Federal, State, and local sources -- has been over $250 billion. Today, the

nationwide system of wastewater infrastructure includes 16,000 publicly owned wastewater treatment plants, 100,000 major pumping stations, 600,000 miles of sanitary sewers, and 200,000 miles of storm sewers.

Investment in wastewater infrastructure has provided significant environmental, public health, and economic benefits to the nation. First through the Federal construction grants program, and now the Clean Water SRF program, the investment in water infrastructure has been integral to improving the quality of the nation's waters. The gains in water quality realized through Federal, State, and local investment in wastewater infrastructure have been significant, helping to increase the number of fishable and swimmable waters throughout the nation since the enactment of the Clean Water Act. As a result of dramatic improvements in wastewater infrastructure, effluent discharges have decreased by one-half since 1970, despite the fact that waste loads grew by more than one-third due to population growth and an expanded economy. Today, the nation's farmers, fishermen, and manufacturing and tourism industries rely on clean water to carry out activities that contribute well over $300 billion to our economy each year.

However, these achievements are now at risk. According to a 2000 EPA report, entitled *Progress in Water Quality*, "without continued improvements in wastewater treatment infrastructure, future population growth will erode away many of the Clean Water Act achievements in effluent loading reduction."

For example, EPA projects that, given the expansion of the U.S. population forecast over the next 20 years, even with expected increases in wastewater treatment efficiencies, by 2016, wastewater treatment plants, nationwide, may discharge pollutants into U.S. waters at levels similar to those that existed in the mid-1970s – only a few years after the enactment of the Clean Water Act.[1] In addition, if these population forecasts are projected further to the year 2025, without significant investment in additional treatment capacity, the level of pollution being discharged into the nation's waters would reach rates not seen since 1968 – four years before the enactment of the Act – when they reached the maximum level ever recorded.[2]

Without increased investment in wastewater infrastructure, in less than a generation, the U.S. could lose much of the gains it made thus far in improving water quality as a result the 1972 Clean Water Act.

An additional concern is that much of the wastewater infrastructure in this country is rapidly approaching or has already exceeded its projected useful life. Many cities and communities throughout the United States are currently facing a critical juncture in the age and reliability of their water infrastructure. For example, several major U.S. cities still rely on sewer pipes that were installed over 100 years ago to collect and treat domestic sewage. In addition, many of the

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[1] U.S. EPA. "Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment." June 2000. EPA has estimated that, by the year 2016, the expansion in population will likely result in a 45 percent increase in influent biochemical oxygen demand (BOD) loading to treatment works (68,030 metric tons per day) and a 20 percent increase in BOD discharges to surface waters (19,606 metric tons per day). BOD is a measure of the oxygen-consuming organic matter and ammonia-nitrogen in wastewater. The higher the BOD loading, the greater the potential for depletion of oxygen in the waterway.

[2] By the year 2025, EPA estimates that the amount of BOD loadings to the nation's waters would reach 21,090 metric tons per day.

wastewater treatment facilities constructed soon after enactment of the Act are now reaching the end of their expected useful life and are in need of repair or replacement.

Another looming need centers on upgrading aging infrastructure to control and eliminate combined sewer overflows. Combined sewer systems were among the earliest sewers built in the United States and continued to be built into the middle of the 20th century. These systems were designed to carry both domestic sewage and industrial wastewater, along with stormwater, to treatment facilities before being discharged downstream. However, during heavy rainfall or snowmelt, the volume of wastewater entering the combined sewer system often exceeds its conveying capacity. To prevent damage to the infrastructure, combined sewer systems were designed to flow directly to surface waters when their capacity is exceeded – discharging large volumes of untreated or partially treated sewage wastes – an estimated 850 billion gallons annually – directly into local waters. Because combined sewer overflows contain raw or partially-treated sewage and contribute pathogens, solids, debris, and toxic pollutants to receiving waters, they create serious public health and water quality concerns. In addition, combined sewer overflows are often the direct cause of (or significantly contribute to) beach closures, shellfish bed closures, contamination of drinking water supplies, and other environmental and public health problems.

Combined sewers are found in 33 States across the U.S. and the District of Columbia. The majority of combined sewers are located in communities in the Northeast or Great Lakes regions – where much of the oldest water infrastructure in the nation is found. However, combined sewer overflows have also occurred in the West, including the States of Washington, Oregon, and California. To eliminate combined sewer overflows, communities must redesign their sewer systems to separate sewage flows from stormwater flows or provide significant additional capacity to eliminate the possibility that combined flows will exceed the limits of the infrastructure. Either way, this will be a massive undertaking – estimated by EPA to cost more than $50 billion.

In the near future, many communities will need to repair or replace large portions of their wastewater infrastructure or face the likelihood of increased failures in their ability to treat wastewater – posing a significant threat to the country's quality of life, economic prosperity, and the health and safety of both human populations and environmental quality.

Moreover, following the terrorist attacks of September 11, 2001, the identification and protection of critical infrastructure has become a national priority, and protection of critical wastewater infrastructure has become important to homeland security. Utilities need to increase security and implement measures to protect their wastewater treatment and collection systems, which is placing a further demand for resources on utilities.

The Clean Water Act requires EPA to report to Congress every two years with a detailed estimate of the costs of needed water infrastructure in each State. This report, which is compiled through a survey of the States, includes estimates of needed projects to achieve the improvements in water quality necessary to meet the goals of the Clean Water Act, including publicly owned municipal wastewater collection and treatment facilities, facilities for the control of combined sewer overflows, activities to control stormwater runoff and nonpoint source pollution, and programs designed to protect the nation's estuaries.

The financial resources necessary for wastewater infrastructure improvements are substantial. EPA's most recent assessments of wastewater infrastructure needs – the Clean Watersheds Needs Survey 2000: Report to Congress and the Clean Water and Drinking Water Infrastructure Gap Analysis – estimate that existing *documented* needs for the nation are $181.2 billion. The same assessment estimates that over the next 20 years, between $300 billion and $400 billion in capital investment is needed for restoration and replacement of the nation's aging wastewater infrastructure. Considering that the average annual investment by EPA over the past few years has declined from approximately $1.35 billion to $700 million this year, the level of investment to address these needs requires a renewed and expanded commitment from all levels of government, including the Federal government.

Other organizations, including the Congressional Budget Office and a coalition of industry and other stakeholders, all have estimated that significant increases in investments are needed to address wastewater needs over the next 20 years – as much as twice the current level of investment by all levels of government. These estimates fall between CBO's low-cost estimate of a $3.2 billion annual gap, and CBO's high-cost estimate of an $11.1 billion annual gap. The needs are especially urgent for areas trying to remedy the problem of combined sewer overflows and sanitary sewer overflows, and for small communities lacking sufficient independent financing ability.

EPA is also examining how improved technologies and innovative financing options might help close the gap between projected needs and current expenditures. However, even if wastewater systems are able to implement cost savings and improved efficiencies, significant increases in investment from all levels of government will be needed to meet projected needs.

FINANCING WASTEWATER INFRASTRUCTURE NEEDS

Titles II and VI of the Clean Water Act provide authority for grants to States and municipalities and the establishment of Clean Water SRFs, respectively, for the construction of treatment works. The Construction Grants program contained in Title II was phased out in favor of state revolving funds in the Water Quality Act of 1987 (P.L. 100-4). For the Construction Grants program, Congress appropriated approximately $60 billion over the life of the program.

Since 1987, most of the Federal government's assistance has been through the Clean Water SRF program. Through this program, individual states and territories maintain revolving loan funds to provide low-cost financing for approved water quality infrastructure projects. Funds to capitalize the Clean Water SRF programs are provided through Federal capitalization grants and state matching funds (equal to 20 percent of Federal government grants). Since 1987, Congress has appropriated over $24 billion in capitalization grants funded through general taxpayer revenues. Clean Water SRF revenues also include receipts from the sale of bonds, loan repayments, and interest earnings. From all sources, over $55 billion has been deposited into the state revolving funds.

EPA has approved 57 states and territories for funding under the Clean Water SRF program. Clean Water SRFs are available to make low interest loans, buy or refinance local debt, subsidize or insure local bonds, make loan guarantees, act as security or guarantee of state debt, earn interest, and pay administrative expenses. Clean Water SRF monies also may be used to implement certain

other water pollution control programs such as nonpoint source pollution management and national estuary programs. All projects must be those that will assure maintenance of progress towards the goals of the Clean Water Act and meet the standards and enforceable requirements of the Act.

Through fiscal year 2005, the Clean Water SRFs have provided $52.7 billion in loans for wastewater projects, including $4.9 billion in loans in 2005 alone. Communities have raised the rest of the capital from other sources, primarily from banks and issuing municipal bonds. Communities use revenues collected from rate-payers to fund both operation and maintenance and repayment of the debt they have incurred. Very few communities have sufficient capital resources to fund infrastructure improvements without incurring debt. Small, rural, and disadvantaged communities face a shrinking pool of financing resources, and are especially at a disadvantage in financing water and wastewater infrastructure.

For a number of years, Federal funding of the Clean Water SRF program had been at a relatively steady level of $1.35 billion annually. In recent years, funding for the program has been declining rapidly – down close to 50 percent from this long-term average of $1.35 billion. In fiscal year 2007, the administration's budget request for the Clean Water SRF was $687.5 million in capitalization grants for the Clean Water SRF program, down from the fiscal year 2006 appropriation of $886.7 million.

Several States have taken steps to supplement funding for water infrastructure and other clean water projects. A number of States have approved special issuances of bonds to assist local communities. In 2004, the State of Maryland enacted legislation that established the Chesapeake and Atlantic Coastal Bays Restoration Fund, supported by a $2.50 per month fee on sewer bills and an equivalent $30 annual fee on septic system owners. The Fund is to be used to upgrade wastewater treatment plants, repair failing septic tanks, and fund a cover crop program to reduce nitrogen and phosphorous loadings to the Chesapeake Bay and coastal bays.

Communities are feeling considerable pressure to improve the management of their wastewater systems to reduce costs and maintain sustainable systems. Some are also looking at innovative ways of integrating decentralized, distributed, and nonstructural wastewater management approaches to reduce the need for expensive infrastructure.

In addition, financing institutions, interest groups, and EPA have been encouraging utilities to improve the management of their infrastructure assets. Moreover, EPA has begun implementing "sustainable infrastructure initiatives" to help communities close the gap between infrastructure funding needs and the current levels of funding through actions and innovations to reduce the demand for infrastructure. Through these initiatives, EPA is promoting better asset management techniques for reducing long-term costs and improving performance and sustainability, promoting water efficiency, promoting full cost pricing of water, and expanding watershed approaches to identify efficient and effective local infrastructure solutions. By properly operating and maintaining infrastructure, and by planning for capital improvements, EPA believes that wastewater utilities can reduce costs and avoid catastrophic infrastructure failures.

Private investment is another source of financing for wastewater infrastructure. Private activity bonds, issued by States and municipalities, are used to attract private investment for

projects that have some public benefit. This type of a bond results in reduced financing costs by generating significant interest savings because of the exemption from Federal, and in some States, state tax, and promotes projects important to the local community. Private activity bonds may be issued for wastewater treatment projects involving private interests, but there are strict tax rules that limit the use of private activity bonds.

A "unified volume cap" restricts the amount of private-activity bonds that states and localities may issue in any given year. Congress has exempted some activities from this volume cap; however, wastewater treatment projects currently are not exempted from the cap. If Congress were to authorize additional private activity bonds for wastewater infrastructure, this could generate considerable additional revenue for this purpose. The Committee on Transportation and Infrastructure does not have jurisdiction over the issue of private activity bonds; this issue is solely with the jurisdiction of the Committee on Ways and Means.

PRIOR SUBCOMMITTEE ACTION AND OTHER LEGISLATIVE PROPOSALS

In prior Congresses, the Subcommittee on Water Resources and Environment developed and considered legislation that would have authorized increased funding for wastewater infrastructure through a reauthorization of the Clean Water SRF program (H.R. 3930, the Water Quality Financing Act of 2002 in the 107th Congress, and H.R. 1560, the Water Quality Financing Act of 2003 in the 108th Congress). Neither bill was considered on the floor of the House of Representatives.

In the 109th Congress, legislation was introduced to create a national clean water trust fund as a means for financing wastewater infrastructure needs (H.R. 4560, the Clean Water Trust Act of 2005. No further action was taken on this legislation.

THE NEED FOR RENEWED INVESTMENT IN CLEAN WATER INFRASTRUCTURE

Friday, January 19, 2007

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT,
Washington, DC.

The subcommittee met, pursuant to call, at 9:34 a.m., in room 2167, Rayburn House Office Building, Eddie Bernice Johnson [Chairwoman of the subcommittee] presiding.

Ms. JOHNSON. Good morning.

I call the subcommittee to order, and I welcome everyone to the first meeting of the Subcommittee on Water Resources and Environment for the 110th Congress. Today, the subcommittee meets to discuss the Nation's wastewater infrastructure needs and the importance of a renewed commitment to addressing these needs. As this is the first meeting of the subcommittee of this Congress, I believe it is a good opportunity to outline the near-term agenda for this subcommittee and our efforts to address many of the water resources challenges in the country.

First, let me say how pleased I am to serve as the chairwoman of the Subcommittee on Water Resources and Environment, and I look forward to meeting with each of my colleagues, learning of their own individual water resource needs and working together to address many of their concerns. I am also pleased with the opportunity to work with my Republican colleague, Congressman Richard Baker of Louisiana. He has not arrived yet, but I am sure he will be here shortly. He has been a long-time active member of this subcommittee, and I look forward to working with him in his new role as ranking Republican.

I am also going to miss Mr. Duncan, who was the Chair of this subcommittee, my good friend. Mr. Duncan often comments that this subcommittee has the broadest agenda of any of the Transportation subcommittees, covering the Corps of Engineers, projects and authorities, the EPA's Clean Water and Super Fund Programs, Brownfield, the Tennessee Valley Authority, the St. Lawrence Seaway, and programs carried out by the National Oceanic and Atmospheric Administration and the National Resources Conservation Service.

The subcommittee will have an active agenda in the coming weeks. Starting with today's hearing, the subcommittee will return to some of the unfinished work of the previous Congress, beginning with an examination of the wastewater infrastructure needs of the Nation and the importance of a renewed Federal commitment to

meeting these needs. The subcommittee hopes to move expeditiously toward the reauthorization of the Clean Water State Revolving Fund. It is my hope that we can build upon the prior bipartisan efforts of this subcommittee and move this legislation through the committee to the floor of the House before the President's Day District Work Period.

In addition, the subcommittee hopes to take up other bipartisan legislative proposals considered by this committee in the previous Congress that were not enacted into law. Two examples are legislation to reauthorize appropriations for EPA's combined Sewage Overflow Grant Program and the pilot program for alternative sources of water. An equally important priority of the subcommittee is to complete work on the Water Resources Development Act of 2006.

Late in the 109th Congress, the staffs of the House and Senate authorizing committees were close to completing what we have waited for 6 years to accomplish, moving a joint House-Senate recommendation for the Army Corps of Engineers to the President. It is my hope that we can quickly pick up where these negotiations left off so that vital water resources development legislation can be enacted and the backlog of essential flood control, navigation and ecosystem restoration projects can finally be authorized.

Finally, in February, the committee and the subcommittee will hold hearings on the administration's budget request for fiscal year 2008. While I do not have high expectations for full funding of those programs and policies that fall within the jurisdiction of this subcommittee, I look forward to beginning the dialogue on funding this committee's priorities in the coming fiscal year.

Returning to the topic of today's hearing, it is fitting that the subcommittee's first hearing is on the need for renewed investment in clean water infrastructure. To a great extent, the improvements in water quality achieved since the enactment of the Clean Water Act have resulted from significant investments by Congress towards wastewater infrastructure improvements throughout the country. Since 1972, the Federal Government has provided more than $82 billion for wastewater infrastructure and other assistance, which has dramatically increased the number of Americans enjoying better water quality and has improved the health of the economy and the environment.

During the same period, overall investment in wastewater infrastructure from Federal, State and local sources has been over $250 billion. Investment in wastewater infrastructure has been one of the greatest investments made by the Federal Government and has provided significant environmental, public health and economic benefits to our Nation. First through the Construction Grants Program and now through the Clean Water State Revolving Funds, these investments have been integral to improving the Nation's waters as well as ensuring the well-being of our Nation's citizens.

In addition, as noted in the testimony for today's hearing, investment in wastewater infrastructure directly benefits our Nation's economy, not only through the creation of well-paying jobs here in the United States but also through ensuring that our Nation's infrastructure stands ready to address the challenges of the 21st century.

However, these achievements are now at risk, as noted in a 2000 report of the Environmental Protection Agency. Without continued improvements in wastewater treatment infrastructure, future population growth will erode away many of the clean water achievements. Without a renewed commitment toward investment from all parties, in less than a generation the United States could lose much of the gains made in improving water quality.

This subcommittee stands ready to renew the Federal commitment to our Nation's wastewater infrastructure. While reauthorization of the Clean Water State Revolving Fund alone cannot entirely close the gap between current needs and expenditure, it does send a strong message on the importance of achieving the goals of fishable and swimmable waters established over 30 years ago.

Before I recognize Mr. Baker for his statement, I will also mention that we have a few members returning to the subcommittee and a fair number of new members joining us this year. Congressmen Filner and Capuano have both served on the subcommittee in the past, and we welcome them back in the 110th Congress. The new members of the Democratic Caucus are Congresswoman Doris Matsui, who represents the Fifth District of California, Congresswoman Mazie Hirono, who represents Hawaii's Second Congressional District, Congressman Heath Shuler, who represents North Carolina's 11th Congressional District, Congressman Harry Mitchell of Arizona, the Fifth Congressional District, Congressman John Hall of New York's 19th Congressional District, Congressman Steve Kagen of Wisconsin's Eighth Congressional District, Congressman Jerry McNerney of California's 11th Congressional District, Congresswoman Grace Napolitano of California's 38th Congressional District, and Congressman Michael Arcuri from the 24th District of New York.

I welcome all of these new members and our returning members from both sides of the aisle to this subcommittee.

I now recognize ranking member, Mr. Mica, I guess, who is not the ranking member, but he is going to represent our Republican members of the subcommittee, for any statements you might make.

Mr. MICA. Well, thank you, Ms. Johnson.

I am the ranking member of the full committee, and I do serve as an ex officio member on each of the subcommittees. That honor and responsibility that Mr. Oberstar had when he had the ranking position is extended to me. Mr. Baker, who we are very pleased will be the leading Republican on the Water Resources and Environment Subcommittee, will be here shortly, but I am pleased to join you this morning, and I welcome you to your new leadership position. We have worked closely together on a number of issues, particularly transportation in Texas, and I look forward to doing that now in my new position. From time to time, I intend to stick my head and my business into the subcommittee business of each of our subcommittees.

Today, I want to just start with a few comments as ranking Republican leader, a member, and hopefully set some of our priorities forward. As we know today, the Subcommittee on Water Resources and Environment takes up an issue that impacts every American, and that is the availability of clean water. I come from the State of Florida, and I am keenly aware of the importance of clean water,

not only directly to the homes and businesses of my constituents but also to the tourists who come to enjoy Florida's beaches. One of our primary assets is the natural aquatic areas, including our Everglades, a national treasure.

Today, the goal of cleaning up the natural waters in America is being threatened by the inability of aging wastewater infrastructure to keep up with the population growth and also the economic development. While I believe that wastewater infrastructure is primarily a local responsibility, there is, in fact, a national public interest in having clean water, and so I believe that it is an appropriate Federal role.

Over the years, this subcommittee has held hearings that have documented the fact that investments in wastewater infrastructure at all levels—public and private, Federal, State, and local—have unfortunately not been sufficient to meet the needs for clean water. The gap is huge, perhaps as much as some $400 billion over the next 20 years. We know we have a problem. The issue is really how we are going to address the problem and where the responsibility and resolution of the problem lie. In other words, to be quite frank, where are we going to get the funds and the money to do and complete this important job?

I believe part of the answer should be the reauthorization and more funding for the State Revolving Loan Fund administered by the EPA, but the Federal Government is not going to be able to solve this problem by itself. Greater investments at all levels of government and also from the private sector are absolutely necessary. I am delighted that we have one witness today—and that one, I believe, was provided by our side—Ms. Debra Coy, from the investment banking sector, who can tell us about the large amounts of private sector capital that is ready, willing and able to invest in our water infrastructure.

In addition, I hope other witnesses today will suggest ways in which we can address this problem beyond just seeking more money from the taxpayer. Perhaps some better technologies, more conservation and innovative financing techniques, including public-private partnerships, can, in fact, put more resources into providing clean water for all Americans.

So those are some of my goals and my priorities. I appreciate the time being yielded to me to state them, and I wish all of the members on both sides of the aisle well, and I see Mr. Baker is back. I am not sure if you want to yield to him now. I see Mr. Oberstar is here. Maybe you can get to Mr. Oberstar and then get back to Mr. Baker, and thank you again for the courtesy extended to me this morning.

Ms. JOHNSON. Thank you very much.

We now recognize the chairman of the full committee, Mr. Oberstar.

Mr. OBERSTAR. Thank you, Madam Chair, and congratulations on your new role as Chair of the Subcommittee, a very important subcommittee, on Water Resources. You have laid out a broad agenda that lies before the subcommittee this year, and I know that from your years of service on the committee you are prepared and ready for the challenge ahead.

I welcome our full committee ranking member, Mr. Mica. He and I have worked together on aviation issues and a wide range of surface transportation matters during the time that he has served in Congress, beginning in 1992, and I appreciate the partnership that we have developed over the years and look forward to a very productive time ahead.

To Mr. Baker, the ranking member on the subcommittee, from Louisiana, I was particularly impressed by Mr. Baker's leadership during Hurricane Katrina when the Subcommittees on Water Resources and FEMA and Economic Development, under the direction of Mr. Shuster, made an inspection tour starting in Baton Rouge and New Orleans and then through into Mississippi and Alabama. Mr. Baker led the briefing at Baton Rouge, demonstrating a full grasp of the subject matter at hand, the issues confronting the Federal Government, the State governments, the local governments, and conducted himself in an extraordinarily competent and diligent manner, and I welcome his participation as ranking member of this subcommittee.

And our former Chair of the subcommittee, Mr. Duncan, who all through his chairmanship of the Aviation Subcommittee and the Water Resources Subcommittee displayed that judicial temperament that characterized his service before he ran for Congress as a judge, and again is a mastery of the subject matter at hand.

We are very blessed on the committee to have members on the Republican side who have served in leadership positions, as with Mr. Young, who is now the ranking member on the Resources Committee but who was our chairman for 6 years, and Mr. Mica chaired the Aviation Subcommittee, and Mr. Duncan chaired the Water Resources Subcommittee, and others, and Mr. Shuster I mentioned earlier, all bring a valuable experience that they gained in chairing subcommittees during the years of Republican majority. Those skills, the knowledge, the experience gained by our colleagues on the Republican side will be of great benefit as we move together in this committee in a bipartisan spirit to carry on the important work of rebuilding America, and I welcome those skills and talents.

As I look on the Republican side, I see from the Great Lakes Candice Miller—I want to thank you for choosing to serve on this committee—representing the Port Huron area that I know very well. My uncle lived there for 25 years or so. I visited many times in Port Huron, and Thelma Drake, representing Tidewater, Virginia.

As I look at the Republican side just as on the Democratic side, we have got all of the coasts covered—Mr. Boustany on the Louisiana Gulf area, Mr. Gilchrest representing the Eastern Shore—the world's greatest estuary, the Chesapeake Bay—who has developed his own special reputation and skill in environmental protection, Mr. LoBiondo on the Atlantic Seaboard in New Jersey, and Henry Brown further down on the Atlantic Seacoast, who is a one-man tourism promoter for South Carolina—he is famously known for that—and so many others who bring special skills to this subcommittee and to the full committee. We welcome your partnership.

We have a big responsibility ahead of us. It was not too many years ago—about 4 years, 5 years after I began service on the committee as Clerk of the Subcommittee on Rivers and Harbors, the antecedent of this subcommittee—that the Cuyahoga River caught on fire. Lake Erie was pronounced dead. People thought it would never come back. Fish had died. The fish kills in Lake Erie were astonishing. The Walleye Head Fishery had just totally disappeared, and soapsuds were coming out of the faucets of citizens living along the Ohio, Illinois, Mississippi River systems because of the soap being discharged without treatment into our waterways. It galvanized the public into action. My predecessor John Blatnik, whose portrait is over there in the corner, who was not only Chair of the full committee but Chair of the Rivers and Harbors Subcommittee, authored the first Federal Water Pollution Control Act in 1956 and all of its subsequent improvements, including the Clean Water Act of 1972, the result of which was a massive investment, a Federal-State partnership, a Federal-private sector partnership to clean up the Nation's waterways. On the Great Lakes alone, industry invested some $10.5 billion to clean up industrial discharges into the Great Lakes, one-fifth of the freshwater in all of the world. Municipalities invested another $10 billion, the Federal Government about $15 billion, and Lake Erie miraculously came back. The Walleye Head Fishery has returned, Lake Erie similarly, but there are still problems with the toxic hotspots in the Great Lakes, 43 toxic hotspots, 26 of which are wholly in the United States, 5 shared between the United States and Canada, the other 12 in Canada. We need to address resources of our government and the Canadian government to clean up those toxic hotspots because they continue to return pollutants into the water column and into the vegetative and aquatic life of the Great Lakes.

Most of America lives along the water. Seventy-five percent of the population of this country lives either on the saltwater coasts or on the Great Lakes freshwater coasts. In the Great Lakes area, we have one-third of the Nation's industry, one-fifth of the Nation's industrial jobs, one-third of the Nation's exports, but our most precious resource is that of freshwater, and we still have a huge job of protecting it.

While a great deal of progress has been made in dealing with point sources, we have still a long way to go to meet the goal of the Clean Water Act of 1972 of fishable, swimmable waters, and maintaining the physical, biological and chemical integrity of the Nation's waters. That must continue to be our goal. The new frontier, if you will, of clean water is non-point source runoff from development lands, housing developments, shopping center developments, and agricultural runoff.

We have to work with all of the those sectors and strengthen their resolve and with local efforts supported by the Federal Government to stem discharges and runoff from non-point sources which continue to deteriorate the Nation's freshwater reserves. We are going to attack those issues this year. We started in bipartisan fashion 6 years ago with the State Revolving Loan Fund reauthorization for various reasons. Even though Chairman Young and I and nearly every member of the full committee were cosponsors of the bill, we could not get it to the House floor. That obstacle has

been resolved. We are going to bring that bill to the floor. We are going to replenish the States' reserves of funding to attack the unmet needs of building sewage treatment plants and water resources and of water and sewer needs and combined sewer overflow needs.

So the hearing today has, as its purpose, to give an overview of the Nation's aging water infrastructure needs. Some areas in the Northeast are still delivering water with wooden pipes. That is not right. We need to help cities fix that problem. We are going to do that. That is what the State Revolving Loan Fund will accomplish. So I think we will achieve a great record in this committee and in this subcommittee in the course of this Congress. As Ms. Johnson said, it has wide-ranging responsibility, and I look forward to working with each and every one of the members on both sides of the aisle toward the goals of restoring the Nation's clean water, and that includes massive rebuilding in the gulf and restoration of the gulf wetlands as the buffer against hurricanes that may and likely will attack in the future.

Thank you very much, Madam Chair.

Mr. Baker, welcome to the subcommittee as ranking member. You represent a very vital ecosystem area of the country. I look forward to your comments.

Ms. JOHNSON. Mr. Baker.

Mr. BAKER. Chairman Oberstar, Chairwoman Johnson, Ranking Member Mica, I am particularly appreciative to be participating in this capacity today. I would note for the record a particular irony in my late arrival.

In speaking of the wooden pipe delivery system of which Mr. Oberstar made reference, apparently they still survive in the condo building in which I live because, with an unannounced maintenance action, they curtailed water service this morning, requiring a particular set of ingenuity on my part to make it here at all. So I thought interesting that I would be coming to a water hearing on the morning of that event, but notwithstanding that———

Mr. OBERSTAR. Would the gentleman yield?

Mr. BAKER. I would be happy to.

Mr. OBERSTAR. Some years ago we were having a hearing of the committee, and it was on Corps of Engineer projects, and the Chief of Engineers was unable to make the hearing. He had had a water main break in his home and his basement was flooded. That was appropriate, too.

Mr. BAKER. He probably lives in my building, I have a suspicion. In any event, I am certainly pleased to be here and wish to at this time welcome the new members on the Republican side of the aisle to the subcommittee who are not, however, new members to the Congress, all of whom have served in various capacities but come to the Water Resources Subcommittee in this Congress.

The gentleman from New Jersey, Mr. Frank LoBiondo, is new to the subcommittee; the gentleman from North Carolina, Mr. Robin Hayes, who is not yet here this morning; the gentleman from Pennsylvania, Mr. Platts; the gentleman from New York, Mr. John Kuhl; the gentlelady from Michigan, Candice Miller; and the gentlelady from Virginia, Thelma Drake.

We are certainly pleased to have the availability of their services and insight on this important matter, and let me quickly add, from the review of the testimony this morning, there is no doubt that there are clear, well-established, and critical infrastructure needs across the Nation. No matter what community one may live in, no matter what type of urbanization or rural setting, we all have water problems of one sort or the other.

The real issue before us, I believe, is how are we to finance and provide the resources necessary going forward to make sure delivery systems are modern, adequate and reliable with particular emphasis in my case on reliability. I find that there are alternative financing mechanisms available which have been greatly underutilized.

As an example, the Federal Home Loan Bank, which is the creation of this Congress, has a regional bank in Dallas, Texas that we had gone to to establish a pilot program for the funding of municipal water improvements. The bank system is unique in the way in which it offers its financing product, extending credit up to 30 years at a very low-interest cost. The bank system set aside a $25 million fund which would have been matched by localities to address certain rural water community needs, and to my shock, there was not one applicant for the available funding that was established. I believe it to be a reality that many at the local and State levels were merely not aware that these alternative funding sources were available. The government-sponsored enterprises, Fannie Mae and Freddie Mac, are today greatly constrained in the types of water projects which they may finance in association with multifamily or low-income housing developments. There is no reason for that limitation, and it should be examined.

The issuance of private bonds or revenue bonds are sources of financing which I believe should be explored by the committee going forward, and as we renew and perhaps expand the State Revolving Fund, we should find it incumbent to explore all of these alternative financing mechanisms as I believe it is very difficult to go through the appropriations process, given the Nation's difficult financial circumstance, and to expect a great amount of resources to be plowed into this particular need.

And for those reasons, Chairwoman Johnson, I am excited about the potential the committee provides. I am confident in working together going forward that we can achieve the needed steps to provide critical water services to communities, and I am pleased that Ranking Member Mica has given me this opportunity and also pleased that Chairman Oberstar has expressed such deep and abiding interest in this matter and am particularly grateful for his personal time and visit to the State of Louisiana when we were having a most difficult time and where we are continuing to struggle with a recovery effort.

I look forward to working with all members, and for those who are new to the committee, let me again say what has been, I think, said repeatedly. This is an extraordinarily bipartisan committee, one of the few in the Congress that has been historically, and I certainly believe it will remain so as we go forward.

I yield back the balance of my time.

Ms. JOHNSON. Thank you very much.

I am going to recognize Mrs. Tauscher, the gentlewoman from California.

Mrs. TAUSCHER. Thank you, Madam Chairman. It is wonderful to say that, and congratulations to you and to my colleagues. I really want to thank you for having this hearing, really, on this dire need for critical investments in our Nation's clean water infrastructure. I would also like to thank you for allowing me the opportunity to make a brief statement today.

We all know the need to ensure clean water and to protect our Nation's waterways should be of paramount importance to all of us, and as stewards of the Clean Water Act, we have the responsibility to provide for the infrastructure necessary to ensure the act's proper implementation. The need is not unknown, but in fact the EPA's own survey shows a needed investment over the next 20 years of between $300 billion and $400 billion. One would assume that such a sobering assessment would spur the current administration to action, but unfortunately this administration has treated the EPA a lot like a red-headed stepchild, cutting its budget and tying its hands on several common-sense initiatives.

Instead of ignoring his own agency's assessments, the President should get behind immediate reauthorization of the State Revolving Fund Program. Such action would require the President to reverse the course he has taken over the last few budget cycles, though. In fiscal year 2007 alone, the administration's budget proposed cutting the Clean Water SRF by 22 percent. That request was on the back of a similar proposed cut in fiscal year 2006 of $370 million. Remember the President's own EPA has identified billions of dollars of need.

I have long been a supporter of reauthorizing the Clean Water SRF and infusing much needed funding into our Nation's clean water infrastructure. In fact, in the 106th, 107th, 108th, and 109th Congresses, I joined my colleague Sue Kelly in authoring legislation to reauthorize the SRF Program. Unfortunately, the Republican-controlled Congress never acted on this important legislation. That is why I am so pleased that Chairman Oberstar and Chairman Johnson have pledged their support to the passage of the State Revolving Fund's reauthorization in this 110th Congress. I look forward to working with them closely on this issue which we have all pushed for the last 8 years.

Additionally, Madam Chairman, it is my hope that our committee's attention to this matter will make it clear to the administration that the President's fiscal year 2008 budget request should reflect a strong investment in clean water infrastructure.

Again, Madam Chairman, congratulations on your new role, and I thank you for holding this important hearing, and I yield back the balance of my time.

Ms. JOHNSON. Thank you very much.

The Chair now will recognize Mr. Duncan, my friend.

Mr. DUNCAN. Well, thank you, Madam Chair.

In my 18 years in the Congress, I very seldom give an opening statement except in the subcommittees which I have had the privilege to chair, and as Chairman Oberstar mentioned, I had the privilege of chairing this subcommittee for the past 6 years and, before that, chairing the Aviation Subcommittee for 6 years and, be-

fore that, serving for 2 years as ranking Republican on the Public Building Subcommittee. I have always really enjoyed the work of this committee. I think it is the greatest committee in the Congress, and I did want to take just a moment to congratulate our new leadership of this committee.

First of all, I do not think there is anybody in the Congress that respects and admires Chairman Oberstar more than I do. I saw him have a dream come true by becoming chairman of this committee, and I want to congratulate him. I want to congratulate the ranking member and my friend, John Mica, who has given me the privilege of serving as ranking on the Highway Subcommittee, and I look forward to that new challenge and opportunity. I want to congratulate my friend Richard Baker, who has been a good friend for a long time, and like Chairman Oberstar, I certainly admired his presentation in Baton Rouge, and I have admired him for many other reasons, but I especially want to say congratulations to my buddy, Eddie Bernice Johnson. We have worked together for the past 6 years. She is now moving into the seat that I held, and she will do a great job.

We had an active subcommittee here. We passed the Water Resources and Development Act twice. The Senate fell down in their responsibilities, but we did a lot of good work on that legislation that I hope will lay the basis for that bill early in this Congress. We passed many other bills like the Brownfield Redevelopment Act, legislation to clean up and help assist in the Long Island Sound and the Chesapeake Bay and many other things.

There is a lot of work that needs to be done. Everybody has pretty well covered that, so I will not go into that. I will say, in regard to this hearing today, I think the need for this hearing was summed up best by one of the witnesses on the second panel, Mr. Stutlet, who is with the National Association of Utility Contractors, and he says this. He says, ″Utility contractors build and repair America's unglamorous but vital water and wastewater infrastructure. What is out of sight and out of mind to most people is clearly visible to NUCA members every day. We routinely uncover rotting pipes with gaping holes that spill raw sewage into the surrounding ground of residential neighborhoods,″ and he tells us about an incident in Denver that just was within inches and seconds of collapsing that would have led to spills of 2,000 gallons of raw sewage per minute down the street, through a public park and neighborhood and so forth, and the reason I particularly like his testimony is I have said for years that in this country there is nothing that we take for granted like our clean water and wastewater systems in this country.

This is a very important subcommittee, and I can tell you this. I love to come to the hearings because I have never been to a hearing yet where I did not learn at least a little something, so I just wanted to say that and congratulate you and say that I look forward to working with you in this Congress. Thank you very much.

Ms. JOHNSON. Thank you very much, Mr. Duncan.

I know that many of our members may have statements this morning. However, we are going to ask you to submit your statements for the record. We are going to have votes soon, and I would

suggest that we get on with the witnesses, but you will have time to make statements at a later meeting.

We are pleased to have a very distinguished panel of witnesses on our first panel here this morning. We have the Honorable Benjamin Grumbles, who should have a special seat on this subcommittee, who is the Assistant Administrator for the Environmental Protection Agency's Office of Water, and next we have the Honorable Martin Chavez, Mayor of Albuquerque, New Mexico, who serves as Cochair of the U.S. Conference of Mayors and Mayors Water Council, and finally, we have Dr. Ellen Gilinsky, the Director of Virginia's Department of Environmental Quality, Division of Water Quality Programs, who is testifying on behalf of the Association of State and Interstate Water Pollution Control Administrators, and the agenda for the hearing also mentions Mr. Todd Ambs, who is the Administrator of the Wisconsin Department of National Resources, Division of Water. He was to testify on behalf of the Council of Great Lakes Governors. However, he is experiencing traveling difficulties this morning and will not be able to attend the hearing. If you listen to the weather reports, I am sure that you understand that. So I ask for unanimous consent that his testimony be made a part of the record.

Ms. JOHNSON. Without objection, we are pleased to have our other witnesses here with us this morning. Your full statements will be placed in the record. We ask that witnesses try to limit their testimony to 5 minutes, an oral summary of their written statements, as a courtesy to other witnesses. We will continue to proceed in the order in which the witnesses are listed in the call of the hearing.

So I now acknowledge and recognize Mr. Grumbles.

TESTIMONY OF HON. BENJAMIN H. GRUMBLES, ASSISTANT ADMINISTRATOR FOR OFFICE OF WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY; HON. MARTIN J. CHAVEZ, CO-CHAIR, MAYORS WATER COUNCIL, U.S. CONFERENCE OF MAYORS; TODD AMBS, ADMINISTRATOR, DIVISION OF WATER, WISCONSIN DEPARTMENT OF NATURAL RESOURCES; AND DR. ELLEN GILINSKY, DIRECTOR, DIVISION OF WATER QUALITY PROGRAMS, ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL

Mr. GRUMBLES. Thank you, Madam Chair, and thank you, Mr. Chairman, Chairman Oberstar, and Congressman Baker, for the opportunity to appear before you. It was always an honor to work on the other side of the table on the committee staff. It is even a greater honor to appear before you on behalf of the EPA and the administration and to discuss innovative, sustainable, market-based solutions for infrastructure financing and management.

Congressman Baker, I would like to state for the record that, to my knowledge, I had nothing to do with the water shortage you experienced this morning.

I would also like to say to former subcommittee chairman, Mr. Duncan, how much we appreciate your efforts over the years to draw attention to the importance of infrastructure.

And, Madam Chair, I cannot tell you how important it is and how much we appreciate the fact that your first action is to draw attention to the importance of infrastructure.

So often, we all focus in this town on areas where we disagree. Where we do agree is the importance of infrastructure to ensuring that water is clean, safe and secure. We look forward very much so to having a constructive dialogue with the committee on appropriate Federal roles and ways to accelerate environmental progress while maintaining our country's economic competitiveness.

Administrator Steve Johnson has emphasized that one of his highest priorities is to work with partners, work with Congress, work with Governors, all involved in this great debate, on developing innovative, sustainable and market-based solutions for water infrastructure financing and management.

I have learned a lot over the years working on this committee, and I would say that we are focused right now in the agency on helping to usher in the third wave of water infrastructure financing and investment in water infrastructure. The first wave was really with the historic Clean Water Act, in the early 1970's, focused on that first wave of Federal grants and subsidies. The second wave was really another historic moment in transitioning to the State Revolving Fund process to bring in more leveraging to stretch that dollar further, and I would say that the third wave right now is really to focus on sustainability, long-term success and, as Congressman Baker emphasized, bringing in private equity. Providing for the Nation's water infrastructure needs is obviously a public responsibility, a public trust. Involving private sector dollars is an important component to that.

So what we are focused on is identifying the needs and developing sustainable solutions. Your hearing is describing the importance of the needs, and I would say that EPA is focused on identifying and documenting the needs across the country. The 2000 Needs Survey identified over 150 billion in needs for wastewater infrastructure meeting Clean Water Act mandates. We focus even more on the gap. In 2004, the agency released a gap that identified a gap of $122 billion in the difference between the needs over a 20-year period, the capital needs, and the expected revenues. That number is actually $21 billion if you factor in a 3 percent increase in revenues above inflation. Our focus is on four pillars of sustainability and on innovative financing to help narrow that gap. In the remaining amount of time I have I want to focus on a couple of those pillars.

Asset management, improved management of the utilities, working as partners with the utilities is key, and we are committed to developing attributes of successful asset management to reduce the demand on infrastructure.

A second pillar of sustainability is full-cost pricing. This country underprices the value of water that is delivered in systems, and so we are committed to working with utilities to help identify the right rates, local rates, so that investment is adequate and sustainable.

Water efficiency is the other key pillar of sustainability for us to help reduce the demand on water infrastructure.

And the fourth is having an overall watershed-based approach that helps improve water quality so it is fishable and swimmable and also reduces the demands on utilities.

I would just say in conclusion, Madam Chair, that the other key component to part of the third wave that we are focused on and committed to working with you on is the innovative financing—private activity bonds, loan guarantees, leveraging—trying to reduce some of the barriers to including the private sector in the funding of public works.

And so we look forward to working with you, and I would be happy to respond to questions or comments that you have throughout the hearing. Thank you.

Ms. JOHNSON. Thank you very much.

We will go directly to the Honorable Martin Chavez.

Mr. CHAVEZ. Good morning, Madam chairwoman and members of the committee. I am delighted to be here.

I am Martin Chavez, Mayor of the City of Albuquerque. I am Trustee of the U.S. Conference of Mayors and Cochair of the Mayors Water Council. I have representation from New Mexico here. I am very pleased that Congressman Salazar is here. For those of you who do not know, New Mexico still claims southern Colorado as part of our own. In saying that, I am not unmindful of the fact that some from Texas claim parts of New Mexico still to this day.

I do appreciate being invited to testify today. The National Conference of Mayors represents approximately 1,200 cities, over 30,000 across the country. We are very much aware that providing wastewater and water services does not get anybody elected, but not providing them guarantees no reelection, and it is one of the critical things that we do, particularly at the urban level, day in and day out.

In the year 2005, the National Conference of Mayors did one of the first ever surveys of America's cities, asking mayors and their senior staff what their water needs were. It was really the first time we had simply asked ″What are your needs?″ we had 414 cities that responded. The three most important water resource priorities facing America's cities are, first, rehabilitating aging water and wastewater infrastructure, second, the security and protection of water resources infrastructure and, third, frankly, water supply availability, and while there is a substantial investment needs gap of which the committee is very much aware, local investment in wastewater and water infrastructure is very, very robust. Half of the cities have made major capital investments between 2000 and 2004. Another half have major capital investments planned between 2005 and 2009, and this is a sustained, ongoing type of investment. As the committee is probably aware, the cities pay approximately 90 percent of the dollar when it comes to these.

The different financing modalities—the ″pay as you go″ course is still the most popular among cities; revenue bonds is the second most common approach; State Revolving Funds, obviously, are very important and are third, general obligations fourth; private activity bonds are last, and we are hopeful that there will be continued flexibility from the Congress, and enhanced flexibility in these activity bonds so that we can use them as well is an important tool.

The State Revolving Fund is used by approximately 60 percent of the cities across the country, and—I am sorry—approximately 40 percent, and we are looking for, certainly, increased funding because that, again, is a very important tool for America's cities, and that funding and the flexibility in those programs is essential in reducing the needs gap.

The Conference of Mayors' policy priorities are as follows: One, grants to municipalities either directly or through the States for water and wastewater infrastructure, certainly where there are affordability issues for communities or when we have severe environmental problems that we are confronted with. Second, expanding some portion of the current 20-year loan category to include a 30-year, no-interest loan category or a 30-year low-interest loan payback period on the State Revolving Fund Program for water and wastewater infrastructure investment. Third, modifying current tax law by removing State volume caps in private activity bonds, to which I alluded earlier, used for public purpose water and wastewater infrastructure projects. Again, the increased use of the activity bonds for public purpose water infrastructure will help us boost the aggregate spending on water infrastructure and then narrow the needs gap, which is critical.

We need your help, and we advocate increasing the SRF for clean water to $1.355 billion or more, drinking water to $850 million or more, and I believe that this will reverse the trend with which we are confronted in the needs gap, particularly when it comes to confronting the Federal mandate, which we are happy to comply with, but as always, we prefer to have it come funded up front.

We support, again, extending the eligible SRF activities to include the replacement of major rehabilitation of wastewater infrastructure, and also we support extending SRF eligibility projects involving direct Federal resources to help our communities deal with water infrastructure-related issues, including $50.6 billion for combined sewer overflows, $88.5 billion for sanitary sewer overflows of stormwater management. We are supportive of asset management provisions, but we would ask for flexibility so that it does not put us into a situation where we end up spending more money in compliance than we actually save.

With that, I would be happy to take questions as the committee deems appropriate, and thank you very much for allowing me to testify today.

Ms. JOHNSON. Thank you very much.

Dr. Gilinsky.

Ms. GILINSKY. Madam Chair and committee members, thank you for the honor of appearing before this distinguished committee and for the opportunity provided for considering reauthorization of the State Revolving Loan Fund so early in this session of Congress.

As I was introduced earlier, I am Ellen Gilinsky. I am the Water Division Director in Virginia, and I am also a board member of the Association of State and Interstate Water Pollution Control Administrators, composed of many of my fellow water directors throughout the country.

You have our written testimony. I am here to spend my time sharing the Virginia experience with the Clean Water Revolving Loan Fund. The Fund has been instrumental in the achievement

of water quality improvement and protection in Virginia. Moreover, with the enormous needs Virginia faces in the immediate future, maintaining this important Federal-State Partnership Program is more critical now than ever before.

To date, the program has funded over $1.5 billion in clean water projects in Virginia. These projects include wastewater treatment upgrades, combined and sanitary sewer overflow elimination projects, decentralized sewer system replacements, agricultural best management practices, land conservation priorities, and Brownfields development.

With escalating construction costs, increased regulatory requirements, the importance of restoration of the Chesapeake Bay, and the aging of our infrastructure, demand for loan funds has grown astronomically. Just this year we approved funding for a State record $302 million in loan funds, but we also had to deny funding to an additional $464 million in requests due to a lack of resources. We fully expect this level of demand to continue or to actually increase in the foreseeable future.

Through aggressive use of fund leveraging in Virginia, we have been able to provide over a 225 percent Federal return on investment to the program to date, and we are expecting this figure to exceed a 300 percent return on investment by 2009. Our administrative costs are low, less than 2 percent of the total funds distributed to date. The expenditure and use of resources is very timely. Well over 90 percent of the program's funds have already been provided to recipients, and the remaining funds are fully committed to projects under design.

Projects funded through the SRF make a real difference in water quality improvements and our quality of life. I would like to take a moment to share some real examples with you.

The City of Lynchburg has used over $70 million in SRF Loan Funds to finance their Combined Sewer Overflow Program. This has resulted in the elimination of over 100 of the 132 overflow points, taking raw sewage discharges out of neighborhood streams as well as out of the James River.

A small, low-income community of Dawn in Caroline County used $2.85 million from the Revolving Loan Fund in conjunction with the housing and community development assistance to install alternative sewage collection and an on-site treatment facility, eliminating a health hazard from failing septic systems.

In our coalfield region of Southwest Virginia, many small towns have been able to replace their old primary sewage treatment facilities with upgraded secondary systems using the Fund. Hundreds of our farmers have been able to install non-point source pollution controls such as animal waste facilities, stream fencing and off-stream watering facilities or purchase no-till planters to protect water quality as a result of these low-interest loans.

In Congresswoman Drake's district, we fund a lot of projects. I am sure she is well aware of those. A few notable ones are in the City of Norfolk. Over $64 million has been borrowed for corrections to their deteriorating sewage collection system, and for the town of Onantock on the Eastern Shore, they have been getting a $6.2 million loan to upgrade their new treatment removal in their sewage treatment plant.

That leads me to our single greatest water quality challenge in Virginia and our surrounding bay States, and that, of course, is the restoration of the Chesapeake Bay. The estimates for wastewater treatment upgrade costs in Virginia alone exceed $2 billion. Virginia has stepped up with a strong commitment to provide substantial grant funding for a significant portion of the costs by allocating over $400 million in grant money from our own Water Quality Improvement Fund.

To continue the commonwealth commitment, Governor Kaine has recently proposed a Bay Bond bill, which, if passed by the General Assembly, will provide another $250 million over the next 4 to 5 years, supplying enough funding to achieve our point source commitments in the bay restoration.

Virginia is also committed to aggressively leveraging the State Revolving Loan Funds to provide loan funding for the remaining local share to realize these improvements. This combination of funding is essential to making the Chesapeake Bay restoration efforts achievable and affordable for our citizens.

In summary, Virginia's strategy to improve our water quality, while funded in substantial part by our own State funds, relies on the State Revolving Loan Fund to provide the difference on low-interest loans and to allow us to leverage our financial resources. Our story is not unique. It is essential that Congress continue to support clean water through increased appropriations to the Clean Water State Revolving Loan Fund.

Thank you again for allowing me this opportunity to speak before you.

Ms. JOHNSON. Thank you very much.

In beginning the first round of questions, I am going to recognize the Chair of the full committee, Mr. Oberstar.

Mr. OBERSTAR. Thank you, Madam Chair, and I want to thank our witnesses for their splendid presentations, very well-documented, thorough presentations. I read the material last night, and I was very pleased with the documentation. We have colleagues—the Governors who are represented and who form the State of Virginia, Dr. Gilinsky speaking for the Governor, and Mayor Chavez who are on the front line of clean water. That is really where it begins, and there is a Federal, State and local partnership, long established in our committee and in the Clean Water Act, so we are grateful for your participation.

Mr. Grumbles, Ben, welcome back to the committee again. As you said, it is a little different being on that side of the table than on this side, but I appreciate your service here, beginning with service for my former colleague from the State of Minnesota when you served in the House. I particularly appreciated your comment that water is a public trust. I have two questions after some observations.

I liked your reference to a water efficiency pillar, the watershed approach to cleanup. I think that is vitally important. I have emphasized that time and time again, and that is tied in with the non-point source approach to cleanup. We have to do it on a watershed-by-watershed basis. I look forward to your March national conference on paying for sustainable water infrastructure. That should be very interesting. We will have committee staff attend,

and if possible, I would like to be there myself, but there is a question of sort of the philosophy about cleanup and responsibilities.

President Eisenhower signed the first Clean Water Act in 1956. He vetoed the second with a veto message that read ″Pollution is a uniquely local blight. Federal involvement will only impede local efforts at cleanup.″ I remember it very well—it was his veto message of the bill advanced by my predecessor, John Blatnik, who also authored the 1956 act and then—that was on the table, and then President Kennedy augmented the act, and legislation was passed in the Kennedy and Johnson years, and then President Reagan came along, and in 1987, he vetoed a bill with a message that said this, meaning funding for pollution abatement is a matter that historically and properly was the responsibility of State and local governments, and then President Nixon vetoed the 1972 Clean Water Act with a veto statement saying that dramatic increases in Federal spending to address inherently local issues would bankrupt the U.S. Treasury. Well, it did not bankrupt the U.S. Treasury. It did lead to cleanup. The Nixon veto was overridden by 10 to 1, meaning overwhelming support on both sides of the aisle.

I just want to know what is the thought process of this administration on responsibilities for cleanup. Secondly, we are going to move a bill, as I said and Ms. Johnson said, in this committee, that has been crafted over the last 6 years on both sides of the aisle, by Ms. Kelly, who is no longer in the Congress, and Mrs. Tauscher, but it is a bipartisan effort. We have fashioned this bill to bring it to the House floor, but we were not able to in the past. We are going to do it in this session of Congress, and I have already had a conversation with the Chair of the Senate committee. We have harmonized our approach to this and other issues so that we can move bills that in the past were matters of bipartisan support but for one reason or another got stuck. We are not going to let them get stuck anymore, so the administration will face a State Revolving Loan Fund bill. What will be its response?

Mr. GRUMBLES. Thank you, Mr. Chairman.

The first thing I would say is that the EPA is very proud of its role and the importance of the Federal Government in the Clean Water Act, setting national standards and encouraging local solutions, and of course local solutions sometimes require regional solutions when you are talking about the Chesapeake Bay or other areas of great importance and that have interstate implications. So we think it is extremely important, and even EPA is proud of the role that Congress has given us in the Clean Water Act.

When it comes to infrastructure investment, the President's plan is to provide $6.8 billion through 2011 for capitalization of the State Revolving Funds. That is a continued commitment in an effort to help in that transitioning to a third wave, which is true sustainability, and also breaking down barriers so that private equity and investment can help towards public works and advancing infrastructure.

So we think it is extremely important to work towards ensuring that the Clean Water SRF Program continues to be a great success, and as it revolves, it also evolves, and our focus is working with the Congress on ensuring flexibility so that it can be an important

tool but certainly not the only tool to meet water infrastructure financing needs, and we truly do look forward to working with Congress in a constructive dialogue on the appropriate Federal role, the role of local government and of the private sector in funding problems and the solutions to the problems that definitely confront this country, and you pointed out yourself—and other members have as well—the importance of having flexibility to get at the real problems that the localities and the States determine are the key problems for a particular cherished water body, and oftentimes that is non-point source pollution or stormwater or wet weather flows.

With so many of the problems, the reason that there is a gap is due to the aging, the natural aging of the infrastructure, and population pressures in some areas and also the underpricing of the value of water.

And we look forward—that is one of the beauties of the water efficiency effort of the agency right now, is the watershed program. It instills an ethic of water efficiency and conservation that can help reduce the demand, the energy costs and the overall costs for utilities in running their wastewater systems, and we look forward to working with you and other members.

Mr. OBERSTAR. Thank you.

If I can summarize your response, the administration does embrace Federal, State and local partnership approach to cleanup.

Mr. GRUMBLES. We definitely embrace the partnerships with State and local government and also the private sector. The public-private partnership, Mr. Chairman, is—some say it is a code for privatization. We say we think it is code for progress.

Mr. OBERSTAR. That is a matter that we will address later.

The second question I asked was about the clean water revolving loan fund bill. What will be the administration's response to that?

Mr. GRUMBLES. We look forward to working with Congress and developing positions and also providing technical assistance as you have questions or want our views on clean water SRF matters.

Mr. OBERSTAR. To be continued. Thank you.

Ms. JOHNSON. Thank you, very much.

Mr. Baker.

Mr. BAKER. Mr. Grumbles, in the Mayor's testimony, he made reference to concern of Federal mandates to a municipality to take certain corrective actions to ensure water quality or enhance levels of water treatment requirements and that often those are not accompanied by the funds necessary to implement the new standard. That clearly is a concern.

I wish to take it one step further, however, in identifying that much of the operative concern in water quality goes to that of private enterprise. In my own case, industries located along the southern reach of the Mississippi River take water out, are required to process, utilize it in their manufacturing circumstance, and when the water goes back into the River, it is cleaner than when they took it out.

Now we are at the end of a very long tube, and there are a lot of other people washing their hands upstream that don't have similar requirements. That may all still be fine in the scope of keeping water quality as the number one goal here, but it would seem to

me that there should be in the construction of these programs something on the incentive side, rather than just on the penalty box side.

If you don't do it, you go to jail; if you do it, you just lose money. Neither seems to be a really good kind of construct.

What about, in looking at programs as we go forward, the concept of if you are doing it timely, you are doing it at the standard or better—because we have a lot of creative people who probably could figure out a better way of doing some of these things in private industry—if you got tax credits of some sort or the other that would yield a benefit of some consequence to the complying business enterprise, the consequence of this today is that we are no longer just competing with industry in Mississippi and California. We are competing globally. The folks around the world are not complying with EPA standards. They are taking water where they get it, using it as they see fit and contributing to the world problem.

The end consequence is the local industry becomes less and less competitive in all measures because of government regulation that inhibits their own creativity and thinking. Why can't we get to an incentive-based program that will enable industry to use its own resources in the most effective manner possible?

Mr. GRUMBLES. Congressman, thank you.

Our charge that the Administrator received from the President is to accelerate environmental progress while maintaining the country's economic competitiveness and the point about making sure that Clean Water Act standards and programs are effective but also efficient and equitable.

I can tell you that one of the Agency's priorities as we focus on implementing and enforcing Clean Water Act requirements is to also accelerate performance track, which is a program that is looking to provide incentives for those who are going above and beyond, rather than penalties, providing some types of incentives for the regulated community, whether it is industry or municipalities.

So the notion you are making is a very attractive one, and it is one that we want to work with you and other colleagues on so that we can be sure that we are maintaining performance and high standards under the Clean Water Act but also increasing the efficiencies so that more will choose to be good stewards or will be rewarded for reducing their water consumption or the input of pollutants.

Mr. BAKER. Thank you.

Mr. Mayor, you may want to follow-up just quickly on the subject of EPA requirements and municipal compliance and whether there are any tangible benefits to some of these requirements that are really downstream consequences. They are not really necessarily going to affect the people from your community because it is a discharge from your community going somewhere else.

And, secondly, when these mandates are required of you, how often are accompanying funds made available?

Mr. CHAVEZ. Madam Chairwoman, Congressman, the City of Albuquerque is ringed by sovereign Indian nations. We are on the Rio Grande, Spanish for great river. If you see it, you wouldn't be impressed, but if you live in the high desert, it is a great river.

Pueblos have State stats for purposes of setting EPA water standards. When I was first elected 12 years ago, the Pueblo downriver enhanced the status of the State level. I had to put out $65 million to improve our discharge, and that is back when $65 million was real money. And in the point of fact, the water discharge for the City of Albuquerque was cleaner than the water receiving from the Pueblos and the communities to the north. We had to foot the bill entirely for that; and my sense would be that everybody should just clean up their own mess and that would be very, very helpful.

Very rarely in my experience have we had any meaningful Federal dollars———

Mr. BAKER. If I may interrupt on that specific point—sorry to interrupt, merely to observe that appropriate professional conduct, in fact, was not rewarded. It was penalized. Because you had to spend $65 million and perhaps you didn't necessarily have it in a sock drawer for a benefit downstream that was not brought on by the actions of your own community.

Mr. CHAVEZ. Absolutely.

Mr. BAKER. Thank you. I yield back.

Ms. JOHNSON. Thank you very much.

Ms. Hirono from Hawaii.

We will be calling on members as we have done in the past as you enter the room, as we alternate.

Mr. Baird, does he have any questions?

Mr. BAIRD. I would like to thank the witnesses here and ask a question of Mr. Grumbles.

You mentioned that the administration—I think you said $6.4 billion———

Mr. GRUMBLES. 6.8.

Mr. BAIRD. 6.8. How does that compare to the projected need?

Mr. GRUMBLES. The gap report that we developed after intensive analysis identified a gap of $21 billion over a 20-year period with respect to capitalization needs—not O&M but capitalization—with the added assumption that revenues would increase by 3 percent. So we made that assumption, that economic assumption.

We then looked at that number and said, if we are successful in implementing our four pillars of sustainability, which also includes full cost pricing, we believe that we will make significant progress in reducing that gap if we provide that funding into the State Revolving Fund to the tune of $6.8 billion over a period of 2004 to 2011. The calculation was made that what that would do was that would then lead to a revolving fund on an annual basis, approximately from 2018 to 2040, of about $3.4 billion that would be going out in the way of loans and providing financial assistance for local infrastructure needs.

We have always said that that isn't the single solution, but that is an important part to capitalize on and make continued progress through the SRFs, because that is the explanation of that $6.8 billion.

Mr. BAIRD. I so appreciate the need for a more comprehensive approach, but the bottom line question I am trying to get at is, I would warrant that every member on this dais has some communities out there knocking on our doors, saying we are being re-

quired to meet improved sanitation and sewage treatment, and we don't have the money to do it and the available money to borrow is vastly oversubscribed. And I want to get just a simple number from you, is what is the oversubscription number? Give me a time frame and tell me how much more money do we need than the administration is prepared to make available?

Mr. GRUMBLES. Tell me more about—by overprescription number———

Mr. BAIRD. Overprescribe, my point being, give me an estimate of demand, simple estimate of demand over a fixed time period and how much the administration plans to put towards meeting that demand so that we know what the shortfall is.

Mr. GRUMBLES. Well, first point, I know you are asking for a single number, and I am not going to be able to give you a single number. I certainly will want to get back to you and talk more about.

Mr. BAIRD. I don't understand that. If I may, if I were trying to estimate—if I were a businessman trying to estimate the need of something, I would say, what is the cost of the need? What are our available resources? What is the shortfall? And that would be a pretty basic number from which to work.

And I understand these are complex matters, but I am just trying to get it so that I can talk to my constituents and say, here is how short we are, or here is how long we are, if we have a surplus. Can you give me that number?

Mr. GRUMBLES. I can tell you, from a national standpoint, if you look at the gap report that we have, we estimated a $21 billion gap between those years of around from 2 000 to 2020.

Mr. BAIRD. So that we will be short $21 billion of infrastructure investment for clean water?

Mr. GRUMBLES. If you don't factor into account the four pillars of sustainability and the increase, an increase beyond the 3 percent estimate for rate increases, revenue increases over the years.

Mr. BAIRD. If you don't?

Mr. GRUMBLES. So, basically, what we are saying is that it is more important than ever to embrace this concept of full cost pricing. And the point I want to emphasize as well, Congressman, is there are other agencies that provide funding, grants and loans for water infrastructure, USDA and HUD, but from an EPA Clean Water Act standpoint, we think that $6.8 will make substantial progress towards the $21 billion gap and that what we really need in addition to that is innovative financing.

See, that gap doesn't take into account that potential. We would say while the needs are growing, the solutions are growing, too, and that if we can really think about approaches above and beyond just the SRF, as a country, we will see progress.

Mr. BAIRD. I would just observe that the need seems to be growing faster than the funding, the solution.

And, secondly, I would observe that while this administration repeatedly and very recently continues to talk about not wanting to have to raise taxes, they do not seem to have a problem with raising fees on people. At the end of the day, if you are a person trying to make ends meet, if your water costs more, you are still paying

an increase out of your pocket somewhere. So it is a little bit of sleight of hand I would just suggest———

Ms. JOHNSON. Time has expired.

Mr. BAIRD. If I may, we are leaving these communities with a mandate to meet certain requirements but without the resources to do that.

Ms. JOHNSON. Thank you.

Mr. Duncan.

Mr. DUNCAN. Thank you, Madam Chairwoman.

Mr. Grumbles, you said in your testimony that the public is greatly underpaying for their clean water and wastewater services and getting a real bargain in that way; and I would agree with that. But the staff did a rough calculation for me that people pay anywhere from 30 to 50 times or perhaps even more for the bottled water, as opposed to the public water; and I remember seeing on 60 Minutes a few years ago where some of these bottled water companies were getting their water from the public water sources.

And I know that we have had a lot of the public water people in here saying their water is really just as clean. But can you give us a rough estimate of how the water is—our water infrastructure and services are being paid for today? What percentage is being paid for by Federal sources of all types? Are the State governments, are the local governments and how much is being paid for by the ratepayers, percentagewise? Do you have information like that?

Mr. GRUMBLES. I am going to get back to you with some more specific information. I will underscore that clean water SRF, which is about to celebrate its 20th birthday on February 4th, over the course of that program, EPA has provided $24 billion.

I have agreed with the Mayor's comments that a good rough estimate rule of thumb has been over the years that 90 percent of local infrastructure projects come from local or State sources.

The Federal commitment continues to be strong in the sense of the clean water SRF, the drinking water SRF, but the whole plan for the administration is that those funds were established by this committee and other committees to—at some point in time to revolve without that initial Federal capitalization or capital subsidy, and so we are laying out a transition to the third wave of water investment.

But, in the meantime, the plan includes $10.2 billion for drinking water infrastructure programs through 2018 and 6.8 billion for clean water SRF capitalization moneys through the Federal Government through 2011.

Mr. DUNCAN. Let me ask you this, has the EPA done any studies and analysis to determine is the problem greater or the needs more in older cities in the Northeast or where, you know, they are losing population but their infrastructure is older, or in the newer areas where the growth is just exploding?

Mr. GRUMBLES. I know the Mayor may have some views on that, too, based on the surveys that his organization has done, but I would say, yes, Congressman, EPA has been doing a study. We are currently working on a 2004—well, it is a needs survey that we hope to release. It is going through interagency review. And an important part of that analysis is not just identifying what types of

needs are the greatest such as for wastewater overflows or nonpoint source pollution but also getting a sense of which States, which areas of the country are seeing needs grow more rapidly.

And you are absolutely right. The basic instinct of in certainly some areas that the infrastructure as the older and has aged, those may be facing some of the biggest price tags. Also, areas where the population growth is occurring are experiencing greater needs.

Mr. DUNCAN. Let me just ask the other two witnesses very quickly, do you see more use of much public-private partnerships in the future? And, Mayor, are you doing that in Albuquerque in some ways?

Also, I will ask both witnesses, have your associations seen the need for a Federal clean water trust fund as we have for highways and aviation and so forth?

Mr. CHAVEZ. Congressman, at this time, the Council of Mayors is opposed to a trust fund. It seems like it is going to be a new tax, and if not a new tax we are actually worried about where the money might come from. But we certainly would urge as much flexibility in financing modalities as possible, whether it be public or private SRF. Just give us as many options as possible and let us solve them as it meets the needs of our particular communities.

Mr. DUNCAN. Do you have any type of public-private partnership in Albuquerque?

Mr. CHAVEZ. We don't. We are primarily financed with IRGs.

Mr. DUNCAN. Dr. Gilinsky.

Ms. GILINSKY. Thank you. I would say the trust fund could be one option. Again, we need more options the better for the financing, and we are certainly not adverse to public partnership. But we found that the partnership between the State and the Federal dollars has really worked very well in Virginia, and Virginia citizens have stepped forward to bear their fair share of the bill along with the Federal dollars.

Mr. DUNCAN. Thank you very much.

My time is up. I thank the Chairwoman.

Ms. JOHNSON. Thank you.

Unfortunately, we will recess for long enough to have one vote and return. So we won't be away too long.

[Recess.]

Ms. JOHNSON. The Chair recognizes Mr. Boustany.

Mr. BOUSTANY. Thank you, Madam Chair.

By looking at the testimony, Mr. Grumbles, I note on page 3 you mentioned down toward the bottom, as of January, 2007, States have provided water body information on $11.1 billion of their Revolving Loan Funds, and information indicates these loans support the goals of the Clean Water Act.

I know that Ms. Gilinsky has also stated in her testimony that this has been one of the most successful Federal programs in terms of leveraging funds and so forth, and yet we have heard a lot of testimony not only here today but in prior episodes where the needs versus revenue gap is a significant problem.

We know that State Revolving Loan Funds have been disbursed generously and leveraged, gaps persist and generally we seem to be losing ground. I would like to know what oversight is being carried out not so much on a Federal level, because you have outlined that

fairly well in your respective testimony, what is being done at the State level? What is being done at the local level to make sure that money is being spent in a very cost-effective way to build the necessary infrastructure and to take care of this gap? And what are we going to do to minimize administrative costs?

Mr. GRUMBLES. I would like to take a shot at trying to respond to your questions and then turn to others if they———

Mr. BOUSTANY. Sure.

Mr. GRUMBLES. —and Dr. Gilinsky, if she would like to talk about State efforts.

A couple of things, Congressman. One is that, as we oversee implementation of the Clean Water Act, it is a unique partnership. The Clean Water Act is—the interesting thing about the Clean Water Act is, more than other Federal environmental statutes, there is a very prominent role, a primary role for the States to carry out the Clean Water Act, to establish the standards which we approve and to—basically, 45 of those States carry out the permitting programs where the rubber meets the road to really get the projects going and complying with the law.

We meet with the States on a very frequent basis to see how implementation of the SRF—how that is going. One of the things, messages that resonates very well with this administration is the need to continuously improve the streamlining of and operation of the State Revolving Funds, that those are very successful but there should continue to be a focus on red tape and cross cutters and to see where we can work together to reduce potential administrative barriers.

I think it is also important, as Congress recognizes, to ensure that some of the funds, Federal funds that go into the State—the seed money into the State SRFs is also for administrative costs. A key point for us, too, is to—which we think of every time we come up with where we are required either because of the terms of the Clean Water Act or we think it is the right thing to do—to come up with new regulations. We have to take into account there are already existing needs and communities have non-Clean-Water-Act-related needs as well, and that should be taken into account.

Mr. BOUSTANY. Because I know, as we look at the funding gap and all the discussion we have had on this, I want to make sure we are covering all bases and doing all the necessary oversight to be sure these dollars are spent in a very cost-effective way and we do minimize our administrative costs.

Mr. GRUMBLES. We think another very important concept of sustainability is to explore—not to mandate but to explore the notion of incentives for States to have permit fees where those who are actually discharging pollution under Clean Water Act permits would pay for some of the costs associated with that to help free up State budgets to focus on other Clean-Water-Act-related needs. So we are working on that, exploring incentives so that States can help meet their the clean water needs.

Mr. BOUSTANY. Dr. Galinsky, do you care to comment?

Ms. GILINSKY. Yes, if I may let you know about the oversight that is done at the local level. Once we give out these loan funds, we go out, we inspect the construction, we have an Office of Wastewater Engineering that is separate from the loan program. It is

paid for by State funds. But we have our engineers review the plans and specs, make sure everything is done in the most efficient manner; and there is grants requirements about what can be used for administrative costs. So it is very tightly controlled and very efficient.

Mr. BOUSTANY. Are we looking at best practices, comparing one State to the next to find out what really works?

I know my time is up, but I was hoping to get a little more information on this.

Ms. GILINSKY. If I may, yes, we are. And, again, through our Wastewater Engineering Department, we are up on the latest technologies and make sure that these localities use them.

Mr. BOUSTANY. I thank you.

Ms. JOHNSON. Ms. Hirono.

Ms. HIRONO. I would like to ask Mayor Chavez to clarify something for me.

In your testimony, you noted that, while these SRF programs exist, that many of the cities do not take advantage of them because of various kinds of limitations; and you note in your testimony that we should have clarifying language to make the term of repayment longer and also to provide for no interest and low interest provisions.

Is that something that is currently not in the authorizing bills that you would like to have clearly in these bills?

Mr. CHAVEZ. Congresswoman, some parts are in there, some parts aren't. Some parts are discretionary at the State level; and if there is not language at least encouraging, then they ought not to do it. For example, going from a 20- to a 30-year period.

The defensible reason why municipalities choose not to go through the SRFs is because they can, frankly, get better rates on their own investment with industrial revenue bonds and some of the other modalities that are available.

Ms. HIRONO. So, clearly, if we were to encourage them through no interest loans that would facilitate their utilization of these funds?

Mr. CHAVEZ. Absolutely. Free money has always been the best money.

Ms. HIRONO. I think that to the extent that the need is great we should encourage the municipalities to use whatever array of methods to finance this infrastructure. And I also note that in your resolutions that were passed that you do not make those points that you would like to have language for no interest loans. I really don't know how much—what the impact of that would be, but since where I am coming from is I want to encourage the municipalities to utilize these loans as long as we are authorizing this legislation, would you—it is not in your resolutions that you attached.

Mr. CHAVEZ. Congresswoman, it is very much a part of the overall platform of the National Council of Mayors. If you have a no interest loan, at least some point you get at least 60 percent of it that turns out to be grant, frankly.

Ms. HIRONO. Thank you very much.

Ms. JOHNSON. Mr. Gilchrest of Maryland.

Mr. GILCHREST. Thank you, Madam Chairwoman.

I would like each of you to respond to this inquiry. Now Ben talked about three stages: Federal grants, State Revolving Loan Funds and now the sustainability aspect of this. And under sustainability, Ben, you described asset management, full cost pricing, water efficiency, and overall watershed approach. Hence my question.

If the emphasis is on clean water and then we look at the overall watershed approach and then we look at swimmable, drinkable, fishable and all those things, we are then, I suppose, looking at, in the watershed approach, the hydrologic cycle which determines the sustainability and the endless flow through that natural physical hydrologic cycle and the hydrologic cycle then has its own infrastructure in the biosphere. It is a natural—nature's designed infrastructure in which we have tapped into because we depend upon it.

Now when we look at nature's infrastructure and we are looking at watershed approach and we are looking at human infrastructure, wastewater treatment plants, do we have in mind the engineering design of making human infrastructure compatible with nature's infrastructure so we don't unnecessarily disrupt the hydrologic cycle which is there to produce clean water so it is fishable, drinkable and swimmable and so on?

So as we approach that perspective, when we look at State Revolving Loan Funds, Federal funds, all those things, in part do we look at the difference between upgrades which produces toxins, nitrogen, phosphorus that we saw in the Potomac River this past year or so, endocrine disrupters as a result of toxins flowing into the Potomac River—and it has happened in a number of other places including the Susquehanna, which flows into the Chesapeake Bay. So do we look at the difference at least as far as our role for keeping water clean in upgrades, as compared to expanding capacity?

Because when you expand capacity that means you offer indirect opportunities for more problems, more impervious surfaces, more storm water problems, more volume of nitrogen and phosphorus, more air degradation and all those things.

So I guess I am looking at the emphasis on, Ben, your four aspects of sustainability, overall watershed approach. Is that really emphasized? And do we look at, when we are getting these dollars, to expand the infrastructure, making it compatible with nature's infrastructure? But is there a significant difference in your approach when you look at upgrades when compared with expansion of capacity?

Mr. GRUMBLES. Thank you.

You are emphasizing the importance of things such as low impact development and green infrastructure, looking at a broader watershed context beyond the pipe, beyond the property lines and the fences of the utility itself to try to come up with ways to reduce the demand and the costs of perhaps unnecessary, perhaps avoidable expansion. That is the idea, you know, trying to recognize the hydrologic cycle but also the terms and definitions under the Clean Water Act and how broad our regulatory authority is.

So what we want to do on a voluntary basis as much as we can with States and localities and utilities is to be thinking about ways

to reduce the costs of operating infrastructure or meeting infrastructure needs by rediscovering and advancing green infrastructure, low impact development. It can help. It is a significant component, a pillar of the sustainable approach to infrastructure.

Mr. GILCHREST. Thank you.

Mr. BAIRD. [Presiding.] Mr. Chavez.

Mr. CHAVEZ. Congresswoman, Albuquerque last month won the world leadership award in London for our utility project called San Juan-Chama. It is a project for bringing water out of the Rio Grande and treating it for drinking purposes.

Prior to that, we were using aquifer for our entire water source; and it was engineered in an entirely different type of way, with fish passageways, with ability to change the flow, so that we didn't dramatically impact the natural ecosystem because we found that that had costs—unintended often—down the road that we couldn't pay for, problematic in how do you budget for those things and how do you really cost something out 40, 50 years down the road. If you build in a certain way, it has an unintended impact on the natural ecosystem you have to pay for later; and I don't have an answer for that one. But, clearly, smart engineers today are doing a better job.

Ms. GILINSKY. Congressman, if I may, our Chesapeake Bay program, the Federal-State local partnership that Virginia and Maryland are in, along with Pennsylvania, is a perfect example of what you were speaking about and our tributary strategy, which basically we are holding the line on the nutrients and the chemicals that are coming into the tributaries and we are using innovative solutions such as nutrient trading between discharges to address that, but we are allowing growth within those caps. To me, that is a perfect example of what you are speaking of.

Mr. GILCHREST. Thank you very much.

Thank you, Madam Chairwoman.

Ms. JOHNSON. [presiding.] Mr. Bishop.

Mr. BISHOP. Thank you, Madam Chairwoman. Thank you for indulging my schedule.

To the panel, thank you very much for coming this morning; and, Mr. Grumbles, it is nice to see you again.

I wanted to follow up on some of the questions that Congressman Baird was asking. You several times this morning have used the term, a $6.8 billion commitment through 2011, correct? What is the starting point of the commitment? Is it 2008 through 2011; 2004 through 2011?

Mr. GRUMBLES. 2004—through the history of the Clean Water Act, the SRF, the Federal Government, EPA through congressional appropriations has provided $24 billion. But the plan, the administration to help transition towards this third wave of greater sustainability is to say, continue to provide Federal seed money for the Clean Water Act, the SRF between 2004 and '11.

Mr. BISHOP. That is the point I wanted to focus in on. Because I appreciate the issue of greater sustainability associated with the third wave, and I was interested to hear your four pillars. But it seems to me that there should be a fifth pillar, and that is a maintenance of Federal effort.

In 2004, the Federal commitment to the SRF was $1.34 billion. The 2007 budget request from the administration was $680 million. So over a 3-year period a decline of a third. And so my question is, aren't we raising the bar on all of the other areas associated with sustainability by diminishing the Federal commitment to maintaining the revolving funds?

Mr. GRUMBLES. I think that there is a greater Federal commitment in other aspects of the equation. It is not just the Federal seed money. But I understand your point about maintenance of effort, and I would respectfully disagree when it comes to the level of funding for the Federal seed money into the SRF.

The view, the vision that we still hold to that was in the original legislation authorizing the clean water SRF would be that there would be a phase-down of the Federal seed money over time and that would further the leveraging and the sustainability of the State funds. That is not———

Mr. BISHOP. But you do acknowledge that the need is growing? We have at least a $21 billion gap by your numbers if not a $120 billion gap?

Mr. GRUMBLES. In various respects, the need is growing. As we discover more about and keep more focus on nonpoint source pollution, the documented needs for nonpoint source pollution grows, but I also believe, Congressman, that the just as certain needs are growing, the overall solutions are growing, too, and they are—there are more innovative approaches that are really budding and that are being carried out in various cities and communities across the country.

Mr. BISHOP. And I am not suggesting that we abandon any of those. I guess all I am saying is it seems to me that we are raising the bar or placing a greater burden on all of the other elements that contribute to the solution here when the Federal Government is sort of systematically diminishing its piece of the solution.

Mr. GRUMBLES. Well, I would say we are focused on accelerating progress in other respects such as utility management, environmental management systems, reducing the footprint of utilities, looking at red tape, potential for problems in accelerating the assistance through the SRF———

Mr. BISHOP. Let me just ask one last question. I know we are about to get the administration's budget request for Congress for fiscal '08. Do you anticipate that the Federal Government's participation in the revolving fund will continue on a downward trend as it has for the last several years, or will you be asking for the same amount that you requested in '07, or will we see an increase?

Mr. GRUMBLES. I anticipate being able to talk about the President's budget when it comes out in February and really seriously working as best I can to answer your questions and in levels of detail. I know Long Island Sound and other areas that you yourself are so committed to. We look forward to engaging with you on the '08 budget.

Mr. BISHOP. I will look forward to that opportunity. Thank you very much.

Thank you, Madam Chairwoman.

Ms. JOHNSON. Mrs. Drake.

Mrs. DRAKE. Thank you, Madam Chairwoman; and I certainly would like to welcome all of you here. This is my first meeting on this committee so I am delighted to be a part of it.

As you know, in the portion of Virginia that I represent, there are very tremendous needs, from the very old city of Norfolk to the very economically depressed cities on the Eastern Shore, very, very small communities. But I have listened a lot this morning to the President's budget and what he is going to propose. Is there something different about this type of funding, that Congress doesn't have the ability to change it if they chose to?

We keep talking about the President's budget, but my understanding was Congress has the ability to hold the purse strings; and if Congress made the choice to increase the funding, wouldn't that be possible?

Mr. GRUMBLES. The administration fully recognizes it is Congress that actually enacts the budget and when the budget is released in February, I know from an EPA perspective we really look forward to working with you and others in the committees and the Appropriations Committee. Part of the message that we are sending in the context of this hearing on needs for water infrastructure is the overall need not only to sustain the State Revolving Fund, because that is a model, and to have continued involvement at the Federal level and the State and local level, but also to be thinking about this third wave of greater sustainability, including private sector. We are very interested in continuing to review innovative financing proposals that may involve other committees and congressional———

Mrs. DRAKE. That is what I heard a lot from you, is that we undervalue water. We heard yesterday on the floor that bottled water—we pay $400 a barrel for what we use in bottled water. So I have heard you say that.

I have heard you talk about permitting, and I think this committee is very interested in how do we address this problem? How do we increase funding to deal with this particular problem?

So it is like in other committees I have served on. I think we all have the same end goal. It is just how do we get there. But nothing would prevent Congress, if they chose to, to increase the funding for the revolving funds.

Mr. GRUMBLES. Right, and we are hoping that Congress will also increase opportunities for good Samaritans to clean up abandoned mine sites. We think that is a great role for Congress to add another tool to the toolbox, which will also help free up public moneys for other types of Clean Water Act needs.

Mrs. DRAKE. I also join Congressman Boustany in being concerned about what are the requirements in here and how are we requiring people to spend money and are we doing things that we could do differently and spend the money more effectively?

But I would also like to ask you, in doing these revolving funds grants and helping localities meet this need, is there any requirement in there for them to have a planning process for down the road? Because it seems to me 50 years from now the Members of Congress are going to have that same discussion as that infrastructure begins to deteriorate.

Mr. GRUMBLES. That is an excellent question; and the answer is, yes, there are some planning requirements. One of the principles that we have when it comes to Congress reviewing the clean water SRF is to look at ways to incorporate asset management, up-front planning even more so than it currently is. But there are some States and communities that are doing a great job. But we think that is an area that is definitely worthy of congressional input.

Mrs. DRAKE. I would just like to ask Dr. Galinsky quickly because you know the rural communities that I represent on the Eastern Shore. Is there something with the Commonwealth that helps them—because small communities don't have the access to have the same staff that, say, Norfolk or Virginia Beach would have, is there help for them or are they on their own planning and what needs to be done?

Ms. GILINSKY. Congresswoman Drake, we do have different rules for how we give out the loans to more rural communities. They get lower interest loans. They get more grant money than loan money from the Water Quality Improvement Fund in Virginia and that helps them hire the contractors. We don't actually do the work for them at the State level, but they do get more help financially. They get a better loan.

Mrs. DRAKE. Do they get help in expertise from a staff level as well?

Ms. GILINSKY. Lower interest loans. They would hire the consultant.

Mrs. DRAKE. Instead of having someone that would be available?

Ms. GILINSKY. We don't have the staff that would actually design it.

Ms. JOHNSON. Thank you.

Mr. Mitchell.

Mr. MITCHELL. Thank you, Madam Chair.

I would like to ask Mr. Grumble a couple questions. Essentially, with the allocation of the SRF funds, does EPA review these, the formula for this at all?

Mr. GRUMBLES. Well, we implement the formula that Congress provided us on a clean water SRF funds, so we review it in the context of making sure we are following the statute in—the allotment formula in the statute.

Mr. MITCHELL. You mentioned, Mr. Grumbles, earlier that it was—one of your concerns is to look at the needs; and I would say that, looking at this formula, the needs have not been taken into effect or into account. Do you think that the current distribution is equitable?

Mr. GRUMBLES. Well, our basic approach is that, ultimately, it is really a congressional decision when it comes to the allotment formula that involves equities and policies. Certainly on needs we feel duty bound to report on what we find and what the States provide us in terms of their needs, and we do have information on growing needs in certain States or areas of the country. But, ultimately, I think historically the view of the agency, regardless of who the administration is, has been the allotment formula itself is typically a role that Congress focuses on.

Mr. MITCHELL. I would like to just mention that I think that this formula which was based on 1970 population figures. Is that correct?

Mr. GRUMBLES. Yes.

Mr. MITCHELL. And Arizona, as an example, has doubled in size, in population. I notice by some of your own figures that we are ranked 10th in needs, we are ranked 20th in population, and 38th in funds received and, in fact, we are at 53rd in per capita. And I would suggest that Arizona now is the fastest-growing State. I would hope that there might be some input from EPA to re-evaluate this and make some recommendation if you are concerned about needs, because I think this formula is really out of whack.

Mr. GRUMBLES. Congressman, we and our staff would be very happy to work with you, particularly looking at the Safe Drinking Water Act amendments of 1996 that Congress enacted that specifically tie revisions of the allotment formula to EPA needs surveys as they come up, to tie that to the revisions to the allotment formula based on the needs survey.

Mr. MITCHELL. Thank you.

Thank you, Madam Chair.

Ms. JOHNSON. Thank you.

Mr. Hall.

Mr. HALL. That you, Madam Chairwoman; and thank you all. You are illustrious witnesses.

According to the ASCE 2005 infrastructure report card, New York has over $20 billion in wastewater needs. My district in New York's Hudson Valley is one of many in the country, particularly in the Northeast, where a growing population and higher usage is threatening to overwhelm an aging clean water infrastructure.

The infrastructure in place is becoming overwhelmed. Old septic systems are being overrun. In many instances, there are new needs for infrastructure where none exists at all.

In a world of competing needs and limited dollars, what is the decision-making process in place to try and assure that growing non urban areas will be able to get adequate assistance; and, in general, what priorities are considered in the distribution of CWSRF funds?

Mr. Grumbles, I guess that would be to you first.

Mr. GRUMBLES. Well, I would say two things; and the second one is going to be to commit to have—for me and staff to get back to you for a longer discussion about the specific criteria that are used in the congressionally directed allotment formula.

In terms of the needs survey, as we are working on the next needs survey, we can also describe to you in more specific terms some of the criteria we look at. But we definitely recognize, Congressman, that the country changes. It is changing, and population shifts mean different needs, water quality needs in other areas of the country and that growth in some areas, whether it is suburbs or rural areas that are growing, will have different infrastructure and water quality needs than they did in the '70's.

One of the things that we are very interested in is advancing a comprehensive strategy from the grass-roots level but with EPA assistance on decentralized systems. Septic systems provide a significant role for communities across the country and, obviously, in

rural areas but also in suburban and some urban areas; and we think it is important to make better, more effective use of funds and technologies to prevent malfunctioning septic systems and provide information. Because it can be a public health issue if septic systems are not properly operated.

Mr. HALL. Thank you.

Director Gilinsky, do you have anything to add from your experience?

Ms. GILINSKY. Yes, only that I am sure, as in your State of New York, we have at the State level—once we have funds available, we prioritize based on what communities need the money, where they have other sources of funds, how quickly they can get ready, and we try to stage different projects so that you can spread the money out as much as possible. Because, obviously, the urban projects take a lot more money than some of the more rural projects. But that doesn't mean they are more important. So we try and spread the dollars, and I am sure your State does that as well.

Mr. HALL. Yes. Thank you very much.

One more question which concerns the whole watershed approach. My district is also home to the Indian Point Nuclear Plant, which is currently leaking strontium and tritium into the groundwater and into the Hudson River, which is the source of drinking water for Peekskill, Poughkeepsie and many smaller communities on the River, whose processing plants I don't believe are cable of separating radionuclides from the River water.

Understandably, water concerns are rising partly because of groundwater contamination, also dumping of trichloroethylene from manufacturing plants into the ground, which has contaminated wells in Hopewell Junction in Dutchess County. So part of this, I guess, would be asking for other branches of EPA to do their job better so that we don't look—we are not faced with a drinking water consumption problem that is either well related or municipal system related because they are taking drinking water out of contaminated water out of the River.

But I was wondering if you had a comment on what EPA's suggestions would be for these kinds of problems and do you have any new—since you mentioned technological assistance, do you have any ideas as to how to remove strontium–90 from river water so we can drink it?

Mr. GRUMBLES. Two things, Congressman. One is source water protection and then the other one is that—your technology question or point about that.

On source water protection, it is a term which is really in the Safe Drinking Water Act that EPA administers with our partners in the States. Focus is recognizing we all live downstream, so there ought to be efforts to prevent pollution upstream that get into your drinking water supplies. And oftentimes the tools to protect that source water is not under the Safe Water Drinking Act, it is under the Clean Water Act, or it could be under Superfund or RCRA. I think the point that you are getting at—or other statutes, depending on the types of activities involved. So that is what the watershed approach is encouraging.

From an EPA perspective, I know there are various offices beyond my office involved in some of the environmental challenges in

your district; and I will certainly share that information with the Superfund office and other offices, enforcement office, so we can use tools that are available and work with the State and with the community.

On the technology front, technology is definitely part of the solution to meeting infrastructure needs and watershed protection needs across the country.

EPA, the President's budget request for '07 included significant initiative for funding for research and development for innovative technologies, primarily for underground wastewater systems and drinking water systems, too, but dealing with the pipes and distribution systems to try to repair and upgrade those in the most cost-effective way possible.

But the point is, I don't have an answer—specifically one to your technology questions about removing that type of contaminant. We think technology is an important part of it, and I will share with our research office and also Superfund office your questions, and we commit to get back to you.

Mr. HALL. Thank you very much; and thank you, Madam Chairwoman.

Mr. BAIRD. [Presiding.] Mr. Arcuri will be next.

Mr. ARCURI. I thank the Chair. I realize no one wants to hear from the last person asking questions after a 2-hour plus hearing, so I will be very brief, but I would like to thank the panel.

Mayor, just a couple of very quick questions for you. I believe you indicated earlier that private activity bonds are the least used—utilized vehicle for financing these type of projects. Is that a correct characterization of your testimony?

Mr. CHAVEZ. That is correct, Congressman.

Mr. ARCURI. Do you know the reason why they are used the least?

Mr. CHAVEZ. My sense is that it is because of the volume caps on those, and if those were—had more flexibility, were removed, they would be more widely used.

Mr. ARCURI. I realize it is not the jurisdiction of this committee, but, if they were removed, would that be a vehicle that would assist municipalities in funding these type of projects?

Mr. CHAVEZ. Congressman, it would be one more tool that we would have at our disposable, absolutely, yes.

Mr. ARCURI. Thank you.

Mr. BAIRD. Mr. Kagen.

Mr. KAGEN. Thank you all for being here, and I apologize for really being the last person to ask a question this morning.

Mr. Chavez, what are the three things that we can do to help you? And the next question, what are the three things that your counterpart to your right at the EPA could be doing, three things to help you do your job better?

Mr. CHAVEZ. Congressman, thank you.

The priorities for the mayors are threefold. One, expanded grants to municipalities, either directly or through the States, preferably directly, for these water and wastewater projects, particularly where there is affordability issues or when you have a serious environmental issue with which we are confronted; expanding the current 20-year loan category to a 30-year no interest loan category or

30-year low interest loan payback period through the SRF; and then modifying the current tax law to remove the State volume caps on the private activity bonds.

Underlying all this is just more flexibility, more tools and then we can see which tool best meets the needs of an individual city.

And in terms of Mr. Grumbles, just as long as he keeps his wonderful, marvelous disposition and then make him give us more money.

Ms. JOHNSON. [Presiding.] Mr. Boustany.

Mr. BOUSTANY. Thank you, Madam Chair.

Dr. Gilinsky, do smaller communities have adequate staff and expertise to properly evaluate and manage their assets, water assets?

Ms. GILINSKY. Yes. Some—I am sure it varies. I don't have direct information, Mr. Congressman, but that is part of the grant, is that they hire consultants who do work with them to get that expertise. We try to hook them up with consultants, and we probably go out and spend a little more time with those smaller communities to let them know what is out there.

Mr. BOUSTANY. Thank you.

One final question for the panel. What is the effect of applying Davis-Bacon prevailing wage laws to the State Revolving Fund and does this mean that fewer projects could be constructed? Do we have any data on this?

Mr. GRUMBLES. Congressman, I appreciate the question, and I feel that the best answer would benefit from some more time and comparing the notes that we have and to get back to you on that, the impacts of that.

Mr. BOUSTANY. I would appreciate some information on that.

Thank you. That is all I have.

Ms. JOHNSON. Thank you very much.

Mr. Baird.

Mr. BAIRD. Mr. Grumbles, earlier you spoke about administration commitment of $6.8 billion over 6 years, do you remember?

Mr. GRUMBLES. 2004 through 2011.

Mr. BAIRD. OK, so 7 years. To the best of your knowledge, how much do we spend in Iraq in 1 week?

Mr. GRUMBLES. I don't know, Congressman.

Mr. BAIRD. It is roughly $2 billion, and I just point that out because it seems to me that our commitment nationwide from this administration to SRF is roughly the equivalent of about 3 and a half weeks in Iraq compared to 7 years in the United States of America to provide clean water for our own citizens, and it is worth keeping that in context.

I yield back.

Ms. JOHNSON. Thanks to all of the panel members. I will probably submit some questions later, but we have kept the second panel waiting a long time. So thank you very much for coming.

The second panel of witnesses consists of Mr. Kurt Soderberg, the Executive Director of the Western Lake Superior Sanitary District, Duluth, Minnesota, testifying on behalf of the National Association of Clean Water Agencies; Mr. J. Kevin Ward, Executive Administrator of the Texas Water Development Board, and testifying on behalf of the Council of Infrastructure Finance Authorities; Ms. Nancy Stoner, Director of the Natural Resources Clean Water

Project; Mr. Jim Stutler, President of the Tierdael Construction Company, located in Denver, Colorado, and current President of the National Utility Contractors Association; and Ms. Debra Coy, Director and Research Analyst of water-related issues for Janney Montgomery Scott.

As I noted to the first panel, your full statements will be placed in the record, and we ask that you try to limit your testimony to 5 minutes as a courtesy to other witnesses.

STATEMENTS OF KURT SODERBERG, EXECUTIVE DIRECTOR, WESTERN LAKE SUPERIOR SANITARY DISTRICT, DULUTH, MINNESOTA, ON BEHALF OF NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES; J. KEVIN WARD, EXECUTIVE ADMINISTRATOR, TEXAS WATER DEVELOPMENT BOARD, DALLAS, TEXAS, ON BEHALF OF COUNCIL OF INFRASTRUCTURE FINANCING AUTHORITIES; NANCY STONER, DIRECTOR, CLEAN WATER PROJECT, WASHINGTON, D.C., ON BEHALF OF NATURAL RESOURCES DEFENSE COUNCIL; JIM STUTLER, PRESIDENT, TIERDAEL CONSTRUCTION COMPANY, DENVER, COLORADO, ON BEHALF OF NATIONAL UTILITY CONTRACTORS ASSOCIATION; AND DEBRA G. COY, DIRECTOR/RESEARCH ANALYST - WATER, JANNEY MONTGOMERY SCOTT, L.L.C, WASHINGTON, DC.

Ms. JOHNSON. Again, we will proceed in the order in which the witnesses are listed on the call, so, Mr. Soderberg, please proceed.

OK, Mr. Ward is next.

Mr. WARD. As I understand, Mr. Soderberg is having a discussion with someone right now, so I will, if you allow me.

Madam Chair, Members of the Committee, I greatly appreciate being here. I am the Executive Administrator of the Texas Water Development Board, but I am also here today because I am testifying on behalf of the Council of Infrastructure Financing Agencies. That is an organization that represents virtually every State and the territories and both the State revolving fund that is a clean water revolving fund as well as the drinking water State revolving fund—should I continue or should I yield to the member?

Ms. JOHNSON. Go ahead and continue.

Mr. WARD. Thank you.

I want to say what a great honor it is to be the first witness from Texas to testify before your committee, Madam Chair. There are an awful lot of needs in the State of Texas, and I believe that we represent a broad base of needs that would reflect most of the States in the United States who don't really have the CSO issues that you might see and some that you brought up as one of your priorities. But, nonetheless, we can relate to that because of issues we have had in some of our major cities.

First off, I would like to express on behalf of CIFA our gratitude and, of course, how pleased we are on the fact that this committee is taking up as a priority reauthorization of clean water State Revolving Funds. As I have heard already from many of the members here, they know that you have been working on this issue for quite some time, and it would be very nice for it to bear fruit this time.

Certainly nonsource point problems throughout the United States as well as in Texas are ones that have not been addressed yet with the program.

But with any program, you have to look at what the partnership has been and what the success has been, and over time, I think that this program demonstrates that partnership is really the key. You have to have the ability to afford flexibility to the States. The beauty of the Clean Water Revolving Fund has been that it was delegated from the old EPA grants program fully to the States; and the States became owners, if you will, of those programs and began bringing forward those priorities through intended-use plans and a formal structure that you glean data from and you are able to get information from. Because of that, you can see that there has been a lot of momentum in this program. It has waned in recent years.

We have a gap survey that we prepared. I heard some comments earlier. I think Congressman Baird asked the question, ″What is the 'gap'?″ we have not done a formal estimate of that, but I would say that we estimate about 2,000 projects are seeking loans right now for over $9 billion, and historically, with the higher level of funding the States have been leveraging, the Federal grants produce about $3 billion to $5 billion a year in loans. So, if you met the low end of that, the $3 billion from the $9 billion, then you have got about a $6 billion gap of need that has been expressed for this fund.

Now, regardless of whether you think in the future there are alternative sources for some of that, if through sustainability you are able to get the entities to take responsibility and fund it themselves on full-cost pricing and all of those issues, it is still the stated needs of your constituents that those are what they say they need.

So we have watched the same thing you have. Over the past 4 years, recent appropriations have been dwindling; it has been cut in half. We see this as a trend that really is counter to what the trends are from our customer base right now. We are seeing a lot more disadvantaged community need. We are seeing an awful lot more need for innovative financing. Certainly, we look at this issue of trying to bring more capital into the program as vital.

One of the issues that there has been for Texas, as well as for our membership, has been for expanded flexibility and the cap allocation under private activity bonds. Right now, you know, it is debatable as to whether that will cause privatization to an extent where actually the services are not being provided by a public entity anymore. I think the real key is, it provides a mechanism, a conduit, to bring private capital into the system in a way that we have not been able to in the past because we compete against other interests in the private activity cap.

In Texas, we did take an innovative approach. The governor several years ago asked the legislature to pass a bill under ″Get Passed″ to give an allocation to the Water Development Board each year for small communities, for rural communities, if you will. It also gave us the ability to ask for large water projects up to $100 million of the cap. So we have seen that already acted on by our legislature, and certainly, it is an issue that I think that many States have brought to you.

Arbitrage rebate relief, that is another issue that we see as something that could also bring more capital into the program. It is just an easy mechanism. This committee has talked about it before. Obviously, your jurisdictional issues need to be worked out, but certainly, we are here to provide whatever information you need on that.

In 2005, we see about 900 projects that were finished. That is 21 billion gallons of water collected and treated every day, 193,000 construction and 77,000 permanent jobs created, and over $1.1 billion in savings over the next 20 years for those entities. Those incentives are why those people came to the program.

I think it also accentuates the fact that it is an investment program. It is not just a drain on Federal capital. This is an investment program that creates jobs. It provides a capital base out there in both the State infrastructure and human infrastructure that was mentioned earlier as well as the capital infrastructure in a permanent way. It revolves. It will always revolve. Any investment that goes in here is required by law to revolve. It has administrative oversight on a continuing basis.

Examples in the State of Texas vary from an infiltration and inflow reduction and correction problem in the city of Houston that could affect up to 5,300 miles of sewer pipes, that are as old as 50 years, to innovative and very environmentally sensitive projects like in High Island Independent School District in Galveston County, where it was cited by EPA for the environmental and economic benefits that it produced.

Finally, additional water supplies have been created for the city of San Antonio. We have had 35,000 acre-feet of water replaced all because of a reuse project that used 64 miles of transmission line to reuse that wastewater in a beneficial way.

We have a lot of recommendations that are specific that we could provide to the committee. Rather than go over any more of my testimony, I have highlighted, I think, the points that are pertinent for you, and I will be here at the end for questions.

Ms. JOHNSON. Thank you very much.

Mr. Soderberg.

Mr. SODERBERG. Thank you, Madame Chairman, and members of the committee. I was unavoidably detained. I did get the opportunity to speak with Mr. Chair, so I took advantage of that.

My name is Kurt Soderberg. I am the Executive Director for the Western Lake Superior Sanitary District in Duluth, Minnesota. I would represent the small sewer district. Although, I am here speaking on behalf of the National Association of Clean Water Agencies, NACWA. We represent some of the largest entities around the country, 300 or more agencies, the largest often in each State. We do reclaim more than 18 billions of gallons of wastewater every day, which is the majority of the wastewater reclaimed around the U.S.

Much of what was in our testimony you have already heard from other speakers, and often, it was more eloquent than I, so I will try to give you more of the local perspective.

We have seen tremendous progress in 35 years, but we have also seen the fact that this is not the time to pat ourselves on the back. There clearly are unmet needs. You heard the statistics already in

some of the members' comments at the beginning. Our point, though, that we made in the testimony is that the Federal Government's abandonment of the States and municipalities as these full-fledged partners in funding clean water will have unacceptable consequences, and we are urging you to move forward again with a partnership.

There are some specific areas that NACWA has comments. We are asking you to fully fund the Clean Water Act, to reauthorize the State Revolving Loan Fund, to provide loans, loan subsidies and grants. The needs out there, you have already heard, clearly outstrip the supply; $20 billion to $30 billion is the number that has been used in other contexts, but there is also a need for a dedicated revenue source.

We ask you to work with us in finding a dedicated revenue source for the State Revolving Loan Fund, provide funding for sewer overflow control projects. H.R. 624, already enacted, provided $250 million per year over a 5-year period. This would help us, our district, as well as many others around the country in trying to eliminate the problem of combined and sanitary sewer overflows. Work with us on a National Institute for Utility Management. Help us to help utility managers work more effectively and efficiently.

We are also looking at the Federal Government for greater investment in research, wastewater treatment technologies, greater research on emerging chemicals of concern, and technologies to treat these chemicals and green technologies for our industries, and also work at comprehensive management—not storm water, not clean drinking water, not wastewater; look at water as being water, and try to manage away from some of the silos.

In the remaining time, I would just like to bring it down to our level. We did a master planning process. Our facilities are worth about $550 million. If we were to replace them, we have got a capital program of about $100 million over the next 10 years. The State of Minnesota takes maximum advantage of the State Revolving Loan Fund. They fund about $100 million in loans annually. Yet, there is another $200 million that goes unmet every year, and Minnesota is one of those States that does take advantage of those. So we are looking at the fact that there is not enough State Revolving Loan Fund money out there.

We are also seeing at the local level this increased cost of compliance and escalating operating and capital costs. This is a perfect storm right now in looking at greater costs and how the global economy is also impacting us. We will be talking about this at our national conference coming up here just later in the month.

We really need more money on the table. That is the bottom line. With the State Revolving Loan Fund, we look at the possibility, and we have asked about the possibility of a reemergence of some additional funding that would be long-term funding.

When Mr. Grumbles talked about the four pillars, he talked about the fact that part of it is that municipalities are not charging sufficient rates. That is not what our data shows. Our data would show that average service charges have increased over the past years that double the rate of inflation. In Region 5, where we come from, rates increased over 13 percent in 2005 alone. In our case, our rates went up by 4.9 percent this 2006 to 2007. Our industrial

customers are saying that they cannot stand those sorts of increases. They are dealing in a global economy with the pulp and paper industry, and they are not believing the full-cost pricing.

So, Madame Chair, we thank you for this opportunity. I will be available to answer questions, and we really are appreciative that you are drawing attention to this very important issue of clean water funding in this new Congress.

Thank you very much.

Ms. JOHNSON. Thank you very much.

Ms. Nancy Stoner.

Ms. STONER. Good morning, Madame Chair, and members of the subcommittee. I am Nancy Stoner, Director of the Clean Water Project of the National Resources Defense Council.

Thank you for holding this hearing today on the reauthorization of the Clean Water State Revolving Fund. This is a tremendous opportunity for the Congress to step up our investment and to spend smarter so that the U.S. continues to make progress in ensuring that there is clean, safe, usable water for the next generation.

The Federal Government's investment in wastewater treatment over the past 35 years has brought tremendous progress in cleaning up our waterways. Yet, the issue of whether there is a Federal role in water infrastructure investment is a recurring question. To my mind, that issue was resolved appropriately by Congress in 1972.

Water pollution knows no State bounds. As Mr. Grumbles said earlier today, we all live downstream. Failure to protect water resources in one State pollutes downstream surface and groundwater resources. That is why Congress passed the Clean Water Act in the first place and why the Federal role is so important today.

But the Clean Water SRF is also a good investment. It provides water quality and community benefits such as reduced discharges of raw sewage into rivers and lakes, less waterborne illness, enhanced wildlife habitat, biodiversity, and safe drinking water sources. It also protects businesses that are dependent upon clean water—tourism, fishing, beverages, and even development.

It creates hundreds of thousands of jobs for skilled workers every year, and because it is matched at the State and local levels, it leverages non-Federal investment at a rate of 2.23 times the Federal dollar. I call your attention to the photo there, which is a picture of a green roof in Milwaukee, which is part of its system for controlling raw sewage discharges.

But it is clear that our level of investment is inadequate. There is an upward trend for beach closings, red tides, dead zones, waterborne illness, water shortages, coral reef damage, nutrient pollution, and as the chart shows, sewage pollution. At our current rate of investment, sewage pollution is expected to be as high in 2025 as it was in 1968, that is, before the passage of the Clean Water Act and when, as Mr. Chairman noted earlier, Lake Erie had been declared dead.

Even while the problems are growing, Federal contributions to the SRF are shrinking, which is what the chart shows. The funding gap is large and increasing, and investment in research and development that could save us money in the long run has been cut in half.

The picture is bleak. The sewer systems are getting older, more antiquated, more likely to fail, and they have more work to do due to increasing population, land development that occurs at a rate more than twice the rate of population growth, global warming, and an increasing population of Americans vulnerable to illness. The pie graphs there are showing the decaying of the pipes in the systems, indicating an increased likelihood that they will fail and break and cause sewer overflows.

We recommend that you address the situation by substantially increasing funding over at least the next 10 years, identifying a dedicated source of funding and better targeting resources to achieve Clean Water Act goals.

I will focus on the last of these three recommendations for the rest of my time.

The photo here is actually from a restored wetland in Houston, Texas, profiled in a recent Sierra Club publication that just came out, Building Better II. It filters runoff from a 30-acre urban residential watershed and reduces the likelihood of flooding.

To increase the efficiency of SRF funding, we need to fund existing needs, not sprawl; fund green infrastructure, which I will be talking more about; fund the highest priorities looking at water resources in an integrated way; provide more funding for R&D to identify better, cheaper approaches; and enhance public involvement and transparency to get better results.

The photograph is a rain garden used to treat parking lot runoff at the Washington Naval Yard. It comes from a publication that NRDC did with a low-impact development center called Rooftops to Rivers.

We need to fund existing needs, not sprawl. Development significantly increases water pollution, and sprawl development increases it the most. The more pavement the more pollution, that is extremely well-documented by now, yet, the SRF still funds new collection systems, new treatment plants at excess capacity, all of which just fuel development. According to EPA's 2005 report, 20 percent of the SRF was used to fund new sewers. Sprawl should pay for itself; it should not be subsidized by the American taxpayers.

Instead, we urge you to increase funding for green infrastructure, an emerging technology that uses soil and vegetation to restore urban and suburban waterways. Green infrastructure approaches include both engineered approaches that mimic natural functions, such as rain roofs and rain gardens, and the protection of natural areas—wetlands, stream buffers and forests—to provide water capture and purification functions naturally.

The photo is a green infrastructure approach used by Seattle to treat runoff.

Green infrastructure has so many benefits that it is hard to fit them on one side, and I do not have time to tell you about them all right now, but they include improved water quality, hydrology, wetland/wildlife habitat, beautifying an area, increasing property values, and often saving money.

The photograph is from Portland.

In addition, we would like to see other program improvements in place to spend smarter—integrated water resource management

planning, research and development enhance public involvement and a commitment by Congress to fund those projects that provide the greatest value first or address immediate public health threats.

This photo is of a restored marsh in Toronto that used to be a landfill.

The last slide is on additional resources available———

Ms. JOHNSON. Which you will submit.

Ms. STONER. —which I will submit, and I appreciate the opportunity to speak with you this morning.

Ms. JOHNSON. Thank you very much.

The Chair recognizes Mr. Baird.

Mr. BAIRD. Madame Chair, I thank you.

I want to thank all of the panelists for their observations. We will have questions in a moment, but I want to take this moment to extend a special welcome to a long-time friend. Jim Stutler is here. He is the President of Tierdael Construction in Denver, Colorado, also of the National Utility Contractors Association.

I am especially glad to see Jim. We were in a Scout troop together back in La Fruto, Colorado. Even though our fathers are not able to see us here today, I would like to think our Scout master, John Barkus, would have some pride that a couple of his young charges managed to make it fairly well in the world.

Jim, thanks for your testimony, and thanks for being here.

I also want to apologize to the witnesses. I have to do duty in the chair on the floor, so if I depart, it is not for lack of interest; it is for mixed responsibilities.

Thank you, Jim, and I look forward to your comments as of all of the witnesses.

Mr. STUTLER. Thank you, Congressman.

Madame Chairman and honorable members of the committee, as Brian said, I am Jim Stutler, and I am the President of Tierdael Construction. We are a utility contracting company in Denver of about 108 employees. I am very grateful for the opportunity to participate in this hearing on behalf of the National Utility Contractors Association.

You may not know that NUCA also serves as Chair of the Clean Water Council, which is a coalition of 26 national organizations committed to ensuring sound environmental infrastructure; and for your reference, a list of the CWC members is attached to my written testimony.

NUCA and the CWC have taken the lead for years in the legislative efforts to reauthorize the Clean Water State Revolving Loan Fund, or the SRF Program, that we have talked so much about here today. We are extremely pleased that this committee and the 110th Congress will again attempt to pass SRF reauthorization legislation to begin to address these overwhelming wastewater infrastructure needs that we have been talking about here today, and we look forward to doing our best part in helping make that happen.

Because utility contractors build and repair these systems, what is out of sight and out of mind to most people is clearly visible to us as NUCA members every day. I have referred to them and heard them referred to as the underground potholes that nobody else sees; and Congressman Duncan earlier referred to a story that

I had told in the written testimony, and I would like to share that with you. And while my crews deal with dilapidated sewer and water systems routinely, I do want to recall this particular situation that was pretty intense that happened to us a few years ago in southwest Denver.

We were under contract with a local district there to replace a 24-inch-diameter interceptor sewer line. A 24-inch interceptor is not the biggest in the world, but it is a pretty good chunk of sewer coming at you, and during one of the earlier shifts in the project, we were upstream a couple of blocks, checking the alignment, and our superintendent popped a manhole lid, and he discovered a surging, live sewer flow coming up to the top of that manhole, and it was literally within inches of blowing that manhole lid off and coming out into the street, and you must remember that a live gravity sewer line does not have a shut-off valve. In acting quickly, our crews were able to immediately set up some temporary pumping to kind of take the head off of the line, and then we set about excavating there where we thought the blockage was.

To make a long story short, we discovered that the entire crown, or the top part, of this 24-inch sewer line was gone; it was completely deteriorated, and what was left of the pipe and the earth and backfill that was overburdened had collapsed into the line very nearly blocking it. Had the collapse occurred at any other time than in approximately the half-hour or so that we had prior to discovering it, the block flows of this 2.8 million gallon per day capacity line would have surcharged that manhole and sent 2,000 gallons of raw sewage per minute down the street, through a park, into a tributary, and eventually into the Platte River. Even an hour of inaction, if we had been off shift, would have put approximately 120,000 gallons of untreated sewage into the streets and waterways. We considered ourselves and, indeed, the district considered themselves very fortunate.

The need to increase Federal funding is clear. The numbers have been presented previously. It is not worth going back over that plowed ground, but we firmly believe that Federal investment needs to be stepped up.

The American Society of Civil Engineers, an active member of the Clean Water Council, evaluates the Nation's infrastructure and reports on the status of it every few years, as you well know. Only 4 years after receiving a ″D″ in 2001, America's wastewater infrastructure fell to a ″D minus″ in their 2005 report card for America's infrastructure.

Meanwhile, as previously testified to, these cuts to the SRF funding occur at a time when the Nation simply cannot afford it. The SRF Program plays a key role to enhance public health and safety, to protect the environment and to maintain a strong economic base. It creates scores of jobs, and do not forget these are quality, high-paying jobs right here in America, and these are not jobs that can be shipped overseas.

Again, the time for SRF reauthorization is now. Many organizations are advocating the establishment of a clean water trust fund or some other vehicle to provide a dedicated source of revenue for improvements to America's water and wastewater infrastructure. NUCA supports the concept of a dedicated funding source even

though we recognize it will take significant time to pass legislation such as this and allow that to happen. In the meantime, SRF legislation will take immediate steps to begin to address this problem by authorizing higher funding levels for this existing and successful program, which has done so much for our environment already.

Although there are several policy issues that will be debated throughout this legislative process, NUCA encourages the committee to focus on the big picture. The impasse over Davis-Bacon provisions has stymied this legislation for too long, and it is our understanding that Davis-Bacon provisions will be included in the coming legislation. And we want to be clear that NUCA represents both union and nonunion contractors, and Davis-Bacon is not an issue of contention for our members. We will fully support the bill as introduced until it is passed.

I do want to briefly mention in closing that the CWC's and Americans for Pure Water Media Awareness Campaign, which will generate local media attention, is a campaign that is targeted in areas to raise awareness about this issue and to motivate everyday people, if you will, to engage in the debate; and I would encourage you to visit the APW Resource Center at Americansforpurewater.com.

Thank you very much for the opportunity to speak with you this morning, and I am happy to answer any questions you may have.

Ms. JOHNSON. Thank you very much.

Ms. Debra Coy.

Ms. COY. Yes. Thank you, Madame Chair, and members of the committee. I appreciate the opportunity to be here today, and I represent a little different point of view coming from a brokerage firm.

My name is Debra Coy. I work with Janney Montgomery Scott, and have worked with a number of brokerage firms based in Washington for my entire career, and have observed the water industry for investors. So, looking from a capital market's perspective, I am really here today to point out an irony, an irony because I sit in Washington and listen to the debate on funding for water and wastewater infrastructure, and obviously, we are hearing again today about the inadequate funding for infrastructure, and yet—and yet—when I look at the vast amounts of money that are being made available in the capital markets for infrastructure, it creates, I think, a huge irony that is interesting for us in Washington to begin to address in terms of capital markets' interest.

″infrastructure″ has become a buzz word of sorts on Wall Street, particularly in the last couple of years, and investors all over the world have realized that infrastructure is a critical part of economic development, and they are putting vast, vast amounts of money into infrastructure funds to be able to participate in the growth and spending that is likely to be needed. A recent survey that came out from Standard & Poor's said that approximately $100 billion was raised in 2006 alone for infrastructure funds. These are global funds that are looking to put money to work in infrastructure investment, and Goldman Sachs, for instance, obviously a leading U.S. investment bank, closed a fund at the end of December that has $6.5 billion that is going to be invested in infrastructure. The fund ended up being a little more than twice what they had planned because of huge investor demand, and I think

that creates an interesting question in terms of how we can put these two pieces together.

This huge amount of money is looking for places to go to work. It has caused water stocks, which I follow, water investment equities, to go up dramatically as investors are looking for ways to play in the water infrastructure arena. They are investing in water stocks. They are investing in companies that make pipes and pumps, but they are not able to put money directly into municipal infrastructure. Why is that?

I think that what we need to look at are the structural barriers to investing in water infrastructure in this country. Obviously, as most of us know, most water and wastewater infrastructure in the U.S. is, of course, municipally owned and operated and, as CIFA and others have referred to, is funded by municipal bond financing, which, of course, is usually sold to private investors as well.

On the other hand, all of the new infrastructure funds are being put directly into assets that are owned; typically, whether it is airports or ports or utilities—electric or gas or water utilities—but typically, they are not able to put the money directly to work in municipal water and wastewater infrastructure because of the funding mechanisms that do not allow private capital to be put to work.

So certainly what I would encourage the committee to do is look at ways that, number one, the awareness of this issue can continue to be raised. We have talked about how this is a pending crisis, but I believe that still, even at this point, the American public is not aware of the number of illnesses that are caused by waterborne disease, is not aware of the billions of gallons of sewage that are spilled into our waterways, is not really aware of the leakage of water from faulty pipes; and raising awareness, I think, is something that Congress can help to do and, secondly, to begin to provide some umbrella where both municipal and private operators and utilities could work together to look at how water infrastructure is funded, how rates are set, some more uniform approach to rate structures so people understand the cost of water infrastructure and, finally, to support innovative financing mechanisms.

There is a tremendous amount of expertise in the project finance and energy finance arenas that know how to put structures in place that can bring in private capital, not private ownership of the asset, but private capital in a project finance vehicle and put it together with leverage that could then allow some of these huge amounts of money that are out there, looking for a place to go to work, to go into municipalities where it is so greatly needed.

So I would like to thank you for the opportunity to speak to you today, and I will be happy to take questions.

Thanks.

Ms. JOHNSON. Thank you very much.

We will start the first round of questioning.

Mr. Ward, you heard the testimony of Ms. Coy, and we are very interested in the rising availability of private capital to meet some of today's wastewater infrastructure needs, and her testimony seems to suggest that the private financial market is looking to expand its opportunities for investment and to obtain a good return for private investors.

In your experience, is this the solution to address to a growing infrastructure gap? Are we looking for ways to find additional capital?

Mr. WARD. Yes, Madame Chair, it is a way, but it is just, as has been stated by other panel members, one way amongst many that need to be brought to bear on this issue.

We do believe that if these roadblocks are taken down and we are allowed now then to access that capital that you will see use of that capital, and it will begin to develop in innovative ways. It is not about an ownership issue when you are talking about providing a conduit to bring that capital into a water system. It is about a choice of what kind of shared risk the investment community is willing to take on with the municipality or even with a private utility for that matter. Lowering the cost of that capital is instrumental, so that is really what the issue is.

When you talk about private activity bonds and what we see as a needed change there, it is not to state that you do not want to have these be subject to those constraints that are applied to all private activity bonds. It is simply a matter of expanding the ability to use private activity bonds in that arena. So you are not talking about making suddenly these private activities and for-profit entities be able to access tax exempt bonds. You are talking about the ability to have them access a capital mechanism subject to alternative minimum tax so that there is a freer flow of capital into these public entities.

And it is a growing need. The population is expanding.

We have talked about—I keep thinking of the Nessie Curve that was presented here several years ago where you talk about the growing underneath-the-ground unknown amount of infrastructure that needs to be replaced.

Shared risk is really the way things are going right now. Capital markets are all ready. I know they keep telling us. I think the municipalities are more ready now than they have been in the past.

We have used this mechanism in the State of Texas more than once now. We actually have set up a program that mirrors the rural development program with 40-year loan terms, with near tax-exempt rates that we go to to private activity bonds every year to fund to the tune of about $25 million a year for projects in Texas, and it has supplemented the cuts that have come down the pike for those programs.

That is just a step. We are seeing it for investment in desalinization projects. I do not see why it would not work with wastewater projects.

Ms. JOHNSON. Thank you very much.

Does anyone else care to comment on that source of funding?

Thank you very much.

Mr. Boustany first.

Mr. BOUSTANY. Thank you very much.

Mr. Soderberg, in your testimony, you proposed a short-term study to be conducted to determine appropriate combinations of revenue sources to pay for clean water infrastructure.

What organization or company should do this study?

Mr. SODERBERG. Madame Chair and Mr. Boustany, when we discussed it earlier, it was a wide range of organizations that could

bring their expertise. There would obviously need to be Federal Government representatives, their representatives of the various agencies that can look at this. So we are looking at a wide-ranging effort with those that have expertise on it.

Mr. BOUSTANY. Certainly, if you have any specific recommendations, the committee would be interested in hearing those.

Mr. SODERBERG. Yes, we do, in fact, and we can provide those to you.

Mr. BOUSTANY. Thank you.

Ms. Coy, a lot of talk has occurred here on the fringes, of innovative financing. How do municipalities access these finance vehicles, and what barriers currently exist for municipalities to access various innovative financing mechanisms?

Ms. COY. Well, I think it varies, certainly, from State to State and project to project, so it is hard to say one specific or even a handful of barriers, but typically, the structures are focused on tax-exempt financing, and then there are limitations on private sector participation where tax-exempt financing is involved. So beginning to break down those barriers so that you can put combinations of financing together I think would be helpful.

Obviously, raising the cap on private activity bonds gets you over that to a certain extent, but I also think that given how water and wastewater infrastructure is structured—you know, it is an entire system, and what the energy arena has done has begun to break off generation assets versus distribution assets, similar to looking at desalinization plans versus transmission systems.

Much of what we are talking about here today is the fact that our sewer pipes are deteriorating, and typically, you cannot bring project finance approaches to an ongoing, you know, what is considered to be maintenance cap X. So, if you could begin to look at breaking that out from the system and putting a project finance vehicle together for a maintenance project like that, then I think you could start to access these alternative sources of debt and equity to put it to work.

Mr. BOUSTANY. Thank you.

I would suggest that perhaps we might make that the subject of a future hearing to look at some of these areas, because, to my knowledge, we have not really done that, and it might be very beneficial.

Ms. COY. And there is a lot of expertise out there.

Mr. BOUSTANY. Ms. Stoner, I appreciate the information you gave on green infrastructure. My younger brother actually does research in that area, but what strikes me is that it is useful in looking at new development.

How do you apply that to aging facilities—inner city and so forth—and is that cost effective?

Ms. STONER. Yes. I appreciate that question. That is a great question.

A lot of the photographs that I showed actually involve retrofits—parking lot retrofits, putting on green roofs and so forth—and those are great techniques to use, particularly in some of the older cities where we have combined storm water and sewage systems; and what that does is, instead of having to store the sewage and storm water after heavy rain events to prevent sewer overflows,

the storm water never goes into the system in the first place. So the costs get to be very, very high as the increasing amounts of that storm water have to be stored. The pipe diameter has to be larger, and it is often very cost effective, instead, to use a variety of approaches that can be integrated into the urban landscape to offload the storm water in the first place.

Mr. BOUSTANY. Thank you. I see my time has expired.

Ms. JOHNSON. Thank you very much.

I want to say that we have had lots of discussion on the various ways of financing water infrastructure. However lifting the cap on private acting bonds is not in our jurisdiction. It is the jurisdiction of the Ways and Means Committee.

Mr. Oberstar.

Mr. OBERSTAR. Thank you, Madame Chair.

The hearing has covered a wide range of issues and elicited a wide variety of views on the subject matter before us.

In response to Mr. Boustany's question about future financing, we have to review these matters consistently and persistently, and we will do that even though, as Ms. Johnson said, ultimately tax initiatives are in the jurisdiction of the Ways and Means Committee. But we most certainly can hold the hearings, make recommendations and do what is in our jurisdiction and recommend to the Ways and Means that they undertake what is in their jurisdiction. We have done that over the years, and we will continue to do that.

Mr. BOUSTANY. Thank you, Mr. Chairman.

Mr. OBERSTAR. Mr. Grumbles talked about public-private partnerships, about a range of private financing mechanisms, and Ms. Coy, your testimony was very interesting, but the question I have is ″Privatizing what?″

In the aviation arena, we held hearings several years ago, and I was Chair on the privatization of airports. Well, that does not mean selling the airport to private interests. It means allowing airports, with the authority which they have, to contract out certain activities within the airports; and as you have seen in the post 9/11 era, airports have become shopping malls—and they have become huge shopping malls, in fact, generating great revenues—and the airlines are pushing airports to generate ever more revenue from selling shoes and socks and jackets and shirts and then using that revenue to defray the costs of operating the airport, therefore, reducing the airlines' charges and costs.

There may be a parallel in the sewage treatment plant operation arena and the drinking water arena. Europe has, for years—European governments, I should say, have allowed initiatives for many years in the drinking water arena to privatize their systems, that is, to be totally owned and operated by private entities.

So I come to the question here of privatizing what: the ownership of the sewage treatment facility? Privatizing its operation, that is, contracting out to an entity to operate it? Then, in that context, what are the responsibilities of the private entities, and how do they differ from the public entity?

Ms. COY. Well, there are a lot of ways to look at privatization or private sector involvement all the way from ownership, as you say,

and I do not think we will probably have shopping malls at sewage treatment plants any time soon———

Mr. OBERSTAR. I doubt it.

Ms. COY. —having been to a few.

I was not even referring in my testimony to ″privatization″ as it is classically portrayed in terms of private sector ownership or operation. I was more referring to making available access to private sector capital to a system that continues to be municipally owned and operated in another form other than through tax-exempt finance, which is, in fact, accessing private sector capital, but through limitations.

Mr. OBERSTAR. Has your organization managed or placed private activity bond financing for jurisdictions?

Ms. COY. We do at Janney Montgomery more muni bond debt. The private activity bond market is pretty small, and that is one of the issues that we are discussing here today, that there is limited access because of the caps.

Mr. OBERSTAR. And the 1986 legislation put a cap on private activity bonds, and that has not been touched since then.

Ms. COY. Right. Exactly.

Mr. OBERSTAR. What would you recommend be done with that, by the way?

Ms. COY. I would certainly advocate a rise in the cap because, as we said earlier, there is this limitation on private participation in municipally financed projects. So, if you raise the cap on private activity bonds, that would make it easier in most jurisdictions for private money to also participate on the equity side as well as on the debt side.

Mr. OBERSTAR. So private activity bonds are used by municipalities for a wide range of public endeavors of funding———

Ms. COY. That is correct.

Mr. OBERSTAR. —a host of public activities.

Could we segregate out some of it or designate some of that for the water infrastructure needs, both drinking water and sewage treatment facilities?

Ms. COY. I would think that would be certainly helpful as well. Absolutely.

Mr. OBERSTAR. What is the difference in interest rate—this is your area of specialty, specialization.

What is the difference in interest rate between municipal bonds and private activity bonds?

Ms. COY. It is actually, unfortunately, not my area of specialization.

Mr. OBERSTAR. Oh.

Ms. COY. I am an equity analyst, and so I focus more on the equity side than on the debt side. So I would not be a good one to answer that.

Mr. OBERSTAR. Well, there is an difference.

Ms. COY. Yes, there is.

Mr. OBERSTAR. Yes.

Other members of the panel? Kurt. Thank you by the way, Kurt, for your coming here and participating in the hearings.

Mr. Soderberg and I go back a long way. He has been a superb manager of the Western Lake Superior Sanitary District, which is

saving Lake Superior; and through the efforts and the vigilance of the Western Lake Superior Sanitary District, we are now catching walleyes. Fisherman are catching walleyes in the St. Louis River, which was dead for a very long time, and they are good-sized walleyes, by the way, and very edible. There is no buildup of toxics in them.

Mr. SODERBERG. Thank you very much, Mr. Chair.

Madame Chair, if I may just talk about the privatization issue, NACWA has clearly looked at the options. Some of our member agencies do have operating contracts. I think there have been maybe a couple of outright transactions to sell a utility around the country, but it really has not gone that far. But one of the initiatives———

Mr. OBERSTAR. Hold the mike up closer to you so we can hear you better.

Mr. SODERBERG. One of the initiatives of our organization was to see whether we are pricing our services competitively. We did that over a series of years, and we believe that we are providing competitive pricing of our services run by the municipal organizations. In the places where they believe they can get a better deal, they have gone down the road to the privatizers.

When the EPA, though, talks about the various sorts of public-private partnerships, it is difficult to understand what they are talking about because it is rather vague. I have read the gap report. I bet some of the folks in this room have read that report. We have looked at the sorts of things that they are talking about that we need to do; and the bottom line is, we are doing all of those things, and we are still seeing these terrific increases in prices.

So we are really hopeful that EPA will have some more specific guidance of what they mean by public-private partnerships, the four pillars of management, because at least right now it seems as if the big need is for additional funding. We are operating far better than we were in the past, but when you look at permit compliance, when you look at struggling local economies, operating costs, capital costs, there really is a need for more and better information from EPA.

Mr. OBERSTAR. Well, given EPA's own estimate of over the next 20 years $300 billion to $400 billion of construction needs in expanding or upgrading existing wastewater treatment facilities, waterlines, sewer lines, interceptor sewers, separated and combined operations, there is plenty of room for a whole range of financing, it seems to me, and we ought to start with something we know that is in place and proven, and that is the State Revolving Loan Fund.

And we have a bill that has been pending now for 6 years. We ought to get that—that is the bird in hand. We have it. We have a bipartisan consensus on it. If we move that without ruling out or prejudicing any other forms of financing. Then we can then come back to and review and include those as well in future legislation.

Mr. Ward and Mr. Stutler, do you have comments?

Ms. Stoner?

Yes.

Ms. JOHNSON. We do have one more.

Mr. OBERSTAR. One more member, yes.

Mr. WARD. Chairman Oberstar, one issue maybe this committee could take up within its own purview is the fact that when you look at the financing in the SRFs, the Clean Water Act when it was admitted in 1987 and Title VI was added to it, it limited the funding to be for publicly owned treatment works, 212, the definition, taken out of old Title II.

In the State of Texas, nonprofit water supply corporations, which are quasi-governmental and at least under the constitution of Texas considered to be a governmental entity for the purposes of financing, are not eligible under the Clean Water SRF. Meanwhile, down the hall on the other side of EPA's building, in the Office of Water, we can do nonprofit water supply corporations. We can even do private entities to fund projects for water, for drinking water purposes.

It seems like it is at odds because you could not argue administratively that the Agency could not handle it, because they are doing it on the other side of the building. So that is an issue. We have it in one of our priorities that we have listed that I can provide to the committee in detail. That might open the door a little wider than even just looking at the private activity bond cap. We have looked at not just lifting the cap, but exempting water projects like you have other exemptions under that.

Mr. OBERSTAR. Do you mean exempting them from the cap?

Mr. WARD. Yes, particularly if it is for the Clean Water State Revolving Fund. I mean, to that extent, it makes a lot of sense because Congress then is maximizing the effect of the program on both sides of its ability to make changes.

Mr. OBERSTAR. I think I will desist at this point from further questions, but you have given us the basis. No. This is fine. Thank you very much. I appreciate your comments.

Ms. JOHNSON. Thank you.

Dr. Kagen. Congressman Kagen.

Mr. KAGEN. Thank you, Madame Chairperson.

Sometimes, Mr. Oberstar, resistance is futile.

I would like the comments of Nancy Stoner about the effects of global warming on our water resources and also the implications for SRF funding, which I am learning is woefully behind what we really require.

Ms. STONER. Thank you for that question.

NRDC is actually doing a study on the effects of global warming on water resources now, that I expect to come out shortly, but some of the initial findings are already out, and they indicate that we can expect to see a range of problems, including less snow pack, so less water available, increased flooding due to more and larger storm events, increased temperature in cold water fisheries so that we will have fewer streams that support trout and so forth.

What all of this suggests to me is an increased need, not only to address global warming directly, which of course is important, but in the water area, to do integrated water resource management to look not only at what our current needs are, but what they are 20 years and 50 years and even 100 years out and to ensure that we are taking the steps now to ensure that there will be safe, usable, clean water for our children and grandchildren.

Mr. KAGEN. On a related issue, in what way do you feel the SRF can have an impact, or how will it affect how we maintain the quality of the Great Lakes water?

As you know or may be aware, in Wisconsin, we have a great deal of E. coli contamination on our beaches that may not be point-sourced anywhere close to where the bacteria are showing up.

Ms. STONER. Yes. NRDC does a report every summer on beach water pollution called Testing the Waters, and it covers Great Lakes beaches; and what we see on Great Lakes beaches is an increasing trend in beach closings and advisories. Great Lakes beaches were closed 13 percent as opposed to 7 percent for other coastal beaches in our last report, and that mostly comes from storm water and sewage, which are two of the principal areas of focus for the Clean Water State Revolving Fund. So, again, more money better spent on those problems will help make sure that Great Lakes beaches are open and safe for people to use.

Mr. KAGEN. Thank you.

Ms. JOHNSON. Thank you very much.

The one thing that we are all aware of is that the warmer the water becomes, the more problems we have and the more disease we have and the more we experience health being at risk in this country.

Mr. Boustany has some questions.

Mr. BOUSTANY. Thank you, Madame Chair.

Mr. Ward, a couple times you made specific reference to some recommendations, specific recommendations, regarding how we can improve wastewater treatment.

Can you provide the committee with those specific recommendations? Do you have that?

Mr. WARD. Yes, sir. We have them in print, and I can leave them with the committee before we leave.

Mr. BOUSTANY. OK, and one final question for you as well.

In looking at the State Revolving Funds, are they structured, in your opinion, to help small, rural and disadvantaged communities; and what can the States do to help reach small and rural communities?

I have got rural communities throughout my district, and they do not seem to get the benefit of the funding needed to fix aged water infrastructure.

Mr. WARD. My answer would be, no, they are not because it does not reach quite deep enough.

The other program that was created almost 10 years later, drinking water, Congress, you know, recognized that and specifically put provisions in so that we could reach deeper down to the communities that have the most hardship. Right now, we do not have a corresponding mechanism on the wastewater side through the Clean Water SRF.

The limitations of 20-year financing, one can say perhaps you can find a legal way to get there underneath the structure, but it is going through a complete maze of requirements right now with EPA. It is no fault of theirs. It is just the way the statute is written, and so you need to look at the 30-year terms at the very least. I think rural communities would argue 40 in some cases.

Lower interest-rate terms, perhaps even the loan forgiveness that you afforded in the drinking water program, all of those mechanisms as an option to a State would then allow the State administrations to work with EPA and reach deeper into the small and rural communities to help those ones that are more disadvantaged.

We just cannot get that far down into the population right now. We just cannot.

Mr. BOUSTANY. It gets back to the question I asked the first panel about oversight and making sure that the money, once it leaves Federal hands and gets to the State and then subsequently down to the local level, that it is actually being spent in a very cost-effective way.

We have very good data about the disbursement of funds and so forth, but are we really spending that money in a very cost-effective way on infrastructure, and I think we need to probably have an improvement in the oversight mechanism by which we review that.

Mr. WARD. I would believe that, yes, we are doing it in a very cost-effective way because we have limited resources that we have to apply across a wide array of projects of very different natures. I mean, you are seeing States do nonpoint source. We are cleaning up septic areas. We are doing source water protection, and virtually every aspect of water pollution control is now being taken care of through these Clean Water SRFs, even given the constraints. So my answer would be, yes, it has been cost effective.

If you are concerned about whether more of it is going towards expansion of systems for future growth, if you do not look at what the trend is for growth in a community when you are building capacity in a treatment plant, then you are going to have the same cycle repeat itself. So those statistics are somewhat misleading.

You know, our group would say that the restrictions that are in there now are on a horizon that is reasonable. I think, in the old grants program, it was close to a 10-year horizon. I think it may have gone up as much as to 20 for the SRFs for some projects, but on a wholesale basis, it is to solve pollution control problems because the priority system is handed down for you, the Congress, just like it is in drinking water, and those priorities then have to be effected through EPA to the States.

We are given flexibility, but we still have to have a priority system. We still have to have an intended use plan. We still have to look at funding in a priority order.

The oversight from EPA is very deliberate with regard to those matters, and so for our organization, we are going to say, yes, it is cost effective.

Mr. BOUSTANY. Thank you.

Ms. JOHNSON. Let me say thank you to all of the panelists who have come today.

We recognize the seriousness and the importance of the issue, and we will be in touch. We hope that this time, after our seventh try of getting the bill passed, we will succeed.

Let me thank all of the Members of Congress who have come, and the committee is adjourned.

[Whereupon, at 12:52 p.m., the subcommittee was adjourned.]

Testimony by Mr. Todd Ambs
Water Division Administrator for the Wisconsin Department of Natural Resources
on behalf of the
Council of Great Lakes Governors
before the
U.S. House Committee on Transportation & Infrastructure,
Subcommittee on Water Resources & Environment

January 19, 2007

Mr. Chairman and members of the Committee, thank you for the opportunity to appear before you today to discuss our nation's wastewater infrastructure funding. My name is Todd Ambs and I am the Water Division Administrator for the Wisconsin Department of Natural Resources. I am testifying today on behalf of the Council of Great Lakes Governors and the Council Chair, Wisconsin Governor Jim Doyle. The Great Lakes Governors continue to work closely with our region's Mayors through the Great Lakes—St. Lawrence Cities Initiative in advancing our shared agenda to protect and restore the Great Lakes.

Underinvestment in wastewater infrastructure is a huge and growing problem for our nation's health and environment. For this reason, Governors have made increased investment a high priority in our States and it is encouraging that this issue is also becoming a higher priority for our federal partners in Congress. I applaud the leadership of Chairman Oberstar for calling this important hearing and commend him and others who have repeatedly advocated for an enhanced federal investment in meeting our shared wastewater investment goals.

One of the major threats to human health across the nation, as well as in the Great Lakes and their tributaries, comes from combined sewer overflows (CSOs), which discharge

untreated sewage during heavy rainfalls. Costly as they are, CSOs are only one of the water infrastructure challenges faced by local communities. From aging wastewater treatment plants to failing on-lot septic systems, the most advanced nation in the world is struggling to manage its sewage. Thirty-five years ago, Congress passed the Clean Water Act. Following passage of that law, the Federal Government provided over $84 billion in construction grants and State revolving fund capitalization grants so that municipalities all across our nation could build modern sewage treatment systems. Today, that investment is applauded as one of the key reasons for the significant improvement in the health of our nation's waterways, although much remains to be done.

We find ourselves at a crossroad as that same infrastructure that we built thirty years ago falls into disrepair and other challenges threaten our waters. America deserves better than to slip back to a time when rivers caught fire and unsanitary conditions remind us of the disease-ridden days of long ago. Increased funding for the Clean Water State Revolving Loan Funds (SRF) that finance wastewater projects would be a good step toward meeting our infrastructure needs. Unfortunately, these funds have been cut in recent years and, the President's most recent budget called for further cuts. We welcome the opportunity to work with you to reverse this trend.

Clearly, the lack of adequate investment in wastewater infrastructure is a national problem. U.S. EPA's gap analysis has showed a $388 billion shortfall between current levels of spending and the projected need for water infrastructure investment over the next 20 years. This need cannot be met without the increased participation of the federal government.

The Great Lakes

The magnitude of the problems created by CSOs and SSOs (sanitary sewer overflows) in our region comes to light when one considers that the Great Lakes constitute the largest surface freshwater system in the world. More than 35 million Americans receive the benefits of drinking water, food, a place to work and live, and transportation from the Great Lakes.

Sewer overflows in the Great Lakes region also jeopardize our national economy which depends in many important respects on the Great Lakes. The Great Lakes States account for 30 percent of the total US Gross Domestic Product. The Great Lakes are a key national transportation network. U.S.-flag vessels annually ship over 125 million tons of cargo between Great Lakes ports. Fishing, boating, hunting and wildlife-watching generate almost $53 billion in annual revenues in the Great Lakes region. One-third of all the boats registered in the United States are in the Great Lakes States and boating alone supports over 250,000 jobs.

Unfortunately, and despite significant and ongoing investments by all levels of government, the Great Lakes remain degraded and continue to be threatened by shortsightedness and our failure to make needed investments. The estimated volume of combined sewer overflow (CSO) discharges in the U.S. is 850 billion gallons per year, with most of these CSOs located in the Great Lakes and Northeast regions. And, these threats promise to increase in the future. If continued unabated, any action we take in the future to restore the Great Lakes or any other waterway may prove futile and may be undermined by the continued discharge of improperly treated wastewater from aging facilities—facilities that cannot be upgraded because the funding is not there. In addition, the potential failure of aging wastewater systems around the region would only exacerbate the crisis.

The Great Lakes Regional Collaboration

In 2004, President Bush issued an Executive Order that led to the launch of the Great Lakes Regional Collaboration. The goal of this Collaboration was to develop a strategy to protect and restore the Great Lakes. The Collaboration used restoration and protection priorities developed by the Governors as its organizing principle.

Over approximately one year, the Great Lakes Governors joined with representatives of the Administration, Congress, Mayors and Tribes to develop the Great Lakes Protection and Restoration Strategy. Over 1500 representatives of a wide cross-section of

governmental and non-governmental stakeholder groups participated in creating this Strategy, resulting in its broad-based support.

The largest-cost element of the Strategy is investment in wastewater infrastructure, estimated at $13.5 billion over five years. In order to address this and other needed investments, the Great Lakes Governors are already committing significant resources. As you may know, the 2003 report by the Government Accountability Office documented the fact that State and local spending on Great Lakes programs far exceeds the investment by the federal government.

Unfortunately, significant challenges remain to achieving our broader objectives. Funding is a consistent obstacle and we recognize that securing investments of the magnitude called for in the Strategy challenges all of us at all levels of government. Nevertheless, the Governors are committed to continuing to work with our region's Mayors, Members of Congress, Tribal leaders and others toward our shared goal of securing large-scale, long-term and stable federal funding to implement the Strategy's recommendations. We are seeking federal funding as a supplement to the State, local and Tribal investment already taking place. While we remain committed to doing our share, we cannot accomplish many urgently needed restoration goals without more federal participation. As the Strategy's recommendations illustrate, some needs can only be addressed through the commitment of large-scale, long-term funding.

Wastewater Infrastructure in the Great Lakes Region

Our States have recognized that we cannot wait to make needed investments in wastewater infrastructure. Lack of federal support for the SRF program has created huge challenges but, nevertheless, the States have marshaled significant resources and provided leadership to overcome this challenge. For example, in Michigan the passage of Proposal 2 on Michigan's November 2002 State-wide ballot brought about the establishment of the Great Lakes Water Quality Bond Fund. The ballot question authorizes the State to sell up to $1 billion in general obligation bonds to finance water

quality improvement projects in Michigan. More than 60% of the ballots cast voted to approve Proposal 2.

It became clear that decreasing levels of federal appropriations to the SRF would leave Michigan unable to meet well established wastewater infrastructure needs, much of which would deal with sanitary and combined sewer overflow problems. This realization resulted in overwhelming support for the ballot initiative from a wide range of interests. Michigan's CWSRF has been aggressively leveraged, and since 1989 has tendered nearly $2.4 billion in assistance. Assuming static levels of Federal capitalization, Michigan is able to tender only about $210 million/year in new loan commitments, far below what is needed to address documented needs.

Assets of the Great Lakes Water Quality Bond Fund can be used for three distinct purposes. Ninety percent ($900 million) is available for supplemental capitalization of the CWSRF. Six percent ($60 million) can be used to capitalize another revolving loan fund, the Strategic Water Quality Initiatives Fund, which funds specific types of water pollution control efforts that cannot qualify for assistance from the CWSRF. The remaining four percent ($40 million) has been awarded in the form of grant assistance to local units of government to complete project planning and design, application prerequisites to access loan funds from the CWSRF for project construction.

In New York, using a leveraged finance model, New York's Environmental Facilities Corporation (NYS EFC) has leveraged roughly $2.6 billion in federal Clean Water grant funds into over $11.76 billion in direct project financing. The level of federal funding, especially related to Clean Water Fund capitalization grant reductions, has limited the availability of SRF funds available for important clean water and drinking water projects throughout New York.

In FFY 2007, NYS EFC intends to finance an additional $464 million in projects ranging from CSO abatement in New York City's East River, to Onondaga Lake Improvements in Syracuse, to greatly needed sewer upgrades in Erie County. Although this is a significant

investment in New York's aging waste water infrastructure, the demand from communities throughout New York by far exceed their supply of resources. Both the Drinking Water and Clean Water Intended Use Plans now contain funding lines that illustrate to prospective borrowers whether or not they will receive funding in the current fiscal year. Recent funding cuts have created a scenario where New York now has more applicants below the funding line than above. Without the low cost funding provided through the SRF program, many communities simply opt to delay or cancel important projects intended to protect our environment.

To date, Wisconsin has received over $637 million in capitalization grants from EPA. In order to meet the need for wastewater funding the State has contributed approximately an additional $600 million. By leveraging these funds, Wisconsin's Clean Water Fund loan program has provided over 600 low-interest rate loans totaling approximately $2.4 billion since 1991.

For the next two years, Wisconsin has identified about $950 million in infrastructure needs for the entire State. During that same time, the State expects to receive about $18.5 million in federal capitalization grants, if funding is not increased.

The State Revolving Loan Fund and the Opportunity for the Great Lakes

As the USEPA noted in their May 1999 report, "The CWSRF program is a powerful partnership between EPA and the states. It allows states the flexibility to provide funding for projects that will address their highest-priority water quality needs....The program allows federal, state, and local agencies to leverage limited dollars. Because of the funds' revolving nature, the federal investment can result in the construction of up to four times as many projects over a 20-year period as a onetime grant." What was true eight years ago remains true today.

As of 2004, the return on the Federal investment has been 1.97 times. States had made more than 14,225 loans totaling $43 billion and there have been no defaults on those

agreements. As can be clearly seen, the SRF program continues to be a critical tool for addressing this major water contamination crisis.

Toward an Enhanced State-Federal Partnership

A consensus is emerging on the urgent need to better use the SRF program to overcome our recent legacy of wastewater underinvestment. The Great Lakes Governors have collectively asked Congress over the past three years to fully fund the SRF program. The National Governors Association has echoed this call, most recently in their May 2006 letter) to Congress. The Great Lakes Mayors have been steadfast in their support and Members of Congress, including Congressman Oberstar and many others, have provided tremendous leadership toward our shared objectives.

If full funding is obtained, it will enable our States to jumpstart wastewater investment—expected outcomes are significant. In closing, Mr. Chairman and members of the committee, our pledge to you is that we will continue to work with you to ensure that the investments we ask Congress to make in our nation's wastewater infrastructure, and in the Great Lakes, are put to good use. We have a responsibility to our citizens, our children and grandchildren.

Thank you, Mr. Chairman.

U.S. Rep. Michael A. Arcuri (NY-24)

Transportation and Infrastructure Committee Hearing:
"The Need for Renewed Investment in Clean Water Infrastructure"

Opening Remarks

January 19, 2007

Thank you, Madame Chair. I am so pleased to have the opportunity to serve on this Subcommittee under your leadership. I also want to say that I am excited to work with each and every one of my distinguished colleagues on the Subcommittee – on both sides of the aisle – to ensure that we can address the needs of Americans by providing adequate resources to begin modernizing the Nation's aging clean water infrastructure.

I am all too familiar with these issues. The 24th District of New York, which I am privileged to represent, has one of the oldest sewer and wastewater systems in the United States. In recent years, my hometown, the City of Utica, along with many other communities in my district, has been plagued with problems due to antiquated infrastructure in desperate need of repair. Combined sewer systems, very common in the Northeast, constantly experience backups and overflows when faced with heavy rains or even rapid snowmelts. These backups and overflows not only pose environmental concerns to cities, but also pose health risks and create an added expense to an already financially strapped system.

These problems are not only faced by my constituents, but are also being experienced by an ever-growing number of communities in the United States. Increased investment in the Clean Water State Revolving Fund is one of the many ways we can maintain a sustainable infrastructure.

Thank you again, Madame Chair for holding this hearing today. I'm confident that under your leadership we will address these and many other pressing issues as the Subcommittee moves ahead with the reauthorization of the Water Resources Development Act in the coming months.

I yield back the balance of my time.

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Statement of Congressman Henry E. Brown
Water Resources and Environment Subcommittee Hearing
January 19, 2007

Madame Chairwoman and Ranking Member Baker:

Thank you for holding this important hearing and thank you to the panelists for their thoughtful and informative testimony.

As the representative of costal South Carolina, I have a special interest in the issue of clean water and how we can do a better job ensuring that communities have the opportunities to best meet their needs. The Grand Strand and South Carolina's Low Country depend so much on the pristine condition of our waterways and estuaries, which make our region so special.

I have success story to tell, one that that demonstrates the tremendous positive results of the Clean Water Act for the City of Charleston and its region. For those who have never been to our beautiful city, it is situated on a peninsula, which is formed, by the Ashley and the Cooper rivers. Charleston has been a port city since the time before the American Revolution and a major naval base. Water is synonymous with City and a major attraction to both tourism and citizens alike.

In the Mid 1960's, we could not fish or swim in the Ashley and the Cooper Rivers, and we could not eat anything from the waters. Charleston, according to news reports then, had the largest fish kills in the country.

At that time, Charleston did not have a municipal waste treatment facility. There were numerous outflows of untreated raw waste going directly into our two rivers.

As a result of this, it was nearly impossible for aquatic species to survive. The US Public Health Service made tests by taking a 55 gallon drum of water from our harbor and putting live fish in the water. The fish could not survive for more than 2 minutes and most died within 30 seconds.

As a result of a local and federal effort brought about by the Clean Water Act passage and a strong commitment on part of the citizens, Charleston built waste water treatment facilities which now meet or exceed all Federal and State standards for effluents. Charleston Water System, the largest water and wastewater authority in South Carolina, has earned national recognition for its stewardship of water resources.

Today the water surrounding the Charleston peninsula is known for its recreational, tourism value, commercial fishing and international shipping activities. Our harbor is one of the crown jewels of the State of South Carolina and of our nation. We have made an extraordinary turn around in 40 years due to the serious investment made over the years to build the infrastructure necessary to protect our valuable environmental quality, a turn around made possible by a partnership between the local water management authorities and the federal and state governments.

Not all is perfect right now, however. Unfortunately, now, Charleston faces a potential crisis and an emergency that the local waste water system has been dealing with for the past four years and for which I, and my state's bipartisan delegation, have dedicated much effort to try to help solve.

The wastewater system for the City is dependent upon 8 mile long waste water carrier tunnels which are located 100 feet below the surface. Four and a half years ago it was discovered that these tunnels, which collect all the waste water for the populated areas of the city were caving in, resulting in failures and major back-ups and potential catastrophic overflows into the streets and the waterways of our picturesque city. Designed nearly 50 years ago, these tunnels were braced and supported by wood flashing which has, over the years, disintegrated. The Charleston Water System has recorded 30 cave-ins to date.

Immediately, the utility began the design and emergency construction of a replacement system to fix the problem and avoid a serious environmental crisis. The price tag for such an undertaking is now over $200 million.

Already supporting a significant debt load, the utility had to place a $130 million dollar bond issue to finance the project. Charleston's wastewater ratepayers now have one of the highest per capital debt loads in the Southeast, second only to Miami according the statistics.

We are at a cross roads now! The cost is so huge and the project so vital. It takes 18 months to build each phase of a five-phase tunnel replacement. If we were not to make this investment, then we run the real risk of returning to the 1960's conditions of waters that are too polluted for swimming, fishing or for commercial activities.

It took innovative solutions to meet the challenges faced by Charleston during the 1960s, and we must examine these solutions if we are to avert a potential return to these conditions. I look forward to working with my colleagues as we bring such new ideas to the table.

Testimony
Of

The Honorable Martin J. Chávez
Mayor of Albuquerque, New Mexico

On behalf of
The United States Conference of Mayors
Mayors Water Council

Before the House Subcommittee on Water Resources
and the Environment

On
The Water Quality Financing Legislation

January 19, 2007

Madam Chairwoman and Members of the Committee

My name is Martin J. Chávez. I am the Mayor of Albuquerque, NM, Trustee of The U.S. Conference of Mayors, and Co-Chairman of the Mayors Water Council. I would like to thank the members of the Committee for inviting me to testify here today.

The Conference of Mayors is a national nonpartisan organization that represents the nation's 1,200 major cities with populations of 30,000 or more, and that have Mayoral forms of governance.

Water and wastewater infrastructure is critical to the cities of our nation. As a mayor, I know it's essential to provide my citizens with a clean, healthy and cost efficient water and wastewater system.

The testimony that was provided by my colleague, Mayor Michael Sullivan of Holyoke, Massachusetts, in March of 2003 pertaining to the "Water Quality Funding Act of 2003", remains the same today with some modifications. These comments are summarized here for your consideration.

The Mayors Water Council is a Task Force of The U.S. Conference of Mayors. The Mayors Water Council (MWC) was created to focus on water resources issues, and particularly on water and wastewater infrastructure development and financing. The Council assists local governments in providing high quality water resources in a cost-effective manner.

National City Water Survey 2005: New Information

The MWC conducted a survey of the nation's large population cities in 2005 that, for the first time ever, asked cities to identify the most important water resources issues they face, (Report enclosed with Testimony). The three most important water resources priorities facing the nation's cities are:

(1) Rehabilitating aging water and wastewater infrastructure (60.6 %)
(2) Security/Protection of Water Resources Infrastructure (54.6 %)
(3) Water Supply Availability (46.5 %)

Local investment in wastewater infrastructure is robust:

- 55.5 % of 414 responding cities stated that they made major capital investments (over $1 million) in wastewater treatment facilities between 2000 and 2004

- 52.8 % of responding cities planned major capital investments in wastewater treatment facilities between 2005 and 2009
- 72.2 % of responding cities stated that they made major capital investments (over $1 million) in wastewater Collection systems between 2000 and 2004
- 69.8 % of responding cities planned major capital investments in wastewater collection systems between 2005 and 2009

Local investment in wastewater infrastructure is sustained:

- 45.5 % of responding cities made multiple major capital investments in wastewater treatment facilities between 2000 and 2009
- 62.3 % of responding cities made multiple major capital investments in wastewater collection systems between 2000 and 2009

Local financing of water and wastewater infrastructure varies, but is limited to a few general approaches, (see Table 1). The columns in this Table do not add to 100 % because cities typically use more than one financing source for major capital investments. The "Other" category, however, stands out because it is comprised of "pay-as-you-go" finance approaches. It is commonplace for cities identifying this approach to raise user fees and rates to finance new construction, replacement construction and rehabilitation of existing water infrastructure.

Other important findings from the survey indicate that:

- Revenue bonds are the second most frequently used form of financing after "pay-as-you-go"
- Private Activity Bonds are seldom used (primarily due to the state volume caps limiting such use)
- Slightly more than a third of cities use the CWSRF as a financing tool

Table 1
Frequency of Multiple-Source Financing
Of Major Capital Investments in Water Infrastructure

Type of Financing	2000 – 2004 (% of Cities)	2005 – 2009 (% of Cities)*
General Obligation Bonds	28.8	28.0
Revenue Bonds	46.1	50.8
Private Activity Bonds	0.8	1.4
State Revolving Fund	38.3	38.6
Other	51.7	53.5

* Planned major capital investments in water infrastructure.

The 38 % of cities that use the SRF do so because they have no other means of financing needed water infrastructure improvements, or would have to delay investments until financing capabilities match demand for investment.

City Practices and Attitudes Concerning the State Revolving Fund Loan Program

The MWC prepared a report in July 2006 (2nd Report enclosed with Testimony) on city attitudes about the Clean Water State Revolving Fund loan Program (CWSRF) and the Safe Drinking Water State Revolving Fund loan Program (DWSRF). This Report sheds light on why cities do or do not prefer to use the SRF financing approach. The summary findings indicate:

- Cities generally prefer to use municipal bonds - revenue and general obligation bonds (35.2 percent of cities); and, Pay-As-You-Go - cash (26.0 percent of cities) rather than SRF loans. The primary reason for this is because it is more cost-efficient due to better finance terms and the greater time-certainty in the

finance process. This preference also reveals that cities with healthy bond ratings and user fees and charges that anticipate the need for reinvestment in water infrastructure play a strong role in finance decisions.

- Red Tape, burdensome paperwork and SRF loan conditions and strings were identified by 15.1 percent of the survey cities as the critical reason why they did not turn to the SRF program for water projects.
- Another 11 percent of survey cities indicated that they applied for an SRF loan but were either rejected or did not receive a response to their application; or, they did not apply because they had knowledge that they would not qualify either because of the type of water project involved or because the state priorities would not favor their applications.
- A small percentage of survey cities (5 percent) stated that they prefer to seek grants over the use of SRF loans.
- A small percentage of cities (6.8 percent) indicated that they had used the SRF loan program in the past, and they "might" or "will" consider using it for water projects scheduled between 2005 and 2009.
- About 10 percent of the survey cities stated that they did not investigate the use of the SRF loan program for water projects; or that they did not need to use the SRF; or that they were not responsible for capital investments in water infrastructure (3.2 percent for this latter group).

Federal Financial Assistance and Municipal Water Infrastructure Investments

If two-thirds of the nation's principal cities are not attempting to use the SRF loan program because they have other viable financial resources for water projects, why is the water infrastructure "Needs Gap" growing instead of closing?

The transfer of financial responsibility for water infrastructure investments from federal and state governments to local government is firmly entrenched. Simultaneously, major capital investments have shifted from federal and state grants to local lending by way of municipal bonds, user

charges and low interest SRF loans. An often cited figure is that local government is responsible for 90 percent of public-purpose water investments. The U.S. Bureau of the Census reports that combined municipal expenditures for water and wastewater infrastructure are second only to educational expenditures. We are experiencing enormous investment, but a growing or, at best, stable water infrastructure investment "Needs Gap".

As municipal spending on water infrastructure has increased over the last two decades so has the number of unfunded federal mandates. The "Needs Gap" itself is measured in terms of what it will take to comply over a 20 year term with existing law. As new environmental requirements are set for water quality the cost to reach or maintain the compliance point is adjusted upward.

Cities will continue to use traditional water infrastructure investment approaches because that is what is currently available. The expectation that traditional funding approaches will satisfy compliance needs has been shown by experience to be faulty logic. Local government cannot completely satisfy spending requirements in this area because the costs are too great and there are competing needs for public capital. Mayors face the daily challenge of balancing competing needs in the community for worthy public-purpose spending with limited financial resources. Most, if not all, states require municipalities to balance their budgets.

The U.S. Conference of Mayors Water Infrastructure Policy Priorities

The Mayors Water Council has identified three basic approaches to help cities finance the water and wastewater infrastructure development necessary to comply with clean and safe drinking water laws. These include: grants; 30-year no-interest loans; and, greater use of Private Activity Bonds (PABs).

- Providing grants to municipalities, either directly or through states, for water and wastewater infrastructure where there is an affordability issue or when a community faces severe environmental problems;

- Expanding some portion of the current 20-year loan category to include a 30-year no-interest loan category, or a 30-year low-interest loan payback period, under the State Revolving Fund loan program for water and wastewater infrastructure investment; and

- Modifying current tax law by removing Private Activity Bonds (PABs) used for water and wastewater infrastructure from state volume caps. The increased use of private activity bonds for public water infrastructure can boost aggregate spending on water infrastructure and help cities make progress in closing the "Needs Gap".

In our opinion, these approaches are the best means to meet our water infrastructure needs.

Increased Funding of the SRF:
The Conference of Mayors resolution adopted in June 2006 (see Attached Resolution) calls for Congress to annually approve recapitalization authorization to the CWSRF at $1.355 billion or more, and the DWSRF at $850 million or more. The resolution *"...strongly urges the Congress to approve legislation to substantially increase the authorized levels for both Funds to help reverse the continuing decline of the federal share of financing these federally mandated improvements."*

The Conference of Mayors water resources policy supports reauthorization and recapitalization of the CWSRF. We do not support the establishment of a new Trust Fund. While the CWSRF is not perfect, it has proven to be a valuable financing resource to the nation's cities. The state SRF programs and the U.S. EPA have much experience with this program, and the Conference of Mayors would rather improve on the current program rather than start from scratch with a new and ill-defined program at this time.

Analyze the cost and effectiveness of alternative management and financing approaches:
The Conference of Mayors supports authorizing legislation that asks SRF applicants to explore cost-effective measures in their wastewater infrastructure solutions. Congress should encourage communities to consider regional alternatives, consolidation and public-private partnerships. It has been our experience that alternative approaches to planning, financing and operating wastewater facilities can yield significant public benefits for the amount of money invested. While choosing a public-private partnership approach should not be prescriptive, but it should be made possible for those cities that want to take advantage of such an approach.

A number of case studies were prepared by the Mayors Water Council on long-term Operations & Maintenance agreements between cities and private water companies. These projects have been able to produce cost-savings of 10 to 30 percent, as well as provide additional public benefits.

The ability of private water companies to competitively bid for "design, build and operate" (DBO) projects in wastewater is another important dimension to explore. The Conference of Mayors adopted policy in 2001 to encourage competition in the design-build-operate phases of new and refurbished water and wastewater infrastructure. This policy was adopted once it was determined that competition for both surface and sub-surface infrastructure projects can lead to less costly projects than the traditional design-build methods employed in the past.

Eligible Activities:
In light of the 2005 National City Water Survey results it is clear that extending eligible SRF activities to include replacement or major rehabilitation would be a step in the right direction. Similarly, the Conference of Mayors adopted policy in June of 2005 (see 2005 Resolution) calling on Congress *"...to approve legislation that would complement the Drinking Water State Revolving Fund and the Clean Water State Revolving Fund by providing more targeted and direct federal resources to help the nation's communities deal with other water infrastructure-related issues , including $50.6 billion for combined sewer overflows, and $88.5 billion for sanitary sewer overflows and stormwater management;".*

Other eligible activities that could be funded under the SRF include: development of a conservation and management plan, implementation of lake protection programs, programs to reduce municipal stormwater runoff, and watershed protection. We would like to see even greater encouragement of the states to fund such comprehensive efforts to improve water quality.

The Conference of Mayors supports legislation that includes a demonstration program for water quality enhancement and management. One of the most difficult problems cities face involves achieving state water quality objectives and total maximum daily loads (TMDLs) in the face of the virtually unregulated nonpoint pollution sources that are usually outside our jurisdictions.

The U.S. Environmental Protection Agency (EPA) has recognized that agricultural and livestock land uses contribute a major portion of nonpoint source pollution in many areas. Many of our cities are engaged in watershed management efforts to deal with nonpoint sources (including urban runoff). Yet there is a critical lack of regulatory drivers forcing the agricultural and livestock land users to contribute to the solution. In some cases, the timing of pending TMDL requirements will force cities to pay for water treatment caused in large part by the upstream, non-urban land users. EPA's Water Quality Trading Policy requires the non-urban polluter to voluntarily participate in a trading scheme.

The Conference of Mayors adopted an action plan for sustainable watershed management in 1998. One of the five principles of that plan is to focus on non-urban, nonpoint source water pollution, and pursue public policy that would assign responsibility to pay for the treatment of polluted water commensurate with the contribution of the pollutant loadings. The action plan also clearly calls for allowing the agricultural and livestock land users to employ best practices and least cost approaches that are effective in lieu of stringent and costly regulations. Mayors fully recognize that these land users, although they may or may not be part of our cities, are important contributors to our regional economies. While we prefer to use the powers of persuasion to convince them to participate in the water pollution solutions, such as the Water Quality Trading Policy approach, we have begun to experience failure in cooperative efforts, and cities have in some instances resorted to legal actions.

The Conference of Mayors adopted a comprehensive watershed organics management policy in 2002. This policy calls for Mayors to take an active, and leading, role in watershed planning to control organics and their constituent nutrients, such as phosphorous and nitrogen which pollute streams and lakes, that subsequently require more costly treatment at water facilities.

A demonstration project provision in your bill could provide some of the appropriate financial incentives necessary to bring voluntary cooperative efforts to bear to solve the water quality designation/TMDL problems that we are facing. The Conference of Mayors supports this type of innovative approach and we would encourage this Committee to consider including this initiative.

Affordability and Loan Repayment Length:
The Conference of Mayors urges Congress to clearly state in authorizing legislation that a CWSRF 30-year repayment term is acceptable for all cities using the CWSRF loan program. A 30-year, no-interest or low-interest loan program administered under the SRF program would provide a financial incentive that many local elected officials would welcome. It obviously would make new infrastructure investment more affordable than the traditional 20-year loan period. It also has the potential to increase aggregate water infrastructure investment because local government now has to make difficult choices on where to spend limited financial resources.

Asset management Provision-
The Conference of Mayors encourages cities to adopt and implement asset management plans that can help cities provide adequate levels of wastewater services to their residents and business users. Asset management tools can help cities properly maintain their treatment works and collection systems over time. Asset management is critical to the preservation of infrastructure.

At the local level, we have a long history of experience with using asset management planning. We would like to mention that formalizing such a requirement as a condition of receiving SRF funding should be integrated into the loan program with caution. Overly prescriptive and/or rigid approaches can be counterproductive. Generally speaking, a one-size-fits-all approach is not recommended. There is concern, strongly influenced by past history, that aggressive federal and state intrusion could prove counter-productive. We would be happy to work with the Committee to explore what an appropriate scope and details of an asset management plan should be.

Conclusion

On behalf of the Conference of Mayors and the Mayors Water Council I wish to thank you again for this opportunity to speak before this Committee. We look forward to working with you as you move forward on important water resources legislation.

ATTACHMENT A

Resolution Adopted in Chicago
June 2005

INCREASING FEDERAL FUNDS TO HELP COMMUNITIES IMPROVE WATER INFRASTRUCTURE AND MEET FEDERAL WATER MANDATES

WHEREAS, many of the nation's communities have aging or inadequate water infrastructure and face staggering costs for making upgrades and repairs to protect and improve water quality and to meet federal clean water and drinking water mandates; and

WHEREAS, generally, the federal Clean Water and Drinking Water State Revolving Funds intended to help communities meet federal water quality mandates continue to be substantially underfunded, and will not satisfy the $530 billion plus "Needs Gap" estimated by the U.S. Environmental Protection Agency (USEPA) to comply with federal mandates; and

WHEREAS, many of the nation's communities experience wet weather episodes involving overflows of untreated wastewater that occur as a result of deteriorating or inadequate infrastructure, and thus are compromising many of the nation's waterways and causing considerable public health impacts each year; and

WHEREAS, the USEPA estimates that there are 21,264 Combined Sewer Systems (CSS) and Sanitary Sewer Systems (SSS), with a combined total of 784,000 miles sanitary and storm sewer lines in the nation; and

WHEREAS, a recent study by the U.S. Environmental Protection Agency estimates that it will cost communities approximately $50.6 billion to address combined sewer overflows (CSOs) and $88.5 billion to address sanitary sewer overflows (SSOs) over the next 20 years; and

WHEREAS, there is currently no dedicated source of direct federal funding to assist the nation's communities with efforts to prevent or mitigate CSOs and SSOs; and

WHEREAS, the nation's communities are vastly in need of additional federal resources to upgrade water infrastructure, and are especially in need of a dedicated source of direct federal funding to help prevent CSOs and SSOs; and

WHEREAS, the nation's communities believe direct federal assistance for water infrastructure upgrades and improvements is a more efficient and more effective approach for achieving real improvements to water quality than receiving federal funds through state-administered programs;

NOW, THEREFORE, BE IT RESOLVED, that The U.S. Conference of Mayors urges the Congress to approve legislation that would complement the Drinking Water State Revolving Fund and for the Clean Water State Revolving Fund by providing more targeted and direct federal resources to help the nation's communities deal with other water infrastructure-related issues, including $50.6 billion for combined sewer overflows, and $88.5 billion for sanitary sewer overflows and stormwater management; and

BE IT FURTHER RESOLVED, that The U.S. Conference of Mayors strongly urges the Congress to provide FY06 funds for the Drinking Water State Revolving Fund at the authorized level of $850 million and for the Clean Water State Revolving Fund at the authorized level of $1.35 billion; and

BE IT FURTHER RESOLVED, that The U.S. Conference of Mayors strongly urges the Congress to approve legislation to substantially increase the authorized levels for both Funds to help reverse the continuing decline of the federal share of financing these federally mandated improvements.

ATTACHMENT B

Resolution Adopted in Las Vegas
June 2006

RECAPITALIZING THE STATE REVOLVING FUND (SRF) LOAN PROGRAMS ANNUALLY TO HELP COMMUNITIES IMPROVE WATER INFRASTRUCTURE AND MEET FEDERAL WATER MANDATES

WHEREAS, a recent Survey conducted by The U.S. Conference of Mayors Urban Water Council identified rehabilitating the aging urban water resources infrastructure as the number one water priority facing America's principal cities; and

WHEREAS, the Survey also indicated that from 52 percent to 83 percent of cities are currently engaged in making major capital investments in five types of water infrastructure: water supply; water treatment plants; water distribution systems; wastewater treatment plants; and wastewater collection systems; and

WHEREAS, many of the nation's communities face staggering costs for making upgrades and repairs to protect and improve water quality and to meet federal clean water and drinking water mandates; and

WHEREAS, the federal Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) are intended to help communities meet federal water quality mandates, but continue to be substantially underfunded, and will not satisfy the $530 billion plus "Needs Gap" estimated by the U.S. Environmental Protection Agency (USEPA) to comply with federal mandates; and

WHEREAS, the federal Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) have been significantly cut back in recent years, to the point where some communities are facing a 50 percent or greater reducrion in new loan funds made available for public-purpose water and sewer projects; and

WHEREAS, the federal Clean Water State Revolving Fund (CWSRF), while inadequately funded, has proven to provide significant public benefits including: better water quality to protect drinking water, protection of aquatic life and wildlife, improvements in waters used for primary and secondary contact recreation, and protection of waters providing fish and shellfish for human consumption; and

WHEREAS, the continued implementation of federal unfunded mandates (like the drinking water standard for arsenic and other regulations) add significant capital costs for municipal water treatment systems that cannot realistically be complied with without federal financial assistance;

NOW, THEREFORE, BE IT RESOLVED that The U.S. Conference of Mayors supports the continuation of the Clean Water Act and Safe Drinking Water Act State Revolving Fund loan programs as currently implemented by the U.S. Environmental Protection Agency and the public and environmental benefits derived from these programs; and

BE IT FURTHER RESOLVED that The U.S. Conference of Mayors strongly urges the Congress and Administration to annually approve recapitalization authorizations to the CWSRF at $1.355 billion or more, and the DWSRF at $850 million or more; and

BE IT FURTHER RESOLVED that The U.S. Conference of Mayors strongly urges the Congress to approve legislation to substantially increase the authorized levels for both Funds to help reverse the continuing decline of the federal share of financing these federally mandated improvements.

THE U.S. CONFERENCE OF MAYORS URBAN WATER COUNCIL

National City Water Survey 2005

A Report Prepared by The United States Conference of Mayors Urban Water Council

November 18, 2005
Washington, D.C.

Urban Water Council

The United States Conference of Mayors

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Chairman, Urban Water Council

J. Thomas Cochran
Executive Director

Acknowledgement

The U.S. Conference of Mayors' Urban Water Council would like to acknowledge and thank the 414 city Mayors and their staff who provided survey information for this report.

THE U.S. CONFERENCE OF MAYORS URBAN WATER COUNCIL

National City Water Survey 2005

A Report Prepared by The United States Conference of Mayors Urban Water Council

November 15, 2005
Washington, D.C.

Prepared by:

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Executive Summary

The United States Conference of Mayors' Urban Water Council (UWC) conducted a survey of the nation's principal cities to examine water resources priorities and trends. Mayors were asked in the survey to provide current information in four key water resources areas: issues and priorities; recent and planned major capital investments in water and wastewater infrastructure; adequacy of water supplies; and, water conservation activities. The UWC has tracked these four areas (and other subjects) of concern for over a decade.

The survey was distributed to nearly 1,200 cities with mayoral forms of government. These are considered the nation's principal cities because they have populations of 30,000 or greater. Nearly 35 percent of the principal cities (414 cities) responded to the survey, and form the basis for this report. The survey response, in this case, was greater than usual. Thus, the survey information provides a robust data base.

Water Priorities and Issues

The top priorities identified, measured by frequency of survey response, include a combination of chronic "every-day" problems associated with maintaining and rehabilitating aging water and wastewater infrastructure, and a number of priorities associated with potential "catastrophic events", (see Table 2).

- The chronic "every-day" problems include the number one priority-aging infrastructure (identified by 60.6 percent of the survey cities) and priorities four and five: permits and regulatory issues (also referred to as unfunded federal mandates, at 45.2 percent), and water quality (42.3 percent), respectively.

- The potential "catastrophic events" issues include the number two priority: water infrastructure security (54.6 percent); the number six priority, flooding (38.4 percent); and the number seven priority, emergency planning and management for storms and hurricanes (34.3 percent).

- Concern over water supply availability was identified as the third highest priority (46.4 percent); three other related priorities were identified among the top ten concerns: drought management (32.6 percent); regional conflict over water use (26.8 percent); and, water rights (25.1 percent).

Water and Wastewater Infrastructure Investment and Financing

The nation's principal cities are engaged in wide ranging and significant investment in building and rehabilitating the five major forms of water and wastewater infrastructure during this decade: water supply; water treatment plants; water distribution systems; wastewater treatment plants; and, wastewater collection systems, (see Tables 3, 4-B and 5).

- 92 percent of the survey cities made major capital investments in water infrastructure between 2000 and 2004; 92 percent of the cities plan to make major capital investments between 2005 and 2009.

- 23 percent of the survey cities made simultaneous major capital investments in all five water infrastructure categories.

- Significant investment in underground infrastructure has been made or planned:

  - 83.7 percent of cities invested in water distribution pipes, and 72.2 percent of cities invested in wastewater collection pipes during the first half of the decade.

  - 79.0 percent of cities plan investment in water distribution pipes, and 69.8 percent of cities plan investments in wastewater collection pipes for the second half of the decade.

- Roughly one-half of the survey cities either made or plan major capital investments in water supply, water treatment plants and wastewater treatment plants.

- Many smaller cities made or plan water infrastructure investment during this decade, but clearly a higher proportion of large and medium size cities are making investments than smaller cities.

Traditional municipal financing methods continue to dominate city water infrastructure capital investments (see Tables 6, 7 and 8):

- A small majority of cities (52.3 percent) relied on a single-source for water infrastructure financing in the first half of the decade, but a small majority of cities (53.5 percent) plan to use multiple-source financing during the second half of the decade.

- The financing method used most frequently by the survey cities was the category "other," which was described as "Pay-As-You-Go." This approach relies on user charges, rate increases and capital reserves generated from user charges. 21.0 percent of the survey cities relied on a Pay-As-You-Go single-source finance method between 2000 and 2004; Pay-As-You-Go was used in combination with other financing methods by 51.7 percent of the survey cities.

- In descending order of frequency, the following multi-source financing methods are used by cities for water infrastructure investments: Pay-As-You-Go, 51.7 percent; revenue bonds, 46.1 percent; State Revolving Fund (SRF) loans, 38.3 percent; general obligation bonds, 28.8 percent; and, private activity bonds, 0.8 percent.

Adequacy of City Water Supply

Water supply availability was identified as the third top priority by the survey cities. For the most part, cities try to be self-sufficient when it comes to water supplies. Two-thirds of the survey cities provide their own water supply; and roughly 19 percent of the cities are served by private water companies. Some cities face a convergence of issues, including drought management, water rights, inter-basin transfers, ground water depletion, and regional conflict over water use that may impact their ability to provide adequate and affordable water in their communities.

- 55.6 percent of the survey cities indicated that they have an adequate water supply for more than 20 years, (see Table 11).

- 35 percent of the survey cities indicated that they have an adequate water supply for less than 20 years, they could face a critical water shortage by 2025.

- Water shortages may be more pronounced in medium size cities.

Sixty-nine percent of the cities that do not have adequate water supplies for more than 20 years have made major capital investments in water supply infrastructure between 2000 and 2004 (see Table 12).

City Water Conservation Activities

The potential for cities to experience critical water shortages in 2015 and 2025 elevates the importance of water conservation activities. Even if cities do not face a critical water shortage it makes good economic and environmental sense to conserve water resources. The survey findings indicate that cities are currently actively engaged in water conservation programs. See Tables 13 through 15.

- Two-thirds of the survey cities indicated they had water conservation plans in place. A high proportion of large cities (about 80 percent) indicated they had programs. The proportion of smaller cities with conservation programs was lower (58.6 percent).

- Cities were three times more likely to have water conservation programs where water supply infrastructure investments were made in the period 2000 to 2004.

- Cities planning to make major capital investments in water supply infrastructure for the period 2005 to 2009 are nearly four times as likely to have an established water conservation program.

- Two system-wide methods that can be effective in water conservation programs are automated meters because they accurately gage use and billing; and altering water rate structures as a demand-management tool.

  - Traditional water meters remain the most common conservation technique, employed by 72.5 percent of the survey cities. However, 68.8 percent of the cities indicated they would consider modernizing with automated water meters if they could save water or money.

  - While the number of cities altering water rate structures is fairly constant over the three population size categories, the proportion of cities employing the technique is clearly related to increasing population size (Table 15). Almost half of the larger cities use the technique, while only about 40 percent of medium size cities and about 30 percent of smaller size cities do.

Introduction

The Urban Water Council (UWC) is a Task Force of The U.S. Conference of Mayors. It is open to all Mayors, and its purpose is to provide a forum for discussion of issues impacting how cities provide and protect community water and wastewater services. Some of the issues that the UWC focuses on include: development and rehabilitation of surface and subsurface water infrastructure; water infrastructure financing; watershed management; water supply planning; water conservation; wetlands construction and education programs; and water system program management and asset management. Additionally, the UWC serves as an educational clearinghouse for cities by compiling and disseminating water resources "Best Practices."

Periodically, the UWC conducts national surveys to determine trends in water resources programs and planning in the nation's large population cities. Generally speaking, the surveys conducted over the last decade address specific areas of concern regarding water resource issues that are prominent at any given time. This report is intended to identify trends in 2005 from Mayors and their cities participating in the survey.

The 2005 survey focused on four areas of concern: genetal water problems and priorities; infrastructure investments; water supply issues; and water conservation measures. These are briefly described below.

General Water Priorities and Problems

Mayors were asked to identify which of 24 water resources issues is either a current or future problem for their cities. The list of 24 water resources issues was derived from discussions with Mayors and their staffs, as well as consultation with federal agencies. The list was not intended to be comprehensive. An 'other' response category was included to allow cities to identify issues that were not on the pre-selected list. Mayors were also asked to rank the five most pressing water resources issues on the list. This convention was intended to distinguish priorities among the problem issues, providing invaluable information for federal policy discussions.

Water and Wastewater Infrastructure Investment

Water and wastewater infrastructure development, rehabilitation and financing have been critical concerns for the UWC since its inception in 1995. The American Society of Civil Engineer's Report Card on Infrastructure suggests that water and wastewater infrastructure is in serious need of rehabilitation in America. The US EPA estimates that new investment necessary to comply with existing law will cost more than $534 billion by the year 2019. Conventional wisdom suggests that local government far outspends state and federal government for water and wastewater infrastructure in the United States.

Mayors were asked to respond to questions concerning five categories of major capital investments in the past 5 years (2000-2004) and the next 5 years (2005-2009). The five categories include: water supply; water treatment plant; water distribution systems; wastewater treatment plant; and, wastewater collection systems.

Additional questions focused on how the cities did or will finance these projects. The major forms of financing include: general obligation bonds, revenue bonds, the Clean Water Act or Safe Drinking Water Act State Revolving Fund loan programs (SRF); private activity bonds; and 'other'. It is common for cities to use multiple forms of financing on major capital investments in water related projects. A special focus was placed on the use of SRF financing to determine its extent in capital spending. An open-ended question asked cities to explain why they do not rely on the SRF financing option.

Water Supply

The U.S. Geological Survey (USGS) recently reported that substantial reductions in water consumption have been achieved in both the agricultural and industrial sectors in the United States since 1985. Water consumption related to electricity production remains stable and accounts for the greatest single category of use. The municipal sector, however, is the only sector that continues to grow. The USGS estimates that municipal water use has increased 25 percent since 1985. The USGS suggests that growth in this sector tracks population growth, in spite of reduced consumption due to water conservation programs.

The survey asked Mayors to identify whether their water supplies are owned by the city, or if they contract with a private water provider. Similarly, the survey asked Mayors if they or their private water provider has established and implemented a water supply plan.

The survey also asked Mayors if their cities have an adequate future water supply for the next 10, 20 or greater than 20 years. Additional questions were geared toward determining if city water supplies rely on groundwater, surface water, or some combination. Finally, the survey asked if cities were contemplating shifting water supply from groundwater to surface water.

Water Conservation

Cities may face future water shortages because there is a finite supply of potable water and the population of the United States continues to increase. Therefore, in order to avert critical shortages that would adversely impact local and regional economies, and most certainly impact the quality of life for our citizens it is imperative that cities establish, implement and succeed in their water conservation programs. Water conservation is a hedge against water shortages. While it will not prevent water shortages, it has considerable potential to forestall critical shortages and buy the time necessary to advance technology, market forces and federal, state and local policy developments to ensure adequate and affordable water supplies in the future.

Similar to the water supply questions asked in the survey, the water conservation questions asked Mayors if they or their private water provider have established and implemented water conservation programs. Mayors were asked if their city administration operates a water conservation department.

Other questions were intended to determine if cities were actively experimenting with conservation. For example, Mayors were asked if their cities were altering water use rate structures as a form of demand management. They were also asked if they were modernizing meter technology to accurately audit and bill water consumption.

Materials and Methods

The United States Conference of Mayors (USCM) represents cities with populations of 30,000 or greater. There are roughly 1,200 cities in this size category, and the Urban Water Council (UWC) conducted a saturation survey, (including all cities in this population group, regardless of whether or not they were members of the USCM).

The survey (Attachment A) was mailed or faxed to the Mayor's office in each city. Mayors were asked to fill out the survey questionnaire and either mail or fax them back to the UWC. The survey was also available on the USCM website, and could be filled out and transmitted via a web-based format. Roughly one half of the 414 responding cities provided their response information via the internet.

The 414 city respondents were categorized by population size (Table 1) in order to examine some of the findings relative to size of city. The categories were delineated as follows: 170 smaller cities (41 percent); 140 medium sized cities (34 percent); 104 large cities (25 percent).

Table 1
414 City Survey Respondents Categorized By Population Size (City Size)

Sort by Population Size	(%)
Smaller Cities — Less Than 50,000	41
Medium Cities — 50,000 to 100,000	34
Large Cities — Greater Than 100,000	25

Follow-up efforts involved one or more telephone calls to urge Mayors to respond to the survey questionnaire in the case of survey non-response. Additionally, telephone follow-up was conducted to improve question non-response. Telephone interviews were conducted with half a dozen cities that submitted multiple survey responses. Each of these cases was dealt with by questioning the Mayor or the Mayor's representative about which survey responses were correct and should be included in the tabulation of findings. These cases involved situations where the city might own/operate either the water or wastewater treatment facilities, and/or a private water service provider might be involved. In each case, the convention followed was to include the priorities and information provided by the Mayor's office; or, based on the Mayor's advice, include the private water service provider's information.

The survey questionnaire information was computer coded for data input. Statistical analyses were performed via a mixture of applying the Statistical Package for the Social Sciences software (SPSS), or by applying statistical procedures provided in Microsoft Excel. Simple frequencies of data distributions and arithmetic averages were calculated and reported, as appropriate. Bivariate analyses involved sorting and filtering and the application of crosstabulations for descriptive purposes. Special attention was paid to open-ended questions. The convention used for analyzing these variables was to review each response and construct broad categories of similar responses. Professional judgment was used in these cases; and multiple reviews of the same responses conducted.

Attachment A reports the percentage of cities answering individual questions. The percentages reported were based on 414 cities, the total sample of survey respondents. The reader is cautioned here that the text of this report and the tables presented may vary from reliance on the 414 cities as the denominator in calculating percentages. Each "Table" of findings will indicate the "N", or number of cases (cities) used to make the calculations presented in the table if it does not rely on the full 414 city responses. For example, in Table 3 the percentage of cities making infrastructure investments in a particular category is based on the total number of cities making water and wastewater infrastructure investment for that time period.

Findings

City Water Resource Priorities

General Water Issues and Priorities

Mayors were asked to identify which of 24 water resources issues is either a current or future issue or priority for their cities. The list of issues was derived from discussions with Mayors and their staffs, as well as consultation with federal agencies. The list was not intended to be comprehensive. An 'other' response category was included to allow cities to identify issues that were listed.

The survey cities identified their water resource issues and priorities, which are listed in Table 2 in descending order of frequency. The top three priorities were: aging infrastructure (60.6 percent); water system security (54.6 percent); and, water supply availability (46.4 percent). These findings indicate that cities are concerned about a mixture of ***"every-day"*** problems and ***"catastrophic events."***

The most frequently identified priority is aging water resources infrastructure. This is a chronic or "every-day" problem experienced by many cities. Maintaining and replacing existing water infrastructure has long been a critical challenge for cities. The cost of maintenance and replacement is considerable. The U.S. Environmental Protection Agency (USEPA) has estimated a water and wastewater infrastructure "Needs Gap" of over $500 billion in investment to comply with water laws by the year 2019.

Another ***"every-day"*** problem that is high on the priority list is ensuring an adequate water supply. This was identified by 46.4 percent of the survey cities, and ranked number three on the list of 24 issues. Other issues related to water supply were among the top ten priorities identified: drought management; regional conflict over water use; and water rights. Additionally, the 11th and 13th priority issues were related to water supply, i.e., ground water depletion and inter-basin transfers, respectively.

The second most frequently identified priority was water infrastructure security and protection; this is generally viewed by cities as a potentially "catastrophic event" issue. This has become an important concern, especially since the 9/11 terrorist attacks in the United States. Congress and the USEPA have directed resources toward vulnerability assessments at large and medium sized water supplies and distribution systems. Both public and private water suppliers have been aggressively developing vulnerability plans in an attempt to secure water supplies from chemical and biological sabotage.

Other ***"catastrophic event"*** issues included the 6th and 7th priorities: flooding, and emergency planning and management for storms and hurricanes, respectively. Note that the survey was conducted in the first quarter of 2005, long before the hurricanes Katrina and Rita struck and devastated Gulf Coast communities.

Permits and regulatory issues ranked as the 4th most important priority. This issue has been a subject of considerable concern to the Conference of Mayors for some time. It is generally considered a priority because it involves unfunded federal mandates that are extremely costly for cities to meet. Another recent survey conducted by the Conference of Mayors identified unfunded federal water mandates as the single largest category of costs facing the nation's principal cities.

The top four priorities were examined based on city size (based on population). Aging infrastructure was identified as a priority by 40.4 percent of small cities, 33.6 percent of medium cities, and 26 percent of large cities. Water system security was identified as a priority by 36.6 percent of small cities, 29.9 percent of medium cities, and 33.5 percent of large cities. Water supply availability was identified as a priority by 34.9 percent of small cities, 33.9 percent of medium cities, and 31.2 percent of large cities. Permits and regulatory issues were identified as a priority by 35.7 percent for both small and medium cities, and 28.6 percent of large cities. Other than aging infrastructure, that appears to be especially problematic for small cities, the other three top ranking priorities do not substantially vary by city size.

Table 2
City Water Resource Priorities

Rank Order	Water Resources Issue	Percent Of Cities
1	Aging Water Resources Infrastructure	60.6
2	Security/Protection of Water Resources Infrastructure	54.6
3	Water Supply Availability	46.4
4	Permits, Regulatory Issues	45.2
5	Water Quality of Urban Streams and Rivers	42.3
6	Flooding	38.4
7	Emergency Planning and Management for Storms, Hurricanes	34.3
8	Drought Management	32.6
9	Regional Conflict Over Water Use	26.8
10	Water Rights	25.1
11	Groundwater Depletion	23.4
12	Sediment Management	19.6
13	Inter-basin Transfers	16.2
14	Best Practices – Technology Transfer	13.0
15	Endangered Species	11.6
16	Loss of River Corridors/Green-space	10.6
17	Loss of Wetlands	10.4
18	Other	9.7
19	Water Transportation (Channels, Ports, Dredging)	8.5
20	Beach/Shoreline Erosion	7.5
21	Neglected/Decaying Waterfront Areas	6.8
22	Channel/Harbor Adequacy	4.8
23	Insufficient Water-Oriented Recreation	3.9
24	Waterborne Traffic	3.4

Water and Wastewater Infrastructure Investment and Financing

Major Capital Investment

The survey cities were asked to identify the types of water infrastructure investment they made over the last five years, and what investments they are planning to make over the next five years. The investments were limited to major capital investments as determined by the survey cities. This information is intended to provide a broad view of water infrastructure investment by cities, encompassing a decade's worth of spending activity. Not surprisingly, cities have been very active in making water infrastructure investments. Ninety-two percent of the survey cities made major capital investments in water and wastewater infrastructure between 2000 and 2004; 92.0 percent of the survey cities plan to make similar infrastructure investments between 2005 and 2009.

The survey findings indicate that cities are making extensive major capital investments in the underground (or sub-surface) infrastructure involving pipes (Table 3).

- 83.7 percent of the responding cities made major capital investments in water distribution systems between 2000 and 2004
- 72.2 percent of the responding cities made major capital investments in sewage collection systems between 2000 and 2004

More than 50 percent of the responding cities made major capital investments in water supply, water treatment and wastewater treatment infrastructure between 2000 and 2004.

Table 3
Major Capital Investments in City Water and Wastewater Infrastructure

Infrastructure	2000 – 2004* (% of Cities)	2005 – 2009** (% of Cities)
Water Supply	61.5	59.3
Water Treatment Plant	56.5	49.6
Water Distribution System	83.7	79.0
Wastewater Treatment Plant	55.5	52.8
Wastewater Collection System	72.2	69.8

* Actual investments made by 382 cities, percentage of cities based on a total of 382 cites, not 414 cities.
** Planned investments by 381 cities, percentage of cities based on a total of 381 cites, not 414 cities.

Water infrastructure investment planning over the next five years indicates a similar pattern of major capital spending.

- 79.0 percent of the responding cities plan major capital investments in water distribution systems between 2005 and 2009
- 69.8 percent of the responding cities plan major capital investments in sewer collection systems between 2005 and 2009

Roughly 50 percent of the responding cities plan major capital investments in water supply, water treatment and wastewater treatment infrastructure between 2005 and 2009.

Actual (2000–2004) and planned (2005–2009) water infrastructure capital investments were examined to determine if city size (measured by population) had any effect on investment decisions. Two comparisons were made. First, infrastructure categories for both actual and planned investment were sorted by city size (Table 4-A). For each category, the percentage of small, medium and large cities was calculated. As expected, the smaller cities made up the higher proportions of investments with few exceptions. This was expected because the smaller cities represented 41 percent of the survey city population.

Table 4-A
Major Capital Investments in City Water and Wastewater Infrastructure and Size of City

Infrastructure Category	Small Cities %	Medium Cities %	Large Cities %
Actual Investments 2000–2004			
Water Supply	35.3	34.9	29.8
Water Treatment Plant	35.8	34.9	29.3
Water Distribution System	39.7	33.1	27.2
Wastewater Treatment Plant	36.8	31.1	32.1
Wastewater Collection System	38.2	33.1	28.7
Planned Investments 2005–2009			
Water Supply	34.5	31.9	33.6
Water Treatment Plant	36.0	32.0	33.8
Water Distribution System	38.9	33.2	27.9
Wastewater Treatment Plant	35.4	32.3	32.3
Wastewater Collection System	37.6	33.8	28.6

Second, each infrastructure category was sorted by city size represented by the proportion of cities in a particular city size category (Table 4-B). Thus, the calculation employed the use of the overall proportion of cities in a particular size category as the denominator. A trend (Table 4-B) indicated that as city size increased so did the percentage of cities making water infrastructure investment. This trend appears to be more pronounced in the water supply, water treatment plants and wastewater treatment plants categories. The trend was slightly less pronounced for the infrastructure categories involving water and sewer pipes. While there may be a greater number of smaller cities making or planning water infrastructure investment, clearly, a higher proportion of large and medium size cities are making investments than smaller cities.

Table 4-B
Major Capital Investments in City Water and Wastewater Infrastructure by Proportion of City Size Category

Infrastructure Category	Small Cities %	Medium Cities %	Large Cities %
Actual Investments 2000–2004			
Water Supply	47.6	58.6	66.3
Water Treatment Plant	44.7	54.3	60.6
Water Distribution System	73.5	76.4	83.0
Wastewater Treatment Plant	45.3	47.8	67.3
Wastewater Collection System	61.8	65.7	75.0
Planned Investments 2005–2009			
Water Supply	44.7	52.1	71.1
Water Treatment Plant	38.8	40.7	61.5
Water Distribution System	68.2	72.1	79.8
Wastewater Treatment Plant	41.2	46.4	62.5
Wastewater Collection System	58.2	64.3	72.1

It is common for cities to make multiple investment commitments to the same category of water or wastewater infrastructure over extended periods of time (Table 5). For example, 72.0 percent of cities making a major capital investment in water distribution systems in 2000 to 2004 also plan to make major capital investments in water distribution systems in 2005 to 2009. The other infrastructure categories exhibited similar but less intensive levels of repeat investment: 62.3 percent of cities plan repeat major capital investments in wastewater collection systems (sewer pipes); 47.9 percent in water supply; 45.5 percent in wastewater treatment plants; and 39.0 percent in water treatment plants. This finding indicates that the level of financial commitment to water infrastructure by cities is both significant and sustained.

The survey data revealed that the level of city capital investment in water infrastructure is not only significant and sustained, but is in some cases rather broad. 23 percent of the survey respondents indicated that they had made simultaneous major capital investments in all five of the infrastructure categories listed in Table 3 between 2000 and 2004. The proportion of cities that plan simultaneous major capital investments in all five infrastructure categories increases to 27.2 percent for the 2005 to 2009 period.

Table 5
Percentage of Repeat City Major Capital Investments in Water Infrastructure by Category

Repeat Infrastructure Investment	Investment 2000-2004 and 2005-2009 (% of Cities)*
Water Supply	47.9
Water Treatment Plant	39.0
Water Distribution System	72.0
Wastewater Treatment Plant	45.5
Wastewater Collection System	62.3

* Percentage of cities based on a total of 382 cites, not 414 cities.

Financing Mechanisms

As mentioned above, 92 percent of the survey cities made major capital investments in water and wastewater infrastructure between 2000 and 2004. Of those cities, 97.4 percent reported the type of financing employed.

The survey responses were examined to determine how frequently the cities relied on single and multiple source financing, (Tables 6 and 7). Five categories of capital investment financing were considered in the survey. 52.3 percent of cities relied on a single source of financing for their major capital investments in water and wastewater infrastructure.

Table 6
Frequency of Single-Source Financing Of Major Capital Investments in Water Infrastructure

Type of Financing	2000 – 2004 (% of Cities)	2005 – 2009* (% of Cities)
General Obligation Bonds	9.4	7.3
Revenue Bonds	15.9	13.9
Private Activity Bonds	0.0	0.0
State Revolving Fund	5.9	4.6
Other	21.0	20.6
Overall % of Cities Using Single-Source Financing	52.3	46.5

* Planned major capital investments in water infrastructure.

"Other" was the most frequently identified form of single-source financing, accounting for 21.0 percent of cities. Survey respondents described "other" financing to include: capital reserves from user charges; increased user rates; and transfer from the general fund. These are generally referred to by the survey respondents as "pay-as-you-go" approaches to financing.

The second most frequently identified single-source financing category was revenue bonds, at 15.9 percent. General obligation bonds accounted for 9.4 percent; and the State Revolving Fund Loan (SRF) accounted for only 5.9 percent. Private activity bonds accounted for less than one percent.

Nearly 48 percent of the survey cities utilized multiple financing sources. They rank in order of frequency as follows: "Other" combined with either general obligation bonds, revenue bonds, private activity bonds or the state revolving fund loan at 51.7 percent; revenue bonds and other financing at 46.1 percent; the state revolving fund loan program and other financing at 38.8 percent; general obligation bonds and "other" financing at 28.8 percent; and, private activity bonds and other financing at 0.8 percent.

Table 7
Frequency of Multiple-Source Financing of Major Capital Investments in Water Infrastructure

Type of Financing	2000 – 2004 (% of Cities)	2005 – 2009* (% of Cities)
General Obligation Bonds	28.8	28.0
Revenue Bonds	46.1	50.8
Private Activity Bonds	0.8	1.4
State Revolving Fund	38.3	38.6
Other	51.7	53.5

* Planned major capital investments in water infrastructure.

A similar pattern of water and wastewater infrastructure financing is planned by the survey cities for the years 2005 to 2009 (Table 6). Slightly over 96 percent of the cities planning major capital investments in water and wastewater infrastructure reported the types of financing methods they anticipate using. Roughly 46 percent of the survey cities plan to utilize single source financing. In descending order of importance, they identified the following plans: "other" 20.6 percent; revenue bonds 13.9 percent; general obligation bonds 7.3 percent; the state revolving fund loans 4.6 percent; and, private activity bonds at 0.0 percent.

Not surprisingly, the 2005 to 2009 financing plans for water infrastructure investment utilizing multiple financing sources is similar to the earlier five year period, (Table 7). In descending order, they are: "other" 53.5 percent; revenue bonds and other financing 50.8 percent; state revolving fund loans and other financing 38.6 percent; general obligation bonds and other financing 28.0 percent; and private activity bonds and other financing 1.4 percent.

Table 8 provides a summary of both single source and multiple source financing of major capital investments in water and wastewater projects. The main diagonal of Table 8 depicts single source financing, while the remaining cells depict multiple financing approaches.

Table 8
Frequency of Single-Source and Multiple-Source Financing Of Major Capital Investments in Water Infrastructure (% of Cities)*

Finance Method	General Obligation Bond	Revenue Bond	Private Activity Bond	State Revolving Fund	Other
General Obligation Bond	9.4	6.5	0.3	12.7	9.2
Revenue Bond		15.9	0.3	16.2	17.3
Private Activity Bond			0.0	0.3	0.3
State Revolving Fund				5.9	15.6
Other					21.0

* Based on 371 cities reporting finance methods for the period 2000 to 2004.

Survey cities (53.1 percent) indicated that they were willing to consider a Public-Private Partnership (PPP) approach to water infrastructure projects if cost savings in operation and maintenance or construction could be achieved. Slightly over 17 percent of the survey cities did not provide a response to this question. City size does not appear to influence the willingness to consider PPPs. The 53.1 percent of cities that said they would consider a PPP approach had the following city size distribution pattern: 51 percent of small cities; 53 percent of medium cities; and, 58 percent of large cities.

The Role Played by the SRF

The State Revolving Fund loan program (SRF) appears to play a consistent role in the way cities finance major water and wastewater infrastructure capital investments over periods of 2000 to 2004 and 2005 to 2009. The SRF provided a single-source of financing for 5.9 percent of the survey cities in 2000-2004 and is expected to provide financing for 4.6 percent of the survey ciries in 2005-2009. In this respect the SRF is the fourth most important source of financing.

The SRF provided one component of multiple-source financing for 38.3 percent of the survey cities in 2000-2004. It is expected to be one component of multiple-source financing for 38.6 percent of the survey cities in 2005-2009. In this respect the SRF is the third most important source of financing.

Generally speaking, the SRF is not a major source of financing for water infrastructure investments among the survey cities. It does, however, play a significant role for the 5.9 percent of the survey cities where it provides 100 percent of project financing. The SRF also provides a substantial (over 50 percent) source of financing for another 17.2 percent of the survey cities (Table 9). It appears to be somewhat more important as a source of financing for smaller cities (Table 10).

Water Supply Information, Issues and Priorities

Two-thirds of the survey cities provide their own water supply; roughly 19 percent of the cities are served by private water companies. Nearly three-quarters of the survey cities have a water supply plan. The survey cities rely on a combination of ground and surface water, (51.7 and 70.3 percent, respectively). Switching from ground water to surface water supplies is rare; with only 6.8 percent of the survey cities planning to switch.

The survey findings suggest that a critical water shortage could occur by 2025 in cities nationwide. Thirty-five percent of the survey cities indicated that they have an adequate water supply for less than 20 years; 55.6 percent indicated that they have an adequate water supply for more than 20 years (Table 11).

Table 9
Frequency of SRF Financing Of Major Capital Investments in Water Infrastructure, 2000-2004

Percent of Major Capital Investment	% of Cities
10 % or less	5.9
20 % or less	3.0
50 % or less	7.3
> 50 % but < 100 %	17.2
100 %	5.9

Table 10
Frequency of SRF Financing Of Major Capital Investments in Water Infrastructure, 2000-2009

Percent of Major Capital Investment	% of Small Cities	% of Medium Cities	% of Large Cities
10 % or less	1.0	1.3	3.5
20 % or less	0.3	0.5	2.2
50 % or less	3.5	1.6	2.2
> 50 %	10.2	8.6	4.3

Table 11
Adequacy of Current Water Supply and City Size

Adequacy of Water Supply	% of Small Cities	% of Medium Cities	% of Large Cities
10 Years or Less	19.3	24.0	17.3
20 Years or Less	15.3	19.2	22.4
Greater than 20 Years	65.3	56.8	60.2
Number of Cities (NOT %)	150	125	98

When city size, based on population, is taken into account, it appears that about a third of small cities will face potential water shortages by 2015 and 2025. The problem is more pronounced for medium size cities with 43.2 percent; and 39.7 percent of large cities.

Water supply availability was identified by 46.4 percent of the survey cities as one of the three top water resources priorities. Focusing on just these (46.4 percent) cities, 68 percent of those cities provide their own water supply while 17 percent rely on private water companies. Cities that provide their own water supply are four times more likely to have indicated water supply availability problems than cities relying on private suppliers. Additionally, focusing just on the 46.4 percent of the survey cities indicating water supply availability as a priority issue, 45.8 percent of those cities will face water supply shortages by 2025, while 44.3 percent have a supply that is adequate for more than 20 years. Eighty-three percent of the cities ranking water availability as a top priority have established water supply plans (even though the supply may be inadequate after 20 years), and 13 percent have no water supply plans for the future.

Sixty-nine percent of the cities that do not have adequate water supplies for more than 20 years have made major capital investments in water supply infrastructure between 2000 and 2004 (Table 12). However, 31 percent have not made capital commitments in new water supply infrastructure. More than half (54.8 percent) of the cities with an adequate water supply beyond 20 years have made major capital investments in new water supply infrastructure between 2000 and 2004.

A similar pattern is observed for the period 2005 to 2009 for planned investment (Table 12). Roughly 71 percent of cities without an adequate water supply after 20 years are planning to make major capital investments in water supply infrastructure. More than half (56.6 percent) of the cities with an adequate water supply beyond 20 years are planning major capital investments in new water supply infrastructure between 2005 and 2009.

Table 12
Adequacy of Current Water Supply And Major Capital Investments in Water Supply Infrastructure Between 2000 and 2004

Adequacy Water Supply	Not Investing in Water Supply Infrastructure (% of Cities)	Investing in Water Supply Infrastructure (% of Cities)
	2000–2004*	
10 Years or Less	6.3	13.9
20 Years or Less	5.5	12.6
Greater than 20 Years	27.3	34.4
	2005–2009**	
10 Years or Less	5.8	15.7
20 Years or Less	5.2	12.5
Greater than 20 Years	26.4	34.4

* Actual investment based on 366 cities
** Planned investment based on 344 cities

Water Conservation Information, Issues and Priorities

Two-thirds of the survey cities indicated they had water conservation plans in place. A higher proportion of large cities (about 80 percent) indicated they had programs; while the proportion of smaller cities with programs was lower (58.6 percent). Water conservation departments as discrete units of local government are relatively rare (11.1 percent). About half of the survey cities use some percent of automated meters; and the average percent of automated meters in the cities that employed them was 38.4 percent but ranged from less than 1 percent to 100 percent. Traditional water meters remain the most common technique, employed by 72.5 percent of the survey cities. However, 68.8 percent of the cities indicated they would consider modernizing with automated water meters if they could save water or money.

A high proportion (82.8 percent) of survey cities that indicated water supply availability was a priority issue had water conservation plans. The vast majority of these cities use traditional water meters (80.7 percent); less than half of them (46.8 percent) use automated water meters and about half of them (50.5 percent) alter water rate structures to improve billing and/or conserve water. Three-quarters of these cities indicated they would consider modernizing their Survey cities that have made or are planning major capital investments in water supply infrastructure are more likely to have established water conservation plans (Table 13). During the period 2000 to 2004, cities were three times more likely to have water conservation programs where water supply infrastructure investments were made. Cities planning to make major capital investments in water supply infrastructure for the period 2005 to 2009 are nearly four times as likely to have an established water conservation program. Even where cities did not plan a water supply infrastructure investment, they were slightly more likely to have established water conservation plans.

Table 13
Cities with Water Conservation Programs and Make or Plan Major Capital Investments in Water Supply Infrastructure Between 2000 and 2004 and 2005 and 2009

Has Water Conservation Plan	Not Investing in Water Supply Infrastructure (% of Cities)	Investing in Water Supply Infrastructure (% of Cities)
	2000–2004*	
Yes	23.5	45.3
No	16.9	14.3
	2005–2009**	
Yes	21.5	48.9
No	17.1	12.5

* Actual Investment Based on 391 cities
** Planned Investment Based on 368 cities

Survey cities that have made or are planning major capital investments in water supply infrastructure are less likely to alter water rate structures to achieve water conservation (Table 14). There are two uncertainties concerning these figures that impact how one interprets these findings. First, the survey information does not include knowledge of whether or not altering rate structures in the past significantly reduced the volume of water use. Therefore, it is difficult to say whether the design volume of the water supply infrastructure involved was affected by altering the rate structure. Indeed, the design volume could be driven by population growth, an expanding local/regional economy, or other important factors. Second, cities planning majot capital investment in the period 2005 to 2009 may begin altering water rate structures as a conservation measure, and that mechanism may be part of the overall water supply plan.

While the number of cities altering water rate structures is fairly constant over the three population size categories, the proportion of cities employing the technique is clearly related to increasing population size (Table 15). Almost half of the larger cities use the technique, while only about 40 percent of medium size cities and about 30 percent of smaller size cities do.

Table 14
Cities that Alter Water Rate Structures and Make or Plan Major Capital Investments in Water Supply Infrastructure Between 2000 and 2004 and 2005 and 2009

Alters Water Rate Structure	Not Investing in Water Supply Infrastructure (% of Cities)	Investing in Water Supply Infrastructure (% of Cities)
	2000–2004*	
Yes	11.7	25.7
No	26.3	36.3
	2005–2009**	
Yes	11.5	27.9
No	25.4	35.2

* Actual Investment Based on 369 cities
** Planned Investment Based on 347 cities

Table 15
Cities that Alter Water Rate Structures and Population Size*

Alters Water Rate Structure	% of Small Cities	% of Medium Cities	% of Large Cities
Yes	29.1	39.5	48.4
No	70.9	60.5	51.5
Number of Cities (NOT %)	158	124	95

* Based on 377 cities

ATTACHMENT A

URBAN WATER RESOURCES SURVEY
The United States Conference of Mayors Urban Water Council
January 10, 2005

STATEMENT OF SURVEY PURPOSE

The U.S. Conference of Mayors' Urban Water Council (UWC) is gathering information on water infrastructure, water supply/conservation, and water resource problems. The information we hope you provide will help us develop public policy positions, and help us focus priorities on the activities pursued by the UWC to aid local government.

RESPONDENT INFORMATION

Mayor: _____
Water Authority Coordinator: _____
Address: _____
_____
Phone: _____
Fax: _____
E-mail: _____

PART I: Water and Wastewater Infrastructure

	% of Cities	
1) Does your City own a drinking water treatment facility?	65.9 Yes	34.1 No
2) Does your City operate a drinking water treatment facility?	63.5 Yes	36.5 No
3) Does your City own a wastewater treatment facility?	57.5 Yes	42.5 No
4) Does your City operate a wastewater treatment facility?	50.1 Yes	49.9 No

5) Has your City made a major capital investment in the last five years in any of the following infrastructure categories?

	% of Cities		
Water supply	56.8 Yes	40.1 No	3.1 No Response
Water distribution system	77.3 Yes	21.0 No	1.7 No Response
Water treatment plant	51.9 Yes	44.0 No	4.1 No Response
Wastewater treatment plant	51.2 Yes	43.7 No	5.1 No Response
Wastewater collection system	66.7 Yes	27.3 No	6.0 No Response

6) If yes, was that capital investment financed by: (check all that apply)

% of Cities	
25.8	General obligation bonds
41.3	Revenue bonds
0.7	Private Activity Bonds
34.3	State Revolving Fund
45.2	Other

7) If the State Revolving Loan Fund was used, did it comprise:

% of Cities	
5.3	10 % or less of the total project cost
2.9	20 % or less of the total project cost
6.5	50 % or less of the total project cost
20.8	more than 50 % of the total project cost

8) Does your City plan to make a major capital investment in the next five years in any of the following infrastructure categories?

	% of Cities		
Water supply	54.6 Yes	36.0 No	9.4 No Response
Water distribution system	72.7 Yes	21.7 No	5.6 No Response
Water treatment plant	45.6 Yes	45.4 No	9.0 No Response
Wastewater treatment plant	48.5 Yes	42.0 No	9.5 No Response
Wastewater collection system	64.3 Yes	28.7 No	7.0 No Response

9) If yes, will that capital investment be financed by: (check all that apply)

% of Cities	
24.9	General obligation bonds
44.7	Revenue bonds
1.2	Private Activity Bonds
34.3	State Revolving Fund
46.6	Other

10) If the State Revolving Loan Fund will be used, will it comprise:

% of Cities	
6.5	10 % or less of the total project cost
6.3	20 % or less of the total project cost
4.8	50 % or less of the total project cost
19.1	more than 50 % of the total project cost

11) If your City does not rely on the State Revolving Fund Loan program to finance water or wastewater facility capital investment please state why.

_____

_____

12) Would your City consider a Public-Private Partnership approach to water infrastructure projects if cost-savings in operation and maintenance or construction can be achieved?

% of Cities		
53.2 Yes	29.7 No	17.1 NR

PART II: Water Supply Information

	% of Cities		
1) Does your City provide its own water supply?	66.2 Yes	32.1 No	1.7 NR
2) Does your City rely on a private company to provide its water supply?	18.9 Yes	76.8 No	4.3 NR
3) Does your City have a water supply plan?	74.2 Yes	20.5 No	5.3 NR

4) Does your City have an adequate water supply for the next:

% of Cities	
18.3	10 years
16.7	20 years
55.6	more than 20 years
9.4	No Response

	% of Cities		
5) Does your city's water supply come from ground water?	51.7 Yes	42.3 No.	6.0 NR
6) Does yout city's water supply come from surface water?	70.3 Yes	24.4 No.	5.3 NR
7) Does your City plan to switch from ground water to surface water supply?	6.8 Yes	68.8 No.	24.4 NR

8) If yes, why are you switching?_____

PART III: Water Conservation Information

	% of Cities		
1) Does your City have a water conservation program?	66.9 Yes	30.2 No	2.9 NR
2) Does your City have a water conservation department?	11.1 Yes	85.3 No	3.6 NR
3) Does your water supply include water conservation?	59.9 Yes	33.6 No	6.5 NR
4) Does your City use automated water meter reading?	50.2 Yes	43.7 No	6.1 NR
5) Does your City use traditional water meter reading?	72.5 Yes	19.3 No	8.2 NR
6) Does your City alter the water rate structure to achieve water conservation?	34.3 Yes	57.2 No	8.5 NR
7) Would your City consider modernizing with automated meter reading if it could save water or money?	68.6 Yes	10.6 No	20.8 NR

8) Other water conservation measures? _____

PART IV: General Water Resources Problems and Priorities

Here are some water resources issues. Please indicate whether each issue is an existing problem or a forecast problem for your community: (Please mark applicable problems in the box [X] below and rank all that apply the top five problems (1–5) with 1 being the most significant in the line ____ below, please do not assign same rankings).

% of Cities		% of Cities	
46.4	Water supply availability	34.3	Emergency planning and management for storms, hurricanes, etc
16.2	Inter-basin transfers	60.6	Aging water resources infrastructure
23.4	Groundwater depletion	54.6	Security/protection of water resources infrastructure
25.1	Water rights	3.9	Insufficient water-oriented recreation
38.4	Flooding	19.6	Sediment management
32.6	Drought management	11.6	Endangered species
26.8	Regional conflict about water use	13.0	Best practices technology transfer
8.5	Water transportation (channels, ports, dredging, etc.)	42.3	Water quality of urban streams and rivers
45.2	Permits, regulatory issues	3.4	Waterborne traffic
6.8	Neglected/decaying waterfront areas	4.8	Channel/Harbor adequacy
10.6	Loss of river corridors/greenspace	9.7	Other (specify below)
10.4	Loss of wetlands		
7.5	Beach/shoreline erosion		

ATTACHMENT B

List of Cities Responding to the Survey

Survey City	State	Population
Anchorage	AK	260,283
Auburn	AL	42,987
Bessemer	AL	29,672
Birmingham	AL	242,820
Dothan	AL	57,737
Florence	AL	36,264
Huntsville	AL	158,216
Montgomery	AL	201,568
Fortsmith	AR	80,268
Little Rock	AR	183,133
North Little Rock	AR	60,433
Springdale	AR	45,798
Avondale	AZ	35,883
Chandler	AZ	176,581
Gilbert	AZ	109,697
Mesa	AZ	396,375
Scottsdale	AZ	202,705
Tucson	AZ	486,699
Alameda	CA	72,259
Alhambra	CA	85,804
Aliso Viejo	CA	45,000
Anaheim	CA	328,014
Bellflower	CA	72,878
Beverly Hills	CA	33,784
Brea	CA	35,410
Buena Park	CA	78,282
Campbell	CA	38,138
Cerritos	CA	51,488
Chino	CA	67,168
Compton	CA	93,493
Concord	CA	121,780
Fairfield	CA	96,178
Folsom	CA	51,884
Fresno	CA	427,652
Gardena	CA	57,746

Survey City	State	Population
Glendora	CA	49,415
Hanford	CA	41,686
Hawthorne	CA	84,112
Hayward	CA	140,130
Hemet	CA	58,812
Inglewood	CA	112,580
La Habra	CA	58,974
La Mesa	CA	54,749
La Mirada	CA	46,783
La Verne	CA	31,638
Lakewood	CA	79,345
Los Angeles	CA	3,694,820
Lynwood	CA	69,845
Manteca	CA	49,258
Modesto	CA	188,856
Norwalk	CA	103,298
Oxnard	CA	170,358
Pasadena	CA	133,936
Pittsburg	CA	56,769
Pomona	CA	149,473
Porterville	CA	39,615
Rancho Palos Verdes	CA	41,145
Redlands	CA	63,591
Redondo Beach	CA	63,261
Redwood City	CA	75,402
Rialto	CA	91,873
Richmond	CA	99,216
Rocklin	CA	36,330
Salinas	CA	151,060
San Bernardino	CA	185,401
San Clemenete	CA	49,936
San Diego	CA	1,223,400
San Francisco	CA	776,733
San Jose	CA	894,943
San Mateo	CA	92,482
Santa Barbara	CA	92,325
Santa Clarita	CA	151,088

Survey City	State	Population
Santa Cruz	CA	54,593
Santa Maria	CA	77,423
Santa Monica	CA	84,084
Seaside	CA	31,696
Simi Valley	CA	111,351
South San Francisco	CA	60,552
Stockton	CA	243,771
Sunnyvale	CA	131,760
Temple City	CA	33,377
Thousand Oaks	CA	117,005
Torrance	CA	137,946
Ventura	CA	100,916
Vernon	CA	91
Vista	CA	89,857
Walnut Creek	CA	64,296
Whittier	CA	83,680
Arvada	CO	102,153
Colorado Springs	CO	360,890
Grand Junction	CO	41,986
Littleton	CO	40,340
Longmont	CO	71,093
Thornton	CO	82,384
Bridgeport	CT	139,529
Manchester	CT	54,740
Norwalk	CT	82,951
Stamford	CT	117,083
Trumbull	CT	34,243
West Haven	CT	52,360
Dover	DE	32,135
Wilmington	DE	72,664
Altamonte Springs	FL	41,200
Clearwater	FL	108,787
Coconut Creek	FL	43,566
Coral Springs	FL	42,249
Deerfield Beach	FL	64,583
Doral	FL	3,295
Dunedin	FL	35,691

Survey City	State	Population
Fort Lauderdale	FL	152,397
Hallandale Beach	FL	34,282
Hialeah	FL	226,419
Holly Hill	FL	12,119
Jupiter	FL	39,328
Key West	FL	25,478
Lakeland	FL	78,452
Largo	FL	69,371
Lauderlakes	FL	31,705
Melbourne	FL	71,382
North Miami Beach	FL	40,786
Orlando	FL	185,951
Pembroke Pines	FL	137,427
Pinellas Park	FL	45,658
Plantation	FL	82,934
Port St. Lucie	FL	88,769
Sarasota	FL	52,715
St. Petersburg	FL	248,232
Tallahassee	FL	150,624
Tamarac	FL	55,588
Tampa	FL	303,447
West Palm Beach	FL	82,103
Athens	GA	101,489
Atlanta	GA	416,474
Augusta	GA	199,775
Dekalb	GA	39,018
Roswell	GA	79,334
Savannah	GA	131,510
Wailuku	HI	12,296
Cedar Rapids	IA	120,758
Iowa City	IA	62,220
Sioux City	IA	85,013
Waterloo	IA	68,747
Coeur d'Alene	ID	34,514
Pocatello	ID	51,466
Addison	IL	35,914
Alton	IL	30,496

Survey City	State	Population
Arlington Heights	IL	76,031
Bartlett	IL	36,706
Belleville	IL	41,410
Berwyn	IL	54,016
Bolingbrook	IL	62,948
Calumet City	IL	39,071
Carpentersville	IL	30,586
Champaign	IL	67,518
Chicago	IL	2,896,016
Decatur	IL	81,860
Evanston	IL	74,239
Glen Ellyn	IL	26,999
Glencoe	IL	8,762
Glendale Heights	IL	31,765
Hanover Park	IL	38,278
Highland Park	IL	31,365
Lansing	IL	28,332
Lombard	IL	42,322
Moline	IL	43,768
Naperville	IL	128,358
Niles	IL	30,068
Northbrook	IL	33,435
Oak Brook	IL	8,702
Orland Park	IL	51,077
Park Ridge	IL	37,775
Quincy	IL	40,366
Rock Island	IL	39,684
Rockford	IL	150,115
Schaumnurg	IL	75,386
Tinley Park	IL	48,401
Villa Park	IL	22,075
Wheaton	IL	55,416
Wilmington	IL	5,134
Carmel	IN	37,733
Columbus	IN	39,059
East Chicago	IN	32,414
Elkhart	IN	51,874
Evansville	IN	121,582

Survey City	State	Population
Gary	IN	102,746
Indianapolis	IN	791,926
Marion	IN	31,320
Michigan City	IN	32,900
Kansas City	KS	146,866
Manhattan	KS	44,831
Overland Park	KS	149,080
Topeka	KS	122,377
Frankfort	KY	27,741
Amesbury	MA	16,450
Amherst	MA	34,874
Chicopee	MA	54,653
Everett	MA	38,037
Fall River	MA	91,938
Fitchburg	MA	39,102
Haverhill	MA	58,969
New Bedford	MA	93,768
Pittsfield	MA	45,793
Quincy	MA	88,025
Somerville	MA	77,478
Weymouth	MA	53,988
Worcester	MA	172,648
Annapolis	MD	35,838
Gaithersburg	MD	52,613
Hagerstown	MD	36,687
Bangor	ME	31,473
Lewiston	ME	35,690
Ann Arbor	MI	114,024
Dearborn	MI	97,775
Detroit	MI	951,270
Farmington Hills	MI	82,111
Flint	MI	124,943
Grosse Pointe Woods	MI	17,080
Jackson	MI	36,316
Lansing	MI	119,128
Muskegon	MI	40,105
Novi	MI	47,386
Pontiac	MI	66,337

Survey City	State	Population
Southgate	MI	78,296
Taylor	MI	65,868
Brooklyn Park	MN	67,388
Burnsville	MN	60,220
Duluth	MN	86,918
Minnetonka	MN	51,301
Plymouth	MN	65,894
Richfield	MN	34,439
Woodbury	MN	46,463
Kansas City	MO	441,545
St. Peters	MO	51,381
Biloxi	MS	50,644
Jackson	MS	184,256
Meridian	MS	39,968
Billings	MT	89,847
Butte	MT	34,606
Asheville	NC	68,889
Cary	NC	94,536
Charlotte	NC	540,828
Durham	NC	187,035
Gastonia	NC	66,277
Goldsboro	NC	39,043
Greensboro	NC	223,891
Kannapolis	NC	36,910
Salisbury	NC	26,462
Wilson	NC	44,405
Winston-Salem	NC	185,776
Fargo	ND	90,599
Bellevue	NE	44,382
Grand Island	NE	42,940
Lincoln	NE	225,581
Manchester	NH	107,006
Bayonne	NJ	61,842
Bloomfield	NJ	47,683
Fair Lawn	NJ	31,637
Freehold	NJ	31,537
North Bergen	NJ	58,092
Piscataway	NJ	50,482

Survey City	State	Population
Sayreville	NJ	40,377
Trenton	NJ	85,403
Vineland	NJ	56,271
Wayne	NJ	54,069
Turnersville	NJ	3,867
Alamogordo	NM	35,582
Clovis	NM	32,667
Las Cruces	NM	74,267
Los Lunas	NM	10,034
Rio Rancho	NM	51,765
Sante Fe	NM	62,203
Las Vegas	NV	478,434
Reno	NV	180,480
Albany	NY	95,658
Binghamton	NY	47,380
Endwell	NY	61,179
Freeport	NY	43,783
Hempstead	NY	56,554
Huntington	NY	195,289
Long Beach	NY	35,462
Mount Vernon	NY	68,381
New York City	NY	8,008,278
North Tonawanda	NY	33,262
Rochester	NY	219,773
Schenectady	NY	61,821
Syracuse	NY	147,306
Troy	NY	49,170
Akron	OH	217,074
Bedford Heights	OH	11,375
Canton	OH	80,806
Cleveland	OH	478,403
Cleveland Heights	OH	49,958
Columbus	OH	711,470
Dublin	OH	31,392
East Cleveland	OH	27,217
Fairborn	OH	30,529
Garfield Heights	OH	30,734
Hamilton	OH	60,690

Survey City	State	Population
Huber Heights	OH	38,212
Kettering	OH	57,502
Lancaster	OH	35,335
Lima	OH	40,081
Loveland	OH	11,677
Mansfield	OH	49,346
Marion	OH	35,318
Newark	OH	46,279
North Olmsted	OH	34,113
Shaker Heights	OH	29,405
Solon	OH	21,802
Springfield	OH	65,358
Stow	OH	32,139
Toledo	OH	313,619
University Heights	OH	14,146
Upper Arlington	OH	33,686
Warren	OH	46,832
Westerville	OH	35,318
Westlake	OH	31,719
Broken Arrow	OK	74,859
Lawton	OK	92,757
Norman	OK	95,694
Oklahoma City	OK	506,132
Albany	OR	40,852
Bend	OR	52,029
Eugene	OR	137,893
Hillsboro	OR	70,186
Allentown	PA	106,632
Erie	PA	103,717
Fairless Hills	PA	8,365
Glenshaw	PA	29,757
Harrisburg	PA	48,950
Lower Paxton	PA	44,424
Reading	PA	81,207
Township of Lower Merion	PA	59,850
Upper Darby	PA	81,821
York	PA	40,862
Caguas	PR	40,502

Survey City	State	Population
Canovanas	PR	43,335
Cidra	PR	42,753
Corozal	PR	36,867
Hormigueros	PR	16614
Lajas	PR	26,261
Lares	PR	34,415
Trujillo Alto	PR	75,728
Cumberland	RI	31,840
Pawtucket	RI	72,958
Warwick	RI	85,808
Woonsocket	RI	43,224
Bartlett	TN	40,543
Germantown	TN	37,348
Johnson City	TN	55,469
Murfreesboro	TN	68,816
Beaumont	TX	113,866
Bryan	TX	65,660
Carrollton	TX	109,576
College Station	TX	67,890
Coppell	TX	35,958
Copperas Cove	TX	29,592
Corpus Christi	TX	277,454
Desoto	TX	37,646
Duncanville	TX	36,081
Euless	TX	46,005
Frisco	TX	33,714
Galveston	TX	57,247
Grand Prairie	TX	127,427
Grapevine	TX	42,058
Houston	TX	1,953.631
Hurst	TX	36,273
Irving	TX	191,615
Laredo	TX	176,575
Lewisville	TX	77,737
Longview	TX	73,344
Mission	TX	45,408
Nacogdoches	TX	29,914
Pearland	TX	37,640
Pharr	TX	46,660

Survey City	State	Population
Plano	TX	222,030
Round Rock	TX	61,136
Sugar Land	TX	63,328
Texas City	TX	41,521
Murray City	UT	34,024
Salt Lake City	UT	181,743
Sandy City	UT	88,418
Chesapeake	VA	199,184
Manassas	VA	35,135
Newport News	VA	180,150
Richmond	VA	197,790
Alexandria	VA	128,283
Danville	VA	48,411
Norfolk	VA	234,403
Suffolk	VA	63,677
Edmonds	WA	39,515
Everett	WA	91,488
Federal Way	WA	83,259
Kent	WA	79,524
Lacey	WA	31,226
Puyallup	WA	33,011
Redmond	WA	45,256
Renton	WA	53,840
Seattle	WA	563,374
Tacoma	WA	193,556
Vancouver	WA	143,560
Yakima	WA	71,845
Beloit	WI	35,918
Brookfield	WI	38,649
Kenosha	WI	90,352
La Crosse	WI	51,818
Manitowoc	WI	34,053
Milwaukee	WI	596,974
Racine	WI	81,855
Waukesha	WI	64,825
Wausau	WI	38,426
Wauwatosa	WI	47,271
Parkersburg	WV	33,099
Cheyenne	WY	53,011

The Urban Water Council

A Task Force of the U.S. Conference of Mayors

The UWC, in spirit of all Mayors, and functions like a USCM task force, is provided Mayors with a forum for discussion of issues impacting how cities provide and pay for community water and wastewater services. Some of the issues that the UWC focuses on include watershed management, water supply planning, water infrastructure financing, rehabilitation of surface and sub-surface water infrastructure, stormwater management, wetlands conservation and education programs, water reuse program management and asset management.

The UWC will continue to develop local government positions and federal legislation, regulations and policy. The UWC, also through the USCM Environment Committee and other Committees, as appropriate, is prepared and adapt resolutions on water related matters that benefit the national cities.

THE URBAN WATER COUNCIL

The Urban Water Council acts as a
Task Force for the U.S. Conference of Mayors

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OPENING STATEMENT OF
THE HONORABLE JERRY F. COSTELLO
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
HEARING ON THE NEED FOR RENEWED INVESTMENT IN CLEAN WATER INFRASTRUCTURE
FRIDAY, JANUARY 19, 2007

Thank you, Madame Chairwoman, for scheduling today's hearing on the nation's wastewater infrastructure needs. The protection and the improvement of water quality are among the greatest responsibilities of this Subcommittee, and at the heart of fulfilling these responsibilities is ensuring that our Nation's water infrastructure is adequate to meet that task.

The Clean Water Act is widely viewed as the Nation's most successful environmental law. It has resulted in significant investment in wastewater infrastructure improvements throughout the United States. However, these achievements would erode without that continued investment.

In my district, I see the effects of under-investing in wastewater infrastructure. Numerous communities, including

Sparta, Sauget, and the Rend Lake Conservancy District in Illinois, are all experiencing wastewater infrastructure problems. Without a consistent and firm commitment from the federal government, these needs will go unanswered. We can and must do better.

Various organizations have testified before this Subcommittee with estimates of current and future needs for wastewater infrastructure. Organizations and governmental agencies, such as the Water Infrastructure Network, the Congressional Budget Office, and the Environmental Protection Agency estimate a shortfall over the next 20 years for necessary wastewater infrastructure improvements, with an annual funding gap of between a low of $3.2 billion and a high of $11.1 billion.

This Subcommittee and the House of Representatives have considered water infrastructure financing legislation in the past but have not been able to get legislation to the President for signature.

I am glad that this Subcommittee is ready to examine our nation's needs in order to expand the federal commitment so that we can work to meet our water infrastructure needs.

I look forward to working with Chairwoman Johnson and Ranking Member Baker to make real improvements towards meeting our Nation's water quality goals. I welcome today's witnesses, and look forward to their testimony.

Testimony of

Debra G Coy
Director – Research/Water

Janney Montgomery Scott LLC
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Washington DC 20037

To
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
US House of Representatives
2167 Rayburn House Office Building

On
The Need for Renewed Investment in
Clean Water Infrastructure

January 19, 2007

Mr. Chairman, members of the committee and the subcommittee – thank you for the opportunity to be here today to discuss the need for investment in clean water infrastructure. My name is Debra Coy, and I am a senior investment research analyst with Janney Montgomery Scott LLC, a Philadelphia brokerage firm founded in 1832. Based in Washington, DC, I have been covering the water industry for investors for more than 15 years, for various investment firms before joining Janney, including Charles Schwab, HSBC Securities, and NatWest Securities.

Working from Washington during these years, I have observed the debate over funding for water and wastewater infrastructure, through the demise of the Clean Water grants program, the development of the State Revolving Funds (SRF) program, and the more recent discussion of how to address the "gap" between needed funding and available funding, identified by U.S. EPA in its widely-quoted 2002 "Gap Analysis" to be in the range of $23 billion per year.

During this period, and particularly in recent years, I have heard a steady refrain: there isn't enough money available for water infrastructure investment and we need dramatic increases in federal funding.

The purpose of my comments today is to point out that there is in fact a tremendous amount of money now becoming available for infrastructure investment – but that the current asset investment approach in the U.S. water industry likely will need some adjustments in order to successfully access it.

The source of funds that I am referring to is private sector capital. The global financial markets have "discovered" infrastructure in the past couple of years, and this is fast becoming a popular asset class that is attracting many billions of dollars in private investment capital. Investors have recognized the huge and growing need for infrastructure investment around the world – in transportation and energy as well as water – and are looking for ways to participate in this market.

Rapid rise in global infrastructure funds. A recent Standard & Poor's (S&P) report said that about $100 billion in new money for infrastructure funds was raised globally in 2006, and more new funds are planned for 2007. Managers of these funds are now actively (some would say frantically) looking for deals where they can put all that new money to work for their investors. Key targets are transportation, energy, and water-related assets.

Most recently, Goldman Sachs announced on Dec. 28, 2006, that it had closed a $6.5 billion infrastructure fund, making it the largest single fund of its kind. The new fund, called GS Infrastructure Assets, which included $750 million of Goldman's own money, ended up being more than two times larger than originally planned, due to high investor demand. The fund is seeking investment opportunities in toll roads, airports and ports, as well as gas, water, and electric utilities, primarily in North America and Europe.

Other major financial firms that have recently established large new infrastructure funds include AIG, Barclays Bank, the Carlyle Group, Deutsche Bank, and Macquarie Bank, as well as several Asian financial groups. In addition, firms such as Morgan Stanley, Merrill Lynch, and Credit Suisse have also indicated plans to create or participate in infrastructure funds.

Australia's Macquarie Bank was the pioneer and has become the dominant player in this relatively new market of creating managed vehicles through which investors are able to gain exposure to an underlying portfolio of infrastructure assets. Macquarie has actively developed this business over the last decade and now manages more than $30 billion in infrastructure assets globally, through a network of listed and unlisted investment funds, with several billion in new funding raised in 2006. As a result, it has become by far the largest non-government owner and manager of infrastructure assets world-wide.

Investors in these funds are often pension funds, insurance companies, or foundations, which have large amounts of capital to invest and are looking for stable, long-term investment returns that basic infrastructure assets can provide. Macquarie looks for infrastructure assets that have low demand elasticity, high asset cost, long-lived assets, and predictable and stable cash returns that are indexed or hedged against inflation. Macquarie says that the average annual compound return on its infrastructure funds in the 11 years since inception is 19%, handily outpacing returns for the S&P 500 stock index during that period.

Lots of money and limited investment choices. Ironically, the huge pools of new capital that have been pouring into infrastructure funds in the past two years are creating another problem – it has become increasingly difficult to put the money to work. There are currently limited opportunities in toll roads, ports, and water and energy utilities, given government ownership of most of these facilities worldwide.

This has pushed up the valuations of available assets. For example, Macquarie and a consortium of its funds paid £8 billion (US $15.8 billion) in cash and debt to buy Thames Water, the largest UK regulated water utility. Macquarie paid a higher-than-expected premium of 20% above Thames' regulated asset value, as it competed against other potential buyers. These premium acquisition prices have become the norm in the past couple of years, since the water investment sector is so awash in available capital looking for deals.

Publicly traded water stocks as a group have also continued to outperform the broader financial markets in the past year, reflecting investor enthusiasm for the sector. The PowerShares Global Water Portfolio, for example, is an exchange-traded fund based in the U.S., with more than $1 billion in assets under management, mirroring the performance of an index or group of global water stocks. According to Bloomberg data,

this water portfolio posted a return of 21% in 2006, compared to 15% for the S&P 500 index.

As a research analyst, I frequently speak to investors who are looking for ways to invest in the water sector, which they perceive to be a long-term growth industry, given the critical and rising demand for clean water supplies and for reliable water infrastructure. In recent articles in the financial press and in investment newsletters, water is now commonly referred to as "blue gold" or "the oil of the 21st century."

Why isn't private investment capital going into U.S. water infrastructure? The question for us here today is, why – if there is such great investor interest in water, and billions of dollars of investment capital looking for ways to invest in clean water infrastructure – are we facing a critical funding shortage in this sector? I believe the answer lies in the way the U.S. water and wastewater industry is structured and financed.

As most of us here know, the vast majority of water and wastewater infrastructure in the U.S. is owned by local government entities, including cities, towns and sometimes regional water or sewer authorities. Approximately 15% of the population in the U.S. is served by investor-owned water utilities, and an even smaller proportion, some 5-8%, is served by investor-owned wastewater utilities. According to EPA data, the industry is highly fragmented, with more than 50,000 water systems around the country, mostly small ones serving fewer than 3,500 people.

Historically, in the U.S., investment in water infrastructure has also been fragmented, with investor-owned utilities and municipally-owned utilities being financed differently.

Investor-owned water utilities fund their infrastructure needs through a combination of equity, which they periodically raise through stock offerings, and debt, usually a combination of bank debt, bond debt, and sometimes low-cost state or SRF-

supported debt. State public utility regulators then approve periodic customer rate increases that pay for these investments, allowing a return on equity and coverage for interest costs and debt repayment.

Municipally-owned utilities, on the other hand, typically pay for their investments in infrastructure by issuing tax-exempt municipal bond debt. They may also receive some contribution from general tax funds, from state or federal grant programs, or from the SRF, but the majority of funds are raised locally. Increasingly, municipalities are also raising customer rates, or user fees, to pay for infrastructure improvements, though some cross-subsidization between water and sewer services and other city services still exists. Historically, municipal bond financing has worked well in this market, but the rising clean water investment needs being faced by many cities are now stretching their bond-raising capacity, since they must also fund a wide range of other municipal services and facilities.

Standard & Poor's, the bond rating agency, has said in recent presentations to investors that despite its historic stability, the public water and sewer utility sector is facing increasing challenges that may impact credit quality. The New York City Municipal Water Finance authority alone is planning $17 billion in water and sewer capital spending over the coming decade. S&P has also noted that deferred costs – the neglect of needed investment in water and sewer pipes and treatment facilities – is becoming a higher risk facing many cities, since the costs compound over time as replacement and repair costs rise.

As a result of this bifurcated industry structure, municipally-owned water and wastewater utilities have typically not had access to private sector investment capital outside the municipal bond market. On the other side, investors have typically not been able to invest in the municipal water market other than through municipal bonds.

Equity investors can buy stock in investor-owned water utilities, of course, and they also can buy stock in the companies that provide equipment and services to municipal utilities. Stocks of companies that provide water pipes, pumps, filtration systems, engineering services, and pipe repair technology, for example, have all performed well in the past year.

The new infrastructure funds are buying assets directly, in private utilities, ports, and toll roads, but for the most part, they aren't putting money into municipal water and sewer utilities in the U.S.

For one thing, most of these assets simply aren't for sale. Goldman Sachs, for example, proposed last year to lease the county sewer system in Birmingham, Alabama, in a deal that could have netted the county some $4 billion over a period of time, but it appears that the deal fell apart amidst local political opposition. Private sector ownership, or even operation, of municipal water and sewer assets remains controversial, while lease structures such as Goldman proposed are still largely unheard of in this industry.

Looking for solutions. So what can be done to help close the "gap" between private sector money and municipal sector need in the water sector? Briefly, here are some thoughts that have emerged from my conversations and observations within the water industry.

- **Need for increased public awareness of the pending infrastructure investment crisis**. A 2005 Aspen Institute report called it "the silent tsunami" – the lack of clean water and sanitation that is causing the deaths of millions of people around the world. Even in the U.S., despite the recent *e.coli* outbreaks in various food sources, the American public is generally unaware of the amount of "flu" sickness annually caused by *giardia*, *e. coli*, and other bacterial contamination within water systems. The public is also generally

unaware of the billions of gallons of water and sewer leakages and overflows that are happening all over the U.S. While media coverage of this issue has been rising, it has yet to generate broad public support for investment to fix our nation's water and sewer systems. If such public support could be achieved, demand for solutions would likely also rise.

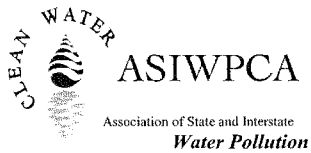
- **Need for a more common view of water and sewer utilities, with more consensus on costs and rates.** As noted earlier, the industry remains highly fragmented, with thousands of individual water and sewer utilities that operate under a wide variety of rate structures. The level of public education about rates and costs required to provide safe, reliable service also varies widely. More consolidation of utilities under regional umbrellas, even informally, could potentially allow more unified rate structures, sharing of central infrastructure and management expertise, and lower cost of capital, with access to additional forms of financing beyond traditional municipal bonds.
- **Need for more innovative financing approaches that can more broadly access available sources of capital for clean water infrastructure projects.** Various water industry and financial services firms are looking to overcome the barriers to bringing private sector capital into the municipal water sewer markets in creative ways outside of direct utility asset purchases. Classic project finance, with a combination of debt and private equity, has been long used in the independent power project market and is beginning to be applied in the water sector.
    - GE's Energy Financial Services group, for example, formed a water finance group last year. The new group is offers structured equity and customized debt financing for water and wastewater

projects, targeting transactions from $15 million to $500 million in size. GE believes that its strong balance sheet and project finance expertise can help lower the overall cost of financing for customers.

- Project developers are beginning to look at this structure when working with municipalities. For example, Insituform, a company that provides sewer pipe rehabilitation services, is working with some of its municipal clients and with GE to provide project financing with outside equity to complement traditional bond financing. Other project finance groups are also beginning to experiment in this market.
- Others in the industry have suggested grouping regional water infrastructure projects, with pooled capital needs and cash flows from the projects in one investment trust vehicle, similar to what has been used in energy financing. This could allow access to larger sources of capital, with lower risk, more sophisticated structures, and higher credit rating due to the consolidation of projects.

These ideas are just a brief sampling of potential approaches that could help municipalities to gain access to the billions of dollars in private infrastructure funds that are now available. And, in addition to large pools of capital, I would note that there are also large pools of financial expertise in the project finance and energy finance markets that could likely help policymakers devise and support solutions to meet the needs of municipal water infrastructure owners as well as private investors.

I thank the committee for the opportunity to raise attention to this issue today.



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Testimony on
Reauthorization of the Clean Water State Revolving Loan Fund
On Behalf of ASIWPCA and the Commonwealth of Virginia

Before the House Subcommittee on Water Resources and the Environment

January 19, 2007

Thank you for the honor of appearing before this distinguished committee and for the opportunity you have provided by considering reauthorization of the State Revolving Loan Fund so early in this session of Congress.

My name is Ellen Gilinsky and I am the Water Division Director for the Virginia Department of Environmental Quality and a Board Member of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA). On behalf of the Association, I submit ASIWPCA's written testimony, and will spend my time with you, sharing the Virginia experience with the Clean Water State Revolving Loan Fund.

My colleagues have told you of the importance of the Fund in addressing water quality throughout the United States. I am here to tell you first hand how the Virginia Clean Water Revolving Loan Fund has been instrumental in the achievement of water quality improvement and protection in Virginia. Moreover, with the enormous needs Virginia faces in the immediate future, maintaining this Federal/State partnership program is more critical now then ever before.

To date the program has funded over $1.5 Billion in clean water projects in Virginia including: wastewater treatment upgrades, combined and sanitary sewer overflow elimination projects, decentralized sewer system replacements, agricultural best management practices, land conservation priorities, and Brownfield remediation projects.

With escalating construction costs, increased regulatory requirements, the importance of the restoration of the Chesapeake Bay, and the overall aging of infrastructure in our older cities and towns, demand for loan funds has grown astronomically. Just this year, we approved funding for a state record $302 million in loan funds, but unfortunately had to deny funding to an additional $464 million in requests due to a lack of resources. We fully expect this level of demand to continue or increase over the foreseeable future.

The State Revolving Loan programs are widely recognized as being well managed and extremely cost effective from a Federal standpoint. Through the aggressive use of fund leveraging in Virginia, we have been able to provide over a 225 % Federal return on investment in the program to date, and we expect this figure to exceed 300% by 2009.

Administrative costs in Virginia are extremely low, at less then 2% of total funds distributed to date. And the actual expenditure and use of available resources is very timely and expeditious, with well over 90% of the program's funds having already been provided to recipients and the remaining funds fully committed to projects under design.

Projects funded through the SRF make real differences in water quality improvements and our quality of life. Let me share a few examples with you:

- The City of Lynchburg has used over $70 million in SRF loan funds to finance their Combined Sewer Overflow program. This has already resulted in the elimination of over 100 of 132 overflow points, taking raw sewage discharges out of neighborhood streams as well as the James River.

- The small low-income community of Dawn in Caroline County used $2.85 million from the SRF in conjunction with Housing and Community Development assistance to install an alternative sewage collection and on-site treatment facility, eliminating a substantial health hazard situation from failing septic systems.

- Numerous small towns in the coalfield region of Southwestern Virginia were able to replace their old primary sewage treatment facilities with updated secondary systems.

- And hundreds of Virginia's financially strapped farmers have been able to install non- point source pollution controls such as animal waste facilities, stream fencing, and off-stream watering facilities or purchase no-till planters to protect water quality as a result of low interest SRF loans.

The single greatest water quality challenge currently facing Virginia and the surrounding Bay States is the restoration of the Chesapeake Bay. The estimates for wastewater treatment upgrade costs in Virginia alone exceed $2 Billion!

Virginia has stepped up with a strong commitment to provide substantial grant funding for a significant portion of the costs by allocating over $400 Million in grant money from our Water Quality Improvement Fund, which was started in 1997.To continue the Commonwealth's commitment, Governor Kaine has recently proposed the Bay Bond Bill, which if passed by the Virginia General Assembly, would provide another $250 Million over the next four to five years, supplying enough funding to achieve our point source commitments in the Bay restoration.

Virginia is also committed to aggressively leverage the SRF to provide loan funding for the remaining local share. This combination of funding is essential to making the Chesapeake restoration efforts achievable and affordable for Virginia's citizens, particularly those in the rural areas of the state where per household treatment costs run high and incomes are generally low.

In summary, Virginia's strategy to improve our water quality, while funded in substantial part by our own state funds, relies on the SRF to provide the difference in low interest loans and to allow us to leverage our financial resources. Our story is not unique. It is essential that Congress continue to support clean water through increased appropriations to the Clean Water SRF and reauthorization.

Thank you again for allowing me the opportunity to testify on this important matter.

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Testimony on

REAUTHORIZATION OF THE

CLEAN WATER STATE REVOLVING LOAN FUND

Before the House Subcommittee on Water Resources and the Environment

January 19, 2007

The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) greatly appreciates the leadership the Committee has so quickly taken to reauthorize the Clean Water State Revolving Fund (CWSRF). We further appreciate the Committee's recognition that the CWSRF is the appropriate vehicle for future infrastructure financing and needs increased funding in the appropriations process.

History of the CWSRF: In the early 1980's, the Office of Management and Budget (OMB) informed States that the Administration would phase out the Federal construction grants program unless States and Congress found a better vehicle. The grant program was too expensive, burdensome and could not fund enough projects to meet the needs. Congress and the States met that challenge, creating the CWSRF in 1987. Since the fund grows over time and revolves, the CWSRF serves as a major source of funding for Clean Water Act implementation *in perpetuity* for:

Traditional wastewater infrastructure and pollution control
Combined sewer overflow correction
Stormwater management
Nonpoint source pollution control (e.g., agriculture)
Implementation of estuary management plans
Assessment and watershed solution development by States, local and regional governments.

Needs: The Committee has asked ASIWPCA to speak to the needs. There are several dimensions to the issue. The capital funding needed for the above activities exceeds well over $ 400 Billion. This is a conservative estimate. Requirements and expectations for pollution sources increase every year. The cost of watershed protection and clean up will be expensive, but has not been quantified for the substantial percentage of assessed waters that are impaired because they exceed State water quality standards or are threatened with becoming so:

	Assessed Waters Needing Further Pollution Controls
Rivers (miles)	16%
Lakes (acres)	53%
Estuaries (sq. miles)	55%
Great Lakes (shore line miles)	100%

Maintaining water quality is also a significant challenge as population, economic growth, and public use of water resources increase over time. The resulting increase in pollution loadings must be addressed, or the nation risks sliding back to the water quality of the 1970's.

There are 16,000 publicly owned wastewater systems in the nation, most of which are small. 23% of funding associated with their capital expenses has been Federal. While over the last 30 years the focus has been on upgrading treatment facilities and expanding systems, it has expanded to address the need to renew and replace aging infrastructure. In areas where the nation's population is becoming most concentrated, the major challenges are municipal discharges and urban runoff.

The recent declines in Federal Funding and the potential to eliminate further capitalization most certainly will affect water quality and attainment of the Clean Water Act, because the Fund is not large enough to meet these many needs. A better capitalized CWSRF is essential for States to be successful helping municipal systems and other sources upgrade and put other controls in place to achieve the Act.

Progress: CWSRF is one of the most successful Federal programs in history, because it is a *streamlined, State-based* program. Since its creation, the CWSRF has addressed a wide array of water quality problems, with projects built in half the time and at less cost than under the Federal grants program. Since 1987:

- More than $24 Billion in Federal funds has been appropriated. With the additional State match, leveraging by States in the bond market, and loan repayments, there is over $61 Billion in State CWSRFs. Due to the high demand for CWSRF funding, virtually all those funds have been loaned out.
- Over 18,600 projects have been funded.
  - In 2006, over $5 Billion in loans were executed.
- Cities and towns of all sizes have benefited:
  - 44% of funds went to projects serving populations of 100,000 and above.
  - 64% of loans went to communities with populations under 10,000.
- In the last 5 years, $1.1 Billion in assistance has been for nonpoint sources.
- Loans can be made based on affordability – e.g. at low to zero interest. Cumulatively, the CWSRF has saved borrowers $17.5 Billion (54%), with an average interest rate of 2% recently.
- Each Billion in CWSRF funding creates 16,000 – 22,000 jobs in the short term (up to 5 years) and 5,000 in the longer term. In addition, many more jobs are created as a result of watershed revitalization, e.g. due to restoration of recreational waters and city river fronts.

[For environmental results achieved recently under the program see attachment]

Recommended Principles in Reauthorization: As Congress seeks to reauthorize the CWSRF, it is vitally important to:

- Continue and increase capitalization levels for the Fund and increase annual appropriations.
- Assure the CWSRF remains competitive in the financial market place.
- Maintain a streamlined and State based program.
- Enable States to direct funding to their diverse priority water quality needs – for each State is unique.

Careful attention needs to be given to the collective impact of any new requirements. The CWSRF's effectiveness in achieving environmental results should not be weakened in any significant way. In addition ASIWPCA recommends:

- The CWSRF should continue to be maintained as the umbrella funding mechanism for achieving goals of the Act in the nation's watersheds.

- The States' ability under the CWSRF should be expanded to:

    - Fund a broader range of eligibilities,
    - Extend loan repayment periods,
    - More adequately cover State administrative costs,
    - Allow States to blend financing mechanisms (loans and principal subsidies) to make projects more affordable, and
    - Enable States to better provide planning and technical assistance, particularly to small entities.

We urge the Committee to:

- Continue State ability to transfer funds between the Clean Water and Drinking Water SRFs.
- Avoid USEPA micromanagement so that States can focus on environmental results.

Impacts of *Not* Funding the CWSRF: The Committee has asked ASIWPCA to speak to the impacts of not funding the program in the future. There are many aspects to that.

- The Clean Water Act Tool Box: For each Federal dollar lost to the program, there is an even a greater amount in State contributions and leveraged funds that will be lost. No other funding mechanism comes close to the CWSRF's buying power, in terms of meeting infrastructure needs. To that extent, the tool will be lost and is irreplaceable.

- Solving Problems: There will be diminished ability to address existing and future water quality problems because the fund is not large enough and would diminish over time.

- Diminished Water Quality: Water quality will be adversely affected. Good quality waters will deteriorate as needs cannot be met.

- Impacts On The economy: There will be diminished economic growth. The infrastructure will not be there to accommodate it and States have very limited ability to allow such growth in impaired waters.

- Implementation: Clean Water Act implementation will slow down.

- Costs: Infrastructure costs will increase as needs are met more slowly over time and subsidized interest rates are not available. .

- Small towns: Smaller towns are of particular concern. Frequently, they have affordability problems and limited (or no) access to the bond market. States will be less able to provide technical assistance to get needed projects completed.

- Compliance: There will be increased non-compliance and more need to rely on enforcement and penalties to motivate action.

- Collaborative Problem Solving: There will be less watershed initiatives to collaboratively solve complex problems, because there will be not funding for the 604(b) setaside and there will be less CWSRF seed funding to get stakeholder buy in to implementing solutions.

- Partnership: Viewing such impacts in their entirety, the partnership between Federal, State and local governments, citizens and other stakeholders would be subject to great strain. Implementation of the Clean Water Act will be much more difficult. A weakened CWSRF undermines the carefully crafted strategy Congress enacted.

Mr. Chairman, we applaud the Committee for moving forward to reauthorize the Clean Water Act State Revolving Loan Fund in this Congress. Understandably of equal importance is the Committee's strong support for increasing funding in the appropriations process. These actions are of vital importance to continue to improve the nation's water quality and maintain the significant progress we all have achieved. We, at ASIWPCA, are eager to work with you and your fine staff to move the nation forward in the pursuit of cleaner water. We appreciate the opportunity to testify and we are available at any time to meet with you and the members of your staff on the recommendations provided in this statement.

Linking CWSRF Financing to the Protection and Restoration of our Nation's Waters

(Based on initial reporting of recent projects, that account for approximately 17% of cumulative CWSRF financing.)

$11.1 BILLION IN CWSRF LOANS

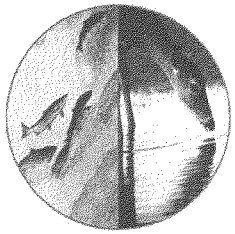
$3.9 BILLION OF COST SAVINGS...

91 MILLION PEOPLE SERVED

FUNDING FOR CLEAN WATER ACT GOALS

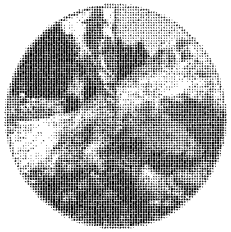
- $[illegible] BILLION TO IMPROVE WATER QUALITY
- $[illegible] BILLION TO ACHIEVE COMPLIANCE
- $[illegible] BILLION TO PROTECT AND RESTORE FRESHWATER FISHERIES
- $2.1 BILLION TO PROTECT AND RESTORE DRINKING WATER SOURCES
- $7.8 BILLION TO PROTECT AND RESTORE RECREATIONAL USES

Public Health Improves for Millions of Americans:
CWSRF's Protect & Restore Impaired Rivers, Lakes, & Streams

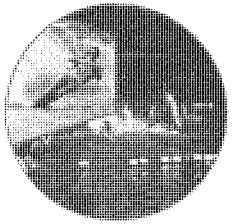


Aquatic Life & Wildlife
49.6 million
people served

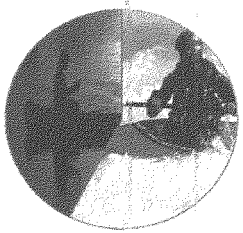
Drinking Water Supply
16.4 million
people served



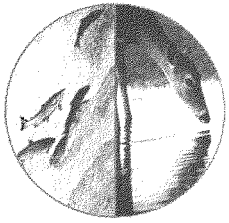
Fish & Shellfish Consumption
40.7 million
people served



Swimming
(Primary Contact Recreation)
42.3 million
people served



Boating, Fishing
(Secondary Contact Recreation)
43.4 million
people served



Aesthetic, Agricultural,
and Other Uses
29.1 million
people served

Note: The figures are based on initial reporting of recent projects that account for approximately 17% of cumulative CWSRF financing.
These population numbers do not include downstream populations and thus underestimate total public health and environmental benefits.

REVISED

TESTIMONY OF BENJAMIN H. GRUMBLES
ASSISTANT ADMINISTRATOR FOR WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES

January 19, 2007

Madam Chair and Members of the Subcommittee, I am Benjamin H. Grumbles, Assistant Administrator for Water at the United States Environmental Protection Agency (EPA). Thank you for the opportunity to testify before you today on the nation's water infrastructure needs and the solutions the Environmental Protection Agency and its partners are pursuing.

Developing innovative, market-based, and sustainable solutions for water infrastructure financing and management is specifically identified by Administrator Steve Johnson as a top priority in his action plan for the Agency. I am proud of the work we are doing and the progress we are making in collaboration with our Regions, the States, Tribal communities and other partners.

Over the past 20 years, communities have spent more than $1 trillion (in 2001 dollars) on infrastructure, operations and maintenance for wastewater treatment and disposal and drinking water treatment and supply. But, it may not be enough to keep pace with America's aging infrastructure systems. Many municipal water distribution pipelines and sewer systems were constructed in the period following World War II with an expected design life of 20 – 50 years. Deteriorating pipelines can cause releases of water or wastewater that result in environmental contamination and a net loss of water with major economic consequences. In addition, numerous treatment facilities that process water and wastewater are in need of upgrading to meet capacity and water quality requirements associated with protection of public health and the environment. There is critical need for replacing, upgrading, and modernizing these infrastructure systems.

Infrastructure Needs

With the aging of the nation's infrastructure and the growing investment need, the wastewater industry faces a significant challenge to sustain and advance its achievements in protecting public health and the environment.

In October of 2002, EPA released the Clean Water and Drinking Water Gap Analysis Report. The report estimated that if capital investments remained at current levels, the potential gap in funding between 2000 and 2019 would be approximately $122 billion (in 2001 dollars) for wastewater infrastructure and $102 billion (in 2001 dollars) for drinking water infrastructure. If revenue grows at 3% per year, a projection that is consistent with long-term growth estimates of the economy, the gap is approximately $21 billion (in 2001 dollars) for wastewater infrastructure and $45 billion (in 2001 dollars) for drinking water infrastructure.

Similarly, EPA's 2000 Clean Watersheds Needs Survey (CWNS) Report to Congress, which was issued in 2003, identified a total capital investment need of $156.9 billion (in 2001 dollars). The CWNS Report estimate differs from the Gap Analysis in that it included only needs that could be justified by project-specific documentation, excluded operations and management (O&M) costs, and reflects project-specific planning horizons generally less than 20 years.

The general causes of the infrastructure funding "gap" are not difficult to identify. Much of the projected gap is the product of deferred maintenance, inadequate capital replacement, and a generally aging infrastructure. In addition, populations are increasing and shifting geographically, thus requiring investment in existing or new infrastructure. The Census Bureau projects the population to grow to 325 million by the year 2020 (an increase of more than 15% over the 2000 population). Lastly, unlike utilities subject to state regulation such as electric and natural gas service and privately owned water systems, many utilities in the US have not historically charged their users the full cost of service.

Federal Financing for Water Infrastructure

The creation of the Clean Water State Revolving Fund (CWSRF) was a major milestone on the path to financial sustainability for our wastewater infrastructure. With the help of federal

capitalization grants, the States provide low interest loans for water infrastructure projects through their individual CWSRFs. Since loan repayments allow the funds to "revolve" over the long-term, the CWSRFs will become self-sustaining. For nearly twenty years, the CWSRF program has played a significant role in helping to finance water infrastructure, a role that will continue over the long-term. Over this time period, EPA has provided more than $24 billion to help capitalize the state-run programs. In combination with state monies and recycled loan repayments, the CWSRFs have been able to "leverage" the Federal investment into $61 billion to fund worthy water infrastructure projects. 2006 marks an important milestone in the CWSRF: it is the first time that over $5 billion in assistance was provided in any one year.

February 4, 2007 marks the 20th anniversary of the passage of the Clean Water Act amendments that authorized the CWSRF program. The CWSRF has helped thousands of communities throughout the United States finance water infrastructure improvements. Working with our State partners, EPA continues to explore how we may further expand the benefits of the CWSRF to more communities and more people. By promoting investment in sustainable infrastructure and encouraging greater creativity in project planning and development, the CWSRF will remain an important financing tool for many years to come.

The CWSRF is evolving as it is revolving. In recent years, the CWSRF program has undertaken an ambitious effort to add environmental and public health related information to its strong financial record. In 2005, states began linking projects to a river, lake, or stream and to designated beneficial uses of that body of water such as fishing and swimming to demonstrate the potential environmental value of the CWSRFs. As of January 2007, states have provided water body information on $11.1 billion of their CWSRF loans. The information indicates these loans support the goals of the Clean Water Act with $7.4 billion used to fund projects in water bodies with a designated use of freshwater fishing and $7.8 billion for projects in water bodies with designated recreational uses.

EPA is committed to helping our partners sustain progress and increase opportunities for state revolving funds through financial stewardship, innovation, and collaboration. The CWSRF

program demonstrates the power of partnerships to leverage, innovate, and excel to meet wastewater infrastructure, watershed protection, and community health needs.

The CWSRF is now and will continue to be a critical tool for capital financing of our Nation's wastewater infrastructure. But, it is not the only tool. Other aggressive and innovative actions and technologies are crucial to solving the Nation's water infrastructure needs.

EPA's Approach to Sustaining Water Resources

The Agency has approached the challenge of keeping pace with infrastructure needs of the future by developing a comprehensive strategy built upon what we call the "Four Pillars of Sustainable Infrastructure" – better management, water efficiency, full cost pricing, and the watershed approach. It is an effort to help ensure that our nation's water infrastructure is sustained into the future by fundamentally changing the way the nation views and manages its water infrastructure. It is a collaborative effort involving drinking water and wastewater utility managers, professional and trade associations, local watershed protection organizations, and federal, state, and local officials.

Better Management

The Better Management "pillar" involves changing the paradigm for utility management from managing for compliance to managing for sustainability. We are concentrating our efforts on improved performance through state-of-the-art management approaches focused on the entire utility, working with smaller utilities to improve their capacity to comply with regulatory requirements, and providing utilities with information on cost-effective technologies.

On May 2, 2006, EPA signed a groundbreaking utility management partnership agreement with six leading water and wastewater utility organizations to ensure the long-term viability of our nation's water systems through effective utility management. Under this agreement, we are working with our partners to identify the key attributes of effectively managed utilities, developing a set of example performance measures for utilities to use to gauge their performance, and identifying resources to help utilities manage all of their operations more effectively.

This partnership is the first of its kind between EPA and these associations, and we believe it will provide utilities with a common management framework to help them ensure that their operations and infrastructure are sustainable in the future. We expect to finalize the utility attributes and sample measures in spring 2007, and then work in partnership with the Associations to encourage their wide-spread adoption, along with other sustainable management practices like environmental management systems and asset management across the water sector in the coming years.

Full Cost Pricing

In many cases, water and wastewater services in this country do not consistently recover the full cost of service, nor do they accurately reflect the true value of the service provided. In fact, the average American family spends more each year for soft drinks and other beverages than they do for water and wastewater services combined.

In November 2006, we convened a workshop for drinking water and wastewater utilities, public utility commissions, academia, and consulting to discuss issues associated with achieving full cost pricing. The overarching message from the meeting was that full cost pricing will only be possible and successful in an efficiently structured and managed water and wastewater sector. The sector's current structure, management, and operations have potentially significant inefficiencies, some of which will be addressed by activities under the other pillars.

In facing this long-term challenge, we view our role as informing and facilitating a broad national dialogue on how to achieve our national public health and environmental protection goals in the least costly and most socially acceptable manner. We are also developing tools and techniques to assist utilities interested in recognizing and recovering the long-term, full cost of providing service. Our goal under this "pillar" is to help utilities correct market signals that have been distorted by years of subsidies, and to help communities find appropriate options for cost allocation and rate design.

Water Efficiency

Improved water efficiency reduces the strain on aging water and wastewater systems, and can delay or even eliminate the need for costly new construction. It also diverts less water from rivers, bays, and estuaries which help keep the environment healthy. Improved water efficiency also translates into cost and energy savings by reducing the amount of energy used to treat, pump, and heat water. Washing machines certified by EPA's Energy Star program, for example, use 35 to 50 percent less water and 50 percent less energy per load. This lowers energy demand, which also helps prevent air pollution.

Under the Water Efficiency "pillar" we are working to foster a national ethic of water efficiency, so that water is valued as a limited resource that should be used wisely. In June 2006, EPA announced the development of a new water efficiency market enhancement program. This program, called WaterSense, is an innovative partnership to promote water efficient products and services and help American consumers make smart water choices that save money and maintain high environmental standards without compromising performance.

The Program features a label that will make it easy to find products and programs that save water while ensuring product quality and performance. In November 2006, we released criteria for programs that certify irrigation design and installation professionals. Looking ahead, WaterSense will focus on residential plumbing products and smart landscape irrigation products, such as soil moisture sensors and weather based controllers.

We are supporting the formation of a national organization to foster water efficiency called the Alliance for Water Efficiency which initially is creating an information clearinghouse and website, and monitoring national plumbing and appliance standards and codes. We look forward to working with this organization as it helps foster the universal understanding and acceptance of the need for efficient water use and in promoting effective water-efficient products, practices, standards and best practices.

Other important activities under this pillar include implementing a Water Efficiency Leader program to recognize organizations and individuals who are providing leadership and innovation,

promoting the adoption of guidelines for the construction of water-efficient new homes, and incorporating water efficiency elements into building rating system such as the U.S. Green Buildings Council Leadership in Energy and Environmental Design (LEED) Green Building Rating System. One of EPA's newest and most impressive facilities, the Region 8 Headquarters, will save water through the use of low-flow plumbing fixtures such as waterless urinals and dual-flush toilets. It also has a green roof.

Watershed Approach

The goal of this "pillar" is to integrate watershed-based approaches into decision making at the local level so that communities can make the most informed and cost-effective infrastructure decisions that also help to ensure the overall health of the watershed. In many cases, adoption of watershed-based approaches, such as source water protection, "green infrastructure", water quality trading, and watershed permitting, in conjunction with traditional "hard infrastructure" approaches can help reduce overall infrastructure costs.

EPA is actively seeking input from outside groups on ways to further promote watershed approaches. A workgroup made up of members from the National Advisory Council on Environmental Policy and Technology has been formed and will provide initial recommendations later this spring. In December, EPA convened a watershed forum with several leading utilities to help define how EPA can foster these integrated watershed efforts, and work toward breaking down barriers to advancing low impact development.

The Agency's approach to sustainable infrastructure does not rely solely on the four pillars strategy. We are actively pursuing innovations to address the challenge of reducing costs and increasing investments in water infrastructure. We are also investigating innovative, market-based financing to help communities ensure adequate funding for sustainable infrastructure.

In March, the Agency has planned an unprecedented National conference to address the challenge of integrating the many diverse tools and strategies to pay for sustainable water infrastructure. Scheduled for March 21-23, 2007 in Atlanta, Georgia, it will provide a forum to

exchange and examine ideas about how best to meet the challenges of paying for Sustainable Water Infrastructure.

The conference will provide an opportunity to hear from a variety of practitioners with experience in innovative sustainable infrastructure approaches. It is hoped that the ideas and concepts presented will spur conversation about approaches for supporting sustainable infrastructure efforts. In the weeks following the Conference, EPA will host a meeting for leaders from the cosponsor organizations to consider what was learned and how best to pursue new ideas and approaches into collaborative efforts to support sustainable water infrastructure.

The Agency's Office of Research and Development has also been planning a new research program to generate the science and engineering to improve and evaluate promising innovative technologies and techniques to reduce the cost and improve the effectiveness of operation, maintenance, and replacement of aging and failing drinking water and wastewater treatment and conveyance systems. The program was identified in the President's Fiscal Year 2007 Budget to receive $7 million per year.

The initial focus of the program will be on "underground" infrastructure and, as such, the initial plan primarily identifies research, demonstration and technology transfer activities addressing wastewater collection systems and drinking water distribution systems. The products from the program will be provided to drinking water and wastewater utilities to help them adopt and implement new and innovative technologies and methods for cost-effectively operating, managing, rehabilitating and extending the life of their systems.

Water Security

The security of our wastewater infrastructure continues to be an important priority for the Office of Water. While EPA has worked to ensure that drinking water systems fulfill their obligations under the Bioterrorism Act, the Agency has by no means ignored wastewater systems, which are not subject to specific provisions of the Bioterrorism Act requiring the completion of vulnerability assessments and emergency response plans. EPA, for example, has provided

guidance and training to these utilities on how to conduct vulnerability assessments, prepare emergency response plans, and address threats from terrorist attacks.

Conclusion

We view the CWSRF program as a true success story. With the support of the Federal Government, every State now has a robust financial program that it can use to address its specific water quality challenges, today and into the future. Taken together, all of these initiatives, innovative tools, and funding resources will help EPA and its partners continue to build on the gains in water quality that we have worked so hard for and enjoyed over the past 30 years.

As the Subcommittee continues to study water infrastructure needs, the Administration would like to encourage a constructive dialogue on the appropriate role of the federal government in addressing these needs. Thank you, Madam Chair, for giving me the opportunity to speak with you this morning.

* * *

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

The Honorable Harry E. Mitchell
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Mitchell:

Thank you for your letter of January 24, 2007, regarding the allocation formula for the Clean Water State Revolving Funds (SRFs). I welcome the opportunity to respond to your questions in detail regarding this important subject. An enclosure to this letter provides responses to the specific questions you raised.

I look forward to working with you and the Committee in the future on this or other issues. If you have any questions, please contact me or have your staff call Steven Kinberg of EPA's Office of Congressional and Intergovernmental Relations at (202) 564-5037.

Thank you

Sincerely,

Benjamin H. Grumbles
Assistant Administrator

Enclosure

CLEAN WATER STATE REVOLVING FUND
QUESTIONS FROM CONGRESSMAN MITCHELL

QUESTION 1: Please explain what procedures, if any, EPA uses to ensure that the allocation of federal funds to Clean Water State Revolving Funds is equitable.

ANSWER: Congress established the statutory formula for the allocation of Federal funds to the Clean Water State Revolving Fund (CWSRFs) in section 205 of the Water Quality Act of 1987.

QUESTION 2: Does the EPA regularly review its procedures for ensuring the allocation of federal funds to SRFs is equitable? If so, please indicate how often, and describe the review process.

ANSWER: Please refer to the answer to Question 1.

QUESTION 3: Has the EPA ever taken a position regarding the use of 1970 Census data to determine the allocation of federal funding for SRFs? If so, please describe.

ANSWER: No. EPA has not taken a position regarding criteria used to determine the allocation of Federal funds for the CWSRFs.

QUESTION 4: Understanding that the allocation of federal funding for SRFs is supposed to be based on population as well as need, does the EPA believe the current allocation is equitable? Please describe why or why not.

ANSWER: EPA has not taken a position on the allocation of Federal funds to the CWSRFs.

QUESTION 5: Has the EPA ever issued any written or verbal recommendation to Congress, or any other governmental or non-governmental entity, that the use of 1970 Census data to determine the allocation of federal funds to the SRFs be discontinued, modified, and/or updated? If so, please describe.

ANSWER: No. EPA has not issued recommendations regarding the use of the current Congressionally established allocation formula.

QUESTION 6: Please estimate how much federal funding Arizona would have received between 1980-2006 if the allocation formula for federal funding for SRFs had used 1980, 1990, and 2000 Census data, as soon as such data became available.

ANSWER: Based on CWSRF appropriations of $24,371,684,200 from 1989 through 2006, if the allocation formula were based only on Census population data, Arizona would receive $387 million over this time period (see attached table).

Clean Water State Revolving Fund
Title VI Federal Funds to Arizona
Based on Arizona's Relative Share of U.S. Total Population

	Population (Census)[1]		Ratio of Arizona's Population to U.S. Total Population	Population Ratio to Apply to CWSRF Appropriation	Total CWSRF Appropriation[2]	Portion of Federal Funds to Arizona Based on Population Ratio
	U.S. Total	Arizona				
1980	226,545,805	2,718,215	0.0120	0.0120	0	0
1981				0.0120	0	0
1982				0.0120	0	0
1983				0.0120	0	0
1984				0.0120	0	0
1985				0.0120	0	0
1986				0.0120	0	0
1987				0.0120	0	0
1988				0.0120	0	0
1989				0.0120	941,000,000	11,290,610
1990	248,709,873	3,665,228	0.0147	0.0147	973,513,900	14,346,638
1991				0.0147	2,047,800,000	30,176,351
1992				0.0147	1,948,500,000	28,714,971
1993				0.0147	1,927,500,000	28,405,496
1994				0.0147	1,196,000,000	17,625,407
1995				0.0147	1,235,200,000	18,203,096
1996				0.0147	2,073,500,000	30,557,091
1997				0.0147	625,000,000	9,210,601
1998				0.0147	1,350,000,000	19,894,899
1999				0.0147	1,350,000,000	19,894,899
2000	281,421,906	5,130,632	0.0182	0.0182	1,345,421,300	24,526,515
2001				0.0182	1,347,030,000	24,557,844
2002				0.0182	1,350,000,000	24,611,990
2003				0.0182	1,341,225,000	24,452,012
2004				0.0182	1,342,035,000	24,466,779
2005				0.0182	1,091,200,000	19,893,781
2006				0.0182	896,759,000	16,166,595
Total					24,371,664,200	386,999,575

[1]Population Census data are from the Census Bureau, U.S. Department of Commerce.

[2]Appropriated amounts shown are the total enacted Title VI Federal funding level and are not adjusted for the Indian set-aside or 604(b) planning grants.

Opening Statement of Representative John Hall
Subcommittee on Water Resources and Environment
Hearing on the Need for Renewed Investment in Clean Water Infrastructure
January 19, 2007

- Thank you, Mr. Chairman, and thank you to all of the witnesses for appearing today.

- Before addressing the specific subject of today's hearing, which is of the utmost importance to my district and the country at large, I would like to take the opportunity to express how happy and excited I am to be a member of this august Committee.

- This is of course our first hearing of the 110th Congress, and my first hearing of any Congress. I greatly look forward to working with the Chairman, Ranking Member, and my colleagues to address America's fundamental infrastructure needs.

- I am particularly glad that we begin our work in that effort by examining the need to invest in clean water infrastructure.

- My district, New York's 19th, and the surrounding Hudson Valley area has an incredible wealth of water resources, not least among them the Hudson River.

- These water resources are a great source of pride for the residents of the Hudson Valley, as well as an important part of the area's environmental and economic health.

- In addition to a great number of water resources, we have a great number of water infrastructure challenges.

- The Hudson Valley has an aging water infrastructure, that is being placed under an ever-increasing amount of strain by rapid population growth.

- The growth in population has placed an increasing burden on septic systems, wastewater systems, drinking water systems, and the infrastructure as a whole.

- We also have clean water challenges created by pollutants like the gasoline additive MTBE that must be addressed.

- And of course, my district is home to the Indian Point nuclear power plant, which continues to leak tritium and strontium 90, threatening the Hudson River and water supplies.

- Over the course of this committee's activities I look forward to addressing all of these challenges, beginning today with an examination of the Clean Water State Revolving Fund.

- I look forward to hearing the views of the panel on how we can find more financial resources for the CWSRF, how these funds can be more efficiently distributed, and what creative solutions are available to meet the critical water infrastructure needs of my district and our nation.

STATEMENT OF
THE HONORABLE EDDIE BERNICE JOHNSON, CHAIRWOMAN
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
HEARING ON THE NEED FOR RENEWED INVESTMENT IN CLEAN WATER INFRASTRUCTURE
FRIDAY, FEBRUARY 19, 2007 AT 9:30 A.M.

Today, the Subcommittee meets to discuss the nation's wastewater infrastructure needs and the importance of a renewed commitment to addressing these needs.

As this is the first meeting of the Subcommittee this Congress, I believe this is a good opportunity to outline the near-term agenda of this Subcommittee, and our efforts to address many of the water resource challenges of this country.

First, let me say how pleased I am to serve as the Chairwoman of the Subcommittee on Water Resources and Environment. I look forward to meeting with each of my colleagues, learning of their own individual water resource needs, and working together to address many of their concerns.

I am also pleased with the opportunity to work with my Republican colleague, Congressman Richard Baker of Louisiana. Congressman Baker has been a long-time active member of this Subcommittee, and I look forward to working with him in his new role as Ranking Republican.

As my predecessor, Congressman Duncan has described, this Subcommittee has the broadest agenda of any of the Transportation Subcommittees, covering Corps of Engineers' projects and authorities, EPA's Clean Water and Superfund programs, brownfields, the Tennessee Valley Authority, the St. Lawrence Seaway, and programs carried out by the National Oceanic and Atmospheric Administration and the Natural Resources Conservation Service.

The Subcommittee will have an active agenda in the coming weeks.

Starting with today's hearing, the Subcommittee will return to some of the unfinished work of the previous Congress, beginning with an examination of the wastewater infrastructure needs of the nation, and the importance of a renewed Federal commitment to meeting these needs. The Subcommittee hopes to move expeditiously towards a reauthorization of the Clean Water State Revolving Fund.

It is my hope that we can build upon the prior bipartisan efforts of this Subcommittee, and move this legislation through the Committee to the floor of the House before the President's Day district work period.

In addition, the Subcommittee hopes to take up other bipartisan legislative proposals considered by this Committee in the previous Congress that were not enacted into law.

Two examples are legislation to reauthorize appropriations for EPA's Combined Sewer Overflow grant program, and the pilot program for alternative sources of water.

An equally important priority of the Subcommittee is to complete work on the Water Resources Development Act of 2006. Late in the 109th Congress, the staffs of the House and Senate authorizing committees were close to completing what we have waited 6 years to accomplish – moving a joint House-Senate recommendation for the Army Corps of Engineers to the President.

It is my hope that we can quickly pick up where these negotiations left off so that vital water resources development legislation can be enacted, and the backlog of essential flood control, navigation, and ecosystem restoration projects can finally be authorized.

Finally, in February, the Committee and the Subcommittee will hold hearings on the administration's budget request for fiscal year 2008.

While I do not have high expectations for full funding of those programs and policies that fall within the jurisdiction of this Subcommittee, I look forward to beginning the dialogue on funding this Committee's priorities in the coming fiscal year.

Returning to the topic of today's hearing, it is fitting that the Subcommittee's first hearing is on the need for renewed investment in Clean Water infrastructure.

To a great extent, the improvements in water quality achieved since the enactment of the Clean Water Act have resulted from significant investment by Congress in wastewater infrastructure improvements throughout the country.

Since 1972, the Federal government has provided more than $82 billion for wastewater infrastructure and other assistance which has dramatically increased the number of Americans enjoying better water quality, and has improved the health of the economy and the environment.

During the same period, overall investment in wastewater infrastructure – from Federal, State, and local sources – has been over $250 billion.

Investment in wastewater infrastructure has been one of the greatest investments made by the Federal government, and has provided significant environmental, public health, and economic benefits to the nation.

First through the Construction Grants program, and now through the Clean Water State Revolving Funds, these investments have been integral to improving the nation's waters, as well as ensuring the well-being of our nation's citizens.

In addition, as noted in the testimony for today's hearing, investment in wastewater infrastructure directly benefits our nation's economy, not only through the creation of well-paying jobs here in the United States, but also through ensuring that our nation's infrastructure stands ready to address the challenges of the 21st century.

However, these achievements are now at risk. As noted in a 2000 report of the Environmental Protection Agency, "without continued improvements in wastewater treatment infrastructure, future population growth will erode away many of the Clean Water Act achievements...."

Without a renewed commitment towards investment from all parties, in less than a generation, the United States could lose much of the gains made in improving water quality.

This Subcommittee stands ready to renew the *Federal* commitment to our nation's wastewater infrastructure. While reauthorization of the Clean Water State Revolving Fund, alone, cannot entirely close the gap between current needs and expenditure, it does send a strong message on the importance of achieving the goals of fishable and swimmable waters established over 30 years ago.

Before I recognize Mr. Baker for his statement, I also mention that we have a few Members returning to the Subcommittee, and a fair number of new Members joining us this year.

Congressmen Filner and Capuano both served on this Subcommittee in the past, and we welcome them back in the 110th Congress.

The new Members of the Democratic caucus are:

Congresswoman Doris O. Matsui who represents the 5th district of California;

Congresswoman Mazie K. Hirono who represents Hawaii's 2nd Congressional District;

Congressman Heath Shuler who represents North Carolina's 11th Congressional District;

Congressman Harry E. Mitchell, of Arizona's 5th Congressional District;

Congressman John J. Hall, of New York's 19th Congressional District;

Congressman Steve Kagen, of Wisconsin's 8th Congressional District;

Congressman Jerry McNerney, of California's 11th Congressional District;

Congresswoman Grace F. Napolitano, of California's 38th Congressional District;

And, Congressman Michael A. Arcuri, from the 24th district of New York.

I welcome all of these new Members, and our returning Members, from both sides of the aisle, to the Subcommittee.

Statement by Congresswoman Doris Matsui
On the Need for Renewed Investment in Clean Water Infrastructure
Subcommittee Water, Resources and Environment
January 19, 2007

Thank you, Chairwoman Johnson. First, I want to congratulate you on your new position as Chairwoman. It is well deserved and I am looking forward to serving on your subcommittee.

Our subcommittee's jurisdiction is of critical importance to my constituents in Sacramento and I am looking forward to working on addressing our nation's critical water issues.

In my state of California, water is both a blessing and a curse. It irrigates our spectacularly productive agricultural fields and makes life in the Central Valley possible for millions of people. However, in much of California, the threat of flooding menaces us each and every day. We take water very seriously in California. In Sacramento we take it extremely seriously.

In Sacramento is like many other metropolitan areas in California, we are experiencing record growth: the number of homes in the Sacramento area will more than double in less than fifty years. By 2020, our population is expected to increase by one million people. However, as our population grows, so must our investment in our infrastructure---and specifically, our investment in our clean water infrastructure.

I am encouraged that Chairman Oberstar and Chairwoman Johnson have made investing in our clean water infrastructure a top priority in the 110th Congress. Legislation to direct federal dollars to the State Revolving Funds program is urgent and critical in a city like Sacramento.

I look forward to working with Chairman Oberstar, Ranking Member Mica, and the other members of the Committee on this and many other issues of critical importance to our country's infrastructure. Increasing federal support for cities like Sacramento to modernize their water treatment systems is a smart, sensible, and encouraging place to start.

Thank you, Chairwoman Johnson.

1

Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Water Resources and Environment
1/17/06

Thank you, Madame Chairwoman. (NOTE: if another member subs for Chairwoman Eddie Bernice Johnson, D-Tex., it may be "I thank my distinguished colleague.")

If there is one thing we understand in Arizona -- it's the importance of water. And so I thank the Chair for this opportunity to address this critical issue.

2

You know the old saying about being "penny wise" and "dollar foolish"?

It seems like that's what Congress has done with wastewater infrastructure. They saved us some pennies, but made cuts that are going to cost us big dollars down the road.

When it comes to critical water infrastructure, I don't see how we can afford NOT to invest. It's vital for our economy. It's vital for our health and safety. It's vital for our way of life.

3

For me, the question isn't WHETHER we invest, it's HOW.

And that raises a key issue for my district and for my state.

State Revolving Fund (~~SFR~~ SRF) money is supposed to be allocated based on population. However, the current formula, established in 1977, is woefully out of date.

4

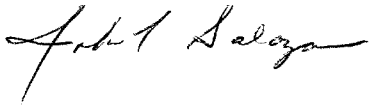
Arizona ranks 38th in ~~SFR~~ SRF receipts, even though it is now the 20th most populous state in the union.

This is inequitable, and I hope this committee…..a distinguished committee….with a long tradition of fairness and bipartisanship…will address this at the appropriate time.

[I yield the balance of my time]

Or

[proceed to questions….]



Opening Statement
Congressman John T. Salazar
T&I Subcommittee on Water Resources
Hearing on the Need for Renewed Investment on Clean Water Infrastructure
January 19, 2007

Thank you, Madame Chair. I would like to once again congratulate you on becoming the first female in recent history to chair this subcommittee. It is quite an achievement and very well deserved.

I look forward to working with you and your staff on many important water related issues.

As we all know, water in the lifeblood of rural America.

As a farmer and rancher in southwest Colorado, I know firsthand the value of our nation's water resources.

In Colorado's Third District, clean water directly affects our quality of life.

In fact, one of the reasons I am here today is because of the many water issues in my district.

Clean and safe water should be a national priority for all Americans.

This committee has devoted much time and energy to this issue. But there is more work to be done.

We are all sensitive to the need to invest in water and wastewater infrastructure.

However, these improvements are extremely costly, especially for rural America.

The fact that the EPA uses the same requirements for small, rural communities as they do for large, urban cities, is completely unfair and makes it difficult for our smaller communities to meet the standards.

I am confident that this Congress will finally tackle the issue of how to create a dedicated source of federal funding for clean water projects.

I truly believe that water is a vital resource, but it is a shared resource.

It is the responsibility of Congress to ensure that we preserve and protect it for today and future generations.

I look forward to today's hearing. Thank you.

NACWA
A Clear Commitment to America's Waters

Testimony of the

NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES (NACWA)

January 19, 2007

Presented by

KURT SODERBERG
Executive Director

Western Lake Superior Sanitary District (WLSSD)
Duluth, MN

Submitted to the

WATER RESOURCES AND ENVIRONMENT SUBCOMMITTEE

of the

HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE

in

Washington, DC

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Testimony of Kurt Soderberg
Executive Director, Western Lake Superior Sanitary District
on behalf of the
National Association of Clean Water Agencies (NACWA)

Introduction

Good morning, Madam Chairwoman and Members of the Committee. My name is Kurt Soderberg and I am Executive Director of the Western Lake Superior Sanitary District in Duluth, Minnesota. I am testifying today on behalf of the National Association of Clean Water Agencies – NACWA. NACWA is the only organization dedicated solely to representing the interests of the Nation's public wastewater treatment agencies. Our members are dedicated environmental stewards who work consistently to carry out the goals of the Clean Water Act as they treat and reclaim more than 18 billion gallons of wastewater each day.

I am pleased to be able to be here representing NACWA, to personally thank you and Chairman Oberstar for having this Subcommittee's first hearing of the 110th Congress on the issue of clean water funding. Minnesotans - and the nation as a whole - are fortunate to have Chairman Oberstar leading the work of the full Committee and you, Madam Chairwoman, heading up the Subcommittee. As we prepare to commemorate the 35th anniversary of the Clean Water Act, this hearing and your and Chairman Oberstar's records of leadership on environmental issues are both timely and fitting.

There is no doubt about the record of environmental achievement enjoyed in the 35 years since the enactment of the Clean Water Act. But despite this vital progress, we must use the Act's 35th anniversary to ask hard questions and review with a critical eye the many new and increasingly complex 21st century challenges to our cherished water resources.

In 1972 Lake Erie had been declared dead by *Time* magazine, and the Cuyahoga River on fire became the poster child for federal action – action that took the form of an unprecedented infusion of federal grants to meet the Nation's water quality challenges. My message to you today, is that this is not a time to pat ourselves on the back for a job well done because, unfortunately, the job is far from finished.

According to EPA, nearly 40% of the Nation's waters remain impaired, with the majority of this impairment caused by nonpoint sources of pollution. Furthermore, an ever-expanding population, which is expected to grow by another 100 million people over the next three decades, coupled with consistently

increasing industrial output is further stressing an already aging system of treatment plants. In line with these trends, the Agency has also projected that by 2016 – less than a decade from now – the water quality gains made as a result of implementing the Clean Water Act could be erased. The image of the Cuyahoga River catching fire made what was happening to our cherished waterways tangible to the entire population. We must not allow the Anacostia River here in Congress's own backyard to become the next poster-child for a Nation's water quality in crisis. Whether it is the Anacostia, the Chesapeake Bay, the Mississippi River, the Great Lakes or California's coastal waters the point is a simple one: the federal government's failure to rejoin states and municipalities as a full-fledged long-term partner in funding the Nation's clean water infrastructure will have unacceptable consequences. Your leadership Mr. Chairman and the foresight of this Committee's members can make such a partnership a reality again.

Funding the Clean Water Act

EPA, the Government Accounting Office, the Congressional Budget Office, and the Water Infrastructure Network (WIN) have all confirmed a clean water infrastructure funding gap of approximately $400-500 billion over the next twenty years just to maintain the current level of treatment for the current population. NACWA, through its Clean Water Funding Task Force, has done extensive research regarding public perception on clean water funding and how best to overcome the gap. Over 91% of Americans, when made aware of this gap, overwhelmingly support ***federal*** legislative action to guarantee the water quality of the Nation's rivers, lakes, streams and bays. Polling data also show that the vast majority of Americans would support a dedicated revenue source for clean water infrastructure structured similarly to those that exist for highways and airports and that Americans are willing to pay out of their own pockets to do so.

Despite the consensus around the funding gap, broad public support for federal action, and years of hearings on these issues, the federal contribution to clean water investment has declined from more than 70 percent in the early 1970s, to less than 5 percent today. This trend is even more inexplicable in light of the ever-increasing costs to comply with new federal requirements and enforcement actions. On top of it all, the escalating cost and unanticipated price increases for material, experienced consultants, engineers, and utility staff are creating the "perfect storm" for wastewater utility managers at the local level.

To bring this issue "home", the needs of my District, WLSSD, and of communities across the nation, have far outgrown the funding levels provided by EPA's Clean Water State Revolving Loan Fund (SRF). Wastewater treatment systems face financial challenges today that far exceed historical investment patterns and also exceed the financial capacity of our local governments and ratepayers.

At WLSSD, our Master Planning process has allowed the District to evaluate virtually every phase of our system and, through this process, we have determined that the estimated replacement cost for our sewer pipes and treatment plant is more than $550 million. This may be small by most NACWA-member standards, but we need to make ongoing replacements and repairs to this substantial regional asset. Our capital planning over the next ten years shows costs of nearly $100 million – much of which will need to come from the State Revolving Loan Fund (SRF), local bonding, or federal grants, if available. We rely heavily upon bonding and the SRF, and we know that Minnesota takes maximum advantage of the SRF capitalization. Minnesota makes loans of about $100 million annually, but still has an active list of another $200 million in unmet needs per year. With the continued decline in funding for the SRF, Minnesota's share of the SRF program will drop from $25.75 million in fiscal year 2004 to only $12.62 million if approved as proposed in the Administration's FY 2007 budget. Clearly the SRF is beneficial to the WLSSD and to Minnesota, but the unmet needs are substantial and growing.

Reduced federal spending and increased federal mandates are taking their toll on utilities. The collective aging of our pipes and systems further limits our ability to meet the objectives of the Clean Water Act. Locally, our District is responding to EPA mandates to eliminate a sanitary sewer overflow problem; the solution for WLSSD and our largest customer, the City of Duluth, will cost an estimated $125 million over the next twelve years. Much of this investment is above and beyond our normal capital plans. As a result of such costs, NACWA recommends the inclusion in upcoming SRF reauthorization legislation of the provisions of H.R. 624, which was introduced in the 109th Congress and would provide $1.25 billion over five years in grants for sewer overflow control projects.

Even more pressing at this time are the tremendous increases we are experiencing in construction costs – whether related to steel, cement, or other construction supplies. Virtually all projects continue to come in over the engineers' original estimates. In just two weeks, NACWA members will gather for our Winter Conference, *Global Trends Impacting Water Utilities . . . The Rising Cost of Clean*, to explore just these issues. We look forward to having more Valuable information to share with you on this new and growing financial challenge.

Congress must work to provide greater overall assistance to meet the critical need to repair, replace and properly manage our clean water infrastructure. Simply stated, more money must be put on the table. NACWA supports a renewed authorization and full funding to capitalize state-administered programs through loans, loan subsidies, and grants. Previous legislative efforts have sought to authorize $20-$30 billion for loans and grants via the SRF program. NACWA supports these funding levels but believes it

would be remiss to authorize money without also seeking a revenue source or sources to pay for these authorizations. For this reason, NACWA strongly recommends the inclusion in any authorizing legislation of a short-term study to be completed in no more than six months to determine the appropriate combination of viable long-term, dedicated revenue sources to bridge the clean water infrastructure funding gap.

The need for viable revenue sources is even more important when considered in the context of the Administration's approach for overcoming the funding gap. This approach, referred to as the "Four Pillars" include better utility management, water conservation, full-cost pricing, and the reliance on watershed planning. While NACWA believes these practices are beneficial, they ultimately boil down to leaving utilities without support to address the clean water funding gap.

At the heart of the Four Pillar approach is full-cost pricing, which continues to be undefined. The approach, however, assumes two things. First, that municipalities are not charging customers sufficient rates for wastewater services and, second, that the federal government has no role in the clean water arena (except for regulating and enforcing against utilities, of course). The evidence, however, strongly suggests otherwise.

The annual *NACWA Index* shows that average annual residential service charges have increased over the past four years at double the rate of inflation. In Region V, where Minnesota is located, rates increased by over 13% in 2005 alone. There is a limit to how high rates can go and we are pushing the envelope every year. In the face of these statistics, the Four Pillar approach, while containing some vitally important objectives, is not really an "approach" at all but constitutes a "retreat". This is why this Committee's focus on SRF reauthorization is so critical.

NACWA's overarching interest is to guarantee environmental progress by putting more money on the table to ensure clean water in America. In the past, despite widespread and growing support, Clean Water Act infrastructure funding legislation has unfortunately stalled over issues of process. One such issue is Davis-Bacon Act prevailing wage coverage. NACWA has no objection to the inclusion of Davis-Bacon in clean water infrastructure funding legislation.

A National Institute for Utility Management

There are several other vital areas that NACWA would like to see focused on in forthcoming legislation. These include the creation of a Utility Management Institute, as well as the need for additional research and technology funds. Clean water agencies could benefit from additional training and education and the use of a greater variety of resources and tools, to improve asset management, worker training, and financial reporting. A National Institute for Utility Management would be the most effective and efficient method to deliver an enhanced set of tools to the water sector and this legislation can go far toward making such an Institute a reality.

Work has already begun on this front, with NACWA, the Water Environment Federation (WEF), and the Water Environment Research Foundation (WERF) working together to explore the establishment of such an Institute. While NACWA, WEF and WERF currently provide the water sector with a comprehensive set of utility management tools, we believe these offerings could be significantly enhanced through collaboration and a common delivery mechanism.

Public wastewater utilities must continuously plan and optimize the maintenance and replacement cost cycles for their infrastructure assets in order to minimize costs and to maximize performance. We recognize that asset management and long-term planning are an essential part of protecting our nation's water infrastructure investments. To help the nation's utilities improve the management of their assets, NACWA has published and distributed over 3,000 copies of a comprehensive asset management handbook, and, due to popular demand, is in the process of developing a new implementation guide as a complement to the handbook. NACWA also has conducted regional workshops to train hundreds of facility managers in asset management techniques.

In our view the addition of new utility management requirements as a condition to accessing SRF funds would serve only to deter potential applicants – precisely the opposite of the objective of any reauthorization legislation. This would be especially true for smaller, often rural, utilities.

Research and Technology

NACWA encourages the Committee to include a significant federal research program, with appropriate funding, under section 104 of the Clean Water Act, as well as a nationwide technology demonstration program that would provide grants for pilot projects that seek innovative approaches to achieving water quality goals.

The objective of the 1972 Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to attain, wherever possible, water deemed "fishable and swimmable." With the help of past federal financial assistance, municipalities constructed wastewater treatment plants to eliminate the discharge of pollutants into navigable waters. The goals of the Act remain in effect, fueled by federally enforced mandates in the form of a growing number of stringent regulations and costly requirements. Lost in this seemingly unending cycle is that the world around us has changed significantly since 1972. From swelling and shifting populations to the introduction of emerging pollutants that have the power to change the course of nature in aquatic life, little attention or financial assistance has been paid to much-needed research to meet new and complex challenges.

There also is a lack of investment in the development of new wastewater technologies. The federal government currently supports technology research and development through EPA programs and Congressional appropriations to non-profit research foundations. Yet, none of these programs focuses specifically on infrastructure and non-traditional solutions. Innovative and alternative approaches are needed to reduce nutrient pollution, improve methods for water conservation and safe reuse, improve monitoring and data analysis, reduce nonpoint sources of water pollution, reduce municipal stormwater pollution, reduce sanitary sewer and combined sewer overflows, and develop more effective methods for treating wastewater – including "green technology", conservation easements, stream buffers and wetlands restoration.

The Need for Comprehensive Approaches

While addressing the funding aspect is a vital first step, the time is rapidly approaching to rethink the Clean Water and Safe Drinking Water Acts. As comprehensive approaches are taking grip at the municipal level, it is critical to consider new, more comprehensive federal legislative approaches that reflect the new realities of the 21st century. The 35th anniversary of the Clean Water Act offers a unique opportunity to do this and NACWA offers its help to the Chairman and this Committee to begin the long process of developing a more integrated water quality approach.

Increasingly, the traditional regulatory divide between drinking water and wastewater continues to shrink as we move toward a universal definition of water. The "silo" approach to managing drinking water, wastewater and stormwater issues separately is dissolving. Integrated approaches such as water reuse, water conservation, energy efficiency, and watershed management are already common practices and carry important weight in the infrastructure decisions of today's modern wastewater treatment system manager.

Green technologies too are becoming increasingly accessible and commonplace. "Water is water" is what we hear from many of our stakeholders, and the ramifications of such thinking are many and broad.

Conclusion

NACWA fully supports your efforts to pass and fully fund meaningful infrastructure funding legislation. We hope – and encourage you – to take this opportunity to include in your bill legislative language that would ultimately, and quickly, assist Congress with the identification of an assured source of federal funding to secure America's investment in the nation's wastewater infrastructure. We offer our help and support to pass new legislation into law that includes:

1. A reauthorization of the SRF with a combination of loans, loan subsidies, and grants;
2. A study of dedicated revenue sources to help ensure that funds are available over the long-term for priority clean water infrastructure projects;
3. Grant funds targeted for overflow control projects based on the provisions of H.R. 624;
4. Funds for a Utility Management Institute that can provide additional training and education as well as a greater variety of resources and tools on utility management issues over the long-term;
5. Inclusion of grants for a federal research and technology program that will focus on the use of new technologies and a nationwide demonstration program;
6. Opening the door to a comprehensive review and approach to the Nation's clean and safe water needs and considering new legislation to address 21st century challenges.

Madam Chairwoman and Members of the Committee, thank you for your time and attention today to NACWA's views on clean water funding for the 21st century. I would be happy to answer any questions.

Clean Water State Revolving Fund

Testimony of Nancy Stoner
Director, Clean Water Project
Natural Resources Defense Council
1200 NY Ave. NW
Washington, DC 20005
(202) 289-2394

U.S. House of Representatives
Subcommittee on Water Resources and the Environment
January 19, 2007

Why We Need the Clean Water State Revolving Fund

- Water pollution knows no state bounds
- Inadequate protection pollutes downstream drinking water sources, beaches, fisheries, wildlife habitat
- That is why Congress set up a national program with federal assistance in 1972

Source: J. Kirk Candyles

The Clean Water SRF is a Good Investment

- Upgraded sewage treatment
- Fewer raw sewage overflows
- Fewer beach closures and safer beachwaters
- Enhanced wildlife habitat and biodiversity
- Less waterborne disease
- Reduced drinking water filtration costs
- Increased revenue from tourism, fishing and shellfishing, waterfront development
- More than 400,000 jobs annually for engineers, contractors, manufacturers, and skilled laborers
- Direct return of 2.23 times the federal investment

MWSD Green Roof
Photo courtesy of MWSD

Water Pollution Problems are Growing

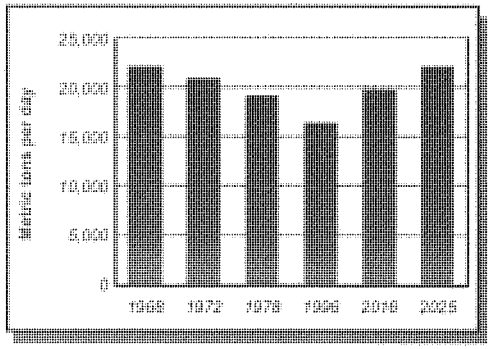


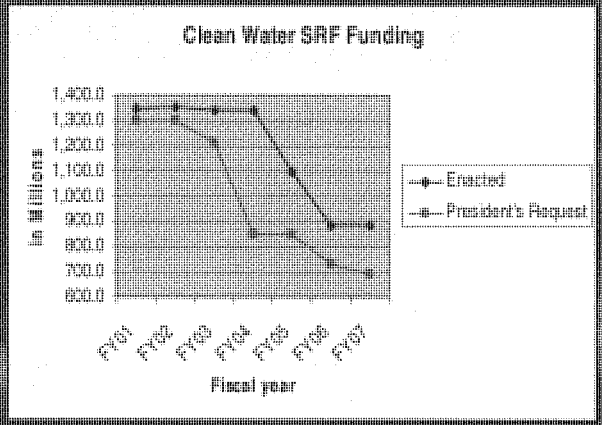
Figure 1–2: Projection of Increase in Biological Chemical Oxygen Demand (BOD)

Source: EPA Report, *The Clean Water and Drinking Water Infrastructure Gap Analysis*, EPA-816-R-02-020, Sept. 2002.

- EPA predicts that sewage pollution will exceed 1968 levels (the highest ever) by 2025
- Upward trend for
  - Beach closings
  - Red tides
  - Dead Zones
  - Coral reef damage
  - Water shortages
- Severity and extent of nutrient pollution is expected to worsen in 70% of the nation's estuaries and coastal waters by 2020

Even Though Problems are Growing, SRF Funding is Shrinking

- Clean Water SRF funding is the lowest in a decade
- Gap estimates are $17-19.5 billion annually
- Investment in research and development down 50%



Graph prepared by Heather Taylor, NRDC

Future Forecast

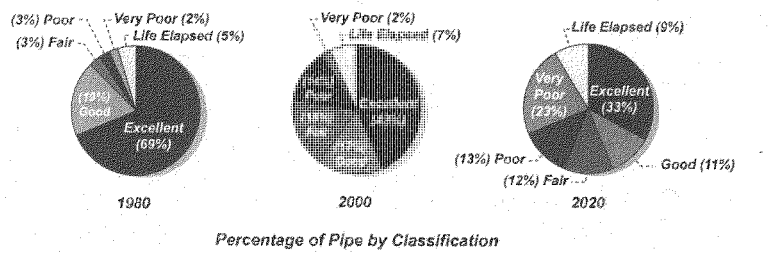


Figure 2–8: Shift in the Likely Condition Associated with the Aging Miles of Pipe in the Network (percentage of pipe by classification)
Source: EPA Report, *The Clean Water and Drinking Water Infrastructure Gap Analysis*, EPA-816-R-02-020, Sept. 2002

- Aging, expanding infrastructure increasingly likely to fail
- Growing population, especially in coastal areas
- Even faster growing rates of land development– expanding sewer lines and stormwater pollution
- Global warming increasing size of storm events
- Increasing population at risk for illness

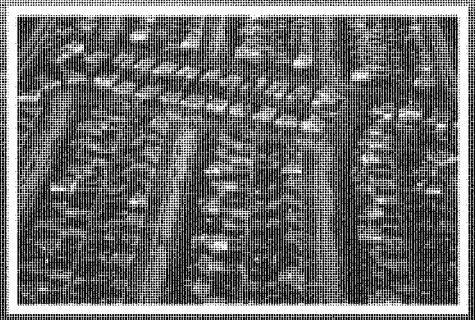
The Solution – More Money, Better Spent

- Substantially increased funding over at least the next 10 years
- Identification of a dedicated source of funding
- Better targeting of resources to achieve CWA goals

Brays Bayou restored wetland, Mason Park, Houston, TX; photo courtesy of the Sierra Club's, *Building Better II: A Guide to America's Best New Development Projects* (Nov. 2008)

Increase Efficiency of SRF
Spending
Fund existing needs, not sprawl
Fund green infrastructure that achieves more per dollar spent
Fund highest priorities from an integrated water resource perspective
Increase funding for research and development on better approaches
Increase public involvement and transparency to get better results
New York Department of Environmental Conservation
Where conservation begins

Fund Existing Needs, not Sprawl



Source: Center for Livable Communities

- Development significantly increases runoff, decreases water quality, and reduces groundwater recharge.
- The more pavement, the more pollution – numerous studies document the deleterious impacts of sprawl on rivers, lakes, coastal waters, and groundwater resources
- Yet, in 2005, 20% of the SRF paid for new sewers
- The SRF should not subsidize sprawl – it should pay for itself

Increase Funding for Green Infrastructure

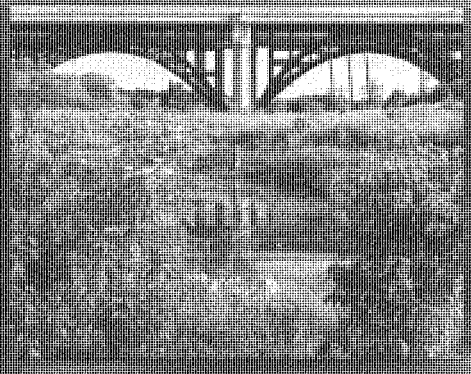
- Green infrastructure uses trees and other vegetation in urban areas to manage and treat precipitation naturally rather than collecting it in pipes.
- It uses engineered systems such as green roofs, rain gardens, and vegetated swales to mimic natural functions.
- Green infrastructure often accompanies approaches that capture and re-use stormwater and wastewater.

Cascade Drainage System. *Photo courtesy of Seattle Public Utilities*

Benefits of Green Infrastructure
Replenishes wetlands and replenishes
flows
Fewer and smaller raw sewage
overflows
Less stream bank erosion
Removes pollutants in stormwater
Recharges groundwater resources
Reduces heat island effect
Improves air quality
Provides wildlife habitat and
recreational space
Reduces energy demand
Prevents flooding
Improves urban freshwaters
Increases property values
Often less expensive than
conventional approaches
Vegetation over Extensive
Air conditioning/ Heat Pump
Energy or Power Generation
Stormwater Sewer

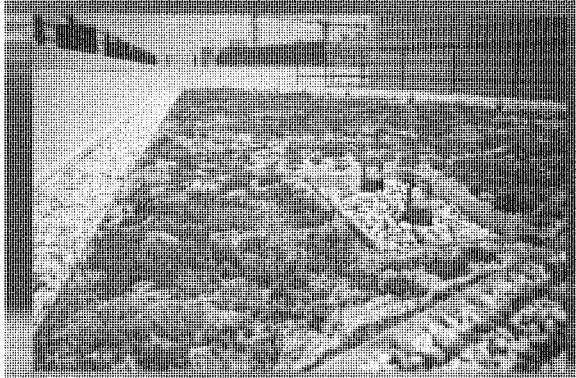
Most Beneficial Projects Should Receive Priority

- Integrated water resources management planning would identify highest needs
- R & D grants should be used to develop and document benefits of most promising new technologies
- Incentives should be provided for multi-benefit approaches, such as green infrastructure
- The public should participate in priority setting
- Projects identified as the top priorities should be funded first



Chestnut Springs Marsh. Source: City of Toronto, www.toronto.ca.

Additional Resources from NRDC



DC's first commercial high-elevation green roof. *Photo courtesy of the Casey Trees Endowment Fund.*

- ***Rooftops to Rivers: Green Strategies for Controlling Stormwater and Combined Sewer Overflows*** (June 2006)
- ***Paving our Way to Water Shortages: How Sprawl Aggravates Drought*** (Aug. 2002)
- ***Testing the Waters: A Guide to Water Quality at Vacation Beaches*** (Aug. 2006)
- ***All Dried Up: How Clean Water Is Threatened by Budget Cuts*** (Sept. 2004)
- ***Stormwater Strategies: Community Responses to Runoff Pollution*** (1999 book and 2001 (CD-ROM))

Advancing the water, sewer, gas and telecommunications construction industries

Written Testimony by

Jim Stutler,
Tierdael Construction Company
&
President,
National Utility Contractors Association

before the

House Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment

Addressing

The Need for Renewed Investment in Clean Water Infrastructure

January 19, 2007

NATIONAL UTILITY CONTRACTORS ASSOCIATION

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Madam Chairman, and Honorable Members of the Subcommittee, my name is Jim Stutler. I am the President of Tierdael Construction, a utility construction company of 108 employees located in Denver, Colorado. I am grateful for the opportunity to participate in this hearing on behalf of the National Utility Contractors Association (NUCA). NUCA is a family of approximately 1,600 companies from across the nation that build, repair, and maintain underground water, wastewater, gas, electric, and telecommunications systems.

NUCA also serves as chair of the Clean Water Council (CWC), a coalition of 26 national organizations representing underground construction contractors, design professionals, manufacturers and suppliers, and others committed to ensuring a high quality of life through sound environmental infrastructure. For your reference, a list of CWC members is attached to this testimony.

I'm here this morning to tell you about what is quickly becoming an environmental crisis in America – the deteriorating condition of America's wastewater infrastructure. You'll hear this from someone who has witnessed this problem up close while working to repair and rebuild these systems, and believe me – the view from the trenches isn't pretty.

I'll also talk about what NUCA and other members of the Clean Water Council are doing to encourage Congress to make increased funding to repair and rebuild this infrastructure a priority on Capitol Hill and to engage the American public in the clean water debate.

NUCA and the CWC have taken the lead for years in legislative efforts to reauthorize EPA's Clean Water State Revolving Fund (SRF) program. We are pleased that the 110th Congress will again attempt to pass SRF reauthorization legislation to begin to address the overwhelming wastewater infrastructure needs in America, and we look forward to doing our part to make that happen.

In the Trenches Every Day

Utility contractors build and repair America's unglamorous but vital water and wastewater infrastructure. What is out of sight and out of mind to most people is clearly visible to NUCA members every day. We routinely uncover rotting pipes with gaping holes that spill raw sewage into the surrounding ground of residential neighborhoods. This leakage can go undetected for months, even years in some cases. To make matters worse, these conditions are often within yards of waterways where we fish, beaches where we swim, and playgrounds where our children play.

While my crews deal with dilapidated sewer and water systems routinely, I recall a particularly intense situation we were involved with in southwest Denver. We were under contract with a local district to replace a 24-inch diameter Interceptor sewer line. During one shift while checking alignment two blocks upstream from our work, our superintendent removed a manhole lid on the existing line. He encountered surcharging live sewer flows that were within inches of overflowing the top of the manhole. Remember, a live gravity sewer line has no on-off valve. Acting fast, we were able to immediately set up some temporary pumping and then set about excavating near where we thought the blockage in the line was.

To make a long story short, we discovered the 24-inch line was so deteriorated that the "crown," or top portion of the pipe, was completely gone and the earth and backfill overburden had collapsed into the line, almost completely blocking it. Had the collapse occurred anytime other than in the half hour or so prior to our discovering it, the blocked flows would have surcharged the manhole and sent 2000 gallons of raw sewage per minute down the street, through a public park, into a tributary and eventually into the Platte River. Even one hour of inaction would have put approximately 120,000 gallons of untreated sewage into the streets and waterways. We counted ourselves extremely fortunate.

Infrastructure Needs Increasing, Federal Investment Declining

The need to increase federal funding for water and wastewater infrastructure is clear. EPA's 2002 *Clean Water and Drinking Water Infrastructure Gap Analysis* found that there will be a $534 billion gap between current spending and projected needs for water and wastewater infrastructure in 2019 if the federal investment is not stepped up. Furthermore, EPA's *Clean Watersheds Needs Survey 2000 Report to Congress* documented America's existing wastewater infrastructure needs at more than $181 billion. That is not a projection. That number reflects documented wastewater needs that actually existed in 2000. Therefore, it is not unreasonable to believe that America's existing wastewater needs now exceed $200 billion.

The American Society of Civil Engineers (ASCE), an active member of the Clean Water Council, evaluates the nation's infrastructure and reports on the status of it every few years. Only four years after receiving a "D" grade in 2001, America's wastewater infrastructure fell to a "D-" in ASCE's *2005 Report Card for America's Infrastructure*.

Clearly, there is a consensus among both government and industry professionals that the state of this infrastructure is quickly going from bad to worse. Meanwhile, federal resources to address this quandary are plummeting every year. The Clean Water SRF, the EPA's main financing program for wastewater infrastructure refurbishment, has not been authorized since 1994. Unfortunately, the lack of reauthorization has led to significant cuts in federal funding.

Appropriations have dropped considerably since 2004, and last year's White House budget proposal included a grossly inadequate level of $688 million for the Clean Water SRF in 2007. That funding level would reflect virtually a 50 percent cut from the $1.35 billion provided for clean water for more than 10 years. Recognizing the tremendous needs described above, the federal government should be increasing the funding for our environmental infrastructure, not cutting it.

Clean Water State Revolving Fund

The Clean Water SRF program is a pragmatic, efficient and fiscally responsible program that provides states with the resources they need to address their wastewater infrastructure needs. It has been hailed by high-ranking public officials as the most successful federally sponsored infrastructure financing program ever.

The SRF program plays a key role in the enhancement of public health and safety, protection the environment and maintenance of a strong economic foundation. It creates jobs, expands the local

tax base and ensures that safe, clean lakes, streams and shorelines will be available for your children, grandchildren and generations to come.

It's important to highlight three important types of economic impacts that result from funding water and wastewater infrastructure projects. There are:

- direct impacts through job creation and the purchase of materials and supplies related to the operation of the project;
- indirect impacts through jobs and the purchase of materials and supplies by vendors indirectly related to the operation of the project; and
- induced impacts, which are supported by spending and re-spending of the income earned by workers. (Induced economic impact is often referred to as the "multiplier effect.")

Another essential point is that this work provides good, high-paying jobs right here in America – these are not jobs that can be shipped overseas.

The SRF originated as part of the Clean Water Act amendments passed in 1987 as a way of moving from direct grants to revolving loans. Under the SRF program, states match 20% of the federal resource capital, and loans made to local communities are paid back over time with interest. The money paid back to the fund "revolves," and is loaned out to other communities in the state for other needed wastewater improvements.

In 1987, the objective was to build the SRF over time until it reached sustainability. Unfortunately, despite its spectacular performance record, the SRF has not received enough funding to sustain itself. Specifically, federal grants have leveraged capital to 10s of billions of dollars in loans, but federal funding has not kept pace with the rising needs.

Legislation Long Overdue

As previously noted, NUCA and the Clean Water Council have taken a lead role in advocating legislation that would reauthorize the SRF for many years. NUCA applauds the committee for making SRF reauthorization a priority in the 110th Congress, and we once again stand ready to assist in seeing the bill become law. The time is now.

There are many opinions and perspectives about the most effective funding mechanism to use to address these problems in the long term. Many organizations are advocating the establishment of a Clean Water Trust Fund or some other vehicle to provide a dedicated source of revenue for improvements for America's water and wastewater infrastructure. NUCA supports the concept of a trust fund although we recognize it will take significant time to pass legislation to allow that to happen. NUCA looks forward to working with government and industry to explore and evaluate alternatives for long-term solutions to funding America's water and wastewater infrastructure.

In the meantime, SRF legislation will take immediate steps to begin to address this problem by authorizing higher funding levels for this existing and successful program, which has done so much for our environmental infrastructure already.

Although there are several policy issues that will no doubt be debated during the legislative process, NUCA encourages the committee to focus on the big picture. For example, the impasse over prevailing wage requirements under the Davis-Bacon Act has stymied this legislation for too long. It is our understanding that Davis-Bacon provisions will be included in the coming legislation. I want to state clearly that NUCA represents both union and non-union contractors. Davis-Bacon is not an issue of contention for our members. We will fully support the bill as introduced.

"Americans for Pure Water"
Earlier, I alluded to efforts of NUCA and other members of the Clean Water Council to engage the American public in the clean water debate as a supplement to our ongoing advocacy efforts. To that end, last year the CWC kicked off the "Americans for Pure Water" media awareness campaign.

The goal of the campaign is to generate local media attention in politically targeted areas to spotlight the direct connection between failing underground infrastructure and current problems with public health, environmental quality and America's overall quality of life. In a nutshell, the idea is to motivate "everyday people" to encourage Congress to act, and act now.

The CWC hopes that the Americans for Pure Water Campaign will support our efforts to advance the coming SRF bill, and we encourage you to visit the APW Resource Center at www.americansforpurewater.com. This website contains background information on the issue, EPA wastewater needs estimates for every state, legislation addressing water issues, media coverage and related correspondence on the issue.

Conclusion
The math is simple. The past several years have shown a decline in federal investment in wastewater infrastructure while the infrastructure continues to age and in some cases fail at an alarming rate. This has created a major financial gap that will only get worse until a firm commitment is made and increased federal resources are provided to every state on a predictable basis.

Thank you for the opportunity to speak with you this morning.

Clean Water Council Members

- American Concrete Pavement Association
- American Concrete Pipe Association
- American Concrete Pressure Pipe Association
- American Council of Engineering Companies
- American Rental Association
- American Road and Transportation Builders Association
- American Society of Civil Engineers
- American Subcontractors Association
- Associated Equipment Distributors
- Association of Equipment Manufacturers
- Associated General Contractors of America
- Construction Management Association of America
- Laborers-Employers Cooperation and Education Trust
- National Association of Industrial Office Properties
- National Association of Sewer Service Companies
- National Association of Women in Construction
- National Precast Concrete Association
- National Ready Mixed Concrete Association
- National Utility Contractors Association
- National Society of Professional Engineers
- National Stone, Sand and Gravel Association
- Portland Cement Association
- Plumbing-Heating-Cooling Contractors - National Association
- The Vinyl Institute
- Uni-Bell PVC Pipe Association
- Water and Wastewater Equipment Manufacturers Association

J. Kevin Ward

Executive Administrator

Texas Water Development Board

On behalf of the Council of Infrastructure Financing Authorities

Subcommittee on Water Resources and the Environment

Committee on Transportation and Infrastructure

January 19, 2007

Madame Chair:

I am Kevin Ward, Executive Administrator of the Texas Water Development Board. I am testifying today on behalf of the Council of Infrastructure Financing Authorities. CIFA is the national organization of state officials involved in the financing of water and wastewater pollution control projects. CIFA members are responsible for the management of the Clean Water and Drinking Water State Revolving Funds.

Initially, I want to express how pleased we are that the issue of financing water quality improvements is at the forefront of the Subcommittee's agenda in the new Congress. Hopefully, today's hearing signals a renewed effort to move forward in cleaning up our nation's water bodies.

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While the progress made by States and the Federal government working in partnership to address water quality challenges has been considerable, it is not sufficient to meet the overwhelming need. All evidence points to a "Gap" that is large and growing. A survey of state CWSRF programs undertaken by CIFA in 2005 identified over 2,000 projects seeking loans requiring almost $9 billion in funding. Obviously a good number of these projects are not going to get underway anytime soon.

The past four years have not provided much encouragement in terms of the federal commitment to preserving and improving our water resources. Both Houses and Senate committees developed comprehensive legislation to reauthorize the State Revolving Funds, providing significant funding increases and program enhancements, only to see those efforts end in stalemate. The recent appropriations picture was equally bleak. Funds have been cut in half. Not only does this represent a decline in the dollar amount of funding available to help make these expensive pollution control projects more affordable, it represents an even starker decline in the level of real support since construction costs have rapidly increased during this period.

The Clean Water State Revolving Fund program is at a crucial juncture. The Congress has important choices to make as to its future. We believe the State Revolving Fund model remains the most effective and efficient means to provide assistance to communities to realize their water quality goals. But it is a program facing increasing difficulty in meeting priority needs. In order for this very successful State-Federal

partnership to continue to succeed, the federal commitment must be clear and sustained. In the recent past it has not been.

Legislation to reauthorize the Clean Water State Revolving Fund would be a critically important step forward in demonstrating that federal commitment.

The accomplishments of the Clean Water State Revolving Loan Funds provide ample argument for reauthorization legislation. Few federal programs have proven as effective in realizing their intended goals. Since its inception, the CWSRF has achieved an impressive record as an affordable mechanism for restoring this country's lakes, rivers and streams and protecting the health of its citizens. Close to $60 billion in low interest loans have been awarded to finance the construction of thousands of projects across the country. These projects serve millions of people and treat billion of gallons of wastewater every day – wastewater that would otherwise destroy precious water resources and threaten the health of millions of people. In addition to these important environmental and public health benefits, the CWSRF helps spur economic revitalization in thousands of communities.

The CWSRF produces these environmental and economic benefits in a way that is affordable for the customers who use these projects. The low interest loans offered by the CWSRF significantly reduce the user rates customers have to pay and bring these rates in line with their ability to pay. The low interest rates offered by CWSRF loans funded over the life of the program translate into $18 billion in savings, compared with

what they would be paying had these projects been funded with market rate borrowing. For a typical $10 million project with a CWSRF loan, the saving is $3.2 million. Since these interest savings are typically targeted at the most financially distressed borrowers, they represent a vital mechanism for bringing public health, environmental and economic development benefits to needy communities.

In looking at CWSRF projects funded in calendar year 2005, about 900 projects were finalized. Among the benefits created by these projects were:

21 billion gallons of water collected and treated per day

193 thousand construction and 77 thousand permanent jobs created

$1.1 billion in savings as a result of low interest loans

Let me turn to a few examples of what the CWSRF is accomplishing in my State of Texas.

We have all heard of the huge problem of deteriorating pipe systems facing urban areas throughout the country. The City of Houston has over 5,300 miles of sewer pipes, installed over the past 50 years, exhibiting varying degrees of corrosion and structural defects. The City has used CWSRF financing for projects citywide to inspect and rehabilitate aging pipes thus meeting a critical infrastructure challenge.

The CWSRF is helping to spur innovation and cooperative coordination. The High Island Independent School District project in Galveston County was cited by EPA for the

environmental and economic benefits it produced. Using a CWSRF loan in conjunction with other funding sources, the District replaced inadequate septic systems with a low pressure septic pump system and a constructed wetlands treatment system thus reducing point and non point source pollution. The land was donated by the Audubon Society and has been restored as a wildlife/bird watching area.

The City of Antonio Water System has used CWSRF financing to support its significant wastewater effluent reuse program. This recycle program consists of 64 miles of transmission line that conveys up to 35,000 acre-feet or roughly 20% of the City's current demand from the Edwards Aquifer, which is the City's primary source of drinking water.

As these three projects illustrate, the CWSRF is playing a vital role in enabling Texas to meet clean water goals.

CIFA strongly supports maintaining the State Revolving Loan Funds as the foundation for future progress in meeting water infrastructure needs. Innovation, new approaches and new priorities can be addressed in the context of the SRF. We also believe restoring funding to at least pre-2004 levels is essential if we are to continue forward progress in meeting our nation's water quality goals. Hopefully, passage of SRF reauthorization will lay the groundwork for a more realistic CWSRF funding level.

As the Subcommittee work on SRF reauthorization legislation, we would hope that you will keep in mind the record of accomplishment by the States and the perspectives of

State program managers. Ultimately, it is up to each State to deliver on the goals of the Clean Water Act.

We recognize the obligations and responsibilities of states in the SRF partnership. We must manage the funds in a fiscally responsible manner and be accountable. We must give priority in our loan decisions to the water quality benefits that will result and the urgency of environmental problems needing resolution. We need to give particular attention to the challenges faced by small and rural and disadvantaged communities. And, we must be creative financial stewards looking for innovative solutions to solve water quality problems.

We have long sought SRF reauthorization legislation and CIFA endorsed the bill developed by this Subcommittee several years ago. We feel funding levels and program operations have suffered from the failure to reauthorize the CWSRF and reauthorization will deliver a strong message that Congress remains committed to the State Revolving Funds.

The benefits of reauthorization should not be undermined by the levying of new requirements and limits on State programs. It is our experience that the more operating flexibility the States are allowed, the more success we can deliver in terms of meeting the environmental and financial goals of the program.

Certainly States must be fully accountable for their use of federal dollars but an excessive statutory overlay of mandates and set aides and operational requirements will only serve to stifle innovation and interfere with the ability of States to best respond to local needs. The success of this program derives from the flexibility of the SRF model allowing each State to determine the most effective means to address individual local water quality issues. Efforts to mandate certain approaches or restrict the use of funds to particular types of projects fail to recognize that water quality needs vary and each State is in the best position to decide how best to meet those needs.

There are a number of specific program changes that we would want to see included in CWSRF reauthorization that we would encourage the Subcommittee to consider as it develops legislation. We would welcome the opportunity to discuss how these recommendations would serve to improve SRF operations.

We very much appreciate the opportunity to share our views and look forward to working with you, Madame Chair, with the Ranking Member, Mr. Baker, and members of the Subcommittee.

STATEMENT OF
THE AMERICAN SOCIETY OF CIVIL ENGINEERS
ON THE
NEED FOR RENEWED INVESTMENT IN CLEAN WATER INFRASTRUCTURE
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
OF THE
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES
JANUARY 19, 2007

Madame Chairwoman and Members of the Subcommittee:

The American Society of Civil Engineers* (ASCE) is pleased to provide you with this testimony for the record on the parlous state of America's clean water infrastructure. We commend you for beginning your work in the 110th Congress by focusing on the importance of the need for a continuing federal investment in the nation's aging sewage treatment systems.

I. ISSUE BACKGROUND

The federal government has directly invested more than $72 billion in the construction of publicly owned sewage treatment works (POTWs) and their related facilities since passage of the Clean Water Act in 1972. Nevertheless, the physical condition of many of the nation's 16,000 wastewater treatment systems is poor, due to a lack of investment in plant, equipment, and other capital improvements over the years.

ASCE reported in its 2005 Report Card for America's Infrastructure (www.asce.org/reportcard/index.cfm) that many sewage-treatment systems have reached the end of their useful design lives. Older systems are plagued by chronic overflows during major rain storms and heavy snowmelt and, intentionally or not, are bringing about the discharge of raw sewage into U.S. surface waters. Because of these continued failings, ASCE gave the nation's wastewater treatment systems a grade of "D –" in 2005, down from a grade of "D" in our 2001 Report Card for America's Infrastructure.

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* *ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 140,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part I.501(c) (3) of the Internal Revenue Code.*

The U.S. Environmental Protection Agency (EPA) estimated in August 2004 that the volume of combined sewer overflows (CSOs) discharged nationwide is 850 billion gallons per year. Sanitary sewer overflows (SSOs), caused by blocked or broken pipes, result in the release of as much as 10 billion gallons of raw sewage yearly, according to the EPA.

In its "Clean Watersheds Needs Survey 2000," the EPA said that the nation needs to invest an estimated $181 billion (in 2000 dollars) to upgrade its aging sewage treatment plants. That estimate was submitted to Congress in August 2003. We believe that the need is even greater today; unfortunately the agency will not issue its next comprehensive needs report until 2009, based on data collected in 2008.

Meanwhile, federal funding under the Clean Water Act State Revolving Loan Fund (SRF) program has remained flat or declined sharply every year since 1995. Despite the impressive funding support provided in the 1970s and 1980s, federal assistance simply has not kept pace with the needs. Nevertheless, virtually every authority agrees that funding needs remain very high: the United States must invest an additional $181 billion for all types of sewage treatment projects eligible for funding under the Act, according to the most recent needs survey estimate by the EPA and the states, completed in August 2003.

In September 2002, EPA released a detailed gap analysis, which assessed the difference between current spending for wastewater infrastructure and total funding needs. The EPA Gap Analysis estimated that, over the next two decades, the United States must spend nearly $390 billion to replace existing wastewater infrastructure systems and to build new ones (the total includes money for some projects not currently eligible for federal funds, such as system replacement, which are not reflected in the EPA State Needs Survey).

According to the Gap Analysis, if there is no increase in investment, there will be a roughly $6 billion gap between current annual capital expenditures for wastewater treatment ($13 billion annually) and projected spending needs. Nearly seven years ago, the Water Infrastructure Network, a consortium of water and wastewater providers, researchers, environmentalists, engineers (including ASCE), and product manufacturers, recognized the problem. WIN released a study concluding that the annual investment need for all sewer treatment facilities is $12 billion. Little has been done in the interim, and the picture has not improved with the passage of time.

The Congressional Budget Office (CBO) released its own gap analysis in 2002, in which it determined that the gap for wastewater ranges, from $23 billion to $37 billion annually, depending on various financial and accounting variables.

The chairman of the full committee, Mr. Oberstar, stated the case quite succinctly in an October 2003 report: "Without increased investment in wastewater infrastructure, in less than a generation, the U.S. could lose much of the gains it made thus far in

improving water quality, and wind up with dirtier water than existed prior to the enactment of the 1972 Clean Water Act."

II. Short-Term Solutions

ASCE supports the reauthorization of the Clean Water Act to allow annual appropriations of $1.5 billion to $2 billion from the federal general fund for the Clean Water State Revolving Loan Fund (CWSRF) program. ASCE also supports funding research into wastewater treatment technology, which may reduce capital expenditures, as well as operation and maintenance cost.

In addition, the reauthorization legislation should include a prerequisite that all contracts for the acquisition of professional design services should conform to the "qualifications based selection" (QBS) requirements of the Brooks Architect-Engineers Act of 1972, 40 U.S.C. §§ 1101-1104. This will ensure that all publicly owned treatment works funded under the Clean Water Act are designed by the most highly qualified architects and engineers.[1]

The case for increased federal investment immediately is compelling. Needs are large and unprecedented; in many locations, local sources cannot be expected to meet this challenge alone and, because waters are shared across local and state boundaries, the benefits of federal help will accrue to the entire nation.

III. Long-Term Solution

ASCE supports enactment of a federal water infrastructure trust fund act that would provide a reliable source of federal assistance for the construction and repair of POTWs to reduce the enormous funding gap.

Without a permanent dedicated source of revenue, our clean water infrastructure remains vulnerable to conflicting federal budget priorities, which can—and do—change from Congress to Congress and administration to administration. (This legislation also should require application of the Brooks A-E Act to the acquisition of all engineering designs funded by the Act.)

Clean and safe water is no less a national priority than are national defense, an adequate system of interstate highways, and a safe and efficient aviation system. Many other highly important infrastructure programs enjoy sustainable, long-term sources of federal backing, often through the use of dedicated trust funds; under current policy, water and wastewater infrastructure do not.

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[1] This provision was included in water infrastructure legislation introduced in the 108th and 109th Congresses. The bills were not enacted. See H.R. 20, 108th Cong. § 3(b) (2003); H.R. 2684, 109th Cong. § 3(b) (2005); H.R. 4560, 109th Cong. § 302(b)(16) (2005).

Madame Chairwoman, that concludes our statement. If you have additional questions, please contact Michael Charles of our Washington Office at (202) 789-7844 or by e-mail at mcharles@asce.org .

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Executive Vice President

Statement for the Record
of the
American Supply Association

Presented by
Joel Becker, President
American Supply Association

Before
United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
On
The Need for Renewed Investment for Clean Water Infrastructure.
January 19, 2007

The American Supply Association (ASA) is the national organization serving wholesale distributors and their suppliers in the plumbing, heating, cooling and industrial pipe, valves, and fittings industries. Members of ASA are distributors, manufacturers, service vendors and independent manufacturer's representatives.

ASA applauds the Subcommittee for its making investment in clean water and reauthorization of the Clean Water State Revolving Loan Fund (CWSRLF) one of the first orders of business in the 110th Congress. Continued funding of water infrastructure projects is of vital importance to our nation's economy. Quick reauthorization by the Congress will allow pending projects to move forward.

In addition, ASA firmly believes that the time for a Clean Water Trust Fund, providing long-term, sustainable funding is now. The U.S. Environmental Protection Agency (EPA), the Government Accountability Office (GAO), and the Water Infrastructure Network (WIN) report a funding gap of $300 billion to $500 billion over 20 years between what is needed and what is actually spent on our infrastructure. Without a federal recommitment to clean water, the costs of maintaining existing and aging infrastructure, further stressed by ever increasing

population and industrial demands, as well as new and cost Clean Water Act requirements must be borne at the local level.

The needs of municipalities, cities, counties and towns have outgrown the funding levels of the Clean Water State Revolving Fund (SRF) The CWSRF program has been under siege since 2004, plummeting from $1.35 billion in 2004 to less than $700 million proposed for 2007. A dedicated source of federal funding must be identified to assure adequate and continued financial assistance to municipalities to meet the goals of the federal water quality program.

ASA supports the objectives of establishing a Clean Water Trust fund. Such a dedicated trust fund for clean water will ensure that infrastructure modernization and maintenance remains a priority; and will secure the long-term viability of the Clean Water State Revolving Fund (CWSRF), while also adding a significant grant component to help communities fully achieve the goals of the Clean Water Act.

An important component of a dedicated trust fund would be expanded eligibility under the CWSRF to authorize the use of the SRF for water conservation measures. This would enable consumers to make more efficient use of treated water, including incentives for the modification, retirement, or replacement of customer-owned water-using equipment, appliances, plumbing fixtures and fittings, and landscape materials.

Saving water through improved efficiency can lessen the need to withdraw ground or surface water supplies for municipal or industrial demands. Strategic use of water conservation not only helps save the nation's water resources but also can help extend the value and life of both water supply and wastewater treatment infrastructure, extending the beneficial investment of public funds.

ASA urges all members of the Subcommittee to include and support language in reauthorization of the Clean Water Act that would assist Congress in quickly identifying a dedicated source of revenue to ensure the availability of appropriations to fund clean water legislation

Thank you for your consideration of these comments. The American Supply Association looks forward to working with the Transportation and Infrastructure Committee on the creation of Clean Water Trust Fund.

CIFA Priorities

for

Reauthorization of the Clean Water Act

Clean Water State Revolving Fund Program

SRF Program Changes Supported by CIFA

1. **Flexibility and Focus at the State Level**

1.1 **State and Local Focus.** Maintain the flexibility, discretion, and focus provided to states and local entities in the implementation of the SRF Program in order to address environmental priorities.

1.2 **Determining Pollution Control Needs.** The U. S. Congress should continue to allow states and local entities to direct SRF funding to the greatest area of pollution control needs and requirements, as identified and prioritized by states and local entities.

1.3 **Extended Loan Terms.** Provide for statutory authorization for 30-year term maximums for the SRF Program that would meet the longer range financing and debt issuance needs of many entities by making the annual costs of the projects more affordable through spreading payments over the entire useful life of the project.

1.4 **SRF Program Transfers.** Provide for transferability of funds (including administrative funds but not program income) between the Clean Water and Drinking Water programs in order for program funds to be used where they are most needed.

1.5 **Private Utility Funding.** Authorize SRF funding of privately-owned treatment works, including non-profit or regulated for-profit utilities. This authority will enable states to better utilize federal funding to address water quality needs regardless of utility ownership.

1.6 **Land Acquisition**. Clarify land acquisition as eligible activity for SRF assistance

2. **Administrative Burden Reduction**

2.1 **Program Requirements and Controls**. The U. S. Congress should give clear direction to EPA to eliminate or significantly reduce unnecessary, burdensome, and costly federal programmatic requirements and administrative controls.

One area in which administrative burden reduction is needed is the requirement for annual SRF performance evaluation reviews. These annual reviews are labor-intensive and time-consuming for entities, many of which have routinely completed satisfactory reviews. An alternative to the existing review process would be to allow those entities meeting this standard (and subsequently considered lower risk) to be subject to an "abbreviated" review by EPA, possibly via a survey or questionnaire for information collection, or be subject to periodic on-site reviews every three to five years.

Another candidate for burden reduction is the SRF federal capitalization grant application process. Over the last several years, a significant amount of additional budgetary

supporting detail and documentation has been required as a part of the grant application. These additional requirements for greater detail translate to additional state agency staff resources, time, and effort to collect and submit the information as a part of the grant application package. The requirements for this additional financial detail should be eliminated or significantly reduced.

2.2 **Administrative Fees.** Allow states to use, for the general administration of the SRF Program, any and all fees collected by the state from any source, including loan proceeds.

2.3 **Capitalization Grant Reimbursement Timeframes.** Allow for a longer period of time (16 quarterly periods) to submit federal grant reimbursement requests to the Automated Clearing House. The current length of time for these reimbursement requests is 12 quarterly periods from the date of the initial federal capitalization grant award. The SRF Program is now at a sufficient level of maturity that the states are no longer finding it necessary to utilize these reimbursements as early in the process. Extending this period would provide the states with additional flexibility in their financial management of the SRF Program.

2.4 **Fee Restrictions.** Federal requirements/limitations with respect to fees should be applicable only to original funds provided through Federal capitalization grants to the SRF, as well as state match funds.

2.5 **NEPA Compliance.** Require EPA, RUS, and HUD to develop a single consistent environmental review process

3. **Small and Disadvantaged Community Needs**

3.1 **State Authority for Financial Needs.** Provide authority for states to tailor financial assistance, to include low or no interest loans, to accommodate the needs of small and disadvantaged communities.

3.2 **Technical Assistance Funding.** Ensure authority for states to utilize funds from the annual EPA CWSRF Program Capitalization Grant to provide needed technical assistance to small and disadvantaged communities.

3.3 **Hardship Determinations.** Delegate hardship determinations to states based upon state-defined criteria.

3.4 **Additional Financial Assistance.** Provide for federal grants or "loan forgiveness" through the CWSRF Program for a more flexible, balanced, and cost-effective program. States need authorization to offer a range of financial assistance, including 40-year CWSRF loan terms for disadvantaged communities, to be able to approach the many communities whose financial situation requires multiple forms of assistance.

3.5 **Independent Grant Programs.** No independent federal grant programs operating outside of the CWSRF Program should be authorized..

"The Need for Renewed Investment in Clean Water Infrastructure"

Subcommittee on Water Resources and Environment

Committee on Transportation and Infrastructure

U.S. House of Representatives

January 19, 2007

Robert A. Briant

Chairman

Clean Water Construction Coalition

Statement for the Record

Submitted January 25, 2007

Madam Chairwoman and Members of the Subcommittee, on behalf of the Clean Water Construction Coalition (CWCC) I am pleased to submit the following statement for the record.

At the outset, CWCC wishes to commend you and the Subcommittee for holding this important hearing. No subject and no resource is more important – and more fundamental – to the quality of life for all Americans than the condition of our Nation's water. As the Subcommittee turns its attention this Congress to the reauthorization of the Clean Water Act, today's hearing is a necessary and important first step.

As a matter of background, CWCC is an organization of 13 construction associations from throughout the Nation committed, as its initial goal, to raising the national awareness to the fact that the Federal Clean Water and Safe Drinking Water Acts have not been reauthorized in over a decade. Due to the lack of reauthorization, annual federal appropriations for sewer and water construction has diminished dramatically.

CWCC was organized on December 2, 2005. Representatives of the Coalition met periodically during 2006 with a Coalition Impact Event held in Washington, D.C. on May 18, 2006. That event brought together representatives of the associations that are part of the Coalition, other organizations that support the goals of CWCC, and various congressional leaders. CWCC hopes, and expects, to play a key role in the reauthorization of the Clean Water Act. As the Subcommittee moves ahead on that effort, we will be making our issue positions known. Pending that, our comments today focus on the overall importance of investing in our Nation's clean water infrastructure.

Madam Chairwoman, water is a unique and precious resource that is necessary to sustain life – human, animal and plant. As such, it is important for agriculture,

transportation, flood control, energy production, recreation, fishing, and municipal and commercial uses. Public opinion consistently and overwhelmingly supports making clean water a National priority. A recent national survey found that nearly 9 in 10 Americans say that federal investment to guarantee clean and safe water is a critical component of our Nation's environmental well-being. The survey also found that most Americans believe clean and safe water is such an important national priority that they are willing to pay more to get it.

Unfortunately, we are all well aware that our national water infrastructure is aging, deteriorating, and in need of repair and replacement. The American Society of Civil Engineers recently graded the condition of the infrastructure throughout our country. Wastewater infrastructure received a "D-". Nearly half of the sewer pipes in American cities are over 50 years old. Some are over 100 years old. Treatment plants build in the 1970's need to be upgraded. New mandates to manage municipal stormwater runoff have gone into effect. Water quality must be improved.

As a Nation, we are not investing enough in our clean water infrastructure to ensure that we will continue to keep our waters clean. As an example, this Administration has consistently proposed to cut clean water infrastructure funding to the lowest level in the Nation's history. Such cuts will only exacerbate the current backlog of water infrastructure projects. The Congressional Budget Office estimates the spending gap for clean water needs between $132 billion and $388 billion over 20 years. EPA's "Clean Water and Drinking Water Infrastructure Gap Analysis" found that there would be a $535 billion backlog of water and wastewater infrastructure projects by 2019 if additional investments are not forthcoming. Further cuts to the Clean Water State

Revolving Fund (CWSRF) will only broaden this gap as federal dollars provide vital funding to leverage public and private sector funds. Unless we act now to renew investment in our clean water infrastructure, we could lose the significant gains in water quality that have been achieved over the last 30 years.

In addition, it must be pointed out that investments in water infrastructure have a well-documented record of success in job creation and economic development. According to the American Public Works Association, every $1 billion invested in water and wastewater infrastructure construction creates over 40,000 jobs. Critical sectors of our economy rely on clean water. These sectors include the $45 billion commercial fishing industry; the soft drink manufacturers that generate $54 billion in sales; and, the manufacturing sector that uses more than 13 trillion gallons of clean water each year.

An integral component of the Clean Water program is the State Revolving Fund. The CWSRF, which provides funding to capitalize state clean water loan programs which in turn fund water quality protection projects for wastewater treatment, nonpoint source pollution control, and watershed and estuary management, is critical to clean water efforts nationwide and is an extremely cost-effective government program. For every dollar the federal government invests, more than two dollars is made available for environmental improvements. CWSRF is also a flexible program, allowing states to choose from a variety of assistance options, including loans, refinancing, purchasing, or guaranteeing local debt and purchasing bond insurance. States can also target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, estuary management, and wastewater treatment.

Madam Chairwoman, we appreciate the funding constraints that are facing the Congress this year, but we believe that the federal government must sustain a strong partnership with states and local governments to fulfill its share of the burden of maintaining and improving the Nation's water infrastructure. Accordingly, CWCC urges the Congress to promote funding for the Clean Water program at a level which ensures the highest protection of, and safety for, our Nation's water.

Thank you.

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TESTIMONY OF WENONAH HAUTER
EXECUTIVE DIRECTOR OF FOOD & WATER WATCH

PRESENTED FOR THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE, SUBCOMMITTEE ON WATER RESOURCES AND THE ENVIRONMENT

ON THE NEED FOR RENEWED INVESTMENT FOR CLEAN WATER INFRASTRUCTURE

JANUARY 19, 2007.

My name is Wenonah Hauter. I am Executive Director of Food & Water Watch, a non-profit consumer organization. We welcome this opportunity to present our views on the need for funding for clean water infrastructure.

According to the last *Clean Water and Drinking Water Infrastructure Gap Analysis* produced by the Environmental Protection Agency, there is a gap of $170 to $493 billion between the funds that are available and what American utilities need to provide clean and safe water.

This gap has real implications for our communities' environmental and public health. As our pipes and treatment systems age, more and more sewage spills into our streams, rivers, lakes and ocean, creating serious public health hazards. Population growth puts even more strain on our water systems.

There were more than 20,000 beach closings and swim advisories in 2005. A majority of beach closings are due to sewage overflows and malfunctioning sewage plants. The National Research Council recently warned that we should expect more water-borne disease outbreaks if there are not "substantial investments" made to improve America's water pipes and systems.

A significant majority (86 percent) of Americans still get their water and sewage from public utilities. This system has worked for decades. But now many communities are struggling to pay for their infrastructure needs. Our organization works with many of these communities. They feel pressure to privatize their water systems, but are concerned about the quality of service that private companies provide, and they question whether private investors will make the investment that their communities need.

Many communities who have privatized their water utilities have found themselves embroiled in corruption scandals, experienced declines in customer service, and find that rate increases correspond to increased profits by the company rather than increased investment in the community water system.

- **Atlanta, GA** - Under a contract with United Water, Atlanta's water utility experienced dramatic staff cuts, "unacceptable" maintenance backlogs, delayed repairs, and responses to emergencies that were "consistently and habitually inadequate and potentially hazardous. The city lost millions of dollars because the company was not reading, installing or maintaining water meters frequently enough, nor did it collect enough late bills. United Water's contract was rescinded just four years after it began.

- **Milwaukee, WI** - Billions of gallons of raw and partially treated sewage have poured into Lake Michigan and local streams since United Water took over Milwaukee's sewer system in 1998. A city appointed auditor and state reviewers have raised questions about the company's efforts to cut costs. The company cut the city's utility staff by nearly a third, allowed a year long backlog of uncorrected problems develop, and shut down pumps.

- **Indianapolis, IN** - Under Veolia's contract to provide water service to Indianapolis residents, non-union employees have seen their pension, health care and other benefits slashed. In October 2005, four Veolia employees were subpoenaed by a federal grand jury as part of an investigation into allegations that water-quality reports were falsified. The probe began amid accusations by Indianapolis City-County Council members that Veolia's local subsidiary has cut back on employees, water testing, purification chemicals, and maintenance. Some even allege the corporation has cooked its books in order to collect financial incentives.

- **Stockton, CA** - Since a partnership of Thames Water and OMI took over Stockton's water and sewer systems, city residents have seen increased rates, unfulfilled customer service requirements, and backlogged maintenance tasks.

- **Corruption, North and South** - Charges of corruption have followed water privatization schemes in many places. In Atlanta, GA, the mayor who oversaw their water privatization was convicted of tax evasion related to United Water campaign contributions. In East Cleveland, OH, the mayor was convicted of receiving kickbacks, bribes and secret payoffs related to their water and sewer contract with CH2M Hill. Massachusetts Inspector General called Veolia's contract to operate the sewer system in Rockland, MA, "tainted by scandalous activity." The Public Services Group (PSG) of Houston plead guilty to bribery charges related to its New Orleans sewage contract. And the mayor of Bridgeport, CT, was convicted of racketeering after collecting bribes from PSG before granting a sewer contract.

There has also been renewed lobbying by private water companies for private investment in the water sector through Private Activity Bonds and Public-Private Partnerships without transferring ownership or entering a full concession contract.

As an organization focused on safe and affordable water, we are concerned about the promotion of private activity bonds and public-private partnerships, as well as any regulatory change that would make CWSRF funds available to privately owned treatment works. These fundraising strategies all facilitate privatization of publicly-owned water utilities.

Considering the track record of the private sector in providing water utility services, the gap between public infrastructure needs and public funding should not be used as a pretext to shift control of water resources and infrastructure from the public to private sector. There is no evidence that the private sector can truly deliver a better and more efficient service than the public sector. Taxpayer dollars should not be diverted from public utilities to support private investors.

- **Public-Private Partnerships and Private Activity Bonds will not provide new financial resources for clean water infrastructure.** Both private companies and public utilities borrow money and recover their costs through rate increases. However, private companies face costs that public utilities do not. Besides making a profit, they must pay for contract and contract administration costs, third-party auditing, and taxes. As a result, private financing for infrastructure investment is more expensive than public investment. Relying on private capital raises the cost of infrastructure investment, without bringing in any new capital.

  Moreover, an increase in tax-exempt bonds in the investment market requires other public bond issuers to raise interest rates in order to lure investors, raising the cost of fundraising for other local government priorities. Private activity bonds crowd out investment in other public sectors.

- **Private investors do not make needed investments.** There is no evidence that private investment in the water sector will result in needed investment in long-term infrastructure. Communities around the country that have experimented with privatization have found that the private sector has not solved their infrastructure needs. From Pittsburgh to Atlanta, and Milwaukee to Indianapolis, private companies have failed to deliver on promised investment.

  Allocation of capital in communities with privatized water is based on a strategy that values short-term profit rather than long-term sustainability of infrastructure. However, the water business has one of the longest capital recovery periods of any industry. Investments made in infrastructure today will not pay returns for decades to come. Financial participation in the sector requires a long-term commitment to the consumers and communities. The public sector is far better equipped to invest for the long term than the private sector.

  Further complicating the situation is the trend of private equity firms purchasing water companies. They have an extremely short horizon for making a profit for shareholders. What is the likelihood that a company with this type of structure will make a long-term investment in infrastructure?

  Aqua America, Inc. Chairman and Chief Executive Officer Nicholas DeBenedictis described the problem at a conference in 2006: "There is concern that some of these financial buyers need an unacceptable amount of leverage to deliver the kind of returns that their investors expect - and in a shorter amount of time compared to the typical utility investment cycle. As a former regulator and someone who's been involved in these issues for more than 30 years, I am very skeptical about putting our precious water resources into the hands of financial entities that are highly leveraged and typically bring a short-term investment horizon."

- **Private investment does not support more efficient utility management.** A 2006 study of forty years of water and waste privatization by Mildred Warner, (Associate Professor, Department of City and Regional Planning, Cornell University), and Germà Bel, (Professor of Economics at University of Barcelona), found that there was no evidence for improved cost savings from privatization. Since utilities are generally a monopoly, there is no competition and, without competition, they found, the private sector was no more efficient than the public sector.

- **Private investment does not promote greener technology.** Installing non-traditional systems can, at first, be more expensive, though costs have shown to fall over time. As new technologies are more widely adopted, they often prove to be less expensive and provide greater public health and environmental bang for the buck. However, the demand by private investors for short-term profits creates a disincentive for the investment required for these technologies. In the United Kingdom, the emphasis on short-term payback on investments has created barriers to the installation of innovative and more sustainable infrastructure, such as distributed stormwater retention, where the payback period is often longer than for conventional designs.

- **The history of lifting Private Activity Bond caps in the waste management sector has resulted in poorly allocated investment.** The only environmental sector for which there is a history of the caps being lifted off of Private Activity Bonds is in the waste management area. One negative result was that the new infusion of capital led to large, ineffective, expensive incinerators being built that redistributed mercury and dioxin widely through the air. May of these incinerators became costly failures and had to be shut down, wasting many millions of dollars.

- **Government should not give out low-interest loans to private investors.** It is illogical for taxpayers to subsidize private utilities that regularly send profits out of the local community to investors in distant places. Investing in a public utility means that money is reinvested into the communities that they serve.

  Moreover, Private Activity Bonds, as a form of subsidy, represent a regressive step in the income tax system, since tax-exempt interest is primarily a benefit for taxpayers in higher income brackets.

- **Most Americans understand the need for federal investment in water infrastructure.** According to a recent poll conducted by Republican pollster Frank Luntz, 71 percent of Americans believe that clean and safe water is a national issue that requires dedicated national funding. As a matter of principle, the federal government should become a true partner with states and localities and pay for the necessary sewage and wastewater treatment systems to guarantee clean and safe water for future generations of Americans. The public is skeptical about private investment in essential water resources. Ninety one percent of Americans agree that "if, as a country, we are willing to invest over $30 billion dollars a year on highways and more than $8 billion a year on our airways, we certainly should be willing to make the necessary investments in our nation's rivers, lakes and oceans."

- **Private water companies do not merit a special tax break.** There is no reason that the private water industry should enjoy a special tax break. This would simply eliminate another source of revenue for the deficit-burdened federal government.

In order to enhance and sustain strong public water management, Congress must step up.

1. **State Revolving Fund allocations must be increased**. Food & Water Watch supports the quick action of this subcommittee to schedule this hearing so early in the legislative session, as well as anticipated efforts to initiate legislation and increase authorization levels for the Clean Water State Revolving Fund.

2. **A dedicated source of federal funding must be identified** to assure adequate and continued financial assistance to municipalities to meet the goals of the federal water quality program. The needs of municipalities, cities, counties and towns have outgrown the funding levels of the Clean Water State Revolving Fund. The CWSRF program has been under siege since 2004, plummeting from $1.35 billion in 2004 to less than $700 million proposed for 2008. A new bill should include language that would assist Congress in quickly identifying a dedicated source of revenue to ensure the availability of appropriations to fund clean water legislation

3. **Conditions in federal funding that favor privatizing water resources must be dropped**, in lieu of legislation to maintain a strong and reliable public sector.

4. **Water corporations should not obtain access to public funding** through tax-exempt private activity bonds. Instead, these resources should be used to support strong public management of our water resources.

We have national trust funds supporting the Architect of the Capitol, National Botanic Garden and the South Dakota Wildlife Habitat Project and 107 other trust funds, but none to support this essential resource. Congress made a commitment to fund clean water standards. Water is a public trust. It's time to take the politics out of funding it.

Statement of the
National Association of Water Companies

Before the

Subcommittee on Water Resources and Environment
House Committee on Transportation and Infrastructure

Regarding Meeting the Nation's Wastewater Infrastructure Needs

January 2007

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The National Association of Water Companies (NAWC) represents all aspects of the private water service industry. The range of our members' business includes ownership of regulated drinking water and wastewater utilities and the many forms of public-private partnerships and management contract arrangements.

Private water companies, like all other public water systems, are regulated on the federal level by the Environmental Protection Agency and on the state level by the various state health and environmental agencies. However, unlike municipally owned utilities, privately owned utilities are also regulated by the various State Public Utility Commissions, (PUC), which approve capital investments and set the rates our members charge.

THE INFRASTRUCTURE REPLACEMENT CHALLENGE

NAWC commends this subcommittee for tackling the complex issue of water infrastructure replacement and financing. This is an extremely important issue; how Congress responds to this challenge will not only set the parameters for the industry's response to infrastructure replacement, but also send important signals to the industry, which will guide it for years to come.

The water and wastewater industry as a whole is struggling with the challenge of closing the clean water and drinking water infrastructure financing "gap" as reported by the EPA in 2002.

However, in this same EPA report, EPA found that the funding gap for water infrastructure replacement "largely disappears if municipalities increase clean water and drinking water spending at a real rate of growth of 3% per year (over twenty years).[1]

In short, the infrastructure replacement challenge facing the water industry over the next several years is just that, a challenge; and one that the industry can largely contend with through good asset management, full cost-of-service pricing, consolidation, and public-private partnerships.

What the challenge is **not** is an unprecedented emergency that requires Congress to toss aside the State Revolving Funds, and create instead some massive grant program to bail out the industry. To that end, we encourage this subcommittee to continue working within the SRF framework, putting in place encouragements for utilities to manage their way through the infrastructure challenge. Our industry has historically been supportive of the SRFs; by providing primarily a modest subsidy on interest, it does not breed dependence like grants, thereby encouraging our industry to be self-sustaining and economically viable over the long-term.

HISTORY & LEGISLATIVE PRINCIPLES

NAWC was very encouraged by H.R. 3930 which was introduced and passed by this Subcommittee during the 107th Congress, garnering 97 bipartisan cosponsors. This piece of legislation was a good model for water infrastructure financing legislation, and with a few modifications we hope this subcommittee returns to this approach. Similarly, in the 108th Congress, NAWC supported H.R. 1560, which also passed out of this subcommittee with bi-partisan support. We viewed this bill as a positive step forward in the process. NAWC looks to this body to consider similar legislation this year. We, however, had a few concerns with past legislation, and hope that those concerns can be addressed in the 110th Congress.

Both H.R. 3930 and H.R. 1560 would have brought many innovations to the Clean Water State Revolving Fund (CW-SRF), which could have moved the water industry toward efficient use of resources and self-sustainability. The provisions in the bill, which encouraged the use of public-private partnerships, regionalization, and consolidation to address viability problems and infrastructure replacement challenges, are of great importance and are to be commended. Similarly, provisions encouraging full cost of service rates and sound asset management are essential if the industry is to meet the challenge and become self-sustaining. We hope that this subcommittee will ensure that these issues will be part of any water infrastructure legislation considered in the 110th Congress.

REJECT GRANTS AND TRUST FUNDS

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[1] U.S. Environmental Protection Agency, Office of Water, *The Clean Water and Drinking Water Infrastructure Gap Analysis,* September 2002.

To address the infrastructure financing challenge there are calls from some to establish a new federal grant program financed through a new trust fund and presumably some sort of new taxes. NAWC does not support such a concept and encourages this subcommittee to go on rejecting this misguided proposal.

The self-sustainability of utilities and the industry should be the goal and grants work directly against this. In fact, grants to utilities should only be made in the rare circumstance when other options have been exhausted.

Grants send the wrong economic and conservation signals to consumers. Grants

- Breed dependence on large federal subsidies,
- Encourage – even reward – bad management practices,
- Discourage innovation, public private partnerships, consolidation, and other creative business models,
- Cost the public more than other creative solutions would.

PRIVATE UTILITY ACCESS TO CW-SRF

We have been disappointed that the bills considered by this Subcommittee in recent years – H.R. 3930 and H.R. 1560 – would not have allowed access to the CW-SRF by privately owned utilities, thereby extending the benefits of the SRF to our customers. Private utilities have had access to the Drinking Water SRF (DW-SRF) since its inception. It has worked very well, and this innovation is long overdue in the CW-SRF.

When Congress authorized the DW-SRF it correctly concluded that the benefits of private access would flow to the customers of private utilities in the form of rate relief, not to their owners or shareholders in the form of increased profits. State public utility assure that investor owned utilities are not profiting from taxpayer investments. Since the benefits of the SRF loans will flow to customers, why shouldn't the customers of privately owned utilities enjoy the same advantages of the SRF as do those of municipally owned utilities? After all, customers of all systems, as taxpayers, are contributing to the SRFs.

The provision granting private access to the DW-SRF has created opportunities for privately owned utilities to work with states and municipalities in assisting failing systems and/or under-served areas. It would be a shame and a mistake to continue to foreclose these potential success stories in the wastewater industry, especially in a bill that is doing so much to bring creative solutions to the many infrastructure challenges we face.

NAWC strongly recommends that any bill introduced in the 110th Congress allow private utilities to be eligible to receive CW-SRF loans.

ROLE OF THE PRIVATE SECTOR

The private sector has long played a vital role in our nation's water infrastructure and stands ready to do much more. Outright private ownership is but one-model localities can pursue as a means of addressing their infrastructure challenges. Another viable option is contract operations, wherein the municipality retains ownership of the asset, in this case a water utility and its infrastructure, but the management and operations of the facility are contracted out to a private company.

History has shown that the private sector can and does provide clean water services to customers efficiently while focusing on long term sustainability through market-based solutions. Privately owned utilities are on the cutting edge of technical innovation and research. Furthermore, in this time of increased utility security awareness, the private sector has once again been on the forefront of these initiatives, attracting experts to the industry with firsthand security experience. The broad range of public-private partnership models can be adapted to the unique needs of individual communities. All of this is done while maintaining accountability to the public and complying with all federal and state regulatory requirements.

Studies by the National Association of Water Companies and others have shown that creative public-private partnerships and other arrangements can increase environmental compliance and simultaneously reduce operating costs by 10 to 40%. It is obvious that with such cost savings, the need to look to the federal government for assistance is greatly reduced, if not eliminated.

CONCLUSION

We appreciate the leadership role that this subcommittee has taken to address water infrastructure problems, and we also appreciate the concern that you have expressed regarding the need for cost-effective and innovative financial solutions. These are long-term challenges, and we look forward to working with the Committee to achieve long-term solutions that will allow the wastewater industry to stand on its own two feet.

Testimony for the Record
Rural Community Assistance Partnership (RCAP)

Subcommittee on Water Resources and the Environment
House Transportation and Infrastructure Committee

Meeting the Nation's Wastewater Infrastructure Needs
January 19, 2007

Chair Johnson, Ranking Member Baker, thank you for allowing us to submit testimony on the need for improved wastewater infrastructure for rural communities. The Rural Community Assistance Partnership (RCAP) shares your desire help rural Americans improve their quality of life by ensuring the availability of safe and clean water, and we look forward to working with you further on this issue.

Since 1969, the Rural Community Assistance Programs (RCAPs), the six regional service providers that constitute the RCAP network, have worked with federal and state agencies in all fifty states and Puerto Rico to help small communities address their drinking water and wastewater treatment problems. The RCAPs provide onsite technical assistance and training to enhance community competence in facilities development, management and finance, operations and maintenance, planning and development, capacity building, education and training, source protection, and funding for small and very small systems. With funding from a range of public and private sources, the RCAPs delivered services to more than 2,000 rural communities last year, ninety percent of which had populations of 2,500 or fewer. By leveraging approximately $25 of additional funding for every $1 received, the RCAPs direct public investments to produce lasting results.

Madame Chair, we applaud the efforts of you and your colleagues to take immediate action in the 110th Congress to assure adequate funding for clean water infrastructure in small rural communities, which often lack access to equipment, staff capacity to deal with regulatory compliance issues, and financial resources to install and operate systems. The funding gap has passed the point of crisis, particularly in communities with fewer than 3,500 residents that need help most. We believe the HR 1560 "The Water Quality Financing Act of 2003" is an excellent blueprint for new legislation, and urge you to consider a clean water trust fund as the mechanism to provide the dedicated funding source this issue requires.

Wastewater Needs Great and Challenges Unique in Rural Communities
The need for greater federal assistance for wastewater infrastructure in America's small rural communities is indeed great. Consider these statistics:

- Nearly 1 million rural households do not have indoor plumbing;
- More than 70 percent of our nation's housing units that lack complete plumbing are in small communities;
- Water systems in communities serving fewer than 10,000 residents are more than twice as likely to violate drinking water standards for microbes and chemicals than systems serving more than 10,000;

- The Environmental Protection Agency estimates that $13.8 billion is required to meet clean water needs of small communities of 10,000 or fewer nationwide.

These numbers are indeed daunting and become even more so when one considers the unique challenges small communities face in meeting water and wastewater needs in comparison to larger communities. For example, the Small Town Task Force, established by Congress in 1992 to advise EPA on how to work better with small communities to improve environmental compliance, found that technical and administrative capacity is severely limited in small towns. As a general rule, small towns:

- Have no full time officials and little or no professional staff;
- Cannot attract or support private technical businesses; and
- Have few, if any, training opportunities for staff or town council members.

Additionally, financial resources are severely limited for small towns, which often rely on government loan funds and grants as the sole revenue available to meet infrastructure needs.

- Almost by definition, small towns have severely limited tax bases, which means limited budgets;
- Small communities bare four times the costs of installing and maintaining water and wastewater systems than do households located in larger communities;
- Because of limited opportunities for young people, small towns tend to have disproportionately older populations and thus incur higher social service costs;
- Small towns tend to have fragile, heavily concentrated economic bases; and
- Infrastructure costs fall disproportionately on small communities because entry-level costs must be distributed over a smaller base.

Finally, small communities often lack the political clout on the state and national levels to leverage greater government focus on their infrastructure needs.

Case Study

Almelund, Minnesota, located in Chisago County in Minnesota's 8th Congressional District, is representative of the challenges faced by small rural communities across the country. Almelund is unincorporated and unsewered; its sixty homes use septic systems, most of which are failing. The community has no tax base and lacks the trained municipal staff required to address such an intimidating problem. With no other options, Almelund contacted Midwest Assistance Program (MAP), the Midwest Regional RCAP, for assistance. MAP is currently helping Almelund establish a Subordinate Sewer District (SSD) within the nearby Township of Amador (population 744). Once this step is complete, MAP will help plan and construct a community-wide system, which will be owned and operated by the Township.

Almelund is only one of the 22 communities currently being served by MAP in Minnesota's 8th District. The 12 projects in progress will directly affect the lives of 22,000 residents, almost 10,000 of which are low-income, by ensuring access to cleaner and safer water.

Small Communities Cannot Shoulder the Burden Alone

Small communities like Almelund cannot alone raise the capital necessary to meet their current and future drinking clean water needs. While State Revolving Loan Funds (SRF), USDA Rural

Utility Services Loan and Grant programs and CDBG funds provide some support, the funding is inadequate, decreasing, and often channeled disproportionately away from rural communities. Of the resources that do exist for rural areas, some are ad hoc and do not guarantee funds go where they are most needed.

The needs of municipalities, cities, counties and towns have outgrown the funding levels of the Clean Water State Revolving Fund (CWSRF). The CWSRF program has been under siege since 2004, plummeting from $1.35 billion in 2004 to less than $700 million proposed for 2007. The overall needs are overwhelming: the EPA, GAO and the Water Infrastructure Network (WIN) calculated a funding gap of $300 billion to $500 billion between what is needed and what is actually spent on our infrastructure over the twenty year period from 1999-2019.

At the same time, rural communities currently face a shrinking pool of government financing. While the loan portion of money available through the USDA Rural Utilities Service has actually increased over the last several years, the grant funding available has decreased. Many of the low-income rural communities we work with count on that grant money to make it affordable to borrow for infrastructure improvements. While some of the communities we work with have water and sewer rates far below sustainable and reasonable levels, others are already paying 5, 10 or even 20 percent of their income for these services. It is unrealistic to ask that they increase water rates.

What is more, a recent analysis conducted on behalf of the RCAPs indicates that nearly 30 percent of States have not distributed Clean Water SRF funds to very small communities under 3,500 over the past five years in proportion to the demonstrated need. The study found that if those States were to have distributed funds according to the demonstrated need, very small communities would have received approximately $240 million more than they actually did to help them obtain adequate wastewater infrastructure.

Finally, dwindling resources for water infrastructure has increased the prevalence of ad hoc solutions such as Congressional earmarks like State and Tribal Assistance Grants (STAG). While these seem to be an effective way of addressing the shortfalls in infrastructure financing, they are potentially neither efficient nor equitable in addressing the financing problem. There is no guarantee that the communities receiving these resources were not already large and wealthy enough to afford private market financing, or needed or desired infrastructure improvements. Additionally, these STAG grants only pay for 55 percent of the project cost, leaving the community to raise the other 45 percent; in some cases this is a burden the community neither understands nor is equipped to meet.

Clean Water Trust Fund

RCAP is increasingly aware of the need for new mechanisms for raising capital and ensuring that it is provided to communities where it is most needed. As a national network of technical assistance providers, we have become increasingly concerned of the inconsistency of infrastructure financing mechanisms across the United States. While some states have developed efficient mechanisms for coordinating and therefore leveraging funding for infrastructure improvements, others have not and run chronically short of resources to serve growing community

needs. In these times of growing need and shrinking relative infrastructure resources, there is a critical need for sharing and adoption of financing best practices across states.

While we do not believe that the federal government could successfully require states to adopt particular financing practices without committing additional resources, we believe that the development of an infrastructure trust fund could provide an opportunity to encourage such practices. The allocation of funds from the trust fund could serve as a carrot to encourage the adoption of best practices that would make financing of infrastructure more coordinated, efficient, and rational. By coordinating financing, states could become stewards of the resources already available.

In some states, wise investments of resources have allowed for a replenishment and even expansion of financial resources over time. Likewise, some states have rationalized the application process so that communities are less burdened in applying for financing. Additionally, some states have coordinated across funding agencies, and through this have been able to engage communities in discussions about strategic planning and asset management so that the water and wastewater systems developed or improved are not only more sustainable, but also more directly linked to economic development opportunities in the area.

Other Recommendations

We hope that you will incorporate the idea of an infrastructure trust fund into your subcommittee's legislation for the 110th Congress. The trust fund would provide the dedicated funding source needed to actuate many of the policies recommended by your committee in HR 1560 "The Water Quality Financing Act of 2003" which the RCAPs supported. Among the provisions we back are:

- The $75 million annual authorization for a comprehensive technical assistance EPA program to assist rural communities with their wastewater infrastructure needs. Current law does not provide for a general technical assistance grant program for small rural communities;
- A small systems revolving fund to provide capitalization grants to non-profits for use in providing small loans to rural communities for emergency repairs, small systems upgrades and pre-development and planning assistance;
- A small rural set-aside of 15 percent of state capitalization grants to ensure that small rural communities receive funding proportional to need; and
- Simplified procedures for small systems to obtain financing.

We thank you for considering our testimony on the pressing and critical issue of water infrastructure financing, and thank you for your commitment to meeting the needs of small rural communities. Please let us know if we can be of assistance.

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WEF Position Statement:
Sustainable Infrastructure for Clean and Safe Water
Approved by the Board of Trustees, April 2005

We have made tremendous progress toward achieving national water quality goals since the passage of the Clean Water Act in 1972. High levels of wastewater treatment are the norm throughout the United States and we enjoy one of the highest levels of water quality in the world. Despite this progress, water pollution still persists. According to EPA's 1998 Water Quality Inventory Report to Congress, 44% of assessed estuaries and 35% of assessed rivers and streams have impaired water quality due to a variety of sources, including inadequately treated wastewater One of the most critical issues facing Americans is how to improve and maintain our infrastructure to ensure that we fully enjoy the health, economic and social benefits that clean and safe water provide. Infrastructure problems associated with aging pipes, out-dated systems, and inadequate capacity to meet growing population demands are requiring many communities to make huge investments in upgrades to their water and wastewater infrastructure systems. According to the EPA, the costs associated with these upgrades range from a low of $485 billion to a high of $896 billion over the next twenty years. These amounts are beyond the capacity of some municipalities to shoulder alone. If this challenge is not met, EPA estimates that by 2016 water pollution levels could be similar to levels observed in the mid-1970s.

WEF Position

The Water Environment Federation supports a three-pronged approach to solve the infrastructure challenge facing water and wastewater utilities: First, utilities must be well managed and appropriately funded to ensure long-term sustainability of collection, treatment and distribution systems; second, there must be a significant and continuing federal investment commitment; and, third, the general public and business community must play a larger role in ensuring that utilities continue to effectively serve their communities.

Utilities must be well managed locally to ensure long-term sustainability of collection, treatment and distribution systems: The first line of defense in ensuring Americans enjoy the benefits of clean and safe water is ensuring our local water and wastewater utilities are well maintained and operated with sufficient local support. Specifically, WEF supports:

- Strong professional staff that are viewed as advocates for clean and safe water in the community and on the state and federal level. In addition, utilities must have employee development and training programs that ensure utility staff possess the skills needed to manage, operate and maintain the utility using best practices;
- Full cost-of-service pricing systems that encourage local communities to establish rates that reflect, to the maximum extent practicable, the system's true life-cycle costs, including debt service, and that can support long-term management needs;
- Sustainable management approaches, including asset management and environmental management systems, that proactively ensure long term viability of each component of the system while simultaneously ensuring compliance with local, state and federal environmental regulations;
- A culture of constant innovation and research into new technologies and management approaches that support best management practices, including conservation, efficiency and reuse; and a system to ensure transparency and public participation so the utility remains accountable to ratepayers and the general public.

There must be a significant and continuing federal investment: WEF recognizes that even if local utilities do all the above and are managing their systems using best practices, federal assistance in financing infrastructure costs will continue to be essential for many communities. Congress must make a significant renewed commitment to help communities and regional watershed partnerships meet their obligations under the Clean Water Act and the Safe Drinking Water Act. Specifically, WEF supports:

Strengthening the SRF—

- Reauthorization of the Clean Water and Safe Drinking Water State Revolving Fund Programs (SRF) with a significant increase in appropriations to more closely reflect financing needs that exist;

- Improved administration of State Revolving Funds, that streamlines the application process, provides increased flexibility to States to determine, with public input, project eligibility and environmental compliance standards, and encourage innovative partnerships that bring diverse stakeholders together for more effective broad-based solutions; and reduces paperwork burdens on communities;

- Flexible forms of financing, made available by states on the basis of need, to assist communities that do not have the rate base to support conventional or SRF loan financing costs. These include extended loan terms, loan forgiveness programs and grants. Communities in need often include low-income communities and small communities or those facing costly environmental challenges such as correction of CSO and SSO problems or meeting new TMDL and security requirements. More comprehensive affordability criteria should be developed for states to use in allocating SRF financing;

- A dedicated revenue source for the SRF could ensure that federal investment in water infrastructure is consistent and no longer solely depends on annual discretionary appropriations. WEF believes that any dedicated SRF revenue source identified should be broad-based, related to clean and safe water, and should not impose a national tax on local water and wastewater ratepayers.

Support for State Programs, Small Communities, Research, Asset Management, and Public Education—

- In addition to increased funding for the SRF, assuring infrastructure sustainability will require increased federal support for States to administer clean water programs, including support for watershed based approaches; federal support for technical assistance to small communities; increased federal investment for research and development of treatment and infrastructure technologies and asset management strategies that improve the life-cycle of wastewater treatment systems; and federal support for the development of a national program to educate the public about the benefits and economic importance of water and wastewater infrastructure.

The general public and the business community must play a larger role in ensuring clean and safe water. WEF supports strategies that encourage greater participation by the general public and the business community in maintaining the healthy operation of community water and wastewater treatment facilities. WEF believes that to ensure long term environmental stewardship of our water resources, all parts of society must be involved. Specifically, WEF supports:

- Entering into partnerships and cooperative relationships with the business community to develop innovative, cost-effective solutions to infrastructure sustainability. Public/private partnerships should not be restricted or hindered by tax laws, grant conditions or other federal requirements. Public-private partnership decisions should be made locally based on what local officials determine is most appropriate for preserving and enhancing the water environment;

- Elected officials and non-governmental organizations, including public health organizations, advocacy groups, business associations and other civic organizations, playing a leadership role in highlighting the importance of water infrastructure and continued investment in it;

- A continued commitment from WEF to continue public outreach among all stakeholders to increase the public's support for investment in infrastructure for clean, safe water.

WEF recognizes that no single solution addresses the full range of clean water infrastructure and related challenges. All levels of government and the private sector must share responsibility for effective, efficient, and fair solutions to protecting our nation's waters.

About the Water Environment Federation
Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with members from varied disciplines who work toward the WEF vision of preservation and enhancement of the global water environment. The WEF network includes water quality professionals from 76 Member Associations in 30 countries. **www.wef.org**

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Testimony
(for the record)

Of

Charlie Nylander
Chairman, Water Infrastructure Financing Subcommittee,
Legislative Committee
Western Coalition of Arid States (WESTCAS)

For

The House Committee on Transportation and Infrastructure
Subcommittee on Water Resources and the Environment

Hearing On

"The Need for Renewed Investment in Clean Water Infrastructure"

January 19, 2007

The Voice of Water Quality in the Arid West
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Madam Chair and Members of Subcommittee, the Western Coalition of Arid States (WESTCAS) is submitting this testimony for the record to the House Committee on Transportation and Infrastructure, Subcommittee on Water Resources and Environment hearing on January 19, 2007 regarding "The Need for Renewed Investment in Clean Water Infrastructure". My name is Charlie Nylander, and I represent the interests of WESTCAS and serve as Chairman of the Water Infrastructure Financing Subcommittee of the WESTCAS Legislative Committee.

WESTCAS is a coalition of approximately 125 water and wastewater districts, cities, towns, and professional organizations focused on water quality and water quantity issues in the eight States of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, and Texas. Our mission is to work with federal, state, and regional water quality and quantity agencies to promote scientifically sound laws, regulations, appropriations, and policies that protect public health and the environment in the arid West.

Financing water infrastructure projects is of particular concern to our member's, all of whom are located in the arid regions of the Western United States. Over the past decade, the population of the Western states has grown approximately 20 percent—greater than any other region of the United States. The demand for both water and water infrastructure has increased just as dramatically. The aging of existing water infrastructure, increasing environmental mandates, serious forest fires, and prolonged drought conditions have magnified and increased this demand, threatening the very communities and economies established throughout the Arid West.

Regarding water infrastructure, WESTCAS avidly supports the development of a new Clean Water Funding Bill, early action by your Subcommittee to complete hearings, and stress the need for an increased authorization level for the Clean Water State Revolving Fund and the consideration of concepts for a Clean Water Trust Fund. This is the time for renewed investment in Clean Water Infrastructure, and the following testimony attests to the import and timeliness of the much needed Congressional action to address the burgeoning Clean Water Infrastructure financing needs.

A number of important factors applicable to the Arid West should be considered regarding the financing of water infrastructure projects, as follows:

- The rapid population growth in the Arid West is challenging local governments, including: county, municipal, Native American, and special districts to provide quality utility services for water and wastewater due to the growing number of existing and new customers, their increasing water demands, and the volumes of wastewater requiring treatment.
- Existing utility infrastructure is typically: aged, and in need of upgrade or replacement, over-loaded, undersized, and constructed of materials that have not proven to have the life expectancy anticipated at the time of original installation or construction.
- Environmental regulations and standards are continuing to become more stringent over time regarding both water supply and wastewater treatment, requiring more sophisticated and expensive treatment processes prior to water supply distribution and consumption, or wastewater discharge into the waters of the United States.

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- Homeland security concerns have increased the costs associated with utility system surveillance, security protection, and response/mitigation planning for acts of terrorism and sabotage.
- The population growth in the Arid West has a significant demographic proportion of retired and aged citizens who are on a fixed and/or limited incomes, and who cannot afford the escalating utility costs that water utilities must attempt to distribute to the local customer base.
- Funding mechanisms for water infrastructure are constrained to a handful, and although local utilities understand that customers in the utility service area should bear the burden of full cost pricing, increasing utility rates alone cannot generate the capital required to maintain, replace, or construct badly needed water infrastructure.
- To-date annual appropriations for the U.S. Environmental Protection Agency's state revolving loan funds for drinking water and wastewater infrastructure have been inadequate to meet the growing national infrastructure demands. Federal funding has been steadily decreased, especially over the past three years.
- The needs of municipalities, cities, counties, and towns have outgrown the funding levels of the Clean Water State Revolving Fund (CWSRF). The CWSRF program has been decreased since 2004, plummeting from $1.35 billion in 2004 to less than $700 million proposed for 2007.

According to recent information from the Government Accountability Office (GAO), drinking water and wastewater infrastructure costs over the next 20 years may range from $492 billion to $820 billion. A recent EPA report, called the Gap Analysis Report, contains similar infrastructure cost ranges from $499 billion to $929 billion. The Water Infrastructure Network (WIN), a coalition of industry, engineering, professional, and various environmental organizations gathered data for a high-end estimate of $806 billion. Sorting through the GAO, EPA, and WIN report estimates finds the funding gap for just Clean Water Infrastructure Financing is estimated to be between $300 billion and $500 billion between what is needed and what is actually spent on Clean Water Infrastructure.

It is interesting to note that the above-mentioned figures for the infrastructure needs may indeed not be accurate, and in fact could be significantly underestimated. WESTCAS members technically understand that the processes employed to collect the infrastructure financial need were based on a mixture of municipal planning predictions, based on disparate planning periods, e.g. 5-year, 10-year, and 20-year planning for capital improvement planning. In any case, the GAO, EPA, and WIN Coalition figures are more than accurate in making their point on the ever widening gap in water infrastructure needs.

The WESTCAS members are troubled by the burgeoning population growth they are experiencing in their western communities, and the increased water and wastewater utility demands on their infrastructure systems. In consideration of the bulleted information that I have highlighted above, our members believe that the federal government must play a more significant role in the financing for water infrastructure, not a lesser role as implied by the recent decreases in EPA's state revolving fund appropriations. However, when confronted with the task at hand, i.e. finding the right solution to water infrastructure financing, WESTCAS members believe that any solution that is being sought should be comprehensive and equitably structured to address all of the national needs. WESTCAS members believe that the federal government approach should be "multi-disciplinary" and capable of

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being utilized as a portfolio of additive mechanisms that collectively solve the Nation's water infrastructure financing problems. A dedicated source of federal funding must be identified to assure adequate and continued financial assistance to those entities that are striving to meet, and must meet the goals of the Clean Water Act.

To this end, WESTCAS members believe that this Committee should consider a spectrum of mechanisms including such suggestions as have been made to-date (or are yet to be proposed) such as: tax deductions for water and wastewater utility fees; appropriate regulation of the quality of wastewater effluent discharges that is more dependent on site-specific conditions versus a "one size fits all regulatory approach"; the water infrastructure trust fund; improved EPA revolving loan funds; and other clever scientific, legal, and financial approaches that collectively narrow the gap on water infrastructure financing. In particular, regarding the creation of a water infrastructure trust fund, WESTCAS recommends the direction to an "appropriate body" to expeditiously examine the potential funding mechanisms for a Clean Water Trust and make recommendations to this Subcommittee by no later than December 31, 2007 on the most appropriate mechanisms to use to generate sufficient revenues to carry out the goals of a Clean Water Trust Fund. Such an examination should solicit input through an inclusive, but expeditious process, from a broad spectrum of knowledgeable sources, including WESTCAS and other organizations intimately involved in Clean Water Infrastructure construction, operation, and maintenance.

It is important to ensure that any legislation devoted to Clean Water Infrastructure financing contain a title regarding water research. In this regard, please note that EPA regulatory programs, developed pursuant to the Clean Water Act, are the most significant driver for the growing needs for wastewater infrastructure financing. That is why seeking a financial solution must be coupled with developing regulatory solutions simultaneously. Wastewater treatment requirements are largely based on national water quality criteria that are based on aquatic species and flow regimes not necessarily representative of low flowing rivers, ephemeral rivers, and effluent-dominated rivers typical of the Arid West. To properly consider regional differences in aquatic species and hydrology, methodologies and criteria must be developed through sound, scientific research studies that can support site-specific water quality standards. WESTCAS has historically served as a dominant supporter of such research, and was successful in supporting the establishment of the Arid West Water Quality Research Project (AWWQRP) in 1995 that resulted in a $5 million federal appropriation (Public Law 103-327).

In the development of a program for Clean Water Infrastructure financing, specific authorizations and allocations should be considered for the conduct of water research in the broadest terms. Research regarding: water quality criteria and standards; wastewater collection and treatment technologies; and wastewater reuse and recycling technologies; represent just a partial listing of the scientific and technical research needed to address fundamental questions and support fundamental decision-making needed in Clean Water regulation, Clean Water Infrastructure financing. Clean Water Infrastructure financing needs must be derived from appropriate Clean Water laws, regulations, and standards. In order to support Clean Water programs, the nation must have sound, scientific research at the foundation.

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During the subcommittees' hearing deliberations on "The Need for Renewed Investment in Clean Water Infrastructure Financing" significant consideration will undoubtedly be given to the growing national infrastructure needs, and to particular regional issues that should be addressed. Following the hearing, any forthcoming legislative initiatives should definitely consider special regional needs, titles and programs that will complement the goals of the Clean Water Act, such as improved watershed management programs, non-point source programs, and programs aimed at improving the aquatic health of the waters of the United States.

The broad subject of this hearing is indeed an opportunity to improve the nation's implementation of the goals and objectives of the Clean Water Act. Since infrastructure financing is the focal point of the hearing, care should be taken to ensure the equitable distribution of any ensuing financial programs. Funding for rehabilitation, repair, and replacement of existing Clean Water Infrastructure is paramount, yet in several regions of the United States, significant population growth and water infrastructure demand should not be left "ill-funded" simply because of the added issue of "new development". The population demographics of this nation are in constant flux, and any renewed investment in Clean Water Infrastructure should appreciate and assist those areas of the nation, like the Arid West, where population growth is creating unquenchable demands for water and Clean Water Infrastructure.

There are several WESTCAS comments to consider in this vein. First, "new growth" limitations unduly penalize the Western states and the burgeoning population growth they are experiencing, much of said growth occurring due to the influx of retirement aged persons on limited or fixed incomes. Our WESTCAS member's perspective is that the demand for new communities, subdivisions, and extended urban areas is in fact what is straining the present utility systems and the financing ability of local government.

Secondly, the extension of loan repayment periods is a valuable attribute in any draft legislation, in that it provides financial flexibility for the local governments responsible for constructing and maintaining the water infrastructure. Along this same vein, legislative provisions for set-aside grant funding for small communities with a population of 10,000 or fewer individuals is necessary to accommodate the typical growth patterns in most of our western states.

Lastly, the taxable source for the creation of a national trust fund for water infrastructure will likely be the most challenging aspect of the trust fund mechanism, as previously mentioned. No specific industry will voluntarily desire to be taxed to provide the basis for a water infrastructure trust fund. Early legislative concepts regarding the taxation of the beverage industry provoked heated discussion. However, this subcommittee must not be persuaded to give up on a trust fund mechanism because it is too hard to find the appropriate tax base. Aside from the previous suggestion regarding the need to have an appropriate body examine and make specific recommendations for the most appropriate course to take, WESTCAS recommends that consideration be given to taxing a base made up of entities that actually contribute influent to the Nation's wastewater treatment facilities; and who also create the most demand on our Nation's water treatment and supply systems.

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Some common contributions to wastewater influent include paper products e.g. toilet tissue; cooking oils and grease contributed by household kitchen and restaurant use; soaps and detergents; dyes and other chemical products contributed both by household and commercial enterprises; and the newest category of concern, i.e. pharmaceuticals. In terms of wastewater treatment issues, oil and grease often create a difficult treatment issue. Pharmaceuticals are now rapidly becoming a significant concern in that they apparently pass through the treatment plants and are discharged into the Nation's rivers and lakes where they are capable of adversely affecting aquatic life, and/or becoming a public health concern regarding their impact on downstream public water supply diversions. In effect, the Committee may be prudent to consider broadening the group of industries targeted for taxation, so as to spread the impact of the taxation process.

On behalf of WESTCAS, I thank the subcommittee for this opportunity to provide testimony.

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