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REVIEW OF INNOVATIVE FINANCING APPROACHES FOR COMMUNITY WATER INFRASTRUCTURE PROJECTS—PART I

(112–73)

HEARING

BEFORE THE

SUBCOMMITTEE ON
WATER RESOURCES AND ENVIRONMENT

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

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U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

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February 24, 2012

MEMORANDUM

TO: Members of the Subcommittee on Water Resources & Environment

FROM: Bob Gibbs
Subcommittee Chairman

RE: Hearing on "A Review of Innovative Financing Approaches for Community Water Infrastructure Projects"

PURPOSE OF HEARING

The Water Resources and Environment Subcommittee will hold a two-part hearing, in Room 2167 of the Rayburn House Office Building, on reviewing innovative approaches for financing community water infrastructure projects. The first part of the hearing will be held on **Tuesday, February 28, 2012, at 10:00 a.m.**, and the second part will be held on **Wednesday, March 21, 2012, at 10:00 a.m.**

The Subcommittee will receive testimony from city mayors, municipal and private water utility directors, experts in municipal and private capital project finance, associations of water quality professionals and contractors, and a State infrastructure financing authority on potential innovative financing tools, including public or private funding and investment mechanisms, to better enable local communities to finance wastewater (and drinking water) facilities mandated by State and Federal environmental laws and regulations.

The hearing also will look at a draft legislative proposal that would be entitled the "Water Infrastructure Finance and Innovation Act" (WIFIA). WIFIA would establish additional financing mechanisms to supplement the State revolving loan fund programs in addressing the means for funding water infrastructure projects. This WIFIA proposal is in part modeled after the Transportation Infrastructure Finance and Innovation Act (TIFIA) for surface transportation projects and other credit programs governed by the Federal Credit Reform Act.

JURISDICTION

The Transportation & Infrastructure (T&I) Committee has jurisdiction, under the Clean Water Act ("CWA"), over water quality and wastewater infrastructure programs administered by the U.S. Environmental Protection Agency (EPA). Title III of the CWA places a number of treatment and other regulatory requirements on municipalities' wastewater treatment works. Title IV of the CWA requires permits, under the National Pollutant Discharge Elimination System (NPDES) permit program, for the discharge of pollutants from wastewater treatment works and certain municipal storm sewer systems. Title VI of the Clean Water Act provides for the establishment and capitalization of Clean Water State Revolving Loan Funds (SRFs) to aid in funding the construction of wastewater treatment works and other wastewater infrastructure around our nation.

The T&I Committee also has jurisdiction over water supply infrastructure. The Committee does not have jurisdiction over Safe Drinking Water Act regulatory requirements. Safe Drinking Water Act regulations fall under the purview of the Energy & Commerce Committee as public health regulations. In addition, the Energy & Commerce Committee has jurisdiction over assistance, including infrastructure assistance, that is for the purpose of meeting the regulatory requirements of the Safe Drinking Water Act.

BACKGROUND

It is widely accepted that clean drinking water and public wastewater services are necessary priorities to sustain public health, support our economy, and protect the environment. Significant amounts of public resources have been devoted to water infrastructure in American communities over the last 40 years to meet these priorities. An impressive inventory of physical assets has been developed over the course of this period.

The nation's 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. Our nation's community drinking water infrastructure includes a similarly impressive array of facilities.

Since 1972, with the enactment of the Clean Water Act, Federal, State, and local investment in our national wastewater infrastructure has amounted to well over $250 billion. This investment has provided significant environmental, public health, and economic benefits to the nation. The nation's farmers, fishermen, manufacturers, and tourism industries rely on clean water to carry out activities that contribute well over $300 billion to our economy each year.

However, the nation's ability to provide clean and safe water is being challenged, as existing wastewater infrastructure is aging, deteriorating, and in need of repair, replacement, and upgrading. Old and deteriorated infrastructure often leak, have blockages, and fail to adequately treat pollutants in wastewater, thereby creating water pollution problems.

REGULATORY PRESSURES AND INADEQUATE INFRASTRUCTURE ISSUES FACING OUR COMMUNITIES

The needs of municipalities to address water and wastewater infrastructure are substantial. According to studies by EPA, the Congressional Budget Office, and the Water Infrastructure Network, the cost of addressing our nation's clean water infrastructure needs over the next 20 years could exceed $400 billion, roughly twice the current level of investment by all levels of government. The needs for drinking water infrastructure drive this figure even higher.

The needs are especially urgent for many areas trying to remedy the problem of combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs), often associated with wet weather conditions, and for communities lacking sufficient independent financing ability. In recent years, EPA (and activist groups, through citizens suits) has stepped up enforcement actions against many municipalities in an effort to force them to eliminate their CSOs and SSOs. EPA's national enforcement initiative has focused on the reduction of these overflows by winning commitments from municipalities to implement extremely expensive infrastructure upgrades to prevent these problems in the future.

These enforcement actions have resulted in many larger cities and smaller municipalities entering into enforcement settlements, by signing consent agreements with EPA (and/or activist groups) to implement enforceable plans to eliminate their CSOs and SSOs. Many of these settlements are costly to implement, especially in the face of dwindling EPA infrastructure funds.

The projected total cost to larger municipalities of implementing the terms of each of these settlements could end up being as much as $1-5 billion per city, or even more in some instances. There are well over 700 communities, located in 31 States and the District of Columbia, with combined sewer systems and CSO issues potentially facing these sorts of costs. Many more communities have SSO issues. EPA estimates that there are at least 23-75 thousand SSOs per year (not including sewage backups into buildings), amounting to an estimated three to ten billion gallons per year of untreated releases.

In recent years, other regulatory issues have also become national priorities, which is placing a further demand for resources on municipalities' utilities. For example, while the nation's wastewater utilities have already removed the vast majority of conventional pollutants from municipal wastewater, looking forward, they face significantly higher costs to remove the next increment plus control pollutants from urban runoff.

EPA has initiated a national rulemaking to establish a potentially far-reaching program to regulate stormwater discharges from newly developed and redeveloped sites and add to or make other regulatory requirements more stringent under its stormwater program. This includes possibly expanding the scope of the municipal separate storm sewer systems (MS4) regulatory program, establishing and implementing a municipal program to regulate stormwater discharges from existing development, imposing specific requirements for transportation facilities, and establishing and implementing stormwater regulations specific to the Chesapeake Bay watershed. This stormwater rulemaking, if promulgated, could cost communities billions of additional dollars in regulatory compliance costs. This would thereby impose substantial

additional regulatory and economic burdens on municipalities to comply, with questionable benefits.

In addition, EPA has begun zealously pressing the States and local governments to adopt a new "framework" for managing nutrients pollution, including crafting numerical nutrients criteria, setting strict numerical regulatory requirements, including numerical standards and total maximum daily load (TMDL) load reduction goals for pollutant sources, and adopting stringent numerical nutrient standards and stringent effluent limits for nutrients in National Pollutant Discharge Elimination System (NPDES) permits for municipal and other dischargers of nutrients. Stringent effluent limits for nutrients in NPDES permits could mean that many municipalities would have to install and operate, at great expense, nutrient treatment and removal technologies at their wastewater treatment plants. These requirements will add an additional layer of regulatory requirements and economic burdens that our communities will have to deal with.

Further, in many cities and towns, water infrastructure has been in place for many decades. Quite often, particularly in the larger cities, components of these systems (such as the water mains) are more than a century old. The life expectancies for these systems are being approached or exceeded in many cities and towns. As the water infrastructure outlives its useful life, it can corrode and deteriorate, resulting in an epidemic of water leakage, burst water mains, unreliable pumps and collection equipment, and aging treatment plants that fail to remove important contaminants. With age and increased demands due to population growth, drinking water infrastructure problems in many cities are growing.

Moreover, many communities face increasing regulatory requirements and more stringent standards under the Safe Drinking Water Act for their public drinking water systems. In addition,. protection of critical water and wastewater infrastructure has become important to homeland security.

A large portion of these Federal and State regulatory mandates are going unfunded by the Federal and State governments. Rather, local governments are being expected to pay for more and more of the costs of these mandates, with the result that local government has made substantial increases in investments in public water and wastewater infrastructure in recent years and local communities and ratepayers are increasingly getting economically tapped out. For example, Jefferson County, Alabama (Alabama's most-populous county and the home of Birmingham) recently declared the largest municipal bankruptcy in U.S. history, in part as a result of a multi-billion dollar sewer project. Today, local government provides the majority of the capital required to finance water infrastructure investments through loans, grants, bonds, and user fees.

COMMUNITIES' CONCERNS

As a result of many communities becoming financially squeezed, representatives of local government are increasingly voicing concerns over EPA and State policies and unfunded mandates, including the cumulative impacts of multiple regulatory requirements being imposed on them.

Municipalities are very concerned about the impacts the unfunded Federal mandates treadmill has on local government ability to meet compliance obligations, and have been urging EPA and State officials to limit the massive costs of complying with agency wastewater and stormwater requirements. This is especially true given municipalities' dwindling revenues due to the economic downturn.

The Water Resources & Environment Subcommittee held a hearing in December 2011 to explore these concerns and a proposed integrated planning and permitting regulatory prioritization effort that EPA has proposed under the Clean Water Act to help reduce the financial burdens communities are facing.

Municipal officials also are urging the Federal government to increase support to the States and local governments to help pay for the unfunded Federal mandates.

TRADITIONAL MEANS OF FINANCING WASTEWATER INFRASTRUCTURE NEEDS

From 1972 to 1990, the Federal government provided assistance through Clean Water Act project grants for wastewater treatment capital improvements. More than $60 billion in direct grants were provided to communities.

Since 1987, most of the Federal government's assistance has been in the form of capitalizing Clean Water SRFs. In this program, Federal money appropriated to EPA is distributed to the States through Federal capitalization grants. This assistance is funded through general taxpayer revenues. States must match the Federal SRF funding by 20 percent. The Federal government has provided approximately $32 billion in SRF capitalization grants to date.

Each State's CWSRF operates much like a specialized infrastructure bank, by making loans for wastewater infrastructure and nonpoint source projects, refinancing existing local debt, and providing guarantees of or bond insurance for local debt. Many State financing authorities have been using innovative debt financing techniques in order to help make adequate and economical funding for water infrastructure available and accessible.

More than half the States leverage their SRF funds by using those funds to provide the collateral for the issuance of State bonds, doubling the amount of such funds available for infrastructure investments. Some States have also established special bond authorities, trust funds, and/or infrastructure banks to aid in the delivery of financing to small communities.

Communities are investing well over $10 billion a year in wastewater infrastructure. In most cases, the capital to make that investment is borrowed. In recent years, communities borrowed approximately $5.3 billion per year in below-market loans from the Clean Water SRFs. CWSRFs have funded over $85 billion in low-interest loans for clean water projects to date. 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. Rural community assistance programs, such as those sponsored through the U.S. Department of Agriculture's Water and Environmental Program in the Rural Utilities Service, provide some assistance (including direct loans, grants, and loan guarantees) for projects in unincorporated rural areas and small towns to develop and rehabilitate water and waste facilities, but this amount of assistance does not meet the needs of these small, rural, and disadvantaged communities.

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 monthly fee on sewer bills and an equivalent annual fee on septic system owners. The Fund is being used to upgrade wastewater treatment plants, repair failing septic tanks, and fund a cover crop program to reduce nitrogen and phosphorus loadings to the Chesapeake Bay and coastal bays.

Despite these substantial Federal and State investments in infrastructure, still more investment is needed to address all of the demands that communities face. As a result, many are seeking new ways to increase funding for water infrastructure.

OTHER POTENTIAL APPROACHES FOR ADDRESSING WATER INFRASTRUCTURE FINANCING NEEDS

Clean Water Trust Fund

Some are advocating cost savings and improved efficiencies, along with local rate increases. Others are seeking increased Federal and State support for the SRFs or for clean water grants. Still others are advocating the creation of a national clean water trust fund as a means for financing wastewater infrastructure needs.

Trust fund advocates argue that a national clean water trust fund would provide a new revenue stream, would be a more stable and secure funding source, would help generate the revenues needed to close the funding gap, could enhance State and local revenue-generating capacity by requiring a State matching component or enhancing the viability of rate increases at the local level, and would ensure that costs are borne equitably by those that benefit from clean water. They point to the highway and aviation trust funds, which provide billions in dedicated funding for roads and airports by collecting fees from highway and airport users, and take the position that the nation's water infrastructure demands a similar dedicated revenue stream.

One of the most complex aspects of moving from the trust fund concept to reality, however, is determining the revenue sources for such a trust fund. Trust fund advocates have looked at several potential revenue sources, including a fee on water-based recreational products and services, industrial discharges, flushable products, or beverages, a broad clean water

restoration fee, as well as a combination of some or all of the foregoing. All options put forth by trust fund advocates are based on the assumption that the beneficiaries of clean water, and/or the pollutant dischargers (other than the wastewater treatment plants themselves), have the primary responsibility for guaranteeing clean water.

However, none of the sectors identified by trust fund advocates as potential funding sources support a fee or tax on their activities. In addition, a true water user fee, which would involve placing a Federal surcharge on water and/or wastewater rates, has little public support.

Improved Asset Management and Sustainable Infrastructure

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 water infrastructure to reduce the need for expensive infrastructure. In addition, financing institutions, associations of water quality professionals, States, and EPA all have been encouraging utilities to improve the management of their infrastructure assets, in order to reduce the demand for new infrastructure.

Moreover, EPA has begun implementing "sustainable infrastructure initiatives" to help communities close the gap 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, expanding watershed approaches, and advocating the use of so-called "green" infrastructure to identify efficient and effective local infrastructure solutions. By properly operating and maintaining infrastructure, and by planning for capital improvements, wastewater utilities can reduce costs and avoid catastrophic infrastructure failures.

However, improved asset management and "sustainable" infrastructure initiatives, alone, will not meet the needs of communities. Increased investment by government, plus the private sector, is needed to close the gap between current spending and projected infrastructure funding needs, even if water and wastewater systems are able to implement cost savings and improved efficiencies. Otherwise, without adequate spending on our nation's water infrastructure, we face the very real risk of losing the environmental gains we have achieved over the last three decades. Our $250 billion-plus investment in wastewater infrastructure is at risk, as is the $300 billion a year in economic activities that rely on clean water.

Private Investment

Private sector capital is another, potentially major source of funding for water and wastewater infrastructure. Municipally owned water and wastewater utilities traditionally have not had much access to private sector investment capital outside the traditional municipal bond market.

However, the financial markets have been "discovering" infrastructure in the past several 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/wastewater, and are looking for ways to participate in this market. In addition, the recent financial market turmoil, triggered by the global financial crisis and concerns of inflation, has prompted many financial investors to reconsider their long-term investment strategies and explore entirely new categories of investment.

In recent years, there has been a rapid increase in the creation and size of infrastructure investment funds. Tens of billions of dollars have been invested in these funds to date. Managers of these funds are actively looking for deals where they can put this new money to work for their investors. Key targets include transportation, energy, and water/wastewater-related assets.

Investors in these funds are often pension funds (including public pension funds such as State-sponsored teacher and public employee plans), 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. Many of these funds are looking for opportunities to invest in long-lived tangible assets that generate predictable and stable cash returns that are indexed or hedged against inflation and pose limited risk. Water and wastewater infrastructure projects fit this bill.

Consistent with these objectives, a number of pension and other investment funds are now interested in building a portfolio of investments in wastewater and drinking water facilities and, in some cases, their related distribution and collection systems. Such facilities provide an essential service to residential and commercial end users, for which there is no viable alternative. They generate cash flows secured by an established and diversified customer base of households and businesses, within service areas that are typically characterized by substantial barriers to entry for potential new competing providers of services. Such facilities effectively generate stable, recession-resistant cash flows, with limited relation to other investment allocations of the funds. Properly selected and structured, investments in wastewater and drinking water facilities also can provide a predictable cash flow stream over the long term.

The investments may take the form of purchasing existing utility assets or, through public-private partnerships, the private sector can invest their own capital in new water or wastewater infrastructure, and operate facilities over periods of time to receive a return on their investment. Private investment capital also is available for providing financing to utilities through lending and the purchase of bonds.

Despite the interest of the private sector investing in infrastructure, many potential private investors are finding impediments to private investment capital going into water and wastewater infrastructure in this country. Many experts in municipal and private capital project finance believe the ways the U.S. water and wastewater industry has traditionally been structured and financed gets in the way of private investment.

For example, investment research analysts have observed that the vast majority of water and wastewater infrastructure in the United States is owned by local government entities,

including cities, towns, and sometimes regional water or sewer authorities. Only about 15% of the population in the U.S. is served by investor-owned water utilities, and an even smaller proportion (less than 10%) is served by investor-owned wastewater utilities. The industry is highly fragmented, with more than 50,000 utility systems around the country, which are mostly small systems serving only a few thousand people.

In the United States, funding and investment in water and wastewater infrastructure is also fragmented. Investor-owned water utilities fund their infrastructure needs through a combination of equity, which they periodically raise through offerings of stock to investors, 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 infrastructure investments by issuing tax-exempt municipal bond debt. They also may receive some contribution from general tax funds, from State or Federal grant programs, or from the SRF programs, but the majority of funds are raised locally. Increasingly, municipalities are 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 in some municipalities.

Historically, municipal bond financing has worked well for public utilities, but the rising clean water investment needs and unfunded mandates being faced by many communities are now stretching their bond-raising capacity, since they also must fund a wide range of other municipal services, facilities, and needs. Despite its historic stability, some are concerned that the public water and sewer utility sector is facing increasing challenges that may impact credit quality.

As a result of this fragmented industry and investment structure, municipally owned water and wastewater utilities have typically not had access to private sector investment capital outside the municipal bond market. Moreover, private investors typically have been precluded from investing in the municipal water and wastewater market other than through municipal bonds.

However, many experts in municipal and private capital project finance believe that, through some restructuring of the industry and by developing creative project financing mechanisms outside of direct utility asset purchases, we could start to overcome the barriers to bringing private sector capital into the municipal water and wastewater markets. For example, they believe a variety of financing structures utilizing tax-exempt facility bonds, commonly known as private activity bonds (PABs), taxable bonds, and equity funding are possible to help optimize water and wastewater infrastructure project development.

Projects can be structured as public-private partnerships to optimize development, construction, and long term operation, as well as appropriate sharing of risks between the public and private partners. Highly-regarded private companies active in the water and wastewater market could help facilitate the structuring of long-term public-private partnership arrangements.

Increased equity investment and assumption of risk by long term private partners for water and wastewater projects could increase with the use of PABs and could benefit all public and private participants developing projects to meet water and wastewater infrastructure needs.

Private activity bonds, issued by States and municipalities, are used to attract private investment for projects that have some public benefit. The State or municipality issuing the bond must be able to prove that a public benefit derives from the private activity bond in order to qualify for tax-exempt status. A tax-exempt PAB results in reduced financing costs by generating significant interest savings because of the exemption from Federal, and in some State, tax, and promotes projects important to the local community. PABs may be issued for wastewater and drinking water treatment projects involving private interests, but there are strict tax rules that limit the use of PABs.

The most serious limitation on the issuance of tax-exempt PABs is the "unified volume cap," which restricts the amount of PABs that States and localities may issue in any given year. Under the Internal Revenue Tax Code, States and municipalities within the State are subject to a State-wide cap on the volume of PABs that may be issued each year. In 2012, that limit is 95 times the State population, or $284.56 million, whichever is greater (this amount is to be adjusted yearly for inflation). In most States, the vast majority of financing by PABs has gone to other sectors such as housing and education.

Congress has exempted some activities from this volume cap. For example, in the latter 1980s, to avert a crisis of lack of landfill capacity, Congress exempted the construction of solid waste landfills from the PABs volume cap. This resulted in many billions of dollars of PABs being issued to help fund the development of new infrastructure to help solve the disposal crisis.

Wastewater and drinking water projects currently are not exempted from the cap. If wastewater and drinking water infrastructure also were exempted from the PAB volume cap, this could generate considerable additional revenue for this purpose. A municipality could issue tax exempt bonds and then use the bond revenues to partner with a private company to build wastewater or drinking water facilities.

Legislation has been introduced in recent Congresses, including H.R. 1802 in the 112th Congress, which would remove the PABs volume cap for water and wastewater facilities.

"Water Infrastructure Finance and Innovation Act" (WIFIA)

The Subcommittee is looking at a potential financing tool for water and wastewater infrastructure projects that would in part be modeled after the Transportation Infrastructure Finance and Innovation Act (TIFIA) for surface transportation projects and other credit programs governed by the Federal Credit Reform Act. A preliminary draft of legislation, that would be entitled the "Water Infrastructure Finance and Innovation Act" (WIFIA), is attached to this memorandum. WIFIA would establish additional financing mechanisms to supplement existing means for funding water infrastructure projects.

The WIFIA program would provide Federal credit assistance in the form of direct loans and loan guarantees, to finance significant water and wastewater infrastructure projects. WIFIA credit assistance could provide improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. WIFIA could help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Many water and wastewater infrastructure projects would be eligible for assistance under this draft proposal.

The WIFIA program would be governed by the Federal Credit Reform Act of 1990 (FCRA), which would require the U.S. Environmental Protection Agency (the administering agency for the proposed WIFIA program) to establish a capital reserve, or "subsidy cost," to cover expected credit losses before it can provide WIFIA credit assistance. Congress would place limits on the annual subsidy amount available.

The FCRA sets up a system of two budgetary accounts to record the budget information necessary for accrual accounting to work, i.e., program and financing accounts. The Program Account is an on-budget account that receives the appropriation for the subsidy cost, i.e., the "true economic cost that ought to be reflected on the Federal budget." The Financing Account is a non-budgetary account that tracks the financing cash flows, such as loan disbursements, repayments from borrowers, and interest payments. As a non-budgetary account, the Financing Account's cash flows are not included in budget totals and are not part of the deficit calculation.

Hence, under the FCRA, the cash flows associated with a Federal credit program such as WIFIA would be tracked in non-budgetary financing accounts, and these cash flows would not be included in budget totals and would not be part of the Federal deficit calculation.

As each loan is disbursed, the Program Account would outlay the corresponding subsidy cost to the Financing Account. The subsidy cost then would be combined with the non-subsidized portion of the loan and the entire loan amount would be disbursed to borrowers. If the loan performs as expected, borrower repayments would enable the entire amount borrowed from Treasury to be repaid to the Treasury over time with interest. The aggregate performance of loans issued would be expected to enable the Financing Account (and hence, the Treasury) to stay in a break-even or better situation.

Under the FCRA, Congress only would have to appropriate the "subsidy cost" of the WIFIA loans -- essentially, an amount to cover the risk of defaults and the government's cost of funds. The draft bill provides for the appropriation of funds to cover the subsidy cost of the WIFIA credit program, plus the appropriation of funds to cover administrative expenses. The subsidy cost and expenses would be expected to be the only costs reflected in the Federal budget.

The draft WIFIA bill also contains language that would remove the PABs volume cap for water and wastewater facilities.

Attachment

WITNESSES
(February 28, 2012)

Mayor Gregory A. Ballard
Indianapolis, IN 46204
(testifying on behalf of the U.S. Conference of Mayors/Mayors Water Council)

Mr. David R. Williams
Elected Board Member
Central Contra Costa Sanitary District Board of Directors
Central Contra Costa County, California
Director of Wastewater
East Bay Municipal Utility District, Oakland, CA
(testifying on behalf of the National Association of Clean Water Agencies)

Mr. Aurel M. Arndt
General Manager
Lehigh County Authority, Allentown, PA
(testifying on behalf of the American Water Works Association)

Eric S. Petersen, Esq.
Partner
Hawkins Delafield & Wood LLP, New York, NY

Mr. Thaddeus R. Wilson
Vice President
M3 Capital Partners LLC, Chicago, Illinois

Mr. Jeffry Sterba
President & CEO
American Water Company, Voorhees, NJ
(testifying on behalf of the National Association of Water Companies)

Mr. Jeffery A. Eger
Executive Director
Water Environment Federation, Alexandria, VA

Mr. Steven A. Fangmann
Executive Vice President
D & B Engineers and Architects, Woodbury, NY
(testifying on behalf of the American Council of Engineering Companies
and the Water Infrastructure Network Coalition)

[DISCUSSION DRAFT]

112TH CONGRESS
2D SESSION

H. R. _____

To provide financing assistance for qualified water infrastructure projects, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M__. _____ introduced the following bill; which was referred to the Committee on _____

A BILL

To provide financing assistance for qualified water infrastructure projects, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 "Water Infrastructure Finance and Innovation Act of
6 2012".

7 (b) TABLE OF CONTENTS.—The table of contents of
8 this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Findings.

TITLE I—WATER INFRASTRUCTURE FINANCE AND INNOVATION

Sec. 101. Definitions.
Sec. 102. Authority to provide assistance.
Sec. 103. Application.
Sec. 104. Entities eligible for assistance.
Sec. 105. Projects eligible for assistance.
Sec. 106. Activities eligible for assistance.
Sec. 107. Selection among eligible projects.
Sec. 108. Credit evaluation.
Sec. 109. Terms and conditions.
Sec. 110. Program administration.
Sec. 111. Technical assistance.
Sec. 112. Threshold for assistance.
Sec. 113. Funding.

TITLE II—PRIVATE ACTIVITY BONDS

Sec. 201. Exempt-facility bonds for sewage and water supply facilities.

SEC. 2. FINDINGS.

Congress finds the following:

(1) It is in the national interest to encourage the timely and cost effective rehabilitation and replacement of aging water and sewer infrastructure.

(2) The Environmental Protection Agency reports—

(A) $334,000,000,000 is needed to invest in infrastructure improvements over 20 years to ensure the provision of safe water; and

(B) $202,500,000,000 is needed for publicly owned wastewater systems-related infrastructure needs over 20 years.

(3) Customer rates and local charges are and will remain the primary means of paying for water service and infrastructure.

(4) The municipal bond market and State Revolving Fund programs are the primary long-term means for financing water infrastructure projects, but upfront investment needs are simply too high to be met with these traditional means alone.

(5) Financing constraints make it particularly difficult for State Revolving Funds to support large water infrastructure projects of regional and national significance.

(6) Current financing mechanisms do not sufficiently catalyze private sector investment, while the capital markets, including pension funds, and other investors have a growing interest in infrastructure investment.

(7) This Act will substantially benefit the Nation's drinking water and wastewater systems by—

(A) addressing the gap in funding for large, regionally, and nationally significant projects by making available direct loans and loan guarantees to reduce borrowing costs and accelerate water infrastructure investment;

(B) enhancing the capacity of State Revolving Fund programs to assist other projects;

(C) facilitating private sector investment in drinking water and wastewater infrastructure; and

(D) promoting compliance with the Federal Water Pollution Control Act and the Safe Drinking Water Act.

(8) As the historical default rate on water and sewer bonds is 0.04 percent, the risk of default on Federal assistance provided under this Act is minimal.

(9) Because loans, loan guarantees, and other credit instruments only incur long-term costs if subsidized or in the event of default, this Act can help to meet the Nation's water infrastructure needs at minimal long-term cost to the Federal Government.

TITLE I—WATER INFRASTRUCTURE FINANCE AND INNOVATION

SEC. 101. DEFINITIONS.

In this title, the following definitions apply:

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

1 (2) BORROWER.—The term "borrower" means
2 an eligible entity that owes payments of interest or
3 principal on a credit instrument.
4 (3) COMMUNITY WATER SYSTEM.—The term
5 "community water system" has the meaning given
6 such term in section 1401 of the Safe Drinking
7 Water Act (42 U.S.C. 300(f)).
8 (4) COST OF A DIRECT LOAN; COST OF A LOAN
9 GUARANTEE.—The terms "cost of a direct loan" and
10 "cost of a loan guarantee" mean the "cost of a di-
11 rect loan" and "cost of a loan guarantee", respec-
12 tively, as those terms are used in section 502(5) of
13 the Federal Credit Reform Act of 1990 (2 U.S.C.
14 661a(5)).
15 (5) CREDIT INSTRUMENT.—The term "credit
16 instrument" means a direct loan made under this
17 title or a loan or other debt obligation that is subject
18 to a loan guarantee under this title.
19 (6) DIRECT LOAN.—The term "direct loan"—
20 (A) means a "direct loan", as such term is
21 defined under section 502(1) of the Federal
22 Credit Reform Act of 1990 (2 U.S.C. 661a(1));
23 and
24 (B) includes a Government purchase of a
25 bond.

1 (7) LOAN GUARANTEE.—The term "loan guar-
2 antee" has the meaning given such term under sec-
3 tion 502(3) of the Federal Credit Reform Act of
4 1990 (2 U.S.C. 661a(3)).
5 (8) STATE INFRASTRUCTURE FINANCING AU-
6 THORITY.—The term "State infrastructure financing
7 authority" means the State entity established or des-
8 ignated by the Governor of a State to receive a cap-
9 italization grant provided by, or otherwise carry out
10 the requirements of, title VI of the Federal Water
11 Pollution Control Act (33 U.S.C. 1381 et seq.) or
12 section 1452 of the Safe Drinking Water Act (42
13 U.S.C. 300j–12).
14 (9) TREATMENT WORKS.—The term "treatment
15 works" has the meaning given such term under sec-
16 tion 212 of Federal Water Pollution Control Act (33
17 U.S.C. 1292).
18 **SEC. 102. AUTHORITY TO PROVIDE ASSISTANCE.**
19 The Administrator may make a direct loan (including
20 a subordinated loan) or a loan guarantee to an eligible
21 entity for eligible activities associated with an eligible
22 project, in accordance with this title.
23 **SEC. 103. APPLICATION.**
24 (a) IN GENERAL.—To receive assistance under this
25 title, an eligible entity shall submit to the Administrator

1 an application at such time, in such manner, and con-
2 taining such information as the Administrator may re-
3 quire.

4 (b) COMBINED PROJECTS.—In the case of a project
5 eligible for assistance under section 105(8), the Adminis-
6 trator shall require from the eligible entity a single appli-
7 cation for the combined group of projects.

8 **SEC. 104. ENTITIES ELIGIBLE FOR ASSISTANCE.**

9 (a) IN GENERAL.—For the purposes of this title, the
10 following are eligible entities:

11 (1) An entity (other than a State or local high-
12 way or road department or agency) that owns or op-
13 erates a treatment works that serves the general
14 public, including a municipal or regional separate
15 storm sewer system management agency.

16 (2) An entity that owns or operates a commu-
17 nity water system.

18 (3) Any grouping or combination of the above
19 that may be cooperating on an eligible project.

20 (4) A State infrastructure financing authority,
21 for the purposes of providing assistance to an eligi-
22 ble project under section 105(8).

23 (b) PUBLIC-PRIVATE PARTNERSHIPS.—In the case of
24 an entity that is a public-private partnership, a public en-
25 tity-owned or investor-owned utility shall be the entity eli-

1 gible for assistance under this title, and not the private
2 financing or development partner.

3 **SEC. 105. PROJECTS ELIGIBLE FOR ASSISTANCE.**

4 For the purposes of this title, the following are eligi-
5 ble projects:

6 (1) A capital project to construct, replace, or
7 rehabilitate a treatment works or a community
8 water system.

9 (2) A capital project to increase the security of
10 a treatment works or a community water system.

11 (3) A capital project to reduce the energy con-
12 sumption needs of a treatment works or a commu-
13 nity water system, including the implementation of
14 energy efficient or renewable generation tech-
15 nologies.

16 (4) A capital project to increase water effi-
17 ciency, reduce the demand for water, or reduce the
18 demand for treatment works or community water
19 system capacity.

20 (5) A capital project to manage or control
21 stormwater.

22 (6) A capital project to reuse municipal waste-
23 water or stormwater.

1 (7) A capital project for the consolidation of
2 two or more treatment works or community water
3 systems.
4 (8) A group of projects described in any of
5 paragraphs (1) through (7) that are combined for
6 purposes of receiving a single direct loan or loan
7 guarantee.

8 **SEC. 106. ACTIVITIES ELIGIBLE FOR ASSISTANCE.**

9 For the purposes of this title, eligible activities with
10 respect to an eligible project include the following:
11 (1) Development phase activities, including
12 planning, feasibility analysis, revenue forecasting,
13 environmental review, permitting, and other
14 preconstruction engineering and design work.
15 (2) Construction, reconstruction, rehabilitation,
16 and replacement required for the project.
17 (3) Acquisition of real property (including inter-
18 ests in real property), environmental mitigation, con-
19 struction contingencies, and acquisition of equip-
20 ment.
21 (4) Funding mechanisms necessary to meet
22 market or affordability requirements, reasonably re-
23 quired reserve funds, capitalized interest issuance
24 expenses, and other carrying costs during construc-
25 tion of the project.

1 (5) Refinancing of interim construction financing, long term project obligations, or direct loans or loan guarantees made under this title.

SEC. 107. SELECTION AMONG ELIGIBLE PROJECTS.

(a) IN GENERAL.—The Administrator shall select eligible projects to receive assistance under this title based on the following criteria:

(1) The significance of the infrastructure needs addressed by the project, including the economic, environmental, and public health benefits of the project.

(2) The creditworthiness of the project under consideration, including the terms, conditions, financial structure, and security features making up the proposed financing, and the financial assumptions upon which the project is based.

(3) The need for Federal assistance, including the likelihood that the provision of assistance by the Administrator under this title will cause the project to proceed more promptly and with lower costs for financing than would be the case without such assistance.

(4) The degree to which the project financing plan includes public and private financing in addition to assistance under this title.

1 (5) The cost of the direct loan or loan guar-
2 antee to the Government for the project.
3 (6) The extent to which the project is nationally
4 or regionally significant.
5 (b) SPECIAL RULE FOR COMBINED PROJECTS.—In
6 the case of a project eligible for assistance under section
7 105(8), the Administrator shall consider only the criteria
8 described in paragraphs (1), (2), (3), and (5) of subsection
9 (a).
10 (c) REASONABLE ASSURANCE OF PAYMENT.— The
11 Administrator may select an eligible project for assistance
12 only if the Administrator finds that there is a reasonable
13 assurance that all payments will be made on the credit
14 instrument.
15 **SEC. 108. CREDIT EVALUATION.**
16 (a) IN GENERAL.—The Administrator shall develop
17 and implement a credit evaluation process before pro-
18 viding any assistance under this title.
19 (b) PRELIMINARY RATING OPINION LETTER.—For
20 purposes of determining creditworthiness under section
21 107(a)(2), the Administrator may require an eligible enti-
22 ty to provide a preliminary rating opinion letter from at
23 least one rating agency, or may use an alternative (includ-
24 ing an internal) credit rating process.

1 (c) RULE FOR CERTAIN COMBINED PROJECTS.—In
2 the case of an eligible project under section 105(8) for
3 which a State infrastructure financing authority is the eli-
4 gible entity, in addition to the creditworthiness consider-
5 ation under section 107(a)(2), the Administrator shall
6 evaluate the creditworthiness of each entity represented by
7 the State infrastructure financing authority that will be
8 carrying out any project described under paragraphs (1)
9 through (7) of section 105 that will be part of such eligible
10 project.

11 **SEC. 109. TERMS AND CONDITIONS.**

12 (a) IN GENERAL.—Direct loans and loan guarantees
13 made under this title shall be on such terms and condi-
14 tions and contain such covenants, representations, warran-
15 ties, and requirements (including requirements for audits)
16 as the Administrator may prescribe.

17 (b) INTEREST RATE.—

18 (1) IN GENERAL.—The interest rate applicable
19 to a credit instrument shall be the rate that is set
20 by reference to a benchmark interest rate on mar-
21 ketable Treasury securities with a similar maturity
22 to such credit instrument, as of the date of execu-
23 tion of the agreement.

24 (2) HIGHER INTEREST RATES.—The Adminis-
25 trator may charge a higher interest rate on a direct

1 loan if the Administrator determines the risk profile
2 of the project indicates a higher interest rate is nec-
3 essary to protect the interests of the United States.
4 (c) TERM OF LOAN.—The Administrator may provide
5 assistance under this title only with respect to a credit
6 instrument the final maturity date of which is not later
7 than 35 years after the date on which funds are disbursed.
8 (d) SECURITY FEATURES.—The Administrator shall
9 require a borrower receiving assistance under this title to
10 use a rate covenant, coverage requirement, or similar secu-
11 rity feature supporting the project obligations to ensure
12 repayment.
13 (e) DIRECT LOAN REPAYMENTS.—
14 (1) SCHEDULE.—The Administrator shall es-
15 tablish a repayment schedule for each direct loan
16 under this title based on the projected cash flow
17 from project repayment sources.
18 (2) COMMENCEMENT.—Scheduled repayments
19 of principal or interest on a direct loan made under
20 this title shall commence not later than the earlier
21 of—
22 (A) 5 years after the date of substantial
23 completion of the project, as determined by the
24 Administrator in a manner set forth at the time
25 the direct loan is made; or

1 (B) [__] years after the date on which the
2 direct loan is made.
3 (3) DEFERRAL OF PAYMENTS.—
4 (A) IN GENERAL.—If the Administrator
5 determines that a borrower lacks the resources
6 to make scheduled payments on a direct loan
7 made under this title based on circumstances
8 not foreseeable at the time the direct loan is
9 made, the Administrator may allow for the de-
10 ferral of such payments.
11 (B) INTERESTS.—Any payment deferred
12 under subparagraph (A) shall—
13 (i) continue to accrue interest until
14 fully repaid; and
15 (ii) be scheduled to be amortized over
16 the remaining term of the direct loan.
17 (C) CRITERIA.—Any payment deferral
18 under subparagraph (A) shall be contingent on
19 the project meeting criteria established by the
20 Administrator, which shall include standards
21 for reasonable assurance of repayment.
22 (4) PREPAYMENT.—Payments on the direct
23 loan may be made in advance with no penalty.
24 (f) SPECIAL RULES FOR LOAN GUARANTEES.—

1 (1) TERMS.—The terms of a credit instrument
2 that is the subject of a loan guarantee under this
3 title shall be consistent with the terms set forth in
4 this title for a direct loan, except that the interest
5 rate and any pre-payment features on such credit in-
6 strument shall be negotiated between the borrower
7 and the lender, with the consent of the Adminis-
8 trator.
9 (2) INTEREST RATE.—The Administrator may
10 make a loan guarantee under this title only if the
11 Administrator determines that the interest rate on
12 the credit instrument that is subject to such loan
13 guarantee is appropriate, taking into account the
14 prevailing rate of interest in the private sector for
15 similar obligations.
16 (3) ELIGIBLE LENDER.—The Administrator
17 may not make a loan guarantee under this title un-
18 less the lender of the loan or purchaser of the debt
19 security that will be the subject of the loan guar-
20 antee is a non-Federal qualified institutional buyer
21 (as defined in section 230.144A(a) of title 17, Code
22 of Federal Regulations (or any successor regula-
23 tion)), including—
24 (A) a qualified retirement plan (as defined
25 in section 4974(c) of the Internal Revenue Code

1 of 1986) that is a non-Federal qualified institu-
2 tional buyer; and
3 (B) a governmental plan (as defined in
4 section 414(d) of the Internal Revenue Code of
5 1986) that is a non-Federal qualified institu-
6 tional buyer.
7 (4) ADEQUATE SERVICING PROVISIONS RE-
8 QUIRED.—No loan guarantee may be made under
9 this title for a loan unless the Administrator deter-
10 mines that the lender with respect to such loan is re-
11 sponsible and that adequate servicing provisions
12 have been made for the loans that are the subject
13 of such loan guarantee that are reasonable and pro-
14 tect the financial interest of the United States.
15 **SEC. 110. PROGRAM ADMINISTRATION.**
16 (a) IN GENERAL.—The Administrator shall establish
17 a uniform system to service the direct loans and loan guar-
18 antees made under this title.
19 (b) ASSISTANCE FROM EXPERT FIRMS.—The Ad-
20 ministrator may retain the services of expert firms, includ-
21 ing counsel, in the field of municipal and project finance
22 to assist in the underwriting and servicing of direct loans
23 and loan guarantees made under this title.
24 (c) FEES FOR ADMINISTRATIVE EXPENSES.—

1 (1) IN GENERAL.—In providing assistance
2 under this title, the Administrator may collect fees
3 for administrative expenses, including premiums for
4 loan guarantees, at a level that is sufficient to cover
5 the costs of services of expert firms and all or a por-
6 tion of the costs to the Federal Government of serv-
7 icing the direct loans and loan guarantees made
8 under this title and, as provided in advance in ap-
9 propriations acts, use such amounts to cover such
10 expenses.
11 (2) LEVEL OF FEES.—The Administrator shall
12 set such fees at a level that will minimize the cost
13 to the Federal Government and maximize the assist-
14 ance that can be provided under this title, while pro-
15 viding competitive credit terms to eligible projects, in
16 order to lower borrowing costs and accelerate water
17 infrastructure investment.
18 **SEC. 111. TECHNICAL ASSISTANCE.**
19 The Administrator may use funds appropriated under
20 this title to provide technical assistance to applicants and
21 prospective applicants in constructing financing packages
22 that leverage a mix of public and private funding sources.

1 **SEC. 112. THRESHOLD FOR ASSISTANCE.**

2 The Administrator may provide assistance under this
3 title only with respect to a credit instrument in an amount
4 of $20,000,000 or more.

5 **SEC. 113. FUNDING.**

6 (a) AUTHORIZATION OF APPROPRIATIONS.—

7 (1) DIRECT LOANS AND LOAN GUARANTEES.—
8 There are authorized to be appropriated for the cost
9 of providing direct loans and loan guarantees under
10 this title—

11 (A) [$_____] for fiscal year
12 2013;

13 (B) [$_____] for fiscal year
14 2014;

15 (C) [$_____] for fiscal year
16 2015; and

17 (D) [$_____] for fiscal year
18 2016, and each fiscal year thereafter.

19 (2) ADMINISTRATIVE EXPENSES.—There are
20 authorized to be appropriated amounts equal to any
21 fees collected under section 110, and in addition
22 there are authorized to be appropriated for adminis-
23 trative expenses under this title—

24 (A) [$_____] for fiscal year
25 2013;

(B) [$_____] for fiscal year 2014;

(C) [$_____] for fiscal year 2015; and

(D) such sums as may be necessary for fiscal year 2016, and each fiscal year thereafter.

(b) PAYMENT OF SUBSIDY COST.—A borrower may pay for the cost of a direct loan or loan guarantee under this title, along with the appropriate amount of related administrative expenses, and the Administrator may use such payment, as provided in advance in appropriations Acts, instead of using funds authorized under subsection (a), to make such direct loan or loan guarantee to the borrower.

TITLE II—PRIVATE ACTIVITY BONDS

SEC. 201. EXEMPT-FACILITY BONDS FOR SEWAGE AND WATER SUPPLY FACILITIES.

(a) BONDS FOR WATER AND SEWAGE FACILITIES EXEMPT FROM VOLUME CAP ON PRIVATE ACTIVITY BONDS.—Paragraph (3) of section 146(g) of the Internal Revenue Code of 1986 is amended by inserting "(4), (5)," after "(2),".

(b) CONFORMING CHANGE.—Paragraphs (2) and (3)(B) of section 146(k) of the Internal Revenue Code of

1 1986 are both amended by striking "(4), (5), (6)," and
2 inserting "(6)".
3 (c) EFFECTIVE DATE.—The amendments made by
4 this section shall apply to obligations issued after the date
5 of the enactment of this Act.

REVIEW OF INNOVATIVE FINANCING APPROACHES FOR COMMUNITY WATER INFRASTRUCTURE PROJECTS—PART I

TUESDAY, FEBRUARY 28, 2012

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

The subcommittee met, pursuant to notice, at 10:00 a.m., in Room 2167, Rayburn House Office Building, Hon. Bob Gibbs (Chairman of the subcommittee) presiding.

Mr. GIBBS. The Subcommittee on Water Resources and Environment will come to order, and I would like to welcome everybody today.

I do want to recognize a former Member, Mr. Ron Packard from California. Good to see you. Of course, I was not here when you were here, but I have heard good things about you. So welcome to the committee.

I will start with my opening statement. We have got a great panel today, and we will recognize you in a few minutes. But first, again, I would like to welcome everybody to the hearing today on potential innovative financing approaches for community water infrastructure projects. This is the first portion of a two-part hearing. We will hold the second hearing on Wednesday, March 21st.

We are all well aware that the needs for communities to address water and wastewater infrastructure are substantial, and these needs are growing. Our Nation's water and wastewater infrastructure is aging, deteriorating, and in need of repair, replacement, and upgrading. This has resulted in frequent leaks, blockages, and inadequate treatment of pollutants.

The needs are especially urgent for hundreds of cities and towns around the Nation as they are trying to remedy the problem of combined sewer overflows and sanitary sewer overflows for communities lacking sufficient independent financing ability. Many cities could end up spending as much as $1 billion to $5 billion each, or even more, to eliminate the combined sewer and sanitary sewer overflow issue.

Numerous other regulatory priorities are placing additional burdens on communities. For example, many of our Nation's wastewater utilities are being forced to install extremely expensive advanced waste treatment to remove the next increment of pollutants, including nutrients. In addition, EPA has initiated a con-

troversial national rulemaking that lead to communities facing the prospect of substantially increased costs for controlling pollutants from stormwater runoff.

Moreover, many communities face increasing regulatory burdens under the Safe Drinking Water Act for their public drinking water systems. All these initiatives are adding additional layers of regulatory requirements and economic burdens that our communities are having to somehow deal with.

According to studies by the EPA, the Congressional Budget Office, and others, the costs of addressing our Nation's clean water infrastructure needs over the next 20 years could exceed $400 billion, roughly twice the current level of investment by all levels of Government. The needs for drinking water infrastructure drive this figure even higher.

This is a staggering amount of money. A large portion of the Federal, not to mention State, regulatory mandates are going unfunded by Federal and State governments. Rather, our local governments are being forced to pay for more and more of their costs of these mandates, with the result that local communities and ratepayers are increasingly getting economically tapped out.

Increased investment needs to take place, which leads to the question, where is the money going to come from? There is no simple answer to that question; rather, we need to make a variety of financing tools available for infrastructure financing, or the toolbox. This includes alternative financing approaches that would make more funds available. There is a tremendous amount of capital from the private sector and other sources potentially available for investment in our infrastructure.

We have been hearing how in recent years, the financial markets have been discovering water and wastewater infrastructure, and how this is becoming a more popular asset class that is increasingly attracting billions of dollars in private investment capital. We have also been hearing that there are some barriers that have inhibited bringing private sector capital into the municipal water and wastewater markets, but with some restructuring and developing of innovative project financing mechanisms, we could start to overcome these barriers.

There are a number of past and current legislative proposals that could provide additional means of increasing investment in infrastructure. For example, there is legislation to remove the volume cap that restricts the amount of private activity bonds that States and localities may issue in any given year for water and wastewater facilities.

In addition, the subcommittee is looking at a potential financing tool that would provide Federal credit assistance in the form of direct loans and loan guarantees to finance significant water and wastewater infrastructure projects. This draft legislative proposal will be entitled the Water Infrastructure Finance and Innovation Act, or WIFIA. This WIFIA proposal is in part modeled after the TIFIA program for the surface transportation projects and other credit programs governed by the Federal Credit Reform Act.

And there are other proposals, including the Clean Water SRF Reauthorization legislation, that this subcommittee has advanced in past Congresses and it is included in the bill that the sub-

committee Ranking Member, Mr. Bishop, has introduced this Congress. Also, a few weeks ago we did have a hearing on integrating the process, the permitting process, to address issues of costs and streamlining prioritized projects for municipalities as part of this total package.

At today's hearing we will hear from a variety of witnesses about these proposals and other potential ways we can encourage increased investment in infrastructure, including from private sources.

Now I will recognize my Ranking Member, Mr. Bishop, for any remarks you may have.

Mr. BISHOP. Thank you very much, Mr. Chairman. Thank you for holding today's hearing on the importance of investing in our Nation's crumbling wastewater infrastructure.

As you know, over the past decade this subcommittee has held numerous hearings on State and local needs to repair and replace its wastewater infrastructure. According to EPA's most recent Clean Watersheds Needs Survey, States have identified almost $300 billion in capital investment needs to meet their wastewater and stormwater treatment and collection needs over the next 20 years. Other organizations, including the Congressional Budget Office and the Water Infrastructure Network Coalition, have identified annual funding gaps ranging from $3.2 billion to $11.1 billion in order to make up the shortfall between annual needs and the current expenditures from all sources.

This subcommittee has also, under both Republican and Democratic majorities, taken significant steps to address these long-term infrastructure challenges, including passages of several bipartisan water infrastructure financing measures over the decades. These past measures highlighted the best of what this subcommittee and this full committee is capable of doing, bridging any potential disagreements between the sides and moving forward on joint proposals that garner overwhelming support in committee and on the House floor, most recently in the 111th Congress by an almost 3 to 1 vote of support.

I am encouraged today that both sides of the aisle seem to be advocating for a renewed commitment to meeting our Nation's wastewater infrastructure challenges, and have put forward proposals to do just that.

All of the witnesses here today have been presented with a copy of the chairman's discussion draft, the Water Infrastructure Finance and Innovation Act of 2012, as well as a copy of the bipartisan bill that I introduced, the Water Quality Protection and Job Creation Act of 2011, along with Ranking Member of the full committee, Mr. Rahall, and Congressmen LaTourette and Petri.

Both bills include mechanisms modeled after the successful Transportation Infrastructure, Finance and Innovation Act, or TIFIA program, as it is known, authorized in TEA–21 to leverage additional capital for wastewater infrastructure investment. Although there are some differences in approach, my first imposition is that there are more similarities than differences between these two drafts on this point, and that should give us all reason to work more closely together.

The chairman's draft also picks up language from the bipartisan bill introduced by a former member of this subcommittee, Mr. Pascrell of New Jersey, and his colleague on the Committee on Ways and Means, Mr. Davis of Kentucky, related to private activity bonds.

In addition, H.R. 3145, the bill that I have offered, continues this committee's efforts to reauthorize the Clean Water State Revolving Fund, a program that has not been successfully reauthorized in almost 25 years.

Putting aside the question of the size of the reauthorization of appropriations for the Clean Water SRF, H.R. 3145 also includes several bipartisan changes to provide communities with greater flexibility and how the Clean Water SRF funds are up side to reduce the long-term costs of SRF loans to local communities and to provide greater technical assistance to small and rural communities that often do not have the internal technical or financial capacity to address water infrastructure challenges.

In addition, H.R. 3145 continues to explore the possibility of creating a Clean Water Trust Fund, which could provide a dedicated, sustainable source of long-term revenue for addressing water quality challenges, akin to the Highway Trust Fund or the Aviation Trust Fund.

Mr. Chairman, in my view, the existing Clean Water Act has served this Nation well in meeting its water quality and water infrastructure concerns, and needs to be part of the long-term solution to addressing future challenges. The question of how some of these alternative financing approaches we will discuss today compliment, duplicate, or conflict with existing law in meeting these future challenges will still need to be addressed.

Again, I welcome today's hearing as an opportunity to begin this conversation. I am hopeful that on this issue of meeting our long-term water infrastructure challenges, we can find agreement and move forward with one voice on an issue that greatly benefits our communities, our economy, and our overall public health and environment.

Mr. Chairman, before I yield back, I ask unanimous consent to insert into the record two things: one, a statement for the record from Representative Pascrell; and the second is a statement from The Associated General Contractors.

Mr. GIBBS. So ordered.

[The prepared statement of the Honorable Bill Pascrell, Jr., appears together with other Members' statements. Please see the table of contents for "Prepared Statements Submitted by Members of Congress." The statement from The Associated General Contractors follows:]

Statement of

The Associated General Contractors of America

to the

Subcommittee on Water Resources and Environment

Committee on Transportation and Infrastructure

U.S. House of Representatives

For a hearing on

"Review of Innovative Financing Approaches for Community Water Infrastructure Projects -- Part I"

February 28, 2012

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.

Building Your Quality of Life

AGC is the leading association in the construction industry. Founded in 1918 at the express request of President Woodrow Wilson, AGC now represents more than 33,000 firms in nearly 100 chapters throughout the United States. Among the association's members are approximately 7,500 of the nation's leading general contractors, more than 12,500 specialty contractors, and more than 13,000 material suppliers and service providers to the construction industry. These firms engage in the construction of buildings, shopping centers, factories, industrial facilities, warehouses, highways, bridges, tunnels, airports, waterworks facilities, waste treatment facilities, dams, hospitals, water conservation projects, defense facilities, multi-family housing projects, municipal utilities and other improvements to real property.

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
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Statement of
The Associated General Contractors of America
Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
United States House of Representatives
February 28, 2012

The Associated General Contractors of America (AGC) is pleased to write today to explain the many possible tools that could and should be active in the water and wastewater infrastructure financing toolbox.

Founded in 1918 at the express request of President Woodrow Wilson, AGC is the leading association in the construction industry representing more than 33,000 firms in nearly 100 chapters throughout the United States. Among the association's members are approximately 7,500 of the nation's leading general contractors, more than 12,500 specialty contractors, and more than 13,000 material suppliers and service providers to the construction industry. These firms engage in the construction of buildings, shopping centers, factories, industrial facilities, warehouses, highways, bridges, tunnels, airports, waterworks facilities, waste treatment facilities, dams, hospitals, water conservation projects, defense facilities, multi-family housing projects, municipal utilities and other improvements to real property. Many of these firms regularly undertake construction for the Environmental Protection Agency's (EPA) State Revolving Loan Fund Program (SRF) and the Department of Agriculture's (USDA) Rural Utilities Service. Most are small and closely-held businesses.

AGC believes that the needs for water infrastructure have been growing for decades, made worse by dwindling federal investment. While many solutions to this problem have been proposed over the years, none is a panacea. Some of these solutions we enacted on a temporary basis, others remain theoretical. As such, AGC believes that an array of tools should be made available on a permanent basis to local governments to ease the burden of water infrastructure upgrades.

Water Infrastructure Needs and the Investment Gap

Even before the current economic downturn, many of our cities and towns, which include everything from large urban to small rural communities, had experienced substantial challenges repairing and replacing water infrastructure that is quickly reaching the end of its useful life. Many communities do not currently have the financial resources to make the necessary investments to meet federal water quality standards and face significant practical and political challenges enacting rate structures to raise adequate capital and make the improvements that are needed. Water infrastructure needs continue to multiply as chronic underinvestment in federal water infrastructure financing programs is compounded by an evolving and expanding regulatory landscape. State and local governments will continue to bear the brunt of this double-edged problem. EPA projects that more than $600 billion is needed in infrastructure improvements over the next 20 years simply to keep pace, yet consistent dwindling of federal commitment to water infrastructure programs has resulted in a gap in funding of more than $20 billion annually.

When the federal government began mandating quality standards for drinking water and wastewater discharge through legislation like the Clean Water Act and Safe Drinking Water Act, it also recognized that forcing local governments to spend billions of dollars to upgrade facilities and equipment to comply with regulatory burdens was impractical. The EPA's SRF program is the vehicle the government uses to avoid foisting the entire burden of maintaining national water standards onto local ratepayers alone. Given that it is in the federal interest to set water quality standards, then so too must it be in the federal interest to provide financing help to operators so they can meet those standards. This is even more salient now with the sharp drop-off in State revenues and lack of budgetary flexibility most states have due to balanced budget requirements. Federal investments in infrastructure also are often the best way to ensure the health, safety and economic vitality of sparsely populated rural communities. Many rural communities, indeed many rural states, lack the resources needed to finance the construction of major infrastructure projects like advanced wastewater treatment plants or safe drinking water filtration systems. The federal government is uniquely suited to support infrastructure investments in these rural communities, especially when so much of our nation depends on the commercial traffic that travels through them and the agricultural products that come from them.

Economic Advantages

Federal support for drinking and wastewater systems delivers a tremendous return for taxpayers by lowering healthcare costs, reducing the cost of cleaning up polluted waterways, and contributing to increased economic vitality. Robust water infrastructure provides a solid foundation for business that wells and septic systems simply cannot. Regular federal investments in infrastructure also save taxpayers money as it costs a lot less to maintain infrastructure than it does to repair it. The cost of replacing water pipes through routine maintenance is typically between $100 and $300 per linear foot. The cost to repair a water main break is approximately $1,500 per linear foot, not including the costs of flooding damage, closures of businesses, and health hazards to those in the area.

Spending on construction also creates jobs. Professor Stephen Fuller of George Mason University found that for every $1 billion in spending on infrastructure, 28,500 jobs are created in construction and construction-related activities which includes 9,700 (34%) direct construction jobs; 4,600 (16%) indirect jobs in supplier industries (mining, manufacturing and services); and 14,300 (50%) induced jobs resulting from purchases out of the additional income of workers and owners in the directly and indirectly supported industries. The US Conference of Mayors found that every job created in water and sewer infrastructure creates over three additional jobs in the national economy to support that job.

The Potential Tools in the Toolbox

There are several infrastructure financing options that have been suggested or have been in use at one time, but none that have remained consistent over the last several decades. There needs to be stability and predictability for state and local governments, which would allow them to create long-term construction plans, which in turn give stability and predictability in the water and wastewater construction markets. Giving municipalities and their contractor partners access to all the tools in the infrastructure financing toolbox will help achieve this.

The first and most immediate solution is simply to halt the assault on the annual appropriations to the federal water infrastructure financing pathways - such as EPA's SRFs and USDA's Rural Utilities Service. Congress slashed almost $1 billion from the SRFs for FY2011 and the House nearly cut almost *another* $1 billion in critical funding during its consideration of appropriations for the EPA earlier in 2011. This instability hurts long-term planning, and can actually drive up the cost of construction because contractors will leave the market for more stable types of construction. AGC of America believes that a more stable revenue stream benefits everyone and is required to ensure that we are keeping up with the national need for safe and clean water.

Even success stories like the water investment in the Recovery Act saddled the SRF program with needless 'Buy American' restrictions that artificially constrained the supply chain, resulting in institutional paralysis, overcorrection, and project delay. While national and project-specific waivers helped to alleviate the morass caused by the application of these regulations to programs that had never had to comply with them previously, the delays and cost overruns needlessly reduced the effectiveness of the Recovery Act spending.

While increased appropriations would go a long way toward alleviating the short-term problem, they would not solve the long-term problem of market stability and predictability. With the volatility inherent in the annual appropriations process, a sustainable, long-term funding mechanism is needed to provide market certainty for construction firms and local water authorities. This new long-term funding mechanism should be multi-year and utilize the existing SRF framework to move funds from the federal to state and local levels. This long-term mechanism should also embrace the "user pays" concept that other infrastructure funding mechanisms have implemented with success to create a budget-neutral, user-fee financed, clean water trust fund. The best long-term solution would be to establish this national clean water trust fund, to be financed by a wide array of small broad-based user fees.

There is ample precedent for dedicated federal trust funds to tackle problems too big for states to handle alone. The GAO has identified more than 120 federal trust funds in operation. These trust funds help ensure funding for other critical projects, including Highways, Airports, Harbor Maintenance, even Oil Spill cleanup. But in this case we can use the model of the highway trust fund that has been extremely successful to build a dedicated long-term, sustainable, off-budget source of funding for water infrastructure such as a trust fund, which would create market certainty in the water and wastewater markets.

Polling has shown that people believe that the government has a responsibility to provide clean water. In fact, 86 percent of Americans support legislation by the U.S. Congress that would create a long-term, sustainable, and reliable federal trust fund for clean and safe drinking water infrastructure. The Government Accountability Office (GAO) in 2009 released a report entitled "Options for a Clean Water Trust Fund" which acknowledges that our nation faces tremendous challenges in replacing and rehabilitating our water infrastructure. As the GAO's report states, a trust fund for water infrastructure may not be the only solution to our water infrastructure needs in America but it would establish a multi-year commitment to address the nation's pressing water needs.

Additionally, while a trust fund would be the best solution, it is still only one tool in the toolbox of financing and funding mechanisms that Congress should make available for use by state and local governments. Alternative and creative methods of financing water infrastructure must be embraced in these tough times. As traditional methods of funding fall out of favor, it is important to seek fresh and creative approaches. However, it is crucial to note that these creative and alternative mechanisms should supplement, rather than replace, the traditional financing mechanisms, such as the SRF, which are already proven to work.

One such creative mechanism is the highly successful, but short lived, Build America Bonds (BAB) program created in the Recovery Act. BABs are taxable bonds for which the U.S. Treasury Department pays a 35 percent direct subsidy to the issuer to offset borrowing costs. The program financed nearly $38 billion in water and sewer infrastructure projects over the two years it was active. Congress should expand and make permanent the BAB program.

Another important financing mechanism to consider would be a federal water infrastructure bank. One of the success stories of the Surface Transportation Program has been the Transportation Infrastructure Finance and Innovation Act program (TIFIA). It seems more than likely that that success could be easily replicated for the water and wastewater infrastructure markets. This is especially true given that water and wastewater systems already have a built in system of collecting revenue (for loan repayment purposes) through ratepayers. A national program that was able to give direct loans and loan guarantees to water infrastructure projects could help take some of the pressure off the SRFs. A program with potential to carry this out already exists in statute in Section 213 of the Clean Water Act, but it has never been funded or utilized. This structure can be used, modified, or even replaced if necessary to allow state and local governments to utilize the full faith and credit of the U.S. Treasury with loan guarantees to lower the overall cost of the project.

Both the discussion draft for a Water Infrastructure Finance and Innovation Act (WIFIA) and HR 3145 contain programs based on this concept and should be commended for their creative approaches. Both have advantages, and are not competing concepts. An ideal water infrastructure bank would be authorized to give both direct loans and loan guarantees for projects. It would also adopt a sensible project value minimum dollar amount that doesn't lock out the majority of water and wastewater systems and should reconcile the qualifications for "national or regional significance" that exist in other proposals for a national infrastructure bank. It would loan directly to the state SRF programs, using existing distribution formulas. Project priority lists developed by the localities should be used, rather than having EPA or Treasury select projects. The more this program uses existing mechanisms, the more likely it is to achieve acceptance and success. Unlike the traditional grants to the SRFs from the federal government, the loans from this bank would not require a state match, but would be repayable over a period of 30 years. It also makes the most sense to have the seed money for this program be some sort of dedicated or self-financing mechanism, rather than it just being an annual appropriation. Otherwise this program could fall victim to the same problems with dwindling annual appropriations that the SRFs face. If the programs work in tandem, why should they compete for funding from the same shrinking source?

A final method of directing funds to water infrastructure would be to secure access to private investment in water infrastructure. Private activity bonds (PABs) can be an important tool for

financing infrastructure investments in our communities by providing long-term financing for capital-intensive infrastructure projects. PABs are a form of tax-exempt financing available to entities like state or municipal governments that want to partner with a private party to meet a public need. Interest paid on bonds issued by State and local governments generally is excluded from gross income for Federal income tax purposes, which allows the interest rates on such bonds to be lower. This, in turn, lowers the borrowing costs for the beneficiaries of such financing.

Congress controls the total volume of tax-exempt bonds by limiting issuance in each state with an annual cap – for example, in 2011 the volume cap for a state was the greater of either $95 per resident, or $277.8 million. Water and wastewater projects should be removed from this annual volume cap, allowing those projects to no longer have to compete with the dozens of other categories of public spending these bonds finance. Exceptions from the volume cap are currently provided for other governmentally-owned facilities such as airports, ports, high-speed intercity rail, and solid waste disposal sites.

PABs employ the best features of successful public-private partnerships, spreading risk and encouraging innovation. By reducing a government's project management burdens and its risk (with PABs, the private entity assumes much of the financial risk and administrative responsibility), multi-year projects and a broader project load become more feasible as the government has more resources to allocate. Also, PABs do not affect the municipality's bond rating, an important benefit of PABs for municipalities. There is considerable private capital that could and would be invested in water infrastructure if the proper mechanisms were available, with some Wall Street estimates putting that value between $2 and $5 billion per year in new private spending.

Concluding Remarks

AGC thanks the Committee for the opportunity to submit this statement for the record. There is a menu of financing tools available to Congress that is as wide in variety as it is deep in financial potential. However, it is critical to remember that water infrastructure financing is not, and should not be, a zero-sum operation. None of these options is mutually exclusive with the others, and indeed many would work better when combined. AGC believes that all should be available to spread the financing burden among as strong a foundation as possible to help this critical sector of a nation's infrastructure.

The SRF program is highly successful, but is in danger of being underfunded further or zeroed out altogether. AGC of America believes the approach outlined above must be taken to give every locality – from the smallest rural towns to the biggest urban centers – the widest range of possible mechanisms to fund water and wastewater construction. Many of these options have been sporadically available in the past and remain good ideas waiting to come off the shelf. A true solution to the water infrastructure financing crisis would include making all of these options available all the time. Permanent long-term solutions are the only way to avert further crisis, let municipalities and contractors plan for the future, and truly safeguard our environment and health.

Mr. BISHOP. Thank you very much, Mr. Chairman. I yield back the balance of my time.

Mr. GIBBS. Mr. Cravaack, do you have a comment, opening statement?

Mr. CRAVAACK. Thank you, Chairman Gibbs and Ranking Member Bishop, for holding this hearing, innovative financing for water infrastructure projects. This issue is vital to the continued health and vitality of our fellow citizens and economy, and needs to be addressed immediately. I would like to welcome today's witnesses, and I would look for to hearing your testimony on this important issue regarding the future of our Nation's water infrastructure.

Our water infrastructure is the cornerstone for many parts of the country, from our national security to our economy to the health of our children. Our water and infrastructure needs to be protected and improved in order to keep us safe, healthy, and prosperous.

Our current infrastructure is getting to the age that it is going to need to be significantly updated or completely replaced. I know the 8th District of Minnesota is facing the reality of aging water and infrastructure systems, and dizziness of cities and townships that I represent are looking for efficient and innovative solutions to this problem.

For example, a facility in my district located in Chisholm, Minnesota is currently operating at or above design capacity and is in need of replacement due to its age and lack of operating consistency and the lack of availability to increase treatment capacity. This has led to a construction moratorium and inability to meet current and future stringent Lake Superior drainage basin effluent requirements. The deterioration is so severe that the potential of a catastrophic failure is not if but when.

This is the situation facing many similar projects, and I hope we can discuss answers here today. I am very pleased to be discussing a way to pay for these much-needed improvements instead of just passing more debt on to future generations.

I will be interested to hear any options or solutions of this very important situation because we need results, and I am sure both Democrats and Republicans can agree to the necessity of our success.

I look forward to hearing from our witnesses and their thoughts on the future financing of water infrastructure projects. Thank you again, and I will look forward to hearing your testimony. And I yield back.

Mr. GIBBS. Representative Napolitano, do you have an opening statement?

Mrs. NAPOLITANO. Thank you, Mr. Chairman. And thank you, Ranking Member Bishop, for holding this very critical and important hearing.

Investing in our clean water infrastructure does create jobs and does protect the public's health. Our Nation's infrastructure—and we hear that in this subcommittee, and we hear it at home—they are deteriorating to the point that it is causing great angst for the local elected officials in many of my areas. They are in need of critical repair, and there is no way many of these communities can fund the necessary repair and replacement.

So we need long-term solutions that are going to be helpful in addressing this aging infrastructure to not only improve the water quality and the health of the environment but to create the jobs that come with it. We must continue to invest in improving our wastewater treatment because it will directly support clean water supply. And there is new technology that can be used and be able to possibly cut the cost of being able to do all this repair, needed infrastructure repair.

I strongly support H.R. 3145, the Water Quality Protection and Job Creation Act of 2011, and congratulate both Ranking Member Bishop and Ranking Member Rahall on the full committee for introducing it. It provides $13.8 billion in a Clean Water State Revolving Fund over 5 years. What better than to have the States be able to help the communities?

It is desperately needed to address these challenges facing our country's communities. And our EPA's most recent Clean Water Needs Survey found, as was stated by the Chair, $400 billion worth of wastewater system repairs over the next couple of decades. My figure stated $300 billion, Mr. Chairman. I am glad you are stating it a little higher because you may have better figures than I do.

These treatment plants have the capacity for solar, wind, and biomethane energy production, and we must continue to look at what is feasible, less expensive, and be able to get the new evolving technology recognized and utilized. This bill will help some of our water challenges, and this is one of the major ones.

So with that, Mr. Chair, I urge my colleagues to help us get this bill through and be able to support our communities. I yield back.

Mr. GIBBS. Thank you.

I welcome our panel again, and we will start with our first witness. He is the mayor of Indianapolis, Mr. Gregory Ballard. He is testifying on behalf of the U.S. Conference of Mayors. Welcome. The floor is yours.

TESTIMONY OF MAYOR GREGORY A. BALLARD, INDIANAPOLIS, INDIANA, TESTIFYING ON BEHALF OF THE U.S. CONFERENCE OF MAYORS/MAYORS WATER COUNCIL; DAVID R. WILLIAMS, DIRECTOR OF WASTEWATER, EAST BAY MUNICIPAL UTILITY DISTRICT, OAKLAND, CALIFORNIA, TESTIFYING ON BEHALF OF THE NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES (NACWA); AUREL M. ARNDT, GENERAL MANAGER, LEHIGH COUNTY AUTHORITY, ALLENTOWN, PENNSYLVANIA, TESTIFYING ON BEHALF OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA); ERIC S. PETERSEN, ESQ., PARTNER, HAWKINS DELAFIELD & WOOD LLP; THADDEUS R. WILSON, VICE PRESIDENT, M3 CAPITAL PARTNERS LLC; JEFFRY STERBA, PRESIDENT & CEO, AMERICAN WATER, TESTIFYING ON BEHALF OF THE NATIONAL ASSOCIATION OF WATER COMPANIES (NAWC); JEFFREY A. EGER, EXECUTIVE DIRECTOR, WATER ENVIRONMENT FEDERATION; AND STEVEN A. FANGMANN, P.E., BCEE, EXECUTIVE VICE PRESIDENT, D & B ENGINEERS AND ARCHITECTS, TESTIFYING ON BEHALF OF THE AMERICAN COUNCIL OF ENGINEERING COMPANIES (ACEC) AND THE WATER INFRASTRUCTURE NETWORK (WIN)

Mr. BALLARD. Thank you, Chairman Gibbs and Ranking Member Bishop, and to the House Transportation and Infrastructure Committee's Subcommittee on Water Resources and the Environment, for inviting me to testify. As mentioned, my name is Greg Ballard. I have been the mayor of Indianapolis since 2008.

I am testifying on behalf of the U.S. Conference of Mayors, and I am here today to communicate the concern of our Nation's mayors, and share about the rising costs of water and wastewater infrastructure, and to ask for a renewed partnership with Congress and the U.S. EPA to provide sensible relief to local governments as they work toward their clean water goals.

It is important to recognize that everyone wants to do the right thing with regard to the environment. And as a mayor, it is my job to be a steward for my citizens. I want them to have the best and the safest water, and so do my peers around the country. So does EPA. So does Congress. We are all in agreement on this. In fact, the American cities provide some of the safest and cleanest water in the world. However, this comes at a hefty price.

In the last decade, public spending on water and wastewater grew by 65 percent, to $855 billion. During that same time, local government long-term debt grew by 82 percent, so $1.6 trillion as of 2009, while local government revenues declined in the face of a struggling national economy.

Clearly, this is an unsustainable problem. It is one reason the U.S. Conference of Mayors is calling on Congress to help us more sensibly and flexibly achieve our shared clean water goals.

Congress has successfully partnered with local government on clean water goals in the past. In the 1970s and 1980s, Congress approved capital construction grants, while local governments shouldered the responsibilities—or the repercussions—or meeting or missing those goals. When these grants were replaced by the State Revolving Loan Fund program, it marked the beginning of a guideline retreat from shared responsibility.

Congress shed financial responsibility for clean water goals, but allowed the administration to continue to set aggressive rules. As a result, many local governments now shoulder significant long-term debt to finance water and wastewater plants that they have had little say in developing. These are unfunded mandates, pure and simple.

Congress can provide immediate relief by passing legislation that increases financing flexibility at the local level—for example, the modification of the Tax Code to remove State caps on the use of private activity bonds for public water and wastewater infrastructure investment, as seen in House Bill 1802 and Senate Bill 939.

We also support the Water Infrastructure Finance and Innovation Act that has been talked about, which can lower overall costs for large capital water projects by as much 16 percent, and that could happen with direct loans to cities. This will help address some of the most pressing debt challenges facing our cities as we strive to meet clean water goals.

But the U.S. Conference of Mayors is also seeking a more sensible way forward. The proliferation of Federal regulatory mandates has drastically increased local water and wastewater spending requirements. Over 780 cities and water/wastewater utilities have or will experience sewer overflow enforcement actions by the EPA.

We are calling on Congress to require EPA to set clean water priorities and reasonable expectations on affordability. This will give us the flexibility to find innovative and efficient solutions to our local water and wastewater challenges as we did in Indianapolis.

Indianapolis originally faced $3½ billion in expenses under a 2006 consent decree. That figure quickly grew by $300 million more through cost overruns, and most certainly would have continued to balloon.

In 2008, we reevaluated the steps necessary to resolve our clean water concerns with an eye towards better results at a lower cost. Though difficult, Indianapolis was able to amend its EPA consent agreement twice. In each case, the city reduced the overall price of the solution and got better environmental results. In fact, our residents will benefit from cleaner water 10 years sooner than under the original consent decree while saving $740 million.

Indianapolis enjoyed forging a partnership with the EPA to find commonsense, less costly fixes to the challenges that we face. In fact, EPA called the renegotiation with my city as a win-win for everyone involved. It was a great example of governments working together. We demonstrated that flexibility, creativity, and government can go hand in hand.

Unfortunately, the Indianapolis model is too often the exception to the rule. The U.S. Conference of Mayors urges the EPA and Congress to use the maximum flexibility allowed in the Clean Water Act and any future legislation to reduce the cost burden of reducing or eliminating sewer overflows. We also ask you to require EPA to prioritize mandates, and to allow flexibility and affordability to play a greater role in determining all clean water solutions at the local level.

Thank you.

Mr. GIBBS. We will have questions and answers when the whole panel gets through their opening statements.

I would like to welcome at this time Mr. David Williams, who is the elected board member of the Central Contra Costa Sanitary District Board of Directors in Central Contra Costa County, California. He is also a director of Wastewater at the East Bay Municipal Utility District in Oakland, California. He is also president of the National Association of Clean Water Agencies in Washington, DC.

Welcome. The floor is yours.

Mr. WILLIAMS. Chairman Gibbs, Ranking Member Bishop, and members of the subcommittee, I am David Williams, president of the National Association of Clean Water Agencies, and here testifying on behalf of NACWA this morning; also Director of Wastewater at the East Bay Municipal Utility District in Oakland, California, and elected board member of Central Contra Costa Sanitary District in Martinez, California. Thank you for inviting me.

The Clean Water Act will be 40 in October. We have seen four decades of exceptional public utility leadership. In 1972, 90 percent of the Nation's waterways were impaired due to pollution. EPA now estimates that at 45 percent. We have come a long ways; there is still a ways to go.

We were certainly helped along the way with the clean water grant program, and later the SRF. Today the SRF provides approximately $5 billion in low-interest loans. In addition, municipalities expend nearly $100 billion on providing water and wastewater services. This supports millions of jobs and also exemplifies local commitments and leadership to ensure clean, safe water.

These investments continue to be made under increasingly difficult circumstances such as the shrinking Federal financial support, increasing cost of regulatory requirements, and in the midst of a major economic downturn.

Despite these challenges, utility leaders are transforming the way we do business through unprecedented innovation. This is exemplified by energy conservation and recovery efforts; water recycling; biosolids reuse; resource recovery from waste streams, such as extracting phosphorus from wastewater and using that for agricultural fertilizer; green infrastructure and low-impact development to lessen the impacts of stormwater. This is all in addition to maintaining the core infrastructure needed to collect and treat the wastewater.

I will give you an example of my utility at East Bay Municipal Utility District. Ten years ago we started a resource recovery program. Under this program, we bring in liquid waste, such as fats, oil, and greases; food processing waste, such as cheese waste or beverage waste; animal processing waste from the chicken and beef industries; and recently, even solid materials such as commercial source-separated food scraps from grocery stores and restaurants.

We take these organic wastes and put them in anaerobic digesters, where they are digested and stabilized. A by-product is methane gas. We capture the methane gas and generate green, renewable energy from these waste materials. We do this at our power generation station that uses clean burn engines and a turbine. Today we are meeting our 5 megawatt daily demand at our waste-

water treatment plant solely from these wastes, plus we are providing 2 megawatts of green energy back to the grid.

Today's POTWs not only collect, treat, and dispose of municipal and industrial wastewater, but they are reimaging themselves as green factories. By becoming green factories, POTWs generate revenues that help keep rates low. There are recycling benefits to the environment. Revenue and energy generation free up capital for investment. That, of course, creates jobs. And jobs, of course, creates increased tax revenues.

In pursuing all of these efforts, financing is a key ingredient. The types of innovative financing mechanisms being contemplated here, plus others yet to be identified, could be very helpful to continue the progress we have made today to promote the types of innovation I have described.

Simply put, more money on the table is helpful, whether it comes from low guarantee loans such as WIFIA, exempting water and wastewater projects from the volume cap on private activity bonds, or other approaches. NACWA supports new additions to the municipal financing toolbox.

Some important considerations, however. We want to make sure that new mechanisms do not negatively impact existing well-used funding mechanisms such as SRF. An example is that funding a new program should not increase public agency costs to access the existing bond markets or other capital markets.

Funds from new financing tools should also be available to help clean water agencies fund innovative projects and new technologies. The budget constraints that make innovative financing a vital discussion today also demand we look at the other side of the coin—namely, we need to reassess the command and control structure of the Clean Water Act.

I testified before this committee last year on NACWA's money matters campaign. The theme of that campaign is: Smarter investment to advance clean water. Its intent is to shed light on growing financial and compliance challenges posed by the Clean Water Act regulations.

NACWA has called for an integrated planning approach. This approach will serve to prioritize competing costs of requirements and help achieve maximum water quality benefits at a cost that will not break the bank, which is our ratepayers. EPA is working on their integrated planning and hope to have the framework finalized by March.

Finally, if we find that under EPA's integrated planning that the 40-year-old Clean Water Act does not have the flexibility to accomplish the goals of cost-effective clean water, NACWA hopes that we can continue to work with this subcommittee to consider targeted changes to the Clean Water Act to effectively address 21st-century challenges and ensure another four decades of water quality improvements and unrivaled utility leadership.

The cost-effective, innovative, green factory concepts that I have described are the underpinnings of NACWA's 20/20 vision of the water resources utility of the future. In the coming months, NACWA is developing an advocacy agenda for specific legislative steps that will help ensure any roadblocks to this vision are removed and the needed tools and support are available for utilities.

And we look forward to working with this subcommittee to make the utility of the future a reality today.

I thank you for the opportunity to testify.

Mr. GIBBS. Thank you.

At this time I would like to welcome our next witness, Mr. Arndt. He is the general manager of the Lehigh County Authority in Allentown, Pennsylvania. He is testifying on behalf of the American Water Works Association.

Welcome. The floor is yours.

Mr. ARNDT. Thank you, Mr. Chairman. Good morning, Chairman Gibbs, Ranking Member Bishop, and members of the subcommittee. I am Aurel Arndt, general manager and chief financial officer of Lehigh County Authority, which provides water and wastewater service to more than 22,000 customers in Lehigh and Northampton Counties in eastern Pennsylvania.

Throughout my career, including service on the executive board of the Government Finance Officers Association, the board of the Pennsylvania Infrastructure Finance Authority, also known as PENNVEST, and the Water Utility Council of the American Water Works Association, I have focused my efforts and interest on water infrastructure finance.

I deeply appreciate this opportunity to speak today on behalf of AWWA and its more than 50,000 U.S. members on the need for innovative financial mechanisms to sustain and rejuvenate our country's water infrastructure.

Yesterday we released a report titled, "Buried No Longer: Confronting America's Water Infrastructure Challenge." We will be sure to provide copies of this report to the committee. This report reveals that replacing and expanding our buried drinking water infrastructure will cost at least $1 trillion over the next 25 years. During that time, the required annual investment will more than double, growing from $13 billion to almost $30 billion per year by the end of that period.

I must emphasize that this $1 trillion is only for buried drinking water infrastructure, largely the pipes underground. Aboveground drinking water facilities, wastewater, stormwater, and other water-related needs are also very large and must be added to this forecast to reflect the true magnitude of the water investment before us.

I would like to focus my remarks today on the new financing tool addressed in the draft legislation released last week, which would help American water utilities address this challenge. I must emphasize, however, that AWWA strongly believes the cornerstone of water infrastructure finance is and should remain local rates and charges.

We have had a chance to review the draft legislation, the Water Infrastructure Finance and Innovation Act, or WIFIA, and we wholeheartedly endorse this approach. As described in the draft, WIFIA will fill a significant gap between what current water infrastructure tools can do and what needs to be done.

We urge this subcommittee, the full committee, and the rest of Congress to enact this legislation, which is modeled after the highly successful Transportation Infrastructure Finance and Innovation Act, or TIFIA.

As we see WIFIA, it has three significant attributes that collectively cannot be matched by any other new water infrastructure financing tool.

First, WIFIA would increase capital available to utilities for infrastructure investment. Water utilities already use a variety of approaches to finance their capital needs, including the State Revolving Loan Funds, municipal bonds, corporate bonds and equity, and private activity bonds, among others. Unfortunately, the investment need before us will push many utilities beyond the limits of those traditional financing sources and undermine the ability to set affordable customer rates.

Second, WIFIA will provide a lower cost of financing for many utilities. We anticipate that WIFIA would access funds from the U.S. Treasury and use those funds to provide loans, loan guarantees, and other credit support for projects at rates at or close to Treasury rates. In most market conditions, Treasury rates are lower than the cost of capital on most other sources of water infrastructure financing.

However, reducing the interest rate by just a few percentage points can amount to a significant savings. For example, lowering the cost of borrowing by 2½ percent on a 30-year loan reduces the lifetime project cost by almost 26 percent, the same effect as a 26-percent grant. Moreover, the savings can significantly accelerate water infrastructure investment by making it more affordable for utilities and their customers.

Third, and perhaps most importantly, WIFIA will have minimal cost to the Federal Government. All of us are well aware of the importance of controlling the Federal budget and the deficit. WIFIA is highly responsive to these concerns. Under the Federal Credit Reform Act, a Federal entity can provide credit assistance to the extent that Congress annually appropriates budget authority to cover the subsidy cost of the assistance—in other words, the net long-term cost to the Federal Government.

Under WIFIA, that long-term cost is minimal, first because loans are repaid in full with interest to the WIFIA administrator, which in turn repays the Treasury, again with interest.

In addition, there is minimal credit risk because virtually all water-related loans are repaid in full.

That fact is highlighted by a Fitch rating report which determined that the historical default rate on water bonds is .04 percent—I repeat, .04 percent—putting water service providers among the best credits in the United States. Moreover, the leveraged SRF programs across the country have no history of defaults, also placing them among the strongest credits in the country.

We note that TIFIA is able to leverage Federal funds at a ratio of 10 to 1. With the water sector's strong credit ratings and history, the ratio for WIFIA should be even greater because the subsidy cost required by the Federal Credit Reform Act would be minimal. If the WIFIA leverage ratio is set at 25 to 1, which is actually 100 times lower than the risk ratio of .04 percent, a $200 million appropriation will produce $5 billion in infrastructure investment. It is important that we are not advocating loan forgiveness or negative interest loans or other similar credit aspects that would increase the cost of the WIFIA program to the Federal Government.

In conclusion, WIFIA will allow us to do more with less—specifically, to build more water infrastructure at less cost, and to top that, our Nation will get a cleaner environment, better public health and safety, and a stronger foundation for our economy.

We thank the subcommittee for its leadership in offering this important tool, WIFIA, to help address a significant need with our water infrastructure. We offer to work with the subcommittee in communicating the value of WIFIA to the rest of Congress and our respective publics.

Thank you again for this opportunity to appear here today. I will be happy to answer any questions and to provide you with any other assistance I can now or in the coming months. Thank you.

Mr. GIBBS. Thank you.

At this time I would like to welcome Mr. Eric Petersen. He is a partner in the Hawkins Delafield & Wood law partnership in New York City.

Welcome. The floor is yours.

Mr. PETERSEN. Thank you, Mr. Chairman.

Chairman Gibbs, Ranking Member Bishop, and members of the subcommittee, my name is Eric Petersen, and as was mentioned, I am a partner at Hawkins Delafield & Wood, a leading national law firm in the fields of public finance, public contracts, and public-private partnerships. I specialize in water projects, and represent the interests of municipal water and wastewater utilities.

Hawkins has negotiated major water infrastructure contracts for Seattle, San Diego, Phoenix, Santa Fe, San Antonio, Washington, DC, New York City, and 75 other cities, counties, and authorities over the past 20 years.

Federal financial support for water infrastructure, in my view, consists mostly of the tax exemption of interest on municipal bonds issued for water and wastewater projects. Proposals continue to surface in Congress and from the administration to raise revenue by curtailing, by any number of means, the tax exemption of interest on municipal bonds. Passage of any of these measures would only serve to tighten the financial vice on the water industry.

Municipal water bonds are tax-exempt only if they are issued by the municipality itself, so-called governmental bonds. Bonds issued for water projects by private companies, known as private activity bonds, are not tax-exempt and thus carry the higher interest rates of corporate bonds.

As a result, if a city wants to have a private firm design, build, finance, and operate a new project, known as a public-private partnership or P3 project, the private financing element causes the debt to be taxable and generally makes the overall project costs too expensive.

The Internal Revenue Code does contain an exception to the provision that makes private activity bonds taxable. Water projects are part of a category of private activity bonds called exempt facility bonds. The total amount of exempt facility bonds that can be issued on a tax-exempt basis in each State, however, is tightly capped.

Private financing of public water infrastructure has thus been effectively blocked. The planning process for large water projects takes years, and the uncertainty and unlikelihood as to the avail-

ability of tax-exempt private activity bond volume cap for a proposed water project, as a practical matter, eliminates private financing and P3 approaches to project implementation.

Unrestricted tax-exempt private financing of public water infrastructure is no cure-all. Most projects surely will continue to be municipally financed using traditional water revenue bonds. But I am convinced that certainty as to the availability of tax exemption for privately financed water projects could create a significant level of renewed interest from the private sector in providing innovative and flexible solutions to a wide variety of municipal water project challenges.

This was indeed the case in 1986, when certainty as to the tax-exempt private activity bond financing for municipal solid waste projects, which was provided by the Tax Reform Act of 1986, unleashed a wave of additional investment in waste to energy and other facilities needed in the municipal solid waste management field, totaling over $15 billion.

To conclude with a real and current example in the water sector, the San Diego County Water Authority this year is going to contract for the purchase of water from an $800 million seawater desalination project in Carlsbad. It is a public-private partnership with Poseidon Resources which will design, build, finance, and operate the plant.

Poseidon's private financing makes the project bonds private activity bonds, but the company has secured volume cap allocation from the State. This is an unusual and fortunate occurrence, made possible only by the collapse in demand for private activity housing bonds in the present market.

The price of water with tax-exempt interest rates is projected at approximately $1,850 per acre-foot. With taxable financing at interest rates about 100 to 150 basis points higher, the price would be over $2,000 per acre-foot, or around a 10-percent increase. It is quite possible that this key water resource project for California would not proceed had lower cost, tax-exempt financing not been secured by the private company. The value of assured tax exemption for water private activity bonds is thus quite plain.

Thank you for this opportunity. I look forward to your comments and questions.

Mr. GIBBS. Thank you.

At this time I would like to welcome Mr. Thaddeus Wilson. He is vice president of M3 Capital Partners in Chicago.

Welcome. The floor is yours.

Mr. WILSON. Thank you, Mr. Chairman. Chairman Gibbs, Ranking Member Bishop, members of the subcommittee, it is an honor to be here today to discuss innovative financing approaches for community water infrastructure projects. My name is Thad Wilson, and I am a vice president with M3 Capital Partners, a management-owned investment and advisory firm based in Chicago, Illinois.

Through an advisory affiliate, M3 currently manages equity commitments of $2.9 billion on behalf of a U.S. public pension plan, focused on long-term investments in real estate.

M3 is currently forming a North American water infrastructure fund that we anticipate will initially be capitalized by a U.S. public pension plan as the "cornerstone" sponsor.

It is expected that the fund will focus primarily on offering an innovative design/build/operate/finance approach to municipal water infrastructure project delivery. We believe this approach offers a robust form of public-private partnership, or P3, to municipalities to capitalize their water infrastructure improvements.

In the U.S. today, there is a significant and growing need for investment in our critical water infrastructure, as we have heard in detail this morning. Given State and local funding challenges, particularly in the current environment, accessing private capital through P3 structures may be a compelling option for municipalities.

At the same time, public pension plans need long-term investments that can provide stable returns for their beneficiaries—teachers, firefighters, police, and other public employees.

In my view, the primary benefits of water infrastructure P3s include the following.

Because a P3 is not an outright sale or privatization, municipalities can retain long-term ownership and control of their water facilities.

Municipalities can also accelerate the launch of new projects, which may help to meet compliance-driven deadlines and may generate near-term employment opportunities for the local economy.

Municipalities can transfer key risks to the private partner. As a result, the private partner is well-aligned with the municipality and is putting its capital at risk, with a requirement to perform its obligations throughout the term of the P3.

And finally, municipalities can potentially realize life-cycle cost savings as a fully integrated team takes on responsibility to effectively design, build, operate, and finance their water infrastructure projects.

Potential measures to facilitate more water infrastructure P3s include the following.

Encourage broader appreciation for the value of water and water infrastructure, supporting true cost pricing for water services, where appropriate.

Increase awareness of the many social benefits from water infrastructure investment, such as conservation and reuse of water from water recycling initiatives.

Increase awareness of the potential benefits of P3 structures, combined with efforts to implement regulations that facilitate the use of P3s.

Help to lower the cost of debt financing for private partners in water facility P3s by removing the State volume cap on private activity bonds for such projects.

And finally, specific to the Water Infrastructure Finance and Innovation Act legislation the subcommittee is currently preparing, in Section 104(b) on public-private partnerships, I would recommend amending the discussion draft to include "the private financing or development partner" as an additional "entity eligible for assistance."

In summary, municipal obligations to provide quality water services align well with the increasing desire of public pension plans to invest in stable infrastructure assets. P3s utilizing public pension plan capital can help to meet water facility investment needs, and more municipalities should find it advantageous to explore this innovative financing approach.

I thank you for your time today and for your consideration of this issue.

Mr. GIBBS. Thank you.

At this time I would like to welcome Mr. Jeffry Sterba. He is president and CEO of the American Water Company, and he is also testifying on behalf of the National Association of Water Companies.

Welcome.

Mr. STERBA. Thank you. Chairman Gibbs, Ranking Member Bishop, members of the committee—I will turn that on to make that better. Now you can hear me. Most people hear me so loud they would just rather I lowered my voice.

I appreciate the invitation to appear before you today. I am Jeff Sterba, president and CEO of American Water, which is the largest publicly traded water and wastewater company operating in the United States. We have over 7,000 employees who serve more than 15 million customers in 30 States of the United States and a couple of Provinces in Canada.

I am testifying on behalf of American Water and the National Association of Water Companies, which represents numerous companies in the private water sector.

This committee has heard from many about the disturbing status of our country's water and wastewater infrastructure, and I applaud your commitment to do something about it. The primary point that I will make in my testimony is that in this era of very tight Federal, State, and local municipal budgets, private capital is, and can be made more, available to help address our crumbling infrastructure and the economic harm that it causes. This can be done without changing the fundamental nature of public ownership of water because we are talking about the infrastructure that treats and delivers it, not the ownership of it.

American Water serves roughly 4½ to 5 percent of the United States, and we invest roughly $1 billion per year in upgrading the infrastructure, which is about 7½ percent of the total investment that is made.

If we couple that with the investments made by other private water companies, which are roughly also about $1 billion, that is $2 billion, which is roughly equivalent to the amount that the U.S. Government invests through the two revolving fund mechanisms for both clean drinking water and under the Clean Water Act.

So, while there is substantial private capital at work today, it is not sufficient. Ranking Member Bishop, you mentioned the $3 to $10 billion annual shortfall. So we have got to find another set of ways to create more capital for sustainable water management projects. So let me touch on four ways fairly quickly.

First, three of the four proposals are legislative in nature, but the first can largely be accomplished through a policy shift. Right now, if a community is going to partner with a private water com-

pany to improve or expand its infrastructure, its customers will likely have to pay a large penalty to remove existing municipal debt because of the way the IRS interprets some of its rules.

This penalty can drive a 15- to 25-percent increase in interest cost with no real benefit, and that 15- to 25-percent increase in interest cost is paid for by customers. The penalty comes from having to retire existing low-cost debt, pay issuance costs for replacement debt, and possibly having to prefund amounts greater than the amount of debt to be paid off.

Now, we are not talking about changing the ownership structure. We are talking about a long-term lease. There is nothing gained that I can tell by this defeasance requirement except higher cost to customers. There is no cost to the Federal Treasury to make this change, and it would enable access to new capital to repair and upgrade water and wastewater systems, adding to the economy and creating jobs. So let's not enable financial barriers for local governments. Instead, let's rewrite the rules that hinder these win-win public-private partnerships.

The second tool has already been touched on, and that is to create greater access to private activity bonds for all public purpose drinking water and wastewater projects. H.R. 1802, the Sustainable Water Infrastructure Investment Act, would do that by removing the water projects from State volume caps.

Experts have stated that this would generate at least $2 billion in new investment each year, an amount which, using U.S. Conference of Mayors' analysis, would translate into some 60,000 jobs. We appreciate the inclusion of similar language in the draft WIFIA legislation.

Frankly, the WIFIA legislation is the third idea I would like to mention. It primarily seeks to lower the financing cost of infrastructure investments. NAWC commends the organizations which have put this forward, and we generally support the principles of WIFIA.

It is not clear, though, how much WIFIA will really increase the total amount of capital investment rather than just substitute for municipal debt or State Revolving Fund leveraging that would otherwise occur. While lowering the cost of debt through a Federal subsidy is a worthy goal, the real priority is to increase the amount of capital that can flow into this needed infrastructure.

Finally, as part of the WIFIA proposal, we strongly encourage the subcommittee to redress an unfortunate oversight in the Clean Water Act. Currently, private water utilities are not eligible to participate in the Clean Water State Revolving Fund. Moreover, while the Safe Drinking Water Act gives States the option to make private water utilities eligible for the Drinking Water State Revolving Fund, only about half the States have done so.

The part of WIFIA that helps leverage State Revolving Funds would provide little benefit to the millions of American taxpayers who are customers of NAWC member companies. Existing Federal programs such as the State Revolving Funds and any new Federal programs such as WIFIA should benefit all taxpayers, including customers of private water companies.

Now, in the end, we know intellectually and we have to understand that the cost of water and wastewater infrastructure up-

grades will put upward pressure on rates. Multiple surveys have found that American voters are willing to pay more to help ensure appropriate infrastructure and service. However, we must bring operational efficiency and low-cost capital to the table to minimize this impact.

Private water companies are integral to doing so, and we stand ready to help the committee on this important challenge. Thanks, and we will take any questions you have.

Mr. GIBBS. Thank you.

At this time I would like to welcome Mr. Jeffrey Eger. He is the executive director of the Water Environment Federation in Alexandria, Virginia.

Welcome. The floor is yours.

Mr. EGER. Thank you, Mr. Chairman and Ranking Member Bishop and members of the subcommittee. I join this distinguished panel in thanking you for hosting this very important hearing.

My name is Jeff Eger. I serve as the executive director of the Water Environment Federation, WEF. It is an 84-year-old professional and technical organization with 36,000 members, including scientists, engineers, and others working for clean water in North America and around the globe.

We are the sponsors of WEFTEC, the largest annual water conference in the world, and our peer-reviewed publications serve as the benchmark for best practice in wastewater treatment, stormwater management, and water quality.

The majority of our members, including those of the Ohio Water Environment Association, work in and for municipal government, so the topic of financing for publicly owned treatment facilities is a very important one for us.

Prior to coming to WEF, I served for 18 years as the executive director of Sanitation District 1, the second-largest public utility in Kentucky. SD–1 maintains $1 billion in physical assets, including 1600 miles of sewer lines, 143 wastewater pumping stations, and 3 major treatment plants. Two of those plants were designed and constructed during my tenure, and to help with this, we secured more than $80 in low-interest loans through the State Revolving Loan program. Federal financial assistance was an important component of our overall financing package.

I am also proud that during my time at SD–1, we tried to be proactive in identifying our capital needs and working with local leaders, including elected officials in the business community, to obtain support for rate increases, having enacted double-digit rate increases seen out of the last 10 years.

We also worked with our State and the U.S. EPA to implement a holistic watershed-based approach to protect water quality that reduced cost and enabled us to assure that ratepayers saw that their money was being spent cost-effectively.

This experience led us to our working with Mayor Ballard's organization, the U.S. Conference of Mayors, to bring the issues of affordability and priority-setting forward as a national issue. Mr. Chairman, we appreciate the attention that you provided to this issue during the subcommittee hearing late last year.

As other witnesses have noted, local governments are facing the worst financial circumstances in more than a generation. If we are

going to continue to provide essential services and make progress in water quality, it is time to reimagine the way we provide local water services.

We need to encourage innovation—innovative technologies, innovative management approaches, and innovative financing. As you heard from my associate, Mr. Williams, we believe that we are on the cusp of transforming from a waste treatment industry to a resource production industry. Funds for research and implementation have never been more important and critical in this regard.

We are approaching the 40th anniversary of the Clean Water Act. The Clean Water Act contained a number of innovations, including a grants program to help cities meet the ambitious national requirements. Fifteen years later, the 1987 amendments phased out grants in favor of another innovation, the State Revolving Loan program.

WEF was an early supporter of the SRF program, and as I noted earlier, the Clean Water SRF has been remarkably successful. We fully support the continuation of the SRF, and we want to thank Congressman Bishop for including reauthorization of the SRF in his legislation introduced last October.

But now, 25 years later, it is time to innovate once again. The WIFIA concept, discussed earlier and proposed in draft legislation, is one opportunity for Congress to assist local communities with their water infrastructure needs in a way that makes sense today. WIFIA would provide much-needed low-interest funding in a manner that compliments the SRF and leverages the available Federal dollars.

As has been mentioned, reduction of just 1 percentage point in a long-term loan could mean savings of millions of dollars over the life of that loan. These savings mean that available public funds will go further in addressing our critical infrastructure needs.

Mr. Chairman, subcommittee members, we know that this Congress in particular is facing some serious issues, including concern about Federal spending and deficit reduction. It can be challenging to see a clear path forward, even on an issue like clean water, which enjoys widespread public support and where there is a strong history of bipartisanship.

Innovative financing legislation provides an opportunity to demonstrate once again that clean water is a national priority, and that leaders here in Washington are sympathetic to the needs of local governments.

In a few weeks, WEF will be launching a major new public awareness campaign, "Water Is Worth It." We have already gone public with an electronic billboard in Times Square, and over time, will be working with the other organizations here at this table, and we hope with you, to reinforce the value of water.

We see introduction and eventual passage of new water infrastructure financing legislation as a very important step in supporting the value of water and our essential water infrastructure. We stand ready to work with you and your staffs to perfect this legislation and move it forward.

Thank you for your time.

Mr. GIBBS. Thank you.

At this time I would like to welcome Mr. Steven Fangmann. He is the executive vice president of D & B Engineers and Architects in Woodbury, New York. He is testifying on behalf of the American Council of Engineering Companies and the Water Infrastructure Network Coalition.

Welcome.

Mr. FANGMANN. Thank you, Chairman Gibbs, Ranking Member Bishop, and the distinguished members of the Water Resources and Environment Committee.

My name is Steve Fangmann. I am executive vice president of D & B Engineers and Architects, a Long Island based firm with over 45 years of expertise in environmental engineering and ranked by Engineering News Record as one of the top 200 environmental design firms.

During my career I have worked for many communities on wastewater management and water supply services, and formerly served as the Deputy Commissioner of Public Works for the Nassau County DPW where I was responsible for the overall water and wastewater management of the department, which included two major wastewater facilities and a $400 million upgrade of both.

I was also responsible for water management, planning for Nassau's sole source groundwater aquifer system, as well as 3,000 miles of a separate sewer collection system.

Engineering firms who work closely with local government officials have a considerable appreciation of the difficulty municipalities and utility districts face in balancing their constituents' demands, public safety, and environmental protection, all in the context of extremely limited funding options.

I am testifying this morning on behalf of the Water Infrastructure Network and the American Council of Engineering Companies. WIN is a broad-based coalition of the Nation's leading construction, engineering, labor, conservation and municipal water and wastewater treatment providers. ACEC is the business association of America's engineering industry with thousands of firms that specialize in water and wastewater design and consulting.

We commend the subcommittee for the timeliness of this hearing today. There are few Members of Congress who are not aware that the country is facing a water infrastructure funding crisis. The question is what can we do to solve it. We know that we must solve it because without safe and clean water for our communities, not only is public safety at risk, but also water dependent industries such as agriculture, commercial fishing and tourism would be at risk and would be unable to contribute the hundreds of billions of dollars annually that they currently provide to our economy. We simply cannot afford to postpone the solution.

We think the answer is not just one silver bullet. What communities need is a comprehensive toolbox of water infrastructure financing options. The water infrastructure financing challenges we face have been a century in the making and will take all of the best ideas that have been presented today to the subcommittee, as well as many that have yet to have been developed, to meet this challenge.

For today's hearing, we would like to focus on just four proposals of the many that have been discussed. The development of a TIFIA

Program for water infrastructure, as championed by Chairman Gibbs, and the innovative finance tools in the Water Quality Protection and Job Creation Act, as introduced by Congressman Bishop, all must be tools in the toolbox.

In addition, we commend Chairman Gibbs for including H.R. 1802 in his draft water infrastructure finance bill. The Sustainable Water Infrastructure Investment Act, which has strong bipartisan support, provides an exemption from private activity bond State volume caps for all water and wastewater projects.

We also support a dedicated source of funding for water infrastructure, as well as reauthorizing the State Revolving Funds for water and wastewater projects.

Regarding TIFIA, WIN and ACEC believe that the development of a TIFIA-like program for water infrastructure makes eminent sense, and we are pleased that water infrastructure funding legislation being advanced by Chairman Gibbs and Congressman Bishop has embraced this financing concept.

Engineering firms who specialize in highway transportation projects are great proponents of leveraging potential of TIFIA, but its usefulness is sometimes limited because of the revenues required, such as toll roads or fees. The TIFIA concept is better suited for financing water infrastructure projects. Municipal water and wastewater projects have a built in system of customer user fees or volume rates collected on a regular schedule and dedicated only to water services and infrastructure. These fees guarantee that bonds can be paid back and offer minimal risk to the lender, as others have stated here. We estimate that 90 percent of the water projects would fit in this category.

We also think that some important modifications would make WIFIA proposals more effective, streamlined and transparent. We have outlined these in detail in our written testimony. In particular, we would urge that the existing State Revolving Fund programs be used to the maximum extent practicable to distribute WIFIA loans. The States already have a 25-year mechanism in place for distributing SRF loans, a mechanism that selects projects based on an objective ranking system that is publicized and available for review.

In addition, it would be far more cost effective for the Department of Treasury to oversee approximately 50 loan agreements with the State SRF financing authorities instead of hundreds or potentially thousands of loans to individual communities. We think that limiting access to WIFIA to only $20 million or larger projects could restrict its usefulness to many medium size and smaller States.

A direct loan program of State SRF financing authorities would allow the States to use their existing ranking systems to issue the loans.

We also hope that the WIFIA proposal would incorporate the improvements to the SRF Program, such as extended loan repayments and expanded project eligibilities that are part of the SRF reauthorization bills passed by the House.

And finally, we would strongly resist efforts to have WIFIA funding supplant existing SRF funding to the States.

I will just quickly touch on private activity bonds. They will have an important role to play and should be definitely a part of the toolbox. Currently each State is limited, as stated by others, by the volume cap. What happens with water and wastewater projects, our projects are out of sight, out of mind, meaning underground structures do not get the public's attention. So the private activity bonds are not used for those types of projects with a volume cap.

It is not a new idea. The Federal Government lifted some low-volume caps when the Nation was facing a financial crisis with respect to the development of adequate solid waste disposal facilities, as testified before me.

Regarding the Clean Water Trust Fund, WIN and ACEC continue to believe that a long-term, deficit neutral, dedicated funding source for water infrastructure must be one of the tools in the toolbox. Though not perfect, dedicated trust funds have financed the majority of our Nation's highway and airport infrastructure construction, and as general funds become scarcer, we must consider the concept.

We remain committed to working with the committee to identify viable funding sources for a Clean Water Trust Fund.

Again, on the SRF, we are strongly supportive of reauthorization, and in conclusion, we are extremely encouraged by the subcommittee's efforts to develop the next generation of water infrastructure financing tools. The House Transportation and Infrastructure Committee and this subcommittee, in particular, have a long history of developing water infrastructure funding legislation that earns broad bipartisan support.

We look forward to working with the bipartisan leadership of this subcommittee to perfect the innovative water infrastructure financing tools discussed at today's hearing and deliver a bill to the President's desk this year.

Thank you for the hearing.

Mr. GIBBS. I will start off the go-round of questions here, but just a couple of comments. You have probably noticed in the draft legislation we are working on it is left blank the dollars that will be put in. That is because we are trying to figure out how we are going to pay for it, at least the exposure to the taxpayers, and so we are working through that.

I think the overall theme versus the support here, there is obviously a need for more financing, but I guess I will open it up to the panel starting off. We heard a little bit about doing some new innovative thinking with like the WIFIA and not be in conflict with other programs because we do not want to have unintended consequences. So kind of along that line you may want to maybe discuss a little bit to make sure that we are not going to do something that is going to cause problems for the current SRF or some of our other financing programs.

Then also I think you could probably touch a little bit maybe on what impediments you might see, either Federal, State or local, that could be challenges that we need to try to work through in the legislation.

So whoever wants to address that. Mr. Arndt.

Mr. ARNDT. Thank you, Mr. Chairman.

As we see it, WIFIA is really a complement to the other tools that are already in place. I know there has been some discussion of does it become a substitute for other programs. I will focus on the SRF.

When you look at what the SRF does, it really helps those utilities that in many cases cannot fund their infrastructure on their own, and as a result, you see things like grants. You also see very low-interest loans and that sort of thing. So we are not looking to essentially replace that capability which comes forward from the SRF.

Likewise those entities, particularly the higher credit rated utilities that are out there, can access the bond markets quite readily, and again WIFIA is not meant to substitute for that access to the bond market. It is a supplement to that.

In summary my comment would be that it is one more tool in that toolbox that we need to fill the gap and, in particular, where we see the increasing needs in areas such as the infrastructure replacement and renewal expenditures which are unprecedented and just emerging at this point in time, to fill that gap that is going to grow progressively as time passes.

Mr. GIBBS. Maybe just to follow up now with Mr. Petersen because your testimony I thought was excellent. In your experience working with private-public partnerships, how do you see to, you know, bring that money in under a WIFIA concept?

Mr. PETERSEN. Thank you, Mr. Chairman.

Yes, our experience tends to be at the planning stages of these projects, and if you can put yourself in the shoes of an administrator of a water or wastewater public authority and they have a large capital need, let's say a CSO Program or a replacement wastewater plant or a new water treatment plant, something like that. They will engage a team of consultants. They will us their own internal resources, and they will look at all of the options that are available to them. They will try to plan for the optimal technical solution. They will project costs. They will have a plan of financing for the project. They will have a financial advisor advising them on current market interest rate conditions, and so forth.

And then they will turn to the question of how are they going to actually deliver the project. Are they going to deliver it using traditional design-build with the municipal operations and municipal bond financing? Are they going to try something a little more innovative like the design-build contracting two contracts in one for efficiency and more expedited delivery; maybe even include private operations in the mix?

Then they will turn to the question of should I consider private financing in this mix of potential ways of delivering this project. And as I was trying to say in my testimony, that is where they always stumble.

We went through a business case exercise considering different project delivery methods for a major wastewater treatment plant in Pima County, for example, in the Tucson area, a million people. They need to replace an old plant, and they went through this whole kind of analysis that I just summarized and they attempted to ascertain the risk adjusted net present value of life-cycle costs

of the project under all of these different approaches of delivering it and financing it.

And the conclusion was they picked a design-build-operate, one contract with three elements, with public financing traditionally. They would have picked design-build-finance-operation, a P3 type of project with private financing but for the uncertainty as to the availability of tax exempt financing. That is where the rubber meets the road.

As I indicated and as I think you all know from discussing this in the past, private financing is obtainable for water projects if you get wide cap allocations, but you can never be sure. And the legislation you are considering will take that uncertainty away.

And I think in the case of the example I just gave in Pima County, they might well have selected private financing to get the debt off their own balance sheet, put it in the balance sheet of the private project company that would develop it if they had some assurance that they could count on the taxes and financing that they would benefit from through the terms of the contract.

Mr. GIBBS. Just to follow up, we know that with the proposal the risk is really on the taxpayers, and of course that helps bring in this private equity. Also, you know, you have a good stream, a good track record because of the ratepayers' fees.

I guess to conclude here in my first round of questions is one question that comes up, and I think I know the answer, but I want to make sure it is on the public record, what historically would be the default rate on water-sewer type projects that maybe we should be looking at for when I have to defend or argue what the cost and what the risk is to taxpayers. What kind of default rate would there be for this kind of operation?

Does anybody want to take a stab at that?

Mr. PETERSEN. I will answer that if I might. Our firm does a lot of bond counsel work, bond counsel to public agencies, and works with rating agencies. Most all of the data is rated by the investment rating agencies, and in general as several of us have said here on the panel, municipal water and sewer revenue debt that is secured by pledged rates and charges is very secure. The default rate is near zero, and that is why most have very strong investment grade credit ratings, in many cases stronger than even tax secured general obligation debts, which is subject to, you know, the vicissitudes of the economy. This is just straightforward rates and charges for water and sewer, very strong credit.

Mr. GIBBS. Yes, Mr. Sterba.

Mr. STERBA. Mr. Chairman, if I could answer your question about whether there are conflicts that exist between what is being proposed and other existing financing mechanisms. From our perspective we do not see conflicts so much as we do see opportunities for leveraging.

So, for example, one of the mechanisms in WIFIA that can bring new capital to the table, as opposed to just lowering the cost of capital, is direct loans. But if you leverage that by requiring private capital to be brought to the table in order to qualify for a loan, then you are effectively getting double value. So you are bringing a loan to the table and then encouraging another source of capital to come along with it.

That is something that has not necessarily been required, but there is a provision in WIFIA that says the Administrator can take into account whether or not other private sources of funding or other sources of funding are brought to the table. So I would encourage the committee to utilize that because it can enhance the pool of overall funding.

The other comment goes back to one of the things that I mentioned about something that could be done administratively. It is very similar to what Mr. Petersen referenced, except it deals with existing assets. Say you have a municipally owned system that was built some time ago and financed with tax exempt debt. It has not been invested in, has not been kept up, and it also has growth and renewal obligations that the municipality cannot meet on its own. So it turns to an entity that provides expertise in that.

Today, the debt that is currently outstanding must be either repaid or defeased, increasing the cost to customers without adding value. And this issue, I think, may be able to be tackled solely administratively working with the IRS. It would help bring new capital, some of which may come through WIFIA, some of which may come through a private purpose entity that is going to fund the new capital additions, but without adding the burden on the existing capital that is already financing assets built 5, 10, 15 years ago.

Mr. GIBBS. That is an excellent point. My time is up.

Mr. Bishop.

Mr. BISHOP. Thank you very much, Mr. Chairman, and thank you to the panel. It has been very, very helpful testimony.

We have a lot of commonality here. We have agreement that we clearly have a problem that we have to address. We have an agreement that we cannot address it sufficiently with the amounts of money that are currently on the table, and we have before us in effect two different proposals which are, I think, complementary as opposed to contradictory with respect to how we go about trying to fund this or what role the Federal Government would play in funding these water infrastructure needs.

The draft bill that the Chairman proposes takes basically a WIFIA approach. The bill that I filed along with Ranking Member Rahall and with Members LaTourette and Petri takes sort of an approach in which it creates a suite of activities, a more robustly funded SRF, the creation of a trust fund, and then a WIFIA approach.

Two differences that I would like to explore and get your guidance on. One is in the bill that I filed. The WIFIA approach type funding would continue to flow through the SRF and judgments would be made by whatever entity the State has set up allocate SRF funds. In New York State, it is the Environmental Facilities Corporation. There are analogues all over the country.

In the Chairman's draft, it seems as if decisionmaking with respect to what projects would be funded would be vested with the Administrator of the Environmental Protection Agency.

And so my question is you are the stakeholders. You are the guys who are on the ground. Is it better to have the decisions made by a body that is State-based or is it better to have the decisions made

by a Federal or is it better to have the decisions made by a Federal body?

So, Mr. Fangmann, let me start with you.

Mr. FANGMANN. Well, having a lot of experience with EFC in New York, one of what I believe are the best run SRF programs on the wastewater side, I think going through that model is the best way. I testified to that effect on behalf of WIN and ACEC.

The idea there is they broke it down into priority groups throughout the State so that the most popular city is guaranteed some bulk of money, but as well as the local communities downstate and upstate so that the money is spread through the State on an equitable basis based on need and priority. You know, what will probably benefit from the projects?

So that is all built into the existing program. So I see additional funding come through a loan to that same program would be an efficient way of moving financing.

Mr. BISHOP. Other members? Mr. Arndt.

Mr. ARNDT. Perhaps a bit of correction. In the draft legislation as we see it, the EPA Administrator would effectively be charged with allocating the funds. There are actually two different mechanisms that are made available in that legislation. In the case of large projects they would have the ability to directly access with the funding via an application, I presume to the Administrator. In the case of the remaining systems who are not eligible for that large project or large utility status, they could in turn work through their SRFs. So it is not an all or a nothing type of approach in that regard.

I would comment that I think the SRFs have an advantage in that they are an established organization. They have criteria. They have had the history of working in that funding arena for now 20-some years, and as a result, I think there is a working relationship that has been developed. Those agencies tend not to be regulatory agencies. They tend to be financial organizations which I think is an important aspect, that the primary focus be to finance, not as a regulatory approach.

In that regard, some of our earlier discussions related to WIFIA actually called for the establishment of an authority of some sort to provide the funding as opposed to working through EPA, which is still, we believe, workable. However, we recognize the advantages of working through an established agency as well.

So I think there is perhaps some more consideration that could be given on that point.

Mr. BISHOP. Are you saying that it is a jump ball?

Mr. ARNDT. I think what is included with the draft, I think, is workable and that we would support. However, perhaps it could be refined. Perhaps the Administrator could delegate that authority to an authority type organization which has more of a financial focus.

Mr. BISHOP. I would just say I appreciate that. When we were drafting our bill, our original draft was the direct approach, and the stakeholders told us no. The stakeholders told us to say with the established mechanism, which is the SRF for the reasons that you just cited. People are familiar with it. It works. There is an established criterion, and that it is something that entities are comfortable with.

My time has expired. I have another question, but I will defer. Thank you very much, Mr. Chairman.

Mr. GIBBS. All right. Anybody down here? Just raise your hand. Representative Napolitano, go ahead.

Mrs. NAPOLITANO. Thank you again, Mr. Chairman.

In listening to the individuals talk about all of the needs that our communities have, as a past mayor of a small city I understand exactly some of the issues that affect our local communities.

Mr. Ballard, you talked about EPA prioritizing and some of the mandates that affect the ability for some of the communities to be able to meet those requirements, and you stress the need of flexibility.

We have been able to in our local area to bring the Regional Director to talk to the Councils of Government to be able to have direct input from them as to how they are affected or not affected by the mandates in our area. I am not sure if anything of that nature is going on and you could suggest to the Conference of Mayors that this is something that is available to them. It has been made available to us.

The new concepts, Mr. Williams that you talk about, is the utilization of new technology, of the green technology, of being able to convert methane gas into electricity to run a lot of stuff, but there is a lot of other technology coming out.

How much of that is being used and being incorporated into long-term plans? And are we actively looking at a way to reduce the energy usage in planning for further need as we move forward in upgrading or maintaining or structuring new areas?

Mr. WILLIAMS. So for years, publicly owned treatment works have been looking at their energy demand inside their plants, and they do energy audits and that type of thing to reduce the energy demand, put in more efficient mechanical equipment, lighting, that type of thing.

What I was talking about was actually going beyond that, and that is actually generating more energy by bringing in waste material, waste material that currently goes to landfills or in some cases actually have energy put into it in order to help the disposal process. So what I am finding in California is that 10 or so years ago not too many plants were doing that, but more and more plants are beginning to do it.

One thing you are seeing a lot of, is plants beginning to take in fats, oil and greases which are very digestible and create a huge amount of energy and using that to power their treatment plants.

Mrs. NAPOLITANO. How is this—I am sorry. My time is running out—how is this being able to increase the participation of the three Ps, the public-private partnerships?

Mr. WILLIAMS. Some of these things take additional capital. So if you were able to partner with the public sector on that and bring in capital to actually build the facilities needed to do this, that would be very beneficial.

Mrs. NAPOLITANO. And does this affect a lot of the smaller communities that may not be able to afford to be able to find out where these partnerships can be formulated or how they can obtain some of the assistance they are going to need to upgrade and maintain?

Mr. WILLIAMS. It would definitely help smaller communities because smaller communities oftentimes just do not have the wherewithal to build facilities that are needed to produce the green energy.

Mrs. NAPOLITANO. Well, as you know, Government does move very slowly in being able to move forward, and we want to be sure that we have those new concepts made known so that we can continue to advocate, whether it is with the Department of Energy or with EPA and other agencies.

Mr. Arndt, you talk about doing more for less. The Federal debt currently precludes thoughtful necessary action. We have to go on the current trend, which is no earmarks, no pork, pay for, et cetera. So how would that be able to increase the participation of the public-private partnerships? And how do we make this more available to communities that have no idea where to go?

Mr. ARNDT. Like a lot of things, no simple answer, but one of the things that has been included in our written comments and others have alluded to that here is that——

Mrs. NAPOLITANO. Would you move the mic up please?

Mr. ARNDT. Yes. One of the things that is included in our testimony is the fact that WIFIA should be allowed to take a subordinate position on financings which we believe would then leverage or encourage private investment and essentially act as an incentive for that purposes.

Beyond that, fundamentally, if you have a lower cost source of capital, which effectively is one of the attributes of WIFIA, what it does is increases affordability to the ratepayers. It increases the certainty that the debt would be repaid with interest as it becomes due, and also it increases the capacity of the utility to do more projects.

I think when you put all of those things together, you end up with a net improvement beyond where we are today.

Mrs. NAPOLITANO. Understood. My time has run out, but with the indulgence of the Chair, I will ask one more question and I will be done, and that is are any of you proposing to any of your cities, communities or the partnerships that you have to look into the future because of the increase in population and the demand it is going to create on the infrastructure itself, one?

And two, what are you doing to educate the general public about the need to increase the rates, whether it is incrementally or generally saying that these needs are going to be vital to the delivery of clean, potable water?

Thank you, Mr. Chairman.

Gentlemen?

Mr. BALLARD. Congresswoman, thank you for that question.

As you probably know as a former mayor, you have to always educate your constituency on the rates. We were facing large rate increases, and that is why we had to do what we had to do, by negotiating with the EPA and coming up with creative financing and all that we could with creating infrastructure and all that we possibly could at the local level.

I think mayors across the country are generally doing that. They are looking for new solutions like WIFIA. They are looking at all sorts of financing opportunities. They are looking at being more

creative with technology, all while telling their constituency that rates are probably going to go up regardless of what we do. And I think they understand that, and as you know, that is a delicate balance as you move forward.

Mrs. NAPOLITANO. Thank you for your indulgence, Mr. Chair.

Mr. GIBBS. Mr. Duncan.

Mr. DUNCAN. Thank you, Mr. Chairman.

Mayor Ballard, I am sorry I did not get to hear your testimony. I was in another meeting, but I was here when we had the Mayor of Omaha here, I guess, a few months ago who told all of the problems he had with EPA. I notice you mentioned him in your testimony.

But in your testimony you talk about that you were under this consent decree that had a potential cost of $3.5 billion, and then it ballooned up even from that another $300 million, but you say that you were able to renegotiate that and reduce the overall price and get a better environmental result.

How much money were you able to save, and how did you do that? I mean, what better things were you able to do after this renegotiation?

Mr. BALLARD. Well, it was a difficult process, Congressman, and thank you for your question. It took a while to get there, to be honest with you. It did balloon up to $3.8 billion by the time we had entered office. We knew that that was a huge number that directly was going to go to ratepayers. No question about that.

I was lucky enough to hire some rather brilliant people to work for the city. They had run water companies before actually, and they went to the EPA and said, "We need to relook at this. We think we have a better solution."

That is what we did. We told them we thought we had a better solution, and we thought we could make it greener. We thought we could make it faster, and we thought we could make it cheaper. To be frank with you, initially that did not matter very much.

Mr. DUNCAN. Do you mean that did not matter to the EPA? Is that what you mean?

Mr. BALLARD. Right, and so we had to essentially negotiate for well over a year, especially on the second amendment and we told them that we had that combination of gray and green infrastructure, which we thought would be more environmentally sound and a lot cheaper for the citizens of Indianapolis, and it took over a year of negotiation. We were very happy that we got that done, and everybody came out in saying that was a win-win solution.

But I would tell you, as I said in my oral testimony today, we are the exception to the rule. Mayors across the country, and you just have to spend a couple hours at any Water Council meeting that are dotted throughout the country to sense the frustration that mayors are going through regarding this. It is palpable. It is hurting them, and frankly, you can see on their faces that they are very, very worried, and that's why whenever I talk about it I ask for more flexibility, more reasonableness, and as you may know, mayors, they just have to get things done.

I mean, as I say, at the city level a buck is a buck, and you have to get things done at the city level. And so there are creative solutions out there, and the mayors and other municipalities, maybe

even smaller, are working their tail off to be creative to work with the mandates that are thrown upon us and to make sure that we can do it in an affordable manner, and that is why we talk about prioritizing mandates, and that is why we talk about being flexible with the EPA.

Mr. DUNCAN. Well, my dad was Mayor of Knoxville from the time I was 11 until I was 17, and so I have great sympathy for any mayor. I found out that everybody and his brother wanted to be a fireman or a policeman, and the way after they went on the force they wanted a promotion and a raise, and certain other problems. Knoxville has had to spend a tremendous amount of money over the last few years, and so I have heard some of these things.

I am going to run out of time. I will say this. When you said that the EPA did not seem to care about the cost, that is really a sad statement because too often people in Government do not worry about the cost because it is not money coming out of their pockets, but they forget that there are a lot of poor and lower income people that have trouble paying some of these things.

Mr. Williams, let me very quickly ask you. I know you expressed concern about the exploding costs on these things, too, in your testimony, but you say that in this subcommittee the best way we could help is to give maximum flexibility to the local water agencies. Do you feel like the Clean Water Act as it is now is not giving enough flexibility? Is that what caused you to put that in your testimony?

Do you have an example?

Mr. WILLIAMS. The short answer is yes. I testified here last year on the integrated permitting and planning that EPA is proposing, and they are going to be finalizing that framework in March. One of the things the clean water community is very anxious to see is what does this actually look like.

We have looked at the framework, but it is hard to tell from the framework how it is actually going to play out on the ground. So we are interested in actually test cases so that you can take a difficult situation where there is a number of regulations and see how this actually plays out, see how they are prioritized, and what flexibility is there.

And we would like to look at that holistically as the entire clean water community in the Nation and just see what happens. If it does not play out as we would like to see it play out where you do get the flexibility, then we would like to work with the subcommittee in terms of introducing legislation that will provide that flexibility.

Mr. DUNCAN. All right. My time is up, but let me just express one other major concern I have. Mr. Fangmann just a minute ago talked about the distribution of funds. I represent, you know, primarily an urban-suburban district in and around Knoxville, but I also have some small towns and some rural areas, and I have heard and read that while the problems of the bigger cities are getting the most publicity and the most attention, that there are a lot of even more problems in some of these small towns and rural areas, and even more so because many people in those areas do not have quite as much income as people in the cities do.

So that is something that I think deserves a little bit more attention than it has been getting. I see somebody on the panel might want to say something about that. I see a couple of people nodding their heads, but if any of you want to say something about that, certainly feel free to do so.

Mr. Arndt.

Mr. ARNDT. Thank you for that question.

The Buried No Longer Infrastructure Report that I mentioned earlier looks at the infrastructure replacement and expansion needs across the country, and they slice that both on a regional basis and in terms of the system size, and one of the things that is very revealing in that regard is when you look, in particular, at small and very small systems on a per customer basis, their costs of keeping pace with those replacement and expansion, more replacement than expansion, are much more costly and in some cases actually would lead to a tripling of the user rates that are necessary to fund that kind of investment.

That is not to diminish the impact, the concerns related to urban areas. In particular, when you look at it from the standpoint of the regional approach, when you look at the Northeast and the Midwestern States, because they tend to have the older cities their costs are quite significant and are rising more quickly than what would happen in other parts of the country.

So there is no individual group that comes out with a clean slate as it were. Every category has its difficulties to deal with, and so I would say that the needs are universal. They are not limited to one area or one size system.

Mr. DUNCAN. We have been having a couple of examples of small towns or cities around the country surrendering their charters because they just could not meet all of the mandates and the expenses of Federal requirements.

Yes.

Mr. STERBA. Congressman Duncan, just a thought. While we serve 15 million people, we predominantly serve fairly rural areas. A lot of those areas do not have the capacity to test for emerging contaminants and comply with all the other new regulations that come along. It puts an increasing burden on small systems, but the big thing that we have found is they lack purchasing power.

We are working with a community right now where when we compare what they are paying for pipe, meters, and valves to what comes through our supply chain, it was over a 35-percent savings because a small community just does not have the capacity to access some of these economies of scale.

Those are the kinds of things that can be done by attacking the other end of the cost equation. Financing is part of it, but how do we get efficient on the operating costs and on how much you have to spend for capital?

Mr. DUNCAN. Thank you. Thank you, Mr. Chairman.

Mr. GIBBS. Ms. Edwards.

Ms. EDWARDS. Thank you, Mr. Chairman.

I would like permission to enter into the record a statement from Congresswoman Eddie Bernice Johnson. She could not join us today, without objection.

Mr. GIBBS. So ordered.

[The Honorable Eddie Bernice Johnson's prepared statement appears together with other Members' statements. Please see the table of contents for "Prepared Statements Submitted by Members of Congress."]

Ms. EDWARDS. Thank you.

Mr. Chairman and Ranking Member Bishop, I really do appreciate this discussion, and to our witnesses, as always, I either am forced to rethink some things that I thought I knew or learn something differently. So I appreciate that.

You know, there is probably not one of us who cannot tell stories about aging and failing infrastructure wherever it is that we live. I happen to represent a district that is right outside of Washington, DC. We have a couple million people serviced by one water agency, and the challenges are really great.

A few weeks ago I jumped into the Potomac River, something completely unrelated, but it occurred to me that I did that, and I felt perfectly comfortable that the water I was jumping into was going to be clean because we were not having sewage runoffs into the river. The river, in fact, was warmer than it is in this room, but it reminds me of how much we do not think about the water until something happens, a boil water restriction, a water main break, any number of failures.

And so I appreciate that we all understand what the gravity of the problem is. The question that I have first for Mr. Wilson, I am intrigued by this discussion of the benefits and value of using public pension funds to make investments, especially in an economic and financial environment in which the kinds of plans that you would not want to put at risk in the general market, investing in water infrastructure is stable by comparison.

But one of the things that I am confused about as I look at your testimony is the recommended change in the chairman's draft that is part of today's discussion. In your testimony, you recommend that private investors like pension funds also have direct access to the U.S. Treasury funds at subsidized rates. And so I am curious as to why because it seems to me that that would mean then competing with the State Revolving Funds or other mechanisms for low-cost financing, which seems at odds given that the argument begins with public pension funds having, you know, sort of a lot to invest, and it is important to invest, and there are benefits like accelerated project funding, et cetera.

So how would it be in the interest of the 27 or so municipalities that I represent to have you investing by borrowing capital funds from the Treasury only to then reloan the funds to the community? Help me understand that.

Mr. WILSON. Yes, thank you for your question.

Congresswoman, I was viewing that in the same vein as the ability to access private activity bonds that are tax exempt. So the private entity that would be set up to manage the design, build, operate, finance of the new project, would utilize primarily equity capital that may come from a public pension plan. They may also want to utilize some debt financing. So you have a total financing package, debt and equity. They may access taxable debt for that. It could be bonds. It could be bank financing, project financing.

The lower the cost of that debt financing that that private entity puts together, the lower overall cost for the community and for the project. So whether it is accessing private activity bonds that are tax exempt or accessing other forms of tax-exempt debt, it should help to lower the cost for the project and should be able to be passed through to the community.

Ms. EDWARDS. But is there not some burden shifting that goes on there? Because I would worry about that. I mean, if a municipality already has access to the SRF to do, you know, other kinds of projects, they may also want to engage in a partnership using the private equity, but would not necessarily want to shift the risk to the Federal taxpayer or to the local community because it is private activity.

I mean, you get a long-term sort of deal to make the most that you can out of there, but also meeting the objectives of delivering water in the system. So I would hate it if we get into a situation where our taxpayers, either Federal or our ratepayers locally, would then end up acquiring a burden for this kind of private investment activity.

Mr. WILSON. I was thinking of it as the burden or the risk would be taken on by the private entity, and the private equity would be first at risk, as if they were financing it. They were putting together the debt and the equity for the project. They would take on the risk to deliver the project on time, on budget, to make sure that it operates according to regulations throughout the PPP term.

So the financing would team up with the service provider that would offer design, build, operate services. They would form one integrated team that would be financed with debt and equity. They would be obligated to repay that debt, that private entity. So that private entity would be at risk for the repayment of that debt.

And my view was toward lowering the cost of the overall capital that was pulled together for a new project such that those costs could be passed on to the community.

Ms. EDWARDS. Thank you.

Mr. Chairman, if I could just have one more question I would appreciate it, and I appreciate your indulgence.

I just wanted to direct this question actually to Mr. Williams. You raised a point, and I appreciate the partnership that we have had with NACWA. I have learned so much from NACWA. But you talked about green infrastructures being one of the tools in the toolkit to lower cost for communities and also provide the benefits that you can get in addition to doing your traditional kind of infrastructure. I wonder if you could speak to that as well as to the availability for municipalities of those kind of investments.

I mean, I have introduced with your help H.R. 2030, a clean infrastructure bill, and I just think we have got to incorporate more of those techniques to offer something else to local communities that is an option for them rather than the tremendous amounts of money that they have just spent in traditional infrastructure.

Mr. WILLIAMS. Yes. Whenever you are trying to meet regulations, I think that a community needs to have a balance, look at the overall cost, and compare the cost of the typical gray infrastructure with the green infrastructure. So any kind of innovative financing

that goes forward should definitely be able to fund things like green infrastructure if those things appear to be cost effective.

Mr. GIBBS. Mr. Capuano.

Mr. CAPUANO. Thank you, Mr. Chairman.

Gentlemen, thank you for coming. I think we are having a discussion about how to best finance something that we all seem to agree needs to be done. The problem that I have is that the American people do not understand this.

We are fighting every day here about a big transportation bill on infrastructure that people can see and feel and touch, and we are losing the argument on that. This is something, as I think Mr. Fangmann said, out of sight, out of mind.

Now, I will tell you that if I tell people, "Do you want some clean water? Here you go, $6," no one complains and they take it and they drink it and they give it to their kids. But if I say for that same six bucks, "Fix this," no one knows what it is. Everybody here knows what it is. Mr. Mayor, I know you know what it is. I got this when I was mayor.

And for the people at home who do not know what this is, this is a 6-inch water main that is about 80 years old when it was taken out of the ground, and what is in the middle here? That is sediment, folks, normal, everyday, average gravity. Every night when every American goes to bed, we shut off our water. When we do, there is water in these pipes. It settles. We turn on the taps in the morning. Anyone who drinks the first drink in the water, especially in the older areas, you had better let it run.

Anyone who has lived near a place where a fire department has come down and opened up a fire hydrant, you all know what happens. What happens is the fire hydrant opens up this sediment, blasts it through, and you get this, and we drink it. The problem is the American people never see this.

This has been on my desk for 20 years. Every single person who comes in my office says, "What in the heck is that?" And when I tell them that is your water pipe that you will find in any American city, anywhere you live, they are all amazed.

Gentlemen, if you want to win the hearts and minds of the American public, give one of these to every mayor, every city counselor, every county executive, and make them put them on their desk. Give it to every Member of Congress so that when we go back and say we need billions to provide you clean water at a lot cheaper rate, we now have a nice, easy visual.

Now, granted, I do not want you to give me a sewer pipe.

[Laughter.]

Mr. CAPUANO. I have seen those, too, but those are a little bit more difficult to explain.

The reason I do this is because I think too many of us forget. Everyone here knows exactly what you are talking about. Mr. Mayor, you know what I am talking about. Every day we get hit, schools, police, fire, and they are right. We want to do more.

The argument is not that. The argument is when you have to make a decision, every mayor, every Governor, every President, every Member of Congress makes the decision. I have got to do it all, cannot do it all, what can be seen?

When it comes to infrastructure, we do bridges fast. A bridge falls down. We fix it. A sewer collapses. We fix it. This can take 80 years to build up, but not one of us wants our children to drink it. Not one of us wants our mother to drink this. Not one of us wants to fix our own pipes to make sure that they do not get clogged up with this, and yet it is in every single American community, and nobody knows it.

So what I really want to plead for you to do is, yes, we will have this debate on how to finance fixing these things, but please help me educate the American public so they can engage in this and they know what they get when we go back to them and say, yes, it is expensive, but here is what you get.

As the richest country in the history of the world, we should not have undrinkable water in any corner of this country, and yet we do. At home because my State has chosen to put billions of dollars into cleaning the water, I just turn the tap on unfiltered, drink it all day long, not early in the morning. In most parts of this country you cannot. This is what you do. This is what you do.

And I am not against this. This is fine. It is nice and convenient for here. I cannot have a tap right here today, but I do not want you to have to spend a buck and a half to have a drink with lunch, and I know you do not either.

So as this whole discussion goes through and we are talking about the intricacies of finances, that is the important way to do it. But if we do not win the hearts and minds of the American public, we are going to be talking to ourselves now and forever more.

Thank you, gentlemen.

Mr. GIBBS. Ms. Eleanor Holmes Norton, do you have a question?

Ms. NORTON. Thank you, Mr. Chairman. I apologize. I had another hearing and could not hear all of this testimony. This issue is of great importance to the public and to me personally.

First of all, I want to thank the National Association of Clean Water Agencies who helped me get a bill through here when the GAO came forward with the opinion that Federal agencies should not have to pay their stormwater fees because it was a tax here in the District of Columbia, and of course the Federal Government cannot tax. Of course, it was a fee for the homeowners. It was a fee for the businesses, and ultimately the Congress agreed it was a fee, and so the Federal Government is paying its share as well.

I do want to speak about the visibility issue that my colleagues have raised. It is certainly true that the surface transportation bill which had to be pulled even though people do express real interest in roads and transit, it had to be pulled here and hopefully will come back, but the invisibility of public works underground surely has something to do with the problem we face here, and that arousing the public is important.

Let me suggest that when there is a problem, it is not hard to arouse the public on clean water. We had a lead in the water scare here, right here in the Nation's capital. It aroused the public a lot. We had hearings here. As you are aware, lead or traces of lead in the water and its effect on children, on pregnant women, and then people began to distrust the water, and my colleague who says, well, this is an alternative. This is America. The whole notion that we have come to the point where some people believe you have to

pay for water in order to have clean water is a step way back in the extraordinary progress our Nation has made.

So let me put it this way. We have at least 33 States at last count who were in the same position that the District of Columbia that I represent is in, where the water comes from a single source, a combined sewer system. That was the way to do it when these older systems were built.

So we have two problems. One is containing the water when there is excessive rainfall so that you get the water contaminating the river and everything around it, and we have two extra ordinary rivers here, one of which is very important for our water supply, the Potomac River, and then you have a problem that increasingly I believe we are not dealing with and do not know how to deal with. It is one thing to force the agencies to make sure there is not lead in the water and there is not arsenic in the water. But now we have reports of substances in the water that we have never had before, such as antibiotics.

No one has to my satisfaction at least said to me that when these antibiotics are in the water because of natural waste, particular in stormwater overflow systems; that no one has assured me that the water I am drinking is not contaminated with some of these newer substances. I would simply like to get your views on whether we are informing the public in the right way.

We are going to talk about pipes underground and even the very important issues here, and I thank the chairman for this committee about how to finance them because that is about the how, not just the what. As long as we are talking about something that the public cannot see, feel, visualize, feels strongly about, I am not convinced we are going to get anywhere on this subject.

So I raise the issue that makes us an advanced Nation, the notion that you can draw your water supply and be assured that it is safe separates us from developing nations, something that the public assumes. How we can raise the level of visibility of clean water and not simply what it takes for the water to go through, which gets fairly technical, I would like to hear all that you may have to say on how we can talk about what is really at issue, what the public really cares about, which is what comes out the pipes, not the pipes and the infrastructure that delivers it.

Yes, sir.

Mr. EGER. Thank you, ma'am.

We could not agree with you more, the Water Environment Federation. As a matter of fact, just within the past month the board of trustees of the Water Environment Federation has pledged a half million dollars to drive a messaging campaign that we are calling Water's Worth, and we have invited many of our associates here at the table and many of those in the water industry to join us as well.

We have an advantage, as does many of the associations here, where we have what we call a ground game. We have member associations, our sectionals that represent States that are involved in local communities that, quite frankly, have been underutilized by many of us in the association world, but are just as anxious and hungry as you are driving this message and getting the concern that we need to make this investment.

We are looking at a 3- to 5-year commitment to this messaging. I mentioned earlier in my testimony that we launched it with our research foundation and New York Water Group. We are now having a billboard in Times Square that talks about the value of water and what it's worth, and on March 22nd, which is World Water Day, we will be launching this initiative with our member associations, but we hear you.

I spent 20 years in this business, many of those as Utility Director, and I am frustrated as well with the under appreciation, and we have got to take the cover off of it, and we have to talk about it more. Hopefully you will see more from all of us in this industry to do that.

Ms. NORTON. Yes. I thank you for that effort, I must say.

Mr. ARNDT. Congresswoman, many of your comments address the issue of drinking water, and I would start with the statement that there is no safer water in the world than the water that we have here in the United States. That said, it is a continuing quest to maintain that quality.

Ms. NORTON. You really think the water in the United States is safer, for example, than the water in some other advanced countries in the world?

What do you say about antibiotics in the water?

Mr. ARNDT. Well, one of the things that I need to point to is that every year every water supplier sends out something called the consumer confidence report, which provides the details on what the quality of the water is in that particular community. Unfortunately, those documents get very little readership, and there are actually proposals under consideration right now to change the method in which those consumer confidence reports are distributed.

We unfortunately suffer under the circumstance that what is out of sight is also very often out of mind, and the only time it becomes obvious is when there is a problem or a failure, and unfortunately that does nothing but undermine the confidence of the public and just as you have indicated.

One of the things that we need to do as an industry, and I am sure all of the associations at the table here have some level of effort going forward to do just that; we need to make sure that we reach out to every group of stakeholders out there that have a benefit or a role to play in our water supply, whether it is manufacturing that needs our water, whether it is the general public that needs the water for drinking and sanitation, and that is something that we need to do day in and day out, and it just as important as financing our infrastructure because ultimately we can invest in the best infrastructure in the world, but if the public will not use it, it has become a wasted expenditure.

And I think that is the message you presented here and the prior Congressman. Sometimes we need to be a little bit more dramatic about it to make sure that the public understands what the challenge is before us. There is no silver bullet. We just need to keep working at it.

Ms. NORTON. I appreciate what you are saying. I do not think we should undermine confidence in our water supply. I mean, when I got into restaurants, I say, "Give me DC water." We have a terrific waterworks. They call themselves water. They no longer put the

word "sewer" in their name. It used to be call the Washington Sewer Authority or something, but they call themselves water, and they try to sell the notion that the water is safe, and I do drink the water.

On the other hand, you and I agree that as long as people simply have confidence, do not read the reports that you are speaking about, they apparently are not awakened to the issue sufficiently to pay for cleaner water, and you see certainly Congress is not.

So the notion that the gentleman indicated about raising the consciousness is very important, not to say, by the way, that we had lead in the water here. We did not say everybody panic. We indicated though that you had to be careful about young children.

I drink the water even though I do not know if there are antibiotics in it, but I am not sure that my new 1-month-old grandchild should have anything to do with this water, even though I believe it is safe for me. We are finding things in children, cancers of the kind that were not heard of when I was a child. I do not know what the cause is. I know a lot of people just do not want to take chances, and since the one ingredient that we all share is water, I think the people who are going to buy this, first and foremost, are people who have children under 18, because they do not want to be responsible for exposing very young bodies to what they may be more vulnerable to than we are.

So I think this is a narrow issue, Mr. Chairman, and I appreciate your indulgence. I just want to make this point because I am very pleased that you raised it. I know that there are countries that do a better job in finding antibiotics, for example. I certainly do not want to undermine the confidence of the American people in their water supply.

At the same time I do believe that the posters and the messaging that is going up in Times Square and around the country will help people to understand that this is not all for free and that we all have to pitch in.

Thank you, Mr. Chairman.

Mr. GIBBS. Thank you.

What we are going to do I have a quick question or comment, and I do not know if anybody wants to respond. Then Mr. Bishop has the last question and we are going to wrap it up.

But I wanted to go back to a little bit of the discussion and give you what my thinking is. We were talking about the SRF and the EPA and what is the vehicle to administer like the WIFIA Program for an example. Now, my thoughts are and my understanding the way how things work now in the SRF is that the EPA, through a very complicated formula process, capitalizes Federal dollars to the SRF to the States.

Now, the reason in the draft bill, and it is one of the reasons we are having this hearing, is we are trying to figure out the best way to go. As we all know, the SRFs are smaller projects, and this draft legislation gives us the ability for them to aggregate and use the WIFIA concept, the bigger dollars. But the reason we at this point have the EPA administering that or being the vehicle is because these are bigger projects, and we are trying to allocate, as we all know, a limited amount of dollars.

And so if you think it, and this is how you will probably want to respond, how the SRF is capitalized, and we are talking bigger dollars, the question is the SRF. It has got to be holistic and look at the whole country. That is kind of our thinking right now, our rationale.

So I would love to hear what your thoughts are. You know, what is the best way to administer the program? Yes, Mayor Ballard.

Mr. BALLARD. Mr. Chairman, thank you.

Of course, I would tell you from the U.S. Conference of Mayors' perspective, we like local. We like as close as you can. So that is what we are really just on record for that.

Mr. GIBBS. Well, I obviously believe in federalism and think that local is better, too. But I guess what I am thinking is we have to have some mechanism. We could be talking, you know, hundreds of millions of dollars for these big projects, and who is going to decide, you know, if it should go to New York City or if it should go somewhere else.

Mr. BALLARD. I understand that. But as much local input as possible, and I realize that you are talking State at this point. I understand that.

Mr. GIBBS. Yes.

Mr. BALLARD. But we would like that.

Mr. GIBBS. Yes, Mr. Williams.

Mr. WILLIAMS. I would just offer that each State has big dollar projects that they could utilize innovative financing for, and I would support Mr. Ballard in terms of local is better. I would, being from California, also urge that the allocation formula for distributing funds to the States be updated. There are plenty of big dollar projects within all of the States, so it is not just New York City or Chicago that would benefit. It is nationwide.

Mr. GIBBS. Mr. Arndt.

Mr. ARNDT. To clarify my earlier comments, one of the dynamics that we faced with the SRFs is that they are largely unable to finance the large projects. I will not say that it never happens, but it is very rare to find projects, for example, exceeding $20 million that are financed by the SRFs, and it seems to me that one of the things that we need to overcome and can overcome, as has been included in this with the draft legislation, is to allow the large projects to go for direct funding because there are certainly economies and efficiencies of doing that.

The SRFs clearly have a relationship with the smaller and midsize utilities, and that is why I believe the bill is drafted as it is, to allow the SRF to be an intermediary for that particular purpose. So I do not think that the SRF is perhaps best equipped to deal with those larger utilities, and that is why we endorse the bill as it has been presented.

Mr. GIBBS. Mr. Petersen.

Mr. PETERSEN. It may be another dimension here. Our experience with the SRF administrators in various States is that they are not always receptive to alternative approaches to project delivery. We have run into several State SRFs who actually oppose design-build contracting, for example, as opposed to traditional design-bid-build, and when you expand that to design-build-operate or the full P3 as we have discussed, the design-build-finance-operate, there is

actually institutional opposition to that degree of private sector involvement, long-term operations, private financings, some of the complexities that Mr. Wilson talked about with private equity capital.

So if you run this through the States you may well find yourself in many circumstances running into that kind of almost ideological opposition to that degree of private sector involve in public water infrastructure.

Mr. GIBBS. OK, great. Yes, Mr. Petersen.

Mr. PETERSEN. Yes, as I stated before, the States, especially, I believe, New York, have a system in place where they are able to divide the monies up for the larger projects as well as the smaller projects, and maybe there might be some tweaking of the SRF, you know, some of the things that have been in previous bills and would be in this bill to help the States better manage the funds so that the larger projects as well as the small projects can get the funds.

The WIFIA legislation would allow some of the larger projects to get that funding, but would also help on the bottom end of it for them to go further down the list with their existing SRF funding to reach the smaller projects. So I think it is a win-win through the States.

Mr. GIBBS. Great. Thanks.

One just quick question, Mr. Williams. I have to comment because I am always impressed when I hear people doing what you said you are doing out there with the biodigester. Is there a lot of that starting to happen in the municipalities? Are you kind of leading the charge?

Mr. WILLIAMS. I believe that my utility is the first that actually is powering its entire treatment plant solely from wastes that come in. However, I will say that that is something is getting a lot of attention. You can hardly open any kind of an industry journal and not read about the advances that are being made across the country in terms of utilization of biogas and bringing in high-strength waste, fats, oil, and grease to digest and produce biogas. It is these types of things that are very common in communities.

So I think it is certainly catching fire across the country.

Mr. GIBBS. Yes, Mr. Petersen.

Mr. PETERSEN. I would say on this point and just for your information, there is a major contracting signing happening this afternoon at DC Water, as Representative Norton indicated for a design-build-operate biogas cogeneration facility right down here 8 miles south of here at Blue Plains Waste Water Treatment Plant. They are taking biogas from a new set of digesters they are going to build, and they are going to produce a lot less sludge; take that energy and build a cogeneration facility to run the biosolid treatment plant and reduce the electric bill at DC Water. They might have even gone P3 with that project had tax exempt financing been available for the private DBO firm.

Mr. GIBBS. I have always been a strong proponent. We have got some digesters in my area of the country, not municipalities, but they are involved in it because it is a private entity, and they are moving the sludge from a sewage treatment plant, and they are digesting. Of course, as you all know, it does two things. It produces

energy, but it also is less stuff going into the landfill and it is great for the environment.

You do not hear a whole lot about that because maybe it is not as glamorous as some of the other things, but it is a real good program.

Mr. Wilson, would you like to comment quickly?

Mr. WILSON. I would just add that from the public-private partnership standpoint projects like biogas generators, also water recycling facilities that can generate revenues for a municipality, we can help to implement those projects and then monetize the value of the future revenues coming off of those projects as a way to reduce the cost for the municipality. So that can be part of the P3 package.

Mr. GIBBS. Great. Mr. Bishop.

Mr. BISHOP. Thank you very much, Mr. Chairman.

I am sort of back to where I was a little while ago. As I indicated, we chose when we did our bill to route the WIFIA type funding through the SRF in part because we heard from the stakeholders that that was a process they were familiar with and though that worked and we should keep.

The second concern that I had was that if we create a separate funding mechanism that does not go through the SRF, that ultimately the SRF withers away. I will tell you what my frame of reference is. My background before coming to Congress was higher education. I was a college administrator for 29 years.

I should point out I am not a snob, and I should also point out that I have somehow maintained my faith.

[Laughter.]

Mr. BISHOP. But there is a Revolving Loan Fund in higher education called the Perkins Revolving Loan Fund. You all may remember it was the National Defense Student Loan Fund or the National Direct Student Loan Fund. That has not received a new Federal capital contribution since, I think, 2000 or 2001, and under current law, it is slated to go out of existence in 2014. So I am concerned that if we create a separate funding stream that is apart from the SRF with the pressure that appropriators are under, that it will be an easy call to stop the Federal capital contribution to the SRF, and that over time we will see the SRF suffer the same fate as the Perkins Loan Fund I think is about to suffer, although I hope we can fight that off.

So I guess I want to, again, put to you as the stakeholders and the practitioners: is that a concern that you share? Am I worst casing it?

Someone, please. Yes, Mr. Williams.

Mr. WILLIAMS. That is definitely a very significant concern of NACWA, the concern being that Congress has all kinds of pressures, and there are all kinds of demands for money and financing, and to the extent that if you have something out there separate, it is like, well, did we not address that and they got their money, and you move on.

So the SRF has been a mainstay for 25 years, and NACWA would certainly like to see that continue. So it is a concern, and that was part of our testimony that it should not be to the detriment of the SRF with something like the WIFIA.

Mr. BISHOP. Thank you very much.

Anyone else care to comment?

Mr. ARNDT. I guess I would just reemphasize what I said earlier, that WIFIA and the SRF program are not in competition with one another. They are dealing with two different sets of clients, as it were, in that the SRFs are very much providing funding for those that do not have the ability to access funding at all under highly subsidized circumstances typical.

WIFIA does not address that need. WIFIA basically provides money at the margin at the lowest possible cost for those that need to do projects.

Mr. BISHOP. And I think I heard you say before that you think that that would be more for the larger project, and the SRF would be more for the smaller project. Is that what I heard you say before?

Mr. ARNDT. No. If I did, I did not intend to say that.

Mr. BISHOP. OK.

Mr. ARNDT. Certainly the direct access for the larger projects is there, but the SRFs also have access where they can essentially put together a pool of projects which may be smaller.

Mr. BISHOP. So what I think you are saying is that if we were to go this separate route, it would be incumbent upon all of us to make sure that we protect the SRF, that one does not fall away because we are pursuing another avenue. I would hope that that is something that we would all agree on.

Mr. Chairman, thank you very much and thank you all very much.

Mr. GIBBS. Thank you very much, and like I said, we will have our second panel on March 21st, I believe it is, on this issue. So thank you for coming, and this adjourns the committee.

[Whereupon, at 12:19 p.m., the subcommittee was adjourned.]

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Innovative Financing Approaches for Clean Water Infrastructure, Part 1
Rep. Earl Blumenauer
Written Testimony
February 28, 2012

Earl Blumenauer

Chairman Gibbs, Ranking Member Bishop and members of the Committee, thank you for the opportunity to share my views on this important, but underappreciated, topic. I deeply appreciate the Committee's interest in and attention to water infrastructure. Your Committee has done a commendable job identifying both the problems associated with our nation's aging water infrastructure as well as the challenges communities face in coming up with the financial resources to maintain and upgrade their systems.

In their latest report card on America's infrastructure, the American Society of Engineers gave water infrastructure a grade of "D-." Recently the organization released another report that attempted to quantify the impacts associated with not making the necessary investments in water infrastructure. The report found that by 2020, unreliable infrastructure will cost businesses $147 billion and households $59 billion. The total impact of increased costs and loss of income will reduce the standard of living for families by almost $900 per year by 2020. These are conservative numbers, as they don't include environmental damage or costs associated with things like traffic disruptions due to water main breaks.

Most of the money being spent currently on upgrade and repair is at the local level. While in some communities people can and should be paying more for water, many communities can't afford the additional costs. Rates are on the rise around the country. For example, in my hometown of Portland, OR, rates have gone up over 70% over the past 10 years and are projected to keep climbing.

The Federal government must be a better partner to these struggling communities. As scientists get better at identifying pollutants and recognizing more challenging threats to water quality, such as urban run-off, our communities will demand greater public health and environmental protections. These changes will increase costs. The answer is not to weaken our environmental and public health standards, it's to provide communities with more resources to help as we explore ways to make regulations more efficient.

There is a bipartisan agreement that the status quo is unsustainable. Our challenge is to help provide the resources necessary to close the funding gap. Dwindling appropriations for the State Revolving Fund make it clear that we can't continue to rely on the yearly budget cycle. Creative financing schemes like WIFIA, an infrastructure bank or removing

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the cap on private activity bonds may help but none of these options contributes new money.

A dedicated water trust fund is a critical part the answer. Whether the revenue raised is distributed through the SRFs or another mechanism, the increasing needs of our communities make it clear that we need new revenue.

We have a highway trust fund financed by a dedicated user fee. Isn't it time we consider one for water infrastructure? Even though water infrastructure is under the ground and less visible, it is no less crucial to our economic prosperity and environmental security.

I was a proud member of this Committee until 2008, and when I left in order to join Ways and Means I did so to help answer this question about how to finance the rebuilding and renewing of America. Repairing and upgrading water infrastructure is an essential piece of this puzzle, and I have been working to indentify funding sources since then.

Last Congress, along with a number of members of this Committee, I introduced the "Water Protection and Reinvestment Act," H.R. 3202, bipartisan legislation to establish a trust fund to finance clean water and drinking water infrastructure. The funding would be distributed mainly through the Clean Water and Drinking Water SRFs. The trust fund would be financed by user fees – on those who use and who pollute clean water – identified in a 2009 report by the Government Accountability Office.

The fees contemplated in H.R. 3202 would all be assessed at the manufacturer level to minimize any increase in prices to consumers. The bill included four separate sources so as not to place the entire burden on one industry or group of consumers. They were: a four cent per container fee on water based beverages, a three percent fee on items disposed of in water, a one-half of one percent excise fee on pharmaceutical products, and a one-fifteenth of one percent fee on corporate profits over $4 million. These fees would raise approximately $10 billion a year.

In the briefing memo for this hearing, Committee staff correctly identified the fundamental problem with these fees: "None of the sectors identified by trust fund advocates as potential funding sources support a fee or tax on their activities." While manufacturers hope to avoid fees, they greatly benefit from the investments we make in our water infrastructure.

Based on my conversations with a number of the affected parties, there is interest in being part of the solution, just not <u>all</u> of that solution. They understand the need to increase investments; they also understand that they would be the primary beneficiaries of the trust fund expenditures. In addition, even those who would pay a little bit more under my legislation recognize the trade-offs. They understand there is a cost associated with doing nothing. I would argue that the costs to businesses of not having clean water, of bursting pipes, of environmental degradation are much greater than the small user fee my legislation proposes. How can a business function without water?

I am not wedded to the specific fees proposed in H.R. 3202. There may be better ideas. I have not reintroduced the legislation in the 112th Congress in hopes of being able to identify additional revenue sources to reduce the burden on each source. However, it was time for someone to come forward and put ideas on the table. That's what we have done with the bill.

I'm pleased that the bipartisan "Water Quality Protection and Job Creation Act," which I support, includes a study of a water trust fund. But I hope that we can soon move beyond studies and start debating actual proposals. The situation isn't getting any better as we wait for new sources of revenue with no opposition to materialize.

An "all of the above" approach makes sense for water infrastructure financing. People who can pay more, should; water rates are nowhere close to the true value of the wastewater system. Communities should raise additional funds locally if they can. Utilities should improve the management of their wastewater systems and improve efficiency. Incorporating more "green" aspects into infrastructure projects can help improve efficiency, lower overall costs, and provide additional benefits. But the Federal government needs to be part of the partnership. And I've become convinced that a dedicated trust fund, similar to what exists for surface transportation and aviation, is the best way to do it.

In addition to enabling communities to maintain and upgrade water infrastructure, an influx of new funds would put people back to work. It would create jobs for construction works, engineers, pipe layers, scientists, utility contractors, and more. Many of these sectors have been the hardest hit by the recent recession.

As a member of the Ways and Means Committee, I stand ready to work with members of this Committee to finally put options on the table to raise the revenue we need to close the gap between current spending and projected infrastructure needs. I look forward to continuing this conversation with the members, witnesses, and anyone else who cares about clean water.

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Statement for the Record
Congresswoman Eddie Bernice Johnson
House Committee on Transportation & Infrastructure
Tuesday, February 28, 2012
Hearing on
The Importance of Investment in Wastewater Infrastructure

Since enactment of the Clean Water Act, the Federal government has provided more than $96 billion for wastewater infrastructure, which has had the effect of dramatically improving the quality of our water and public health, protecting the environment, and reducing water pollution. In addition to these funds, there has been over $250 billion in overall investment in the Nation's wastewater infrastructure from Federal, State, and local resources.

But unfortunately, as the members of this subcommittee know well, the advances in water quality we have made are now at risk, and thousands of water infrastructure systems throughout this country are in significant disrepair, endangering the health and well being of citizens everywhere. The costs of repair to these systems are staggering. According to the EPA's Clean Watersheds Needs Survey 2008 Report to Congress, states have documented more than $298 billion in capital investment to meet the water infrastructure needs for the next 20 years.

As our economy slowly improves, it is critical that we look for innovative ways to finance the repair and improvement of our wastewater systems. In addition to improving water quality, repair and construction of these systems will create thousands of jobs nation-wide, jobs we desperately need. It is estimated that for every $1 billion spent on wastewater infrastructure, as many as 33,000 jobs are created.

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With a weak economy and the uncertainty of future appropriations, it is imperative that we look for additional ways to invest and finance these projects. I commend Subcommittee Chairman Gibbs and Ranking Member Rahall for holding this hearing, and it is my hope that we can make build upon the bipartisan progress made in H. R. 3145.

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COMMITTEE ON WAYS AND MEANS
SUBCOMMITTEE ON HEALTH

COMMITTEE ON THE BUDGET

Congress of the United States
House of Representatives

Rep. Bill Pascrell, Jr.
Testimony
Transportation and Infrastructure Committee
Hearing on "Review of Innovative Financing Approaches for Community Water Infrastructure Projects-- Part I"
2/28/2012

Chairman Mica, Ranking Member Bishop, thank you for this opportunity to address an issue of great importance for my district, as well as thousands of communities across this country. The issue is the need for access to sustainable financing for water and wastewater infrastructure upgrades. According to the 2009 scorecard by the American Society of Civil Engineers, our country has an overall infrastructure grade of a "D." While this is unacceptable, what is even worse is that our water and waste-water infrastructure falls below, coming in at a "D-."

As a former Mayor, I understand that our water infrastructure and water quality is an economic and public health issue. For instance, an estimated twenty-five percent of treated water is leaking from water systems in disrepair, leading to energy waste and possible environmental problems. However, as of today, the Environmental Protection Agency and the Government Accountability Office estimate that there is a $500 billion funding gap for the nation's aging water and wastewater infrastructure. Unfortunately, due to Federal budget constraints, municipalities can no longer look only to the Federal government for loans and grants to help upgrade.

We have alternative financing mechanisms available to help states and municipalities close the financing gap, including the use of Private Activity Bonds (PABs) for water and wastewater infrastructure upgrades. PABs, which allow municipalities to benefit from the use of private capital for public upgrades, have already had success in financing projects including airports, light rail, and solid waste. Legislation I introduced with Congressman Geoff Davis, *The Substantial Water Infrastructure Act of 2011* (H.R. 1802), uncaps the amount of PABs that a municipality can issue for water and wastewater infrastructure upgrades. According to former Environmental Protection Agency Administrator, Stephen Johnson, removing the cap would unleash $5 billion in private capital every year.

Beyond addressing issues of water quality and water waste, uncapping the number of PABs that a municipality can issue would also have significant economic impact. According to a 2008 report by the Associated General Contractors of America, "every billion dollars invested in nonresidential construction activity adds $3.4 billion to the gross domestic product, increases personal earnings by $1.1 billion and creates or sustains 28,500 jobs . Almost 19,000 of those jobs would be in areas outside the immediate construction sector, including equipment manufacturing, materials supply, food service, [and] health."

PABs for water and waste-water infrastructure provide states and municipalities access to much needed private capital for upgrades often forgotten but critical to the public good. Uncapping the amount of PABs that these governments can issue will go a long way to help address the large gap they face. Thank you for taking the time to discuss this issue, which I care deeply about.

Bill Pascrell Jr.

Bill Pascrell, Jr.
Member of Congress

Testimony of Mayor Gregory A. Ballard
City of Indianapolis, Indiana
On Behalf of The U.S. Conference of Mayors

Water Resources Subcommittee
House Transportation and Infrastructure Committee

February 28, 2012

Testimony of Mayor Gregory A. Ballard – City of Indianapolis, Indiana
Water Resources Subcommittee - House Transportation and Infrastructure Committee
February 28, 2012

My name is Greg Ballard, and I've been the Mayor of Indianapolis since 2008. I would like to thank the Chairman and the committee for inviting me.

I am testifying on behalf of The U.S. Conference of Mayors where I serve as Co-Chair of the Mayors Water Council, and have been part of the discussions that led to EPA's Integrated Planning Memorandum.

As Mayor of Indianapolis, I have direct experience with one of the most expensive Combined Sewer Overflow enforcement actions in the nation's history. In fact, Indianapolis was the first city in the country to successfully renegotiate an EPA Consent Decree. We succeeded in amending our long-term control plan twice, resulting in better environmental protections at less cost, scheduled to be completed 10 years ahead of the original consent decree. That is cleaner water for our residents ten years earlier than originally prescribed by the EPA.

This background gives me a unique perspective to comment on the matter before this subcommittee today.

I am here today to tell you why the Mayors of this nation are concerned about the rising costs of water and wastewater infrastructure, and comment on ways by which Congress can provide much needed relief to local governments as they work towards their clean water goals.

I think it is important to recognize that EVERYONE wants to do the right thing related to the environmental condition of our communities.

As a Mayor, my job is to be a steward for my citizens. I want them to have the best, safest water. So do my peers around the country. So does EPA, so do environmental groups, so do community representatives, and so do our businesses. We are all in agreement on this. But we can find a better way forward to reach this shared goal.

My testimony today focuses on 3 areas.

1. Local governments need serious, immediate financial relief in order to rehabilitate and modernize existing water and wastewater physical plants.

First and foremost, water and wastewater infrastructure serves to protect public health, support the economy, and protect the aquatic ecosystem. In 2009 alone, local governments invested $103 billion in such infrastructure investments. As a result, American cities provide some of the safest, cleanest, most affordable water in the world. America's cities have long ago put out the fires on the Cuyahoga River, and continual improvement of water quality has been achieved over the last 40 years.

This comes at a hefty price, and the price tag continues to grow. In the last decade, public spending on water and wastewater was $855 billion, significantly outpacing GDP growth, (spending 65%, GDP only 41%).

At the same time, local government revenues declined in the face of a struggling national economy. And notably, local government long-term debt grew over the decade by 82%. In fact in 2009, local government long-term debt was greater than annual revenues for these same municipalities.

This financial picture is not rosy, and is not projected to change course.

For example in Ohio in 2009, local government revenues were $53 billion, expenditures were $55 billion, and long term debt was $44 billion, up from $15 billion in 1995. Per capita spending on water and wastewater was $186 in 1995 and $322 in 2009. The national average was $337 in 2009. In New York State, local government revenues were $139 billion, expenditures were $176 bill, and long term debt was$165 billion, up from $66 billion in 1995. Per capita spending on water and wastewater was $170 in 1995 and $348 in 2009.

These trends indicate that annual deficit spending at the local government level is a growing problem, and an unsustainable one. Importantly, the phenomenal growth in long term debt may prove to be the single greatest limiting factor in achieving clean water goals and sustaining the current high quality of life for over 300 million Americans.

It makes it all the more difficult for our cities do the right thing … provide clean water … and to do it effectively. It is one reason the U.S. Conference of Mayors is calling on Congress to help us more sensibly and flexibly achieve our shared clean water goals.

2. Local Government wants to reestablish a true Partnership with Congress and the Administration.

Congress has successfully partnered with local government on clean water goals in the past. In the 1970s and 1980s to reach shared clean water goals, Congress approved capital construction grants, while local government shouldered the responsibilities – and repercussions – of implementing and then meeting or missing those goals.

As these grants were replaced by loan programs, it marked the beginning of a gradual retreat from shared responsibility. The State Revolving Loan Fund (SRF) program was adopted by Congress primarily because the grants program proved to be too costly to the U.S. Treasury. Congress therefore shed financial responsibility for clean water goals while still setting the rules and the strategy for meeting the rules. Ultimately, this translates into unfunded mandates.

As a result, for the last 20+ years, local government has had to finance water and wastewater infrastructure through a combination of pay-as-you-go and long-term borrowing through revenue and general obligation bonds. The large amounts of capital necessary to construct, reconstruct and expand physical plant leaves no choice to communities but to rely on long-term financing.

While the SRF loan program is helpful, it is largely targeted to smaller-population communities that lack access to favorable terms on the capital market. Currently, Congress has recapitalized the SRF program at about $2 billion per year, bringing the total amount of financing available to roughly $6 billion a year including the revolving funds that go back out in loans.

SRF loans only apply to capital investments. In contrast, all-in local costs for water and wastewater infrastructure and services eat up sixty cents of every operations and maintenance (O&M) dollar spent. These loans also compound the growing issue of overall long-term debt being faced by our cities. The debt is amortized over time, and is accounted for by water and wastewater revenues. As debt and O&M increases, so too do rates.

Current considerations for alternative financing all involve long-term borrowing. These alternatives do not provide a "solution", but they do provide some financial relief to communities. Because of that the U.S. Conference of Mayors supports the following proposals:

- **Modification of the tax code to remove state caps on the use of private activity bonds for public water and wastewater infrastructure investment (e.g., H.R. 1802; and S. 939).** This allows local government to harness private capital and expertise in building and operating water and wastewater systems while retaining public ownership.

- **Water Infrastructure Finance and Innovation Act (WIFIA).** The U.S. Conference of Mayors adopted policy to support this approach because it can lower overall costs for large capital water projects by as much as 16 percent.

- **Public-Private Partnerships.** These can lower O&M costs as well as capital costs where investments in construction are involved.

The U.S. Conference of Mayors is also exploring opportunities to work with pension fund managers to provide capital for investment.

Congress can play a vital role in improving local investment options by passing legislation that increases access to the full array of financing tools available to meet our environmental goals.

3. Congress can play a greater role in providing financial relief for communities by setting clean water priorities and reasonable expectations on affordability.

The proliferation of aggressive federal regulatory mandates has served to increase local spending on water and wastewater on top of the mounting budget and financing concerns outlined above. Over 780 cities and water/wastewater utilities have, or will, experience sewer overflow enforcement actions by the EPA. These actions all amount to unfunded mandates.

My colleague Mayor Jim Suttle of Omaha, Nebraska, already pointed out in testimony regarding EPA's new Integrated Planning Policy Framework that multi-billion dollar consent decrees to manage Acts of God (storms and sewer overflows) account for the largest public works investments in the history of the cities affected.

Indianapolis originally faced $3.5 billion in expenses as part of a consent decree reached in 2006 with the Regional EPA and Indiana State regulatory authorities. That figure quickly ballooned by an additional $300 million through cost overruns, and the city likely would have continued to face additional, unexpected and unbudgeted charges throughout the implementation period.

In 2008, however, the city invested in an effort to re-evaluate the steps necessary to resolve the clean water concerns with an eye to better results at a lower cost. As a result, Indianapolis amended the consent agreement twice with EPA. In each case, the city was able to reduce the overall price of the solution and get better environmental results.

We enjoyed forging a partnership with EPA, finding common sense, less costly fixes to the challenges we face. In fact, EPA called the renegotiation with my city as a win-win for everyone involved. It was a great example of governments working together. We demonstrated that flexibility, creativity and government can go hand-in-hand.

The U.S. Conference of Mayors adopted policy in June 2011 urging the EPA and Congress to use the maximum flexibility allowable in the Clean Water Act to reduce the cost burden of reducing or eliminating sewer overflows.

Recently a group of Ohio mayors penned a letter to their Congressional delegation asking them to convince EPA to apply readily available and legally allowable flexibility in this area.[1]

[1] See attached Letter and Resolution 43 for Achieving Clean Water Goals

Conclusion

It is important for the committee to recognize that the recession and deficit spending is not over at the local level. Growing long term debt will stymie investment in infrastructure and other social programs.

It is also important to recognize that Congress can play a role in reducing water and wastewater costs by requiring EPA to prioritize mandates, and acknowledge that flexibility and affordability should play a greater role in determining clean water solutions at the local level.

Thank you again for inviting me to testify before you.

Gregory A. Ballard, Mayor of Indianapolis

CITY OF CLEVELAND
Mayor Frank G. Jackson

Mayor Michael B. Coleman

LIMA, OHIO

February, 2012

U.S. Senator Sherrod Brown
U.S. Senator Rob Portman
U.S. Representative Steve Austria
U.S. Representative John Boehner
U.S. Representative Steve Chabot
U.S. Representative Marcia Fudge
U.S. Representative Bob Gibbs
U.S. Representative Bill Johnson
U.S. Representative Jim Jordan
U.S. Representative Marcy Kaptur
U.S. Representative Dennis Kucinich
U.S. Representative Steven LaTourette
U.S. Representative Robert Latta
U.S. Representative Jim Renacci
U.S. Representative Timothy Ryan
U.S. Representative Jean Schmidt
U.S. Representative Betty Sutton
U.S. Representative Steve Stivers
U.S. Representative Patrick Tiberi
U.S. Representative Michael Turner

Ladies and Gentlemen:

As you are well aware, our cities and the nation generally have made great progress in cleaning up our waterways since the passage of the Clean Water Act 40 years ago. Notwithstanding that progress, more needs to be done. As Ohio Mayors, we are keenly aware of **both** of these facts and of the role that cities must play in the ongoing efforts to improve our environment and live sustainably for the long term. But we have great concern with the enforcement approach being taken by USEPA.

80 Ohio cities have sewer systems with Combined Sewer Overflows (CSO). They have found themselves in various stages of vigorous, often hostile, enforcement actions by

USEPA resulting in consent decrees creating billions of dollars in long term liabilities. These liabilities are now translating into customer utility rates that: oppress poor households; impose greater costs on our middle class families whose real wages have declined over the last decade; and profoundly discourage economic development. Additionally, the USEPA continues to, or plans to, issue other water and wastewater/stormwater mandates that will force Ohio cities into yet more long term borrowing that is unaffordable in light of substantially reduced local government revenue shortfalls and reductions in state and federal financial assistance.

The US Conference of Mayors adopted Resolution 43 (see enclosed copy) at its June, 2011 meeting, to highlight these problems and to offer a set of very practical solutions, solutions which would not change the goals and objectives of the Clean Water Act, but would change the policies guiding the USEPA enforcement actions.

Twenty-two Ohio cities, sewer districts, and professional associations have adopted resolutions endorsing Resolution 43 and urging Congressional legislative action to enact the provisions of that Resolution. Please see attached copies of these city resolutions.

We are writing this cover letter to formally request that our Ohio delegation in both the United States Senate and House of Representatives take the lead in championing bi-partisan legislation to enact the provisions of USCM Resolution 43.

We look forward to working with you to achieve the regulatory and financial relief that will result from Resolution 43

Thank you.

Don Plusquellic Mayor City of Akron	Frank Jackson Mayor City of Cleveland	Michael Coleman Mayor City of Columbus	David J. Berger Mayor City of Lima

Enclosures

THE UNITED STATES CONFERENCE OF MAYORS

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REFORMING THE CLEAN WATER ACT SEWER OVERFLOW POLICY TO ACHIEVE SUSTAINABLE LONG-TERM GOALS

WHEREAS, approximately 772 cities in the United States will be required to establish legally binding Long-term Control Plans (LTCPs) to comply with the Federal Clean Water Act regulations involving Combined Sewer Overflows and Sanitary Sewer Overflows (CSO/SSO) over the current and next decade; and,

WHEREAS, city LTCPs will involve the establishment of new infrastructure to reduce the discharge of untreated sewage and/or untreated storm water into local receiving waters; and the new infrastructure options available for this purpose involve major capital investments and recurring increases in user charges (increased rates) for the construction of new treatment facilities or additional treatment capacity at existing facilities, new separate and/or combined sewer lines to convey wet weather overflows to the new treatment facilities, underground storage facilities, additional monitoring, reporting, and compliance costs, additional operations and maintenance costs to municipalities; and,

WHEREAS, local government involved in CSO/SSO enforcement actions to establish LTCPs, or those who enter into voluntary negotiations with the US EPA and state regulators have demonstrated that the US EPA is reluctant to exercise the flexibility they adopted in the US EPA CSO Control Policy concerning affordability, compliance schedules, volume and frequency of annual overflows necessary to comply with Clean Water Act water quality standards, and inclusion of green infrastructure as part of a city's LTCP; and,

WHEREAS, the capital cost cities bear to comply with CSO/SSO policy are among the singlemost costly public works projects in their history, often a single CSO/SSO LTCP is equal to or greater than all combined long-term debt incurred for public expenditures in a single period of time; and,

WHEREAS, the latest available Bureau of the Census report for 2008 states that local government annual revenues were $1.53 trillion, local government annual expenditures were $1.59 trillion, and outstanding long-term debt of local government in 2008 exceeds $1.51 trillion it is clear that current spending for public purposes and long-term debt are twice the amount of annual revenues, and additional unfunded federal mandates that are not absolutely necessary or are not associated with an emergency situation are ill-advised and clearly not sustainable; and,

WHEREAS, the environmental benefits associated with U.S. EPA's interpretation of

requirements under the CSO/SSO Control Policy are often vague and not discernable, and arguably do not balance with local economic goals, and in many cases create a cost-disincentive for commerce and industry, thus adversely impacting jobs, local income, and the local tax revenues and income of ratepayers to support the investments required to finance the LTCPs,

NOW, THEREFORE, BE IT RESOLVED, that The U.S. Conference of Mayors urges Congress to amend the Clean Water Act to: create a true Federal/Local Partnership whereby the Federal government provides at least 50 percent of the cost of compliance with all regulations established under the Clean Water Act; and

BE IT FURTHER RESOLVED, that if Congress does not provide at least 50 percent of the costs, the Conference of Mayors urges Congress, the Environmental Protection Agency, and the Department of Justice to provide the following relief to communities as it relates to CSO/SSO LTCPs:

• Compliance schedules related to CSO/SSO LTCPs be no less than 30 years (unless a city voluntarily chooses to comply in less than 30 years) and up to 50 years so that local government can finance investments to achieve compliance without diverting financing for other public priorities, to avoid forcing local governments into unreasonable levels of long-term public debt and to prevent the levying of unaffordable rates upon poor and middle class households;

• Local government should be allowed to incorporate green infrastructure solutions in their LTCPs, and the EPA should encourage incorporation of green infrastructure in LTCPs in tangible ways that allow experimentation and flexibility on control criteria and should provide a clearinghouse of green infrastructure options for cities to choose from; further, cities should be encouraged to amend their LTCPs to adjust the mix of green and gray infrastructure when the opportunity arises to increase energy efficiency and permeability;

• EPA should not stipulate an arbitrary number of overflows, but rather focus on the objective of achieving real improvements to water quality that are affordable and sustainable. Thus, local governments should not be restricted to four or less wet weather overflow events per year if that is not required to meet water quality standards under the Clean Water Act;

• When determining the affordability of the LTCP solution that a city is required to implement, EPA and DOJ should use the two percent of Median Household Income as the total cost of sewer operation's ceiling, not the floor, and other factors such as the cost/benefit analysis and carbon footprint impacts;

• Cities should only be held responsible for complying with water quality standards based on a reasonable assessment of the proportion of degradation they actually contribute to water bodies.

Adopted June 2011
Baltimore, Maryland

NACWA
A Clear Commitment to America's Waters

Testimony of:

David Williams

Elected Board Member
Central Contra Costa Sanitary District Board of Directors
Central Contra Costa County, California

Director of Wastewater
East Bay Municipal Utility District
Oakland, California

President
National Association of Clean Water Agencies
1816 Jefferson Place, NW
Washington, DC

Subcommittee on Water Resources and Environment
House Transportation and Infrastructure Committee
U.S. House of Representatives
February 28, 2012

Introduction

Chairman Gibbs, Ranking Member Bishop, and members of the Subcommittee, thank you for the opportunity to appear before you today. My name is David Williams and I am the Director of Wastewater for East Bay Municipal Utility District (EBMUD) in Oakland, California and am an elected Board Member for the Central Contra Costa Sanitary District in Contra Costa County, California. I also serve as the President of the National Association of Clean Water Agencies (NACWA) and it is my pleasure to testify today on behalf of NACWA.

NACWA's primary mission is to advocate on behalf of the nation's publicly owned wastewater treatment works (POTWs or clean water agencies) and the communities and ratepayers they serve. With the Clean Water Act (CWA) poised to turn 40 years old, NACWA public agency members have exhibited exceptional leadership. They are responsible for over four decades of water quality improvement. These leaders and their workforces are public servants and true environmentalists who ensure each and every day that the Nation's waters are clean and safe, meeting the strict requirements of the CWA.

Public agency leaders have done a remarkable job over the past four decades to clean up the Nation's waters. They are doing this with shrinking federal financial support, increasingly costly regulatory requirements, and an economic downturn that is impacting all levels of government. Despite these challenging trends, these utility leaders are transforming the way they do business and are engaging in innovations and employing new technologies on an unprecedented scale. These efforts include energy conservation and recovery, water reuse and reclamation, resource recovery from the waste-stream such as phosphorus for agricultural use, and low-impact development.

As the federal government seeks how, under severe budget constraints, to help the Nation's clean water agencies, NACWA believes the types of innovative financing mechanisms being contemplated here – and others yet to be identified – can be very helpful for use by agencies engaged in this transformational shift. NACWA also believes that this Subcommittee can play a unique role in ensuring that clean water agencies have the maximum flexibility under the CWA to address water quality challenges based on site-specific affordability determinations and choosing projects that maximize water quality "bang for the buck." Finally, to the extent the CWA cannot accomplish these goals, NACWA hopes we can continue to work with this Subcommittee to consider targeted changes to the Act so that it can effectively address 21st century challenges and ensure another four decades of water quality improvement and unrivaled utility leadership.

In sum, these concepts form the basic underpinnings of NACWA's "2020 Vision for the Water Resources Utility of the Future" and we look forward to working with the Subcommittee to make the utility of the future a reality today.

Background

This hearing on innovative financing approaches takes an important look at new and creative options for financing critical infrastructure and innovative projects to help the Nation's public agencies. It is important, however, to understand the context in which this discussion is taking place.

In October 2012, the CWA will mark its 40th anniversary. There are those who will celebrate the many successes and the water quality gains made under the Act over the past four decades. Others may take a different approach, questioning whether the Act continues to effectively address complex 21st century challenges. Both perspectives are valid.

There is little doubt that the Nation's water quality has improved as a result of the CWA. In 1972, approximately 90 percent of the Nation's waterways were impaired due to pollution. Today, EPA estimates that approximately 45 percent of these waterways remain impaired - constituting a dramatic and unprecedented improvement over the past four decades. The vast network of treatment plants across our country, and the untold number of rivers, lakes and streams that they have improved, are viewed by many as evidence of the most successful environmental public works program in our Nation's history. Furthermore, this network of clean water agencies across a massive and diverse geography serving the majority of the population is the envy of countries across the globe.

But our success has also had consequences. During the initial phase of the CWA, the federal government provided over $60 billion under the Construction Grants Program to help build this great network of treatment plants. This grants program gave way to the State Revolving Loan Fund program in 1987 – a helpful program that today provides approximately $5 billion annually in low-interest loans to communities, many of which are small and in need of basic technical assistance. By comparison, municipalities spend nearly $100 billion a year on water and wastewater infrastructure, supporting millions of jobs and demonstrating again how the leadership for maintaining, expanding and improving this network of high-tech systems resides at the municipal level.

This shift away from a federal funding partnership has also come at a time of expanding and costly regulatory requirements as well as an ongoing economic downturn that has put enormous additional pressures on the federal, state and local budgets the lingering impacts of which will be felt for years to come.

NACWA deeply appreciates the work of this Subcommittee to determine how, under these severe budget constraints, it can continue to be a partner in addressing the EPA-estimated $300-$500 billion funding gap that exists between what is currently being spent and what is needed to upgrade our existing water and wastewater infrastructure.

Simply put, more money on the table is helpful. Whether it comes in the form of a loan guaranty program, such as the Water Infrastructure Finance and Innovation Authority (WIFIA), lifting the cap on Private Activity Bonds (PABs), or via other approaches, NACWA is supportive of measures that provide new and helpful tools to the municipal financing toolkit. It is critical, however, that these funds hold harmless existing funding mechanisms, namely the SRFs, and do not have unintended consequences in terms of public agency access to the bond market or other capital markets.

NACWA also believes that these innovative funding mechanisms be used wisely to help clean water agencies fund innovative projects and new technologies as well as to supplement the SRF where it

has insufficient funds to help meet clean water agency needs on key infrastructure projects. NACWA also continues to support the need for a dedicated clean water trust fund that can put significant money on the table in a dedicated, sustainable, long-term fashion.

But let me be clear. The same budget constraints that make innovative financing measures a vital and viable discussion today, also demand an assessment of the other side of the same coin – namely that the command and control structure of the CWA must be re-assessed. Business as usual is simply no longer the answer.

Integrated Planning and the Utility of the Future

Late last year, I testified on behalf of NACWA in a hearing your Subcommittee held on integrated planning under the CWA. NACWA has consistently played a leadership role in advocating for an integrated planning approach, including longstanding and related efforts over the past decades to advance an integrated watershed approach and a more flexible and realistic approach to community affordability determinations under the CWA. NACWA also launched its *Money Matters... Smarter Investment to Advance Clean Water*™ campaign two years ago to shed light on the growing financial and compliance challenges posed by CWA regulations and calling for an integrated approach based on prioritizing these competing requirements to achieve maximum water quality benefit.

The CWA has led to an accretion of costly regulations on the Nation's communities and on the rate-paying residents and industries that foot the bill to ensure CWA compliance. The list is well-known – from wet weather-based requirements including combined sewer overflows, sanitary sewer overflows, and stormwater regulations – to specific requirements for nutrients and other pollutants driven by stringent water quality standards and total maximum daily loads. At the same time that regulations continue to expand, so too have enforcement actions. Nearly 100 cities across the country have signed off on sewer overflow consent decrees, with some costing individual cities billions of dollars – often to meet a single CWA requirement. Recently, municipal clean water agencies were also hit with a stringent reinterpretation of the Clean Air Act (CAA), which if not overturned by judicial or legislative action would force enormous costs to communities who have sewage sludge incinerators. Ideally, CAA and Safe Drinking Water Act obligations should also be considered in terms of the overall costs and affordability burdens that public agencies face.

NACWA believes that the Subcommittee has a responsibility to communities and their ratepayers across the United States to encourage the U.S. Environmental Protection Agency (EPA) to act boldly and in a timely manner in putting its integrated planning framework together. NACWA has participated in all five workshops that EPA has held across the country regarding this effort and looks forward to the Agency's final framework due out at the end of March. NACWA will assess this framework document and will continue its productive dialogue with the Subcommittee to determine legislative next steps to the extent this Agency effort falls short.

Minimally, EPA's integrated planning initiative symbolizes the recognition that it is time to do things differently. It is, to some extent, a sign of the increasing awareness that the CWA is now forty years old and that existing interpretations of, and perhaps the Act itself are not ideally suited to meeting the needs of the 21st century.

Often and for good reasons, discussions regarding clean water agencies focus on specific regulatory compliance issues under the CWA or how to best fund or finance an aging network of pipes and systems. These important discussions, however, often neglect – and sometimes even serve to overshadow –the fact that a significant, transformational shift in how utilities are managing their systems is well underway.

Utility leaders have grown increasingly sophisticated over the 40 years since the CWA became law. The prescriptive "command-and-control" construct of the CWA was not intended to account for the multi-faceted and complex roles utilities must now play within their communities. Increasing numbers of wastewater treatment plants are becoming agents of resource recovery, using cutting-edge techniques and technologies. These agencies are engaged in the capture and reuse of energy, the reuse of their wastewater to bend the curve on the hydrological cycle, capturing phosphorus and other beneficial and vital resources available from a constantly replenishing waste stream, using their solids as fertilizer and energy sources, becoming stormwater harvesters, green infrastructure innovators, product stewards, and sustainable community advocates.

At East Bay Municipal Utility District, for example, we have a program we refer to as Resource Recovery. Under this program we accept trucked in liquid waste from surrounding communities. These wastes include fats, oils and grease from restaurants, food processing wastes such as from cheese production, animal processing wastes such as from chicken and beef production, and recently food scraps from restaurants and grocery stores. We digest these high strength organic wastes in large anaerobic digesters which produce methane gas as a by-product of the digestion process. This gas is captured and used to generate green energy at our power generation station where we have clean burn engines and a gas turbine. Our Resource Recovery Program has grown to the extent that we now produce enough green energy from these waste materials, that otherwise may go to a landfill, such that we meet the power demands of our entire wastewater treatment plant and provide excess green energy back to the electrical grid.

As you can see from this example, what were called wastewater treatment systems or publicly owned treatment works in the 1970s and 1980s, and became clean water agencies in the 1990s and 2000s, have now in 2012 matured even more – becoming resource recovery agencies. In line with this, NACWA has unveiled a "2020 Vision" for the "Utility of the Future". In 2020, NACWA will be celebrating its 50th anniversary and the CWA will be nearing 50 years old as well. In line with these milestones, it is vital to recognize our sector is at a crossroads and to get out ahead of the curve and shape the next decade's clean water agenda.

This evolution to a utility of the future, however, has significant consequences. It demands a serious re-appraisal of the CWA, its ongoing relevance in the 21st century, and whether and how it can be amended to address and embrace the transformational change taking place at the local level. The drivers of some of these trends were not entirely foreseeable when the CWA was passed, including population growth, weather patterns, a push toward energy independence, an ongoing economic downturn that rivals the Great Depression, awareness of multi-source pollution challenges, and

product stewardship approaches that can keep harmful products off the shelf and a plethora of medications and chemicals out of the waste stream.

The Business Case for the Water Resources Utility of the Future

The water resources utility of the future contemplates a new business model. Instead of simply collecting, treating, and disposing of municipal and industrial wastewater, the utility of the future re-imagines itself as an integral component of the local economy, ecology, and social community. Its objectives are to separate, extract, or convert valuable commodities from wastewater to reduce costs to households and businesses, improve the quality of surrounding ecosystem, and deliver economic value to the local economy.

This is not a future aspiration. With the help of technology developers, innovative municipal leaders are beginning to take these steps today. They are becoming more energy efficient, recovering energy from biosolids, reusing effluent and biosolids, recovering a wide range of commodities, transforming waste streams into valuable new commodities, and taking steps to support economic expansion by setting capital investment priorities to meet the needs of industry.

In so doing, utilities are reducing costs and finding new sources of revenue. Savings are passed back to the community in the form of mitigated rate increases and investments in community welfare. The environment also is a net beneficiary. And so is the local and, in many cases, the national economy. Reduced costs and increased revenues passed back to households and businesses create more disposable income, which can be reinvested in local goods and services. Capital can be freed up for reinvestment in the plant and equipment as well as research and development. Part of this investment ends up creating new jobs in the technology and manufacturing sectors, which creates demand for new housing and other goods. As a result, governments enjoy growing tax receipts. Nationally, energy savings reduce imports and support a healthier balance of trade.

Please see the graph at the end of the testimony which provides a visual of the business case for moving in the direction of the water resources utility of the future.

Conclusion

I believe that we are at a crossroads. We have a unique opportunity to put the federal, state and local partnership back on track to help meet our communities' water quality needs. This Subcommittee can play a vital role on several key, related fronts. NACWA applauds this Subcommittee's commitment to innovative financing mechanisms and wants to work with the Subcommittee on developing these mechanisms and ensuring that they are directly tied to the innovative leadership being shown across the country by our utilities. This would constitute a strong step toward making the utility of the future a reality and will be a partnership we can build on as economic times improve.

NACWA also deeply appreciates this Subcommittee's concerns with the growing cost of compliance with CWA regulations – no entity is more concerned about this than NACWA. It is critical that we watch closely EPA's integrated planning effort but also seriously assess the CWA's capacity to embrace the utility of the future concept and to allow our municipalities and states to work together

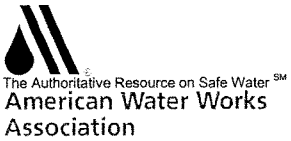
toward ensuring that limited resources are spent in a manner that maximizes water quality, community benefits, as well as local jobs and economic prosperity.

NACWA has also shared with the Subcommittee its draft legislation for a viable integrated permitting approach, which we stand ready to advance with your help at the appropriate time if necessary. NACWA is also developing over the coming months an advocacy agenda of specific legislative activities that can help ensure that roadblocks are removed and the needed tools and support are available for utilities, like the EBMUD and others across the country, as they continue to provide the unrivaled leadership that has been the hallmark of the last forty years.

Thank you for the opportunity to appear before you today, I look forward to any questions the Subcommittee may have regarding my testimony. We look forward to continuing to work with the Subcommittee on this and other important clean water initiatives.

The Business Case for the Water Resources Utility of the Future

		Example Processes	Environmental Effects	Utility Effects	Regional Economic Effects
Reduce Cost	Energy Efficiency	• Energy efficient equipment & networks • Photovoltaic installations • Wind turbine installations	• Reduced consumption of fossil fuels • Reduced greenhouse gas emissions • Reduced air pollution	• Reduced energy demand • Reduced operating costs	• Reduced imports/better trade balance • Enhanced investment in R&D • Creation of technology jobs • Increased household incomes • Increased local GDP • Increased local tax receipts
	Energy Recovery	• Methane production form biosolids • Hydrogen production from biosolids • Recovery of heat • Hydrokinetic energy recovery	• Reduced consumption of fossil fuels • Reduced greenhouse gas emissions • Reduced air pollution		
Increase Revenue	Water Reuse	• Supply of treated effluent for cooling • Recharge of effluent to groundwater • Effluent for landscape, golf course irrigation	• More fresh water for higher valued uses • Less salt water intrusion • Reduced discharges to cleaner waterways	• Creation of new revenues • Reduction of biosolids disposal costs	• Reduced imports/better trade balance • Enhanced investment in R&D • Creation of technology jobs • Increased household incomes • Increased local GDP • Increased local tax receipts
	Materials Recovery	• Ammonia recovery • Phosphorus compounds recovery • Nitrogen compounds recovery • Metals recovery (LI, MN, ZN, AU, AG)	• Reduced loadings to cleaner waterways • Healthier ecosystems		
	Materials Conversion	• Bioplastics production from biosolids • Pyrolosis of biosolids to fuel oil • Algal biomas fuel production • Biosolids solid fuel to replace coal • Biosolids fertilizer pellets & soil conditioner	• Less landfilling • Less mining and burning of fossil fuels • Reduced net carbon emissions		
	Biosolids Reuse	Use of biosolids slurries as liquid fertilizer	• Less landfilling • Better absorption of nutrients, less runoff		
Support Economic Growth		• Upgrades & expansions to handle new flows • Sewer extensions for industrial expansion • Managed package plants to replace septic systems	• Less groundwater contamination • Less septage overflow to waterways	Stronger partnerships with communities	• Creation of manufacturing jobs • Increased household incomes • Increased local GDP • Increased local tax receipts



Innovative Funding of Water Infrastructure for the United States

Presented by
Aurel Arndt
General Manager
Lehigh County Authority
Allentown, Pennsylvania

Before the House Subcommittee on Water Resources and Environment
February 28, 2012

Good morning, Chairman Gibbs and members of the Subcommittee. My name is Aurel Arndt, and I am General Manager and Chief Financial Officer of the Lehigh County Authority based in Allentown, Pennsylvania. I deeply appreciate this opportunity to offer input on the critical issue the subcommittee is addressing today: the need for innovative financial mechanisms to sustain and rejuvenate our country's water infrastructure.

As background, the Lehigh County Authority provides high-quality, affordable and reliable water and sewer service to more than 22,000 customers in Lehigh County and Northampton County, Pennsylvania. I have worked for the Lehigh County Authority since 1974. Throughout my career, which includes service on the Executive Board of the Government Finance Officers Association, then the board of the Pennsylvania Infrastructure Investment Authority (PennVest), and now on the Water Utility Council of the American Water Works Association (AWWA), I have focused my efforts and interest on water infrastructure finance. I am here today representing AWWA and its more than 50,000 members across the United States.

Yesterday, AWWA released a report titled, "Buried No Longer: Confronting America's Water Infrastructure Challenge," which reveals that restoring existing water systems as they reach the end of their useful lives and expanding them to serve a growing population will cost at least $1 trillion over the next 25 years. I want to emphasize that this is $1 trillion for buried drinking water assets <u>only</u>. Above-ground drinking water facilities, waste water, storm water, and other water-related investment needs are also very large, and must be added to reflect the true magnitude of the water investment needs before us. I would be happy to share copies of that report with members of the subcommittee. As I'm sure you know, a number of other organizations, including EPA, and other witnesses at this hearing have all concluded that the country's need for infrastructure reinvestment is substantial and pressing. Therefore, I'd like to focus my remarks today primarily on addressing the challenge before us.

A New Approach: The Water Infrastructure Finance and Innovation Act. We have had a chance to review this subcommittee's draft legislative language that would create a Water Infrastructure Finance and Innovation Authority (WIFIA) and I must say, we wholeheartedly endorse this approach. As described in the draft, WIFIA would fill a significant gap between what current water infrastructure tools can do and what needs to be done.

I would like to emphasize that AWWA strongly believes the cornerstone of water infrastructure finance is, and should remain, local rates and charges. That said, there are periods in time when large infusions of capital are needed, such as when large amounts of pipe must be replaced or a treatment plant must be upgraded due to age or new regulations. Today, the state revolving loan fund (SRF) program and municipal bond market represent the primary long-term means for financing water infrastructure projects. The scale of water infrastructure investment needs however, often push utilities beyond the limits of these traditional financing sources and beyond the ability to set affordable rates for its customer base. That calls for an expanded toolbox of funding options to help meet the nation's critical water infrastructure needs.

The SRF program is the primary federal mechanism for assisting local communities in dealing with water infrastructure challenges. It is an effective program that we strongly support. However, in many states, the SRF is unable to make loans to large communities or for large projects simply because large loans would exhaust all of the state's capitalization funds – leaving a gap for large, regionally and nationally significant water infrastructure projects.

About 70 percent of American communities use municipal bonds and other forms of debt to finance water infrastructure projects. Being able to lower the interest rate by just a few percentage points in a multi-million-dollar loan can amount to significant savings in the cost of an infrastructure project. These savings for local borrowers can significantly accelerate needed water infrastructure investment by making it more affordable for utilities and their customers. In fact, lowering the cost of borrowing by 2.5 percent on a 30-year loan reduces the lifetime project cost by almost 26 percent, the same result as a 26-percent grant.

Lowering the cost of infrastructure investment pays dividends in other ways as well. Most fundamentally, it makes it possible to do more with less, that is, to rebuild more infrastructure at lower cost. In addition, the US Department of Commerce Bureau of Economic Analysis (BEA) estimates that for every dollar spent on water infrastructure, about $2.62 is generated in the private economy. And for every job added in the water workforce, the BEA estimates 3.68 jobs are added to the national economy. Moreover, these national benefits come on top of improved public health, a cleaner environment, strengthened fire protection, and a better quality of life in the community.

Consequently, WIFIA would assist communities in meeting the nation's water infrastructure needs in a manner that would have minimal cost to the federal government while complementing existing financing mechanisms, maintaining the current federal role, leveraging private capital, and creating vital manufacturing and construction jobs.

We urge this subcommittee, the full committee, and the rest of Congress to enact this WIFIA legislation. We note that it is modeled after the highly successful Transportation Infrastructure Finance and Innovation Act (commonly called TIFIA). Similar to TIFIA, WIFIA will lower the cost of capital for water utilities while having little or no long-term effect on the federal budget.

Replicating the TIFIA model. We largely agree with the approach taken in the draft, which would access funds from the U.S. Treasury at long-term Treasury rates and use those funds to provide loans, loan guarantees, or other credit support for water infrastructure projects. Funds would flow from the Treasury, through WIFIA, to funding recipients to enlarge their pool of capital. Loan repayments – with interest – and guarantee fees would flow back to WIFIA and thence into the Treasury – again, with interest.

Eligible water infrastructure projects would include drinking water, waste water, storm water, water reuse and desalination, and similar projects, and associated infrastructure replacement and rehabilitation.

We agree that WIFIA should have the authority to:

- Provide direct loans, loan guarantees, and lines of credit for large water infrastructure projects. We believe it makes sense for WIFIA to make loans above a minimum size, which we have proposed as $20 million. That is generally the top level at which State Revolving Loan Funds can make loans, and WIFIA is intended to complement the SRF program by specifically targeting this gap and focusing on larger projects that are generally unable to access capital through the SRFs.

- Provide direct loans, loan guarantees, and lines of credit to SRFs for a group of smaller projects combined to meet the $20 million minimum threshold. Currently, 31 states leverage their SRF programs by borrowing. Allowing SRFs to borrow through WIFIA will further leverage SRF resources and make such a practice more attractive to additional states. This will allow SRFs to make more loans for small and medium-sized projects.

AWWA concurs that, like the TIFIA program, WIFIA should be able to take a subordinate position in any project. This would be extremely helpful in attracting and leveraging private capital in particular projects. We do recommend, however, that it must be the utility that applies for and receives a WIFIA loan, and not a private participant in a project.

We concur that WIFIA should not provide for loan forgiveness or negative-interest loans or similar credit aspects that would increase the cost of the WIFIA program to the federal government. We agree with the straightforward approach of creating a mechanism to allow the very low cost of Treasury funds to be passed on to American communities for investment in water and wastewater projects. Loans would be made at Treasury rates and repaid with interest. In addition, a small interest surcharge or fee would be added to cover WIFIA's operating expenses, or Congress could appropriate those expenses, minimizing or offsetting the amount needed to be appropriated for administrative expenses.

It is also essential to ensure a streamlined approach to financing. We appreciate WIFIA's streamlined review and application process and ability to make decisions with no more burden to the applicant than required by traditional credit markets. We believe it is important to avoid federal cross-cutter requirements and complications of that kind to the maximum possible extent.

Low Cost to the Federal Treasury. A key feature of the draft proposal for WIFIA, as in TIFIA, is the minimal cost to the Federal Government. Under the Federal Credit Reform Act, a federal entity can provide credit assistance to the extent that Congress annually appropriates budget

authority to cover the "subsidy cost" of the loan, i.e. the net long-term cost of the loan to the Federal government. In this way, Congress directly controls the amount of lending – but the budgetary impact is also minimal because it reflects the net long-term cost of the loan, and virtually all water-related loans are repaid in full. In fact, Fitch Ratings, a top credit rating agency, determined that the historical default rate on water bonds is 0.04 percent. Indeed, water service providers are among the most fiscally responsible borrowers in the United States. Moreover, those states that leverage their SRF programs have no history of defaults, placing them among the strongest credits in the country. Consequently, WIFIA – because it involves loans that are repaid with interest – involves minimal risks and minimal long-term costs to the federal government. TIFIA is able to leverage federal funds at a ratio of approximately 10:1. With the water sector's strong credit ratings and history, that ratio could be even greater for WIFIA. In other words, because of the sector's strong credit rating and history, the "subsidy cost" called for by the Federal Credit Reform Act would be minimal.

We do advocate modifying the TIFIA model in at least one important respect: to explicitly provide that a utility which pays its own "subsidy cost" up front should be able to get a loan or guarantee that does not count against WIFIA's appropriated budget authority. In effect, such a utility would be paying for credit insurance and would be able to access funds at Treasury rates in the same degree as a utility that had its "subsidy cost" paid through the appropriated budget authority. Happily, the draft does do these things.

Conclusion. Enacting a Water Infrastructure Finance and Innovation Act (WIFIA) modeled after the successful transportation program known as TIFIA will offer meaningful assistance to American communities in a modern, cost-effective way, at the lowest-possible cost to federal taxpayers. It will help to increase the nation's level of investment in water and waste water infrastructure to meet the immense needs for rehabilitation and replacement, build the infrastructure we need for future prosperity, and create the jobs we need today. A number of water infrastructure tools have been sincerely proposed over the years, but WIFIA is the one that best targets the real needs of communities, makes the most fiscal sense, and that will have the most impact on our nation's water infrastructure.

In short, WIFIA will allow our nation to build more water infrastructure at less cost. And to top that, we will get a cleaner environment, better public health and safety and a stronger foundation for our economy.

We thank this subcommittee for the leadership it is taking today in holding this hearing and more importantly, in offering this vitally needed tool – WIFIA – to help address in a significant way this nation's water infrastructure challenges. We offer to work with the subcommittee in communicating the value of WIFIA to the rest of Congress and our respective publics.

Thank you again for the opportunity to appear today. I will be happy to answer any questions or to provide you with any other assistance I can, now or in the coming months.

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TESTIMONY TO THE
SUBCOMMITTEE ON WATER RESOURCES
AND ENVIRONMENT
OF THE COMMITTEE ON TRANSPORTATION
AND INFRASTRUCTURE
OF THE U.S. HOUSE OF REPRESENTATIVES

REGARDING

WATER INFRASTRUCTURE FINANCING

By
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February 28, 2012

Chairman Gibbs, Ranking Member Bishop, and Members of the Subcommittee:

It is an honor to be here today to offer the perspective of a municipal contract and finance attorney on our country's water infrastructure financing challenges.

My name is Eric Petersen and I am a partner at Hawkins Delafield & Wood, a leading national law firm in the fields of public finance, public contracts and public private partnerships. I specialize in water projects and represent the interests of municipal water utilities. Hawkins has negotiated major water infrastructure-related contracts for Seattle, San Diego, Phoenix, Santa Fe, San Antonio, Washington, DC, New York City, and more than 75 other cities, counties and authorities over the past 20 years. We were also centrally involved in the creation of six state revolving funds for water projects. Every year Hawkins typically issues formal legal opinions as to the tax-exemption of interest on more than $15 billion in municipal bonds. We are

regular participants in major water industry forums, including the U.S. Conference of Mayors, the American Water Works Association, the Design-Build Institute of America, and the National Council of Public Private Partnerships.

The water business in the United States, in the broadest sense, is sound and stable. Low interest rate, tax-exempt financing is provided by a mature municipal bond industry, and projects are built by a deep market of highly skilled and experienced engineering and construction firms. Most water and wastewater systems are run by municipal managers, with the exception of investor owned water utilities and about 1000 plants where operations are outsourced to highly qualified contract operators. The industry has a solid record of compliance with the Safe Drinking Water Act and Clean Water Act, both passed more than 30 years ago.

A large vise, however, is causing relentless financial pressure on the water industry, forcing it to constantly re-think how it does business. On one side, there remains a fundamental unwillingness to raise user rates for obvious reasons. On the other, the unavoidable capital needs of a heavily capital intensive industry mount inexorably. Those needs arise from long-deferred capital maintenance; the necessity to replace obsolete assets and build new facilities; and ever-tightening state and federal regulatory standards, particularly in the nitrogen removal, combined sewer overflow, and treated water quality areas.

Federal financial support for water infrastructure consists almost exclusively of the tax-exemption of interest on municipal bonds issued for water and wastewater projects. The national grant programs have long since expired, and the federally-assisted state revolving fund programs of subsidized loans to municipal utilities are severely underfunded and, in many states, fall far short of the need. Proposals continue to surface in Congress and from the Administration to raise revenue by curtailing, by any number of means, the

tax-exemption of interest on municipal bonds. Passage of any of these measures would only serve to tighten the financial vise on the water industry.

Municipal water bonds are tax-exempt only if they are issued by the municipality itself, so called "governmental bonds." Bonds issued for water projects by private companies — known as "private activity bonds" — are not tax-exempt, and thus carry the higher interest rates of corporate bonds. As a result, if a city wants to have a private firm design, build, finance and operate a new project (known as a "public private partnership", or "P3" project) through a competitive process, the private financing element causes the debt to be taxable and generally makes the overall project costs too expensive. This is true even though the P3 water project serves the general public in exactly the way a municipally-financed project serves the public, and likewise remains owned by the municipality.

The Internal Revenue Code does contain an exception to the provision that makes private activity bonds taxable. Water projects are part of a category of private activity bonds called "exempt facility bonds." The total amount of exempt facility private activity bonds that can be issued in each state is capped under legislation first passed 25 years ago, and currently aggregates about $240 billion nationally. This is known as the "private activity bond volume cap." Municipally issued private activity housing bonds traditionally have been, by far, the largest recipient of state volume cap allocations, essentially crowding out private activity bonds for water projects.

Private financing of public water infrastructure has thus been effectively blocked. The planning process for large water projects takes years, and the unlikelihood and uncertainty as to the availability of tax-exempt private activity bond volume cap for a proposed water project, as a practical matter, eliminates private financing and P3 approaches to project implementation from meaningful consideration when project delivery methods are considered by local municipal officials.

Completely removing the private activity bond volume cap applicable to water and wastewater projects may well help to moderate the water rate financial squeeze. P3 projects privately financed using tax exempt bonds generate substantial savings by virtue of the following:

- Expedited delivery schedules
- Guaranteed performance
- Early price certainty
- Guaranteed, lower costs
- Increased innovation
- Greater competition
- Qualifications based, best value contractor selection
- Full collaboration between the designer, builder and operator
- Transfer of design and construction risks
- Improved capital maintenance
- Single point of accountability
- Life-cycle focus
- Enhanced security for performance

Significant savings result as well in design-build and design-build-operate project procurements financed with traditional municipal bonds, and for the same reasons. And DB and DBO procurements are being successfully undertaken with increasing frequency in the water sector. Adding "financing" to the group of privately provided services has the potential, however, to deliver

even greater value to municipalities in select circumstances. These include particularly:

- Projects characterized by innovation, such as desalinization projects, biosolids management facilities, or treatment projects involving new technologies.
- Projects in which there is a higher degree of perceived performance risk, where the use of risk-taking equity capital may be appropriate.
- Situations where the municipality wants to turn over system management to a private concessionaire in order to get out of the business, receive a concession fee, improve service or reduce cost.
- Situations where the municipality does not want to issue debt or own the asset.

In each case, having the assurance that all present and future capital improvements can be financed on a tax-exempt basis would remove the only major hurdle to serious evaluation of the P3 approach to providing public water services. As others on the panel can testify, budget scoring studies have shown a negligible revenue loss to the Treasury from such a change.

Unrestricted tax-exempt private financing of public water infrastructure is no cure-all. Most projects surely will continue to be municipally financed using traditional water revenue bonds. But I am convinced that certainty as to the availability of tax-exemption for privately financed water projects could create a significant level of renewed interest from the private sector in providing new, innovative and flexible solutions to a wide variety of municipal water project challenges. The question is not "how are municipalities going to finance all of their water infrastructure needs." They

can, with appropriate rate increases. The question is, "will assured tax exemption for private financing of water infrastructure assist in alleviating the rate squeeze?" The answer, for many projects, will be "yes," by placing P3 projects and traditional projects on a level financing playing field and allowing the power of innovative, competitive contracting and financing to deliver best value.

This was indeed the case in 1986, when the certainty of tax-exempt private activity bond financing for municipal solid waste projects, which was provided by the Tax Reform Act of 1986, unleashed a burst of additional investment in waste-to-energy facilities and other privately financed projects needed in the solid waste management field totaling over $15 billion.

To conclude with a real and current example in the water sector, the San Diego County Water Authority this year is going to contract for the purchase of water from an $800 million seawater desalinization project in Carlsbad. It is a public-private partnership with Poseidon Resources, which will design, build, finance and operate the plant. Poseidon's private financing makes the project bonds private activity bonds, but the company has secured a volume cap allocation from the State. This is an unusual and fortunate occurrence, made possible only by the collapse in demand for private activity housing bonds in the present market. The price of water, with tax-exempt interest rates, is projected at approximately $1,850 per acre foot. With taxable financing, at interest rates about 100-150 basis points higher, the price would be over $2,000 per acre foot, or around a 10% increase. It is quite possible that this key water resource project for California would not proceed had lower cost tax-exempt financing not been secured. The value of the assured tax-exemption thus is quite plain.

Thank you again for this opportunity. Water infrastructure financing needs, which are local by their nature, are often overshadowed by other, broader infrastructure issues, and we in the water industry applaud the

Subcommittee's renewed focus on the question today. I look forward to your questions and comments.

Testimony of

Thaddeus R. Wilson
Vice President

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To
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
US House of Representatives
2167 Rayburn House Office Building

On
A Review of Innovative Financing Approaches for
Community Water Infrastructure Projects

February 28, 2012

Chairman Gibbs, Ranking Member Bishop and Members of the Subcommittee:

It is an honor to be here today to discuss innovative financing approaches for community water infrastructure projects. My name is Thad Wilson and I am a Vice President with M3 Capital Partners LLC (M3), a management-owned investment and advisory firm based in Chicago, Illinois. M3 is registered with the SEC and a member of FINRA and SIPC in the United States.

M3, through an advisory affiliate, currently manages equity commitments of $2.9 billion on behalf of a U.S. public pension plan. The focus of these equity commitments is on long-term, entity-level investments in real estate operating companies.

M3's Water Infrastructure Initiative

M3 is currently forming a North American water infrastructure fund that we anticipate will be initially capitalized by a U.S. public pension plan as the "cornerstone" sponsor. It is expected that the fund will focus primarily on offering an innovative Design-Build-Operate-Finance (DBOF) approach to municipal water infrastructure project delivery. We believe this approach offers a robust form of public-private partnership (PPP) to municipalities to capitalize their water infrastructure improvements, which may include the repair, upgrade or replacement of drinking water and wastewater treatment facilities and, in some cases, their related distribution and collection systems (collectively referred to herein as "Water Facilities"). M3 plans to form strategic ventures with highly experienced water service providers who will undertake the Design-Build-Operate (DBO) components of project implementation.

We believe M3's fund will be an attractive partner for municipalities given the common need for long-term investments in critical Water Facilities. Municipalities need a DBOF partner with a long-term vision to ensure their Water Facilities will perform for decades, providing local rate payers with high-quality water services at a reasonable cost. M3's pension plan clients need long-term investments that can provide stable, long-term returns for their beneficiaries – teachers, firefighters, police, and other public employees. By helping to provide a DBOF package, M3 believes we can offer municipalities the certainty they need to repair, upgrade or replace their Water Facilities on schedule and on budget.

My testimony today explores some of the compelling reasons to bring municipalities and public pension plans together through PPPs in such a way as to creatively address the nation's water infrastructure investment needs. Although M3 is a private group, we seek to establish a fund that will facilitate investments by public pension plans, which in turn will ultimately support public pension plan beneficiaries.

Public Pension Plan Interest in Water Infrastructure

During the past several years, U.S. public pension plans (particularly state retirement plans for teachers, firefighters, police and other public employees) have been exploring new categories of stable investments to improve their ability to meet long-term payment obligations to their beneficiaries, while minimizing the potential erosion of investments from possible future inflation. The significance of these efforts has been magnified in light of the effects of the global financial crisis, which generated volatile performance even in investment categories that were previously considered "core" or "stable". Many investments that were reasonably expected to produce steady annual cash distributions have failed to do so. As a result, public pension plans

are increasingly looking to build or expand allocations focused on "tangible asset" investments. Such tangible asset investments will include infrastructure investments that seek to generate stable cash flows over a long-term holding period, with limited economic correlation to other investment holdings (e.g., stocks, bonds and real estate). Pension plans have seen the punishing impact of having all of their investments underperform at the same time. In addition, pension plans have feared their investments would not keep up with inflation, should inflation rear its ugly head. Ideally, pension plan investments would provide inflation-protected returns commensurate with the risk profile of the underlying assets.

Recent data clearly demonstrate the increasing desire among institutional investors, including public pension plans, to invest in infrastructure:

- According to industry research by Preqin Ltd., from 2007 through 2011, 174 global unlisted infrastructure funds were formed with $138 billion in aggregate capital commitments and an average fund size of $791 million. In 2011 alone, 28 funds obtained $16.1 billion in aggregate capital commitments globally, with nine of these funds obtaining $8.5 billion in total capital commitments focused primarily on North America.[i]
- According to a recent survey of global institutional investors conducted by Institutional Real Estate, Inc. (IREI), 44% of survey participants indicated that their 2011 allocations to infrastructure (i.e., the amount committed) increased compared with 2010, and 62% of survey participants indicated that they raised their target allocations to infrastructure (i.e., the percent of their total portfolio devoted to infrastructure) in 2011 compared to 2010.[ii]
- Another survey from IREI tracks specific investor commitments to infrastructure funds. This survey indicates that since 2005, 46 U.S. public pension plans have made 80 distinct commitments to infrastructure funds, totaling in excess of $7.4 billion.[iii]

Consistent with these trends, M3's view is that a number of public pension plans will be interested in building a portfolio of investments in municipal Water Facilities. Municipal Water Facilities provide an essential service to residential and commercial end users, for which there is no viable alternative. Further, they generate cash flows secured by an established and diversified customer base of homes and businesses. As such, municipal Water Facilities typically generate stable, recession-resistant cash flows, with a limited correlation to other investment allocations of pension plans.

Although the repair, upgrade or replacement of municipal Water Facilities requires a significant capital investment, such projects are not so large as to raise the issue of investment "concentration risk" for the majority of public pension plans. For example, $25 million to $100 million in equity may be required to upgrade or replace Water Facilities serving small-to-medium sized municipalities. Equity requirements within this range typically represent an attractive investment "sizing" for all but the smallest-capitalized pension plans.

The long-term investment requirements of municipal Water Facilities are also well-aligned with the long-term investment "hold period" of public pension plans. Public pension plans will generally target long-term, stable yields on investments that reflect the strength and stability of the underlying assets, ideally with adjustments for inflation that allow for an acceptable real return over a long-term investment period. For municipalities, partnering with a long-term investor is an effective way to provide long-lasting, quality water infrastructure that will have efficient operating costs for the long-term, to the ultimate benefit of rate payers. Moreover, parties who know they will be partners for thirty or more years will typically come to an agreement that will benefit all parties for the long-term, and not just for the short-term.

Potential PPP Structures

There are various PPP structures municipalities can consider to meet their Water Facility development and operating needs. Among these various structures, we anticipate two structures in particular are well suited to matching public pension plan capital with municipal water infrastructure investment needs:

- **Existing Facility PPP** – for the repair, upgrade or expansion of existing Water Facilities.
- **Replacement Facility PPP / DBOF** – for the development of new or replacement Water Facilities.

Both of these PPP structures typically involve significant equity to capitalize Water Facility capital project needs, as part of a long-term "concession agreement" between a municipality and a private investor partner (referred to herein as the "Investor Partner"). The Investor Partner may be comprised of a) a public pension plan (or an infrastructure fund capitalized by public pension plans), which provides most of the needed capital costs up-front, and b) a service provider or combination of service providers, with the experience and expertise needed to design, build and / or operate the Water Facility over the term of the PPP. The Investor Partner receives payments over the life of the PPP, which are set to provide a reasonable return on the capital costs invested. At the end of the PPP term, the Water Facility typically will be owned by the municipality under pre-negotiated terms and no further payment is due by the municipality to the Investor Partner.

Under an Existing Facility PPP structure, the Investor Partner assumes responsibility for operations and maintenance of the Water Facility during the PPP term. The Investor Partner may also capitalize and implement any immediate required upgrades or other periodic capital expenditures. The up-front capital payments plus an appropriate return on capital is effectively returned to the Investor Partner over the PPP term through service fees paid by the municipality.

Proceeds necessary for the payment of service fees to the Investor Partner come from rate payers served by the municipality. In some cases, rates can be kept lower because of long-term operating cost savings realized by the design, construction, operations, and maintenance services brought to bear by the Investor Partner.

A Replacement Facility PPP structure can be utilized by an established municipality a) to build a new Water Facility (e.g., a water recycling facility) that replaces an existing older, obsolete Facility that no longer meet regulatory compliance standards or b) to build new Water Facilities (e.g., a biosolid facility). Under this structure, the Investor Partner will provide a) the resources and talent which will implement design and construction services during project development, b) the operating and maintenance services through the life of the PPP term, and c) financing for the initial project construction and for all future capital replacements required. With the Investor Partner coordinating all design, build, operate and finance functions (under the standards and oversight of the municipality), the municipality can enter into a single agreement for the development and operation of new or replacement Water Facilities. Once the new Water Facility is commissioned and operations commence, the up-front capital invested in the project is repaid to the Investor Partner over the life of the PPP term through service fee payments.

In contrast with these PPP structures, municipalities may also consider an outright sale or "privatization" of their Water Facilities to a private investor. A privatization transaction typically requires a shift in control over rate setting and other matters from the municipality to a state Public Utility Commission or similar regulatory authority.

Recent Example of a Replacement Facility PPP

The City of Santa Paula, California (the City) provides a recent example of a Replacement Facility PPP structure utilizing private capital. The City's wastewater treatment facility, built in 1939, was out of compliance and needed to be replaced. The City did not have sufficient funds to pay for a new facility and was facing a tight completion and compliance deadline to avoid more than $8 million in fines. Due to the short timeline and capital requirements, Santa Paula's City Council moved the replacement project forward under a DBOF procurement process, utilizing Section 5956 of the California Government Code. Section 5956 encourages PPPs in the state to address public infrastructure needs through private investment.

The Santa Paula City Council awarded the project to an Investor Partner team comprised of an experienced DBO service provider (PERC Water) and an infrastructure fund (which counts a number of pension plans as its source of capital) as the primary capital provider. In July 2008, just two months after the contract was awarded, the Investor Partner broke ground on the project and a new water recycling facility for Santa Paula was in full operation by May 2010, seven months before the compliance deadline. PERC Water is now operating the facility under a 30-year agreement between the Investor Partner and the City.[iv]

Broader Market Activity

During 2011 American Water Intelligence, a water industry publication, identified and tracked 284 water infrastructure projects that were either under consideration or awarded in the U.S. and Canada, totaling $14.8 billion in total project value. The majority of these projects (64% by project value) were expected to be delivered as "traditional" design-bid-build (DBB) projects, while the balance (36%) were expected to be delivered under "alternative" approaches

(e.g., Design-Build, DBO and DBOF). Among the total projects, seven projects totaling $1.5 billion in value (10% by project value) were to be delivered as DBOF structures.[v]

Why Municipalities Should Consider PPPs Utilizing Public Pension Plan Capital

In the U.S. today, there is a significant and growing need for investment in our critical water infrastructure. Moreover, increasingly stringent regulations established and maintained by the Environmental Protection Agency (EPA) necessitate the ongoing upgrade or replacement of existing Water Facilities. According to a recent report from the American Society of Civil Engineers, the total U.S. water and wastewater infrastructure capital need in 2010 was an estimated $91.2 billion, while total capital spending was an estimated $36.4 billion, resulting in a total estimated "capital gap" of $54.8 billion. According to this report, if current trends persist, the anticipated capital gap will grow to $84.4 billion by 2020.[vi]

In the current environment, as municipalities are taking on these required investments in their water infrastructure asset base, state and local governments are also facing significant budget and debt-load constraints. To further complicate matters, some state and federal financing programs available for Water Facilities, such as the Drinking Water and Clean Water State Revolving Funds (SRF), have recently been curtailed and may continue to experience cuts in the coming years. Given these funding challenges, accessing private capital through PPP structures may be an even more compelling option for municipalities to capitalize investments in Water Facilities. The primary benefits of PPP structures utilizing public pension plan capital for municipal Water Facilities are summarized in the following paragraphs.

Ownership and Control

With a PPP arrangement, municipalities can secure long-term ownership of their Water Facilities. During the PPP term, the Investor Partner typically obtains the benefits of ownership of the asset (potentially through a lease or other property interest in the asset). At the end of the PPP term, the benefits of ownership revert back to the municipality under pre-defined exit standards, with no further payment due to the Investor Partner at that time. The length of allowable PPP terms varies by state, with terms potentially ranging from 20 to 35 years.

Under a PPP, the municipality can retain control over rate setting, rather than conceding such control to a state Public Utility Commission (as typically occurs under an outright sale / privatization of Water Facilities). The PPP agreement may stipulate that failure to comply with established performance levels or regulatory standards results in termination of the PPP, with the benefits of ownership of the Water Facility reverting back to the municipality for a pre-established and agreed reimbursement. With a properly structured PPP, the Investor Partner is highly motivated to comply with – or even exceed – local, state and federal regulations.

Accelerated Project Launch

In order to accelerate the launch of Water Facility projects, municipalities can access private investment via PPP structures with public pension plans, potentially without the timing constraints associated with SRF applications or municipal bond financing arrangements. Because municipalities that access the bond market must carefully manage their bond maturities, credit ratings and financial ratios, they may only be able to access the bond market at established intervals. PPP structures with public pension plans can be formed independent of the municipal

bond cycle and provide an alternative financing source for near-term and long-term investment needs.

There are many reasons municipalities may seek to accelerate the launch of Water Facility projects. For example, by accelerating the launch of major Water Facility repair, upgrade or replacement projects, municipalities facing EPA consent decrees are more likely to meet environmental compliance-driven deadlines and avoid imposition of fines or have any accrued fines waived. In addition, by accelerating project launch municipalities can generate significant near-term employment opportunities for their local economy.

Risk Transfer

A key driver for many PPP transactions is the need of municipalities to transfer financial and performance risks inherent in the design, construction, and operation of water facilities to the private entities with which they contract for these services. Too often municipalities pay dearly for these services separately, and yet do not gain what they and their water customers need (i.e., a Water Facility that meets updated water quality standards, is constructed or upgraded on-time and on budget, and has performance guaranteed). Under a PPP structure, we anticipate the Investor Partner will take on operating and maintenance risks, while guaranteeing operational compliance with local, state and federal regulations throughout the PPP term. Under a Replacement Facility PPP, the Investor Partner may also assume key risks associated with the design, construction, operations and financing of the project. To the extent the Investor Partner guarantees project costs, schedule of completion, water / effluent quality, capital replacements and energy consumption levels, the Investor Partner is well aligned with the municipality and is

putting the capital it has invested "at risk", with a requirement to perform its obligations throughout the PPP term.

Given the broad range of risks transferred to the Investor Partner throughout the PPP term, the Investor Partner typically approaches such projects from a life-cycle perspective, which focuses on the long-term operational performance of the project. With a life-cycle perspective, the Investor Partner is motivated to invest up-front during the design and construction phases to deliver the appropriate level of service to the municipality throughout the PPP term.

Life-Cycle Cost Savings

By utilizing a PPP approach for the development of replacement Water Facilities, municipalities potentially can realize savings in life-cycle costs (i.e., the risk-adjusted net present value of total project costs to the municipality over the life of the PPP term) as compared to the traditional DBB approach to project delivery. Lower life-cycle costs may be achievable under the PPP despite the relatively higher cost of capital of the Investor Partner as compared to tax-exempt bonds and / or SRF loans that are typically utilized under the DBB approach.

Lower life-cycle costs under the PPP approach are driven by the life-cycle perspective of the Investor Partner. An integrated team takes full responsibility for the design, construction, operation and maintenance of the project over the life of the PPP term, allowing for coordination and efficiencies across these activities. The Investor Partner is also motivated to invest in equipment during construction that will result in the lowest operational costs through the PPP term, producing cost savings that can be shared with the municipality. In contrast, the DBB approach separates the design, build and operations phases of the project. Under the DBB model, independent design and construction firms, generally with no operating responsibilities

beyond project start-up, are less aligned with the municipality regarding the long-term operating performance of the Water Facility. By combining the design, build, operate and finance functions under a single Investor Partner, municipalities can potentially avoid change orders, cost overruns and / or litigation costs associated with separate, non-integrated service providers.

New Revenue-Generating Opportunities

Investments in new Water Facilities may present municipalities with new revenue-generating opportunities, which potentially can be monetized by partnering with an Investor Partner. Municipalities and long-term-focused Investor Partners, such as public pension plans, can form PPPs in order to facilitate the development of new facilities and the application of innovative technologies that allow for:

- desalination of seawater or brackish water;
- treatment and reuse of wastewater (i.e., "recycled water") and / or;
- waste-to-energy conversion of wastewater byproducts (i.e., "biosolids").

To the extent meaningful revenues can be generated from such initiatives, they can help lower rates, or mitigate the need for rate increases, for end users. Investor Partners may also be able to incorporate an appropriate, risk-adjusted valuation for such future new revenues into PPP structures that have a long-term investment period. In such cases, the value attributable to the future new revenues may then be applied by the Investor Partner to offset a portion of the costs to the Municipality of the subject new development.

Long-Term Partnership Approach

Through PPPs with public pension plans, municipalities can form partnerships with established investors that have deep financial resources and proven track records. In addition, although public pension plans capitalize to the Private Investor in PPP structures, they are ultimately responsible for preserving and growing the long-term retirement benefits of teachers, firefighters, police and other public employees. As such, public pension plans and municipalities share a common public mission, which creates a solid foundation for mutually beneficial long-term partnerships.

Facilitating Water Infrastructure PPPs

Although the U.S. faces a nationwide need for investment in community water infrastructure projects, the implementation of such projects is generally carried out at the local level. As a result, any efforts toward increasing the number of water infrastructure PPPs that utilize public pension plan capital should primarily seek to enhance the ability of local officials and their staff to effectively solicit, review, deliberate and approve such projects, with the input and support of citizens, employees, businesses and interest groups.

More specifically, the primary challenges to implementing water infrastructure PPPs, along with potential measures to address those challenges, are as follows:

- **Value of water and water infrastructure** – Water is generally viewed as a public good in the U.S., with very limited appreciation among many of us for the true cost to develop and maintain the critical infrastructure required to deliver safe drinking water, and to collect and treat wastewater. Capital intensive pipe systems and technologically advanced treatment

facilities are typically "out of sight and out of mind", so long as water arrives at and departs from our homes and businesses as needed. With a focus on important but shorter-term priorities, a number of municipalities have maintained user rates for water-related services at levels that do not reflect the true cost of such services. Rate increases that may be needed to support required water infrastructure investment, no matter the capital source, are often met with resistance. Potential measures to address these challenges include:

- Encourage broader community appreciation for the value of water and water infrastructure, supporting efforts to implement true-cost pricing for water services where appropriate;
- Increase awareness of the significant and growing need for investment in U.S. water infrastructure required to maintain high standards of quality and reliability;
- Increase awareness of the myriad social benefits from optimal water infrastructure investment, such as: (i) the reliable delivery of safe drinking water; (ii) the protection of the environment through effective wastewater treatment; (iii) the conservation and reuse of water from water recycling initiatives; and (iv) the potential for job creation from near-term project launches.

- **Understanding of PPPs** – Given the limited number of water infrastructure PPPs utilizing private capital that have been completed in the U.S., a) most interested citizens are unaware of the potential long-term benefits of PPPs, and b) few municipal officials have meaningful experience in soliciting, evaluating and structuring such transactions. In addition, regulations governing the implementation of PPPs vary widely from state to state. As a result, many municipal officials may be reluctant to deviate from the "traditional" DBB procurement

approach, as compared to a potentially more cost-effective PPP structure that involves a multi-faceted and long-term service agreement under a potentially uncertain regulatory environment. Potential measures to address these challenges include:

- Increase awareness of the potential benefits of PPP structures for water infrastructure investments, particularly with regard to PPPs utilizing public pension plan capital in whole or in part;
- Encourage more state governments to implement PPP regulations which facilitate the solicitation, evaluation and structuring of PPPs, along the lines of Section 5956 of the California Government Code, under which a Replacement Facility PPP was recently completed in Santa Paula, CA;
- Establish a nationwide office to promote and support PPPs at the municipal level, similar to the "PPP Canada" initiative launched in 2009 by the Canadian federal government. PPP Canada provides a national office for the promotion, coordination and financial support of private investment in public infrastructure as part of the country's long-term economic plan. PPP Canada also manages a C$1.2 billion fund, which is a merit-based program, designed to promote consideration of PPPs in public infrastructure procurements, in order to achieve value for taxpayers and other public benefits.[vii]

- **Debt Financing Options** – Most municipalities, and particularly larger cities, can access low-cost, tax-exempt financing through the municipal bond market and / or the SRF program for their major water infrastructure investment needs. The lack of similarly low-cost debt financing for PPP projects involving Water Facilities increases the overall cost of capital for private Investor Partners, even with the moderate return objectives of public pension plans.

Although "tax-exempt private activity bonds" may periodically be available to private investors in Water Facilities, uncertainty caused by the tax-exempt private activity bond "state volume cap" for Water Facilities may limit the competitiveness of PPP structures in certain cases. Potential measures to address this challenge include:

- Help to lower the cost of debt financing for private Investor Partners in Water Facility PPPs by removing the private activity bond state volume cap for Water Facility projects;
- Facilitate additional programs, potentially as part of the Water Infrastructure Finance and Innovation Act (WIFIA), which can provide competitive, low-cost debt financing for Investor Partners in Water PPPs, particularly for projects capitalized by U.S. public pension plans.
- Specific to the WIFIA draft legislation the Subcommittee is currently preparing, in SECTION 104, ENTITIES ELIGIBLE FOR ASSISTANCE, subsection (b) PUBLIC-PRIVATE PARTNERSHIPS, amend the discussion draft to **include** the "private financing or development partner" as an additional "entity eligible for assistance under this title". The "private financing or development partner" is understood to include an Investor Partner in a Water Facility PPP as described herein. By including the Investor Partner as an "entity eligible" for low-cost debt financing under the WIFIA legislation, Investor Partners would be able to offer Water Facility PPPs to municipalities based on a lower cost of capital, generating cost savings that ultimately could be passed on to community rate payers.

Summary

Municipal obligations to provide quality water and wastewater services to the public align well with the increasing desire of public pension plans to invest in stable, long-term cash flow generating assets. PPPs utilizing public pension plan capital are an attractive option for municipalities to meet their Water Facility investment needs. PPP structures can accelerate project launch, generate near-term jobs, allow for long-term municipal ownership and control, and potentially generate meaningful cost savings and / or new revenues through the life of the project. Among the thousands of drinking water and wastewater systems across the U.S., more municipalities should find it advantageous to explore the solutions offered by PPPs involving public pension plan financing.

Endnotes:

i Preqin Ltd. 2012. Preqin Global Infrastructure Report.

ii Institutional Real Estate Inc. 2012. Institutional Investing in Infrastructure. February.

iii Institutional Real Estate Inc. 2011.

iv PERC Water website. 2012.

v American Water Intelligence. 2012. Projects Tracked in the U.S. and Canada in 2011.

vi American Society of Civil Engineers. 2011. Failure to Act – The Economic Impact of Current Investment Trends in Water and Wastewater Treatment Infrastructure.

vii PPP Canada website. 2012.

U.S. House of Representatives Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment

"A Review of Innovative Financing Approaches for Community Water Infrastructure Projects"

February 28, 2012

Testimony of Jeffry Sterba
President and Chief Executive Officer
American Water

for the National Association of Water Companies

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Before the
Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
U.S. House of Representatives

February 28, 2012

Chairman Gibbs, Ranking Member Bishop, and Members of the Subcommittee – good morning and thank you for the opportunity to be with you this morning. I am Jeff Sterba, President and CEO of American Water, the largest publicly-traded U.S. water and wastewater utility company. We employ approximately 7,000 dedicated professionals who provide drinking water, wastewater and other related services to approximately 15 million people in more than 30 states, as well as parts of Canada and including 10 US military bases. I am pleased to be with you today representing the National Association of Water Companies. NAWC is the voice of the private water service industry and has members located throughout the nation and ranging in size from large companies like American Water owning, operating or partnering with hundreds of utilities in multiple states to individual utilities serving a few hundred customers. Through our various business models private water and wastewater professionals serve more than 73 million Americans, nearly a quarter of our country's population.

I am pleased to join you today to present actions we can take together as a Nation to unleash *"More Tools for the 'Financing Toolbox'"* through innovation and by embracing the powerful combination of public service and private enterprise to build the water infrastructure our communities need to thrive and to be healthy. The good news about the increasing attention water and wastewater is getting – even in the popular press – these days is just that: that the infrastructure that truly promotes economic vitality, provides public health, and protects our environment is getting the attention it deserves and needs. The bad news about too much of this coverage is that it primarily tells a story of doom and gloom.

Our Challenges Bring Opportunities

When it comes to providing safe water in this country, we have been doing the same thing for so long that we are comfortable. And in many ways the status quo has worked – the United States generally has built systems that reliably bring safe drinking water to homes and business and efficiently takes away waste and treats it to be returned to the environment or to be reused. And while our efforts have been successful, many signs are emerging that continuing as we always have is no longer sustainable. Former EPA Assistant Administrator for Water Ben Grumbles, who now is President of the Clean Water America Alliance, recently identified this trend as "the Public Rust Doctrine" – the "principles and teachings that water and wastewater infrastructure systems should only be owned, operated and maintained by public entities supplied with public funds as long as possible and that efforts to change this dynamic should be resisted, at least until systems rust, decay, or approach catastrophic collapse."

The challenges we face to protect and maintain our water and wastewater systems and make the investments needed for continuing growth and new public health and environmental standards seem vast, but they need not paralyze us. As the Johnson Foundation, in collaboration with American Rivers and Ceres, says in a report, *"Financing Sustainable Water Infrastructure"*, released just a month ago on January 26, 2012, as part of its Charting New Water initiative:

> While these challenges are significant, they are not insurmountable. In fact, they can be viewed as drivers of much-needed change in how we finance and develop our water systems to meet future demands. New financing models and pricing flexibility, which are necessary to pay for new infrastructure and to support legacy systems, provide enormous opportunity for positive transformation necessary to keep pace with the rapid changes being experienced by counties, municipalities and investor owned utilities.[1]

The guiding questions the Johnson Foundation asked of the diverse group of experts it convened for the report were 1) "What new financing techniques can communities use to pay for integrated and sustainable infrastructure approaches?" and 2) "How can we direct private capital toward more sustainable water management projects?"

The NAWC applauds you, Mr. Chairman, and this Subcommittee, for leadership in bringing these same questions to the halls of Congress and providing this forum for presenting some of the transformational solutions that will answer them.

Americans Value Water

Americans value clean, reliable water. A survey by ITT Corporation in 2010 shows that 95 percent of voters value water over any other service their households receive, including heat and electricity. And more than three out of four of these voters say that disruptions in their water system would create direct and personal consequences. What Americans may not understand as clearly, unfortunately, is what it takes to ensure they do not suffer those disruptions and consequences. American Water recently conducted a series of focus groups throughout our service area that reinforced the ITT survey, finding our customers believe having safe and reliable running water in their homes and businesses is invaluable and essential to their lifestyles. However, many of our customers do not know the extent of the infrastructure network that delivers water to their homes – they know there are pipes under the streets in their neighborhood, but they don't think about the reservoir, the treatment plant, the thousands of miles of pipe that underlay every other neighborhood in their town or city, and the pumps and energy that move a ton or more of water into every household every day.

These extensive and integrated water and wastewater systems that deliver such great value are at risk today. Take for example, the overall state of water mains in the U.S. There are approximately 240,000 main breaks annually – about 650 every day – that lose roughly 7 billion gallons of water treated to drinking water standards daily. This should be no surprise since many community water systems are on schedule to replace their pipes on a 250 year cycle. Which means the water pipes that Thomas Jefferson laid for Monticello are just about ready for an upgrade. This is not acceptable, nor is it sustainable, if we are to maintain the great progress we have made protecting public and environmental

[1] The Johnson Foundation, *Charting new Water Convening Report: Financing Sustainable Water Infrastructure*, January 2012, http://www.johnsonfdn.org/sites/default/files/reports_publications/WaterInfrastructure.pdf.

health and to build the economic foundation for future prosperity. The American Society of Civil Engineers in its recent study on the economic impact of underinvesting in our water and wastewater infrastructure estimates that on the track we currently are on, between now and 2020 American businesses will lose $734 billion in sales and the cumulative loss to our GDP will be $416 billion directly due to deteriorating infrastructure.

The upkeep and replacement of these systems drives the need to invest substantial amounts of capital, and once Americans are educated about their water systems and investment needs, they understand their role in ensuring long-term access to clean water. The ITT survey found that two-thirds of American voters are willing to pay an average of 11 percent more per month than their current water bills. Such increases are necessary, but we still need to attract the capital to be invested that full-cost recovery customer rates will support. We believe one major answer lies in removing roadblocks that deter increased private investment in water infrastructure.

Use of Private Capital

Before I talk about some specific recommendations to improve our nation's "Financial Toolbox", I think it is important to understand that substantial private capital already is at work in water. In 2011, American Water alone invested $925 million in our community water and wastewater systems across the country and we expect to do about the same in 2012. NAWC estimates that its 6 largest members are investing around $2 billion each year in their systems, which is significant when one notes that the total federal appropriation for the clean water and drinking water state revolving fund (SRF) programs for the current fiscal year is approximately $2.4 billion. While those numbers are big and a number of other financing sources and programs are being used to invest in water and wastewater infrastructure, several groups estimate that the total industry spend is significantly lagging what is needed.

In any situation, and particularly when discussing the needs of the water and wastewater systems, we need to agree that any distinction between public and private operations, any argument over the inherent virtue of public or private capital, any such demagoguery is not only meaningless – it is harmful. Our sole driving objective should be to provide the maximum amount of flexibility to deliver the most cost-effective and sustainable solutions for our nation's water and wastewater infrastructure systems. And right now our nation needs as many tools in its financing toolbox as we can develop.

The tools I am proposing will help attract additional private capital – including funds from companies such as American Water and additional private capital that is already in infrastructure funds and pension funds and other sources eager for the long-term, reliable investments that well-run water utilities provide. These tools will also provide municipalities with additional flexibility in addressing their water and wastewater system and for improving their overall fiscal health.

Impediments Keep the Financing Toolbox Closed

I would like to share with you today some of the opportunities for increasing the flow of this money into water and wastewater infrastructure investments, as well as some of the impediments in place.

Requiring Defeasance of Debt

No one likes to be told they cannot do something. This is particularly true when governmental entities are reviewing all of their strategic and fiscal options including their options related to how their water and wastewater systems are financed and operated. Unfortunately, the presence of existing IRS rules and the interpretations of those rules are effectively telling governmental entities they cannot pursue the use of private capital and operational expertise unless they pay a significant penalty to remove existing debt. The penalty I am talking about is not a specific fine. Rather it is the difference between the costs, on one hand, of the face value of the debt the IRS requires governmental entities to retire because of the use of private capital and, on the other hand, of the securities municipalities are required to buy to prefund the debt service on the portion of the debt that cannot be repaid immediately. The specific process I am referring to is called "defeasance", a term rarely used in general conversation.

So what drives the need to "defease" the debt and incur what is effectively a penalty? For the most part, local governments finance their water and wastewater facilities, and other infrastructure, through the issuance of tax-exempt bonds. The tax-exempt status of interest on these bonds enables municipalities and public utilities to borrow on a low-cost basis to fund their infrastructure needs by allowing the buyers of their debt to not pay federal income taxes on the interest those buyers will receive. In order to issue their bonds on a tax-exempt basis, however, local governments must comply with a number of tax law restrictions. For example, tax-exempt bonds ordinarily cannot be issued if the proceeds are loaned to a nongovernmental person or are used to construct property that is then leased on a long-term basis to a nongovernmental person. It is important to note that the proceeds from tax-exempt bonds can be loaned to a nongovernmental person if those funds are used to construct certain types of assets, included water and wastewater infrastructure. Under this scenario, American Water has issued hundreds of millions of dollars' worth of tax-exempt private activity bonds through state conduits.

Public-private partnerships related to municipal water and wastewater facilities often arise in a very different context than this, however. A common situation where public-private partnerships might arise is when a municipal water or wastewater utility constructs its system through the issuance of tax-exempt bonds with no intent to involve a private entity in the operation of that system. Then many years later that utility finds it needs to bring in a private partner in order to more efficiently run the system or to provide a new source of capital to make improvements to the system. In these situations, often the preferable path forward for the governmental entity and the private partner is to have the private partner lease the system on a long-term basis, agreeing both to operate the system and make necessary improvements while keeping the rates to customers reasonable and subject to governmental control. In these circumstances, the parties would enter into arm's length negotiations to determine the consideration to be paid and the fact that the governmental entity's borrowing cost was based on tax-exempt rates would not ordinarily be part of the negotiations. As a result, *in these transactions, the nongovernmental entity leasing the system would not be benefitting from the fact that the system was financed on a tax-exempt basis and the IRS ought to be indifferent to the transaction.*

What I am proposing is not a new concept. In fact, until at least the late 1980s, the IRS permitted this type of public-private transaction if it happened well after the tax-exempt bonds were issued. In other words, for many years the IRS had permitted issuers of tax-exempt bonds to lease tax-exempt bond financed property if the lease had not been reasonably expected at the time that the bonds were issued, evidently taking into account that a later, unexpected public-private partnership for the facilities had little or nothing to do with the original bond issuance. If the circumstances of the later public-private partnership transaction did not indicate that the transaction was a mechanism to pass on the benefits of tax-exempt financing to a nongovernmental person, the transaction was permitted by the IRS.

Beginning in the mid-1990s, however, the IRS began issuing rules that required continuing compliance with the limitations on the use of the facilities throughout the term of an issuer's tax-exempt bonds. Given that tax-exempt bonds often have final maturity dates of 30 years or more, this created a very significant restriction on the ability of local governments that ran into unexpected financial or other difficulties or sought to realize other benefits from bringing in private partners to operate the systems on a long-term basis. As the new IRS restrictions evolved, the rules effectively required that in the event of any non-compliance with the use restrictions while the related tax-exempt bonds are outstanding those bond must be "remediated." In the context of a governmental entity that wants to lease its water or wastewater system to a nongovernmental person, remediation as imposed by the IRS involves the onerous requirement that the governmental person "defease" the related tax-exempt bonds with the effective penalty I noted earlier. In the present environment of very low interest rates, this means that an issuer will have to buy securities with a significantly larger value than the remaining amounts due on outstanding tax-exempt bonds in order to meet the escrow requirements. Thus, for example, to remediate a private activity bond "violations" by defeasing $10 million of tax-exempt bonds to satisfy the IRS rules could necessitate that the issuer use $11 - $12 million or more to fund an escrow that, when invested, is sufficient to provide for all of the payment of the principal and interest on lower cost, tax-exempt bonds.

We believe that the IRS rules and interpretations of those rules in the context of utilizing solutions for water or wastewater systems that use private capital or operational expertise are punitive and should be eliminated. Moreover, much of the work to correct the problems entails simple IRS interpretation changes that are not mandated by the Internal Revenue Code provisions. These IRS rules create a significant economic barrier for local governments that seek to bring in a private partner to operate and/or finance their water and wastewater systems. Whether the public-private partnership is motivated by a governmental utility's economic situation or recognition of the benefits that an experienced private operator can bring, IRS rules should not hinder these transactions by imposing a significant monetary penalty on the governmental entity. In addition, we believe that these changes would have no effect on federal income tax proceeds. We urge that the rules and interpretations that penalize governmental entities for accessing private capital or expertise be repealed or altered.

Private Activity Bond Reform

The next tool water and wastewater systems need is greater access to private activity bonds (PABs) for all public-purpose drinking water and wastewater projects. H.R. 1802, the Sustainable Water Infrastructure Investment Act, would do just that by removing water projects from state volume caps for private activity bonds, spurring increased private investment in systems throughout the country. Some experts state that H.R. 1802 would generate at least $2 billion – translating into 60,000 jobs – in new investment each of the first few years and grow to several times that as the market opens up. And this is federal support for water infrastructure and jobs that is highly leveraged. That new investment of

billions of dollars per year costs, the last time this PAB proposal was scored by the Joint Tax Committee, well under $400 million over ten years.

H.R.1802 has nearly 60 cosponsors and I am delighted and grateful that 15 of those 60 serve on the Transportation and Infrastructure Committee. This legislation is bipartisan and bicameral and in fact passed the House twice in the last Congress as part of larger packages sent to the Senate. Most recently, the provisions of H.R. 1802 were incorporated into the Senate Finance Committee mark-up of the surface transportation bill. We are eager to see this legislation enacted this year, given the private investment it will spur and the jobs it will create. We very much appreciate the support it has received from members of this Committee and hope that you will continue your work to ensure it becomes law.

The Water Infrastructure Finance and Innovation Authority (WIFIA)

Finally, we commend the American Water Works Association (AWWA), along with the Water Environment Federation (WEF) and the Association of Metropolitan Water Agencies (AMSA), for their focus on lowering the cost of infrastructure investments and increasing the availability of lower-cost capital to utilities. These organizations' proposal to create a Water Infrastructure Finance and Innovation Authority – "WIFIA" – is a significant topic of today's hearing. NAWC generally supports their objectives and the principles of WIFIA, which would 1) offer loans, loan guarantees, and other credit support for large water infrastructure projects and those with national or regional importance; and 2) reduce the cost of leveraging for State Revolving Fund (SRF) programs by lending to them directly at Treasury bond rates. However, we believe the legislation should not set a minimum project size so large that only the biggest and most complex projects would qualify. Many smaller and medium-sized water utilities, especially in suburban and rural areas, could benefit from WIFIA-like loan programs outside of the SRF if they are eligible.

The WIFIA proposal itself has merit as far as it goes, but we believe it will do little to bring significantly *increased investment* into America's water infrastructure. By lowering the cost of capital to some large projects and SRFs it certainly will allow the amount of investment supported by utility revenues to increase, but to a large degree, we fear that WIFIA funding will substitute for municipal debt or SRF leveraging that would otherwise occur anyway. NAWC believes that WIFIA, or similar financing proposals such as an infrastructure bank, should explicitly encourage and facilitate investment by the private sector rather than passively allowing it. The Federal Highway Administration's "TIFIA" program after which WIFIA takes its name, for example, states on its website that *"[t]he program's fundamental goal is to leverage Federal funds by attracting substantial private and other non-Federal co-investment* in critical improvements to the nation's surface transportation system" (emphasis added) and that the "TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital." We strongly encourage that the Subcommittee consider strengthening the WIFIA proposal by establishing similar program priorities.

State Revolving Fund Eligibility and WIFIA

This Subcommittee's consideration of the WIFIA proposal provides an opportunity to redress an unfortunate oversight in the Clean Water Act. Currently, private water utilities are not eligible to participate in the Clean Water SRF. Moreover, while the Safe Drinking Water Act gives states the option to make private water utilities eligible for the Drinking Water SRF, nearly half the states have not done so. The part of WIFIA that helps leverage SRF funds would provide little benefit to the millions of American taxpayers who are customers of NAWC member companies. NAWC and our member

companies are proud to stand alongside our colleagues in the water industry promoting WIFIA as we strive to bring more capital investment into America's water infrastructure. I hope we can agree that the existing federal financing assistance programs, such as the State Revolving Funds, and any new federal programs such as WIFIA, should benefit all taxpayers, including those who are customers of private water companies.

Conclusion

I sincerely appreciate your invitation to appear before the Subcommittee today and, along with my many colleagues in the National Association of Water Companies, look forward to continuing our work with you to ensure that all Americans benefit from innovation in financing and delivering the water infrastructure that every day delivers to them their quality of life. Thank you and I would be happy to respond to any questions you may have.

Water Infrastructure Innovation: Financing and Beyond

TESTIMONY OF

JEFFREY A. EGER

EXECUTIVE DIRECTOR, WATER ENVIRONMENT FEDERATION

BEFORE THE

WATER RESOURCES AND ENVIRONMENT SUBCOMMITTEE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 28, 2012

Water Environment Federation
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Alexandria, VA 22314

Good morning, Chairman Gibbs and Subcommittee Members. My name is Jeff Eger and I am the Executive Director of the Water Environment Federation [WEF]. At the Water Environment Federation, our passion is to preserve and enhance the water environment to support clean and safe water, both in the United States and globally[1]. I am honored to be here today to discuss innovative financing approaches for water infrastructure. I will also add a few thoughts on the broader imperative for innovation in water infrastructure beyond financing needs.

Modern, high-quality drinking water and wastewater systems are essential to public health, environmental protection, economic well-being and quality of life in the United States. We all know that our water and wastewater infrastructure is aging and that many communities must significantly increase their levels of investment in repair and rehabilitation along with meeting ever-increasing public health and environmental requirements. The U.S. Environmental Protection Agency estimates that given current levels of investment, the shortfall between actual versus necessary levels of investment in water infrastructure will exceed $530 billion over the next twenty years. While numbers may differ somewhat, all available studies point to a very large and growing infrastructure gap that will have profound impacts on our public health, environmental welfare, the economy and overall quality of life.

A recent "Value of Water Survey" done for ITT[2] asked a representative sample of American voters and businesses about the state of our nation's water infrastructure. The

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[1] Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization of 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. WEF members, Member Associations and staff proudly work to achieve our mission to provide bold leadership, champion innovation, connect water professionals, and leverage knowledge to support clean and safe water worldwide.

[2] *Value of Water Survey: Americans on the U.S. Water Crisis*, published by ITT Corporation, www.itt.com/valueofwater/

public and businesses both agree that fixing our water infrastructure is a key national priority. More than 80% of the surveyed registered voters say government – Federal, State, local - should increase water infrastructure investment to upgrade our systems and should lead the search for solutions. But all are willing to do their part: 63% of voters and 57% of the nation's industrial and agricultural businesses are willing to pay more each month in their water bills to ensure long-term access to clean water.

WEF continues to champion financial sustainability for water infrastructure as key to meeting our nation's clean water needs. In 2010, WEF issued an updated position statement that reaffirmed that Americans are best served by well-managed water and wastewater systems that are self-sustaining through rates and other local charges set to reflect full-cost pricing of these valuable services.[3] WEF also recognizes that even if local utilities are well-managed using best practices and striving for full-cost pricing, federal leadership, including assistance in financing infrastructure costs, will continue to be needed for many communities due to affordability issues. This Federal leadership includes strengthening and funding the Clean Water and Safe Drinking Water State Revolving Fund Programs (SRFs). WEF recognizes that our nation's budget situation is applying pressure on Congress and the Administration to reduce spending upon discretionary programs, but we feel that maintaining or slightly increasing funding for the SRF's, combined with innovative funding mechanisms, would be good policy and make practical long-term economic sense for our nation as we try to curb the ever widening gap between water and wastewater infrastructure needs and capabilities. As Congress works

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[3] *Financial Sustainability for Water Infrastructure*, adopted by WEF Board of Trustees February 5, 2010; see: http://www.wef.org/GovernmentAffairs/PolicyPositionStatement/WaterInfrastructure/

to find solutions to our water and wastewater infrastructure capacity problem, it is critical that new funding mechanisms are added to the toolbox, while successful traditional funding mechanisms remain the most reliable and practical tools in the toolbox.

In evaluating innovative financing approaches, the federal government should consider how to lower the cost of capital for water and wastewater investments. Almost 70 percent of American communities use bonds to finance local infrastructure. They pay billions of dollars in interest costs each year. Lowering the cost of borrowing for water and wastewater infrastructure is an important way to leverage local funding and help America rebuild and rehabilitate our aging water infrastructure.

To lower the cost of infrastructure investments and to increase the availability of lower-cost capital, the American Water Works Association (AWWA), the Association of Metropolitan Water Agencies (AMWA) and WEF have been supporting enactment of a "Water Infrastructure Finance and Innovations Act" (WIFIA), modeled after the successful Transportation Infrastructure Finance and Innovations Act (commonly called TIFIA). Such a mechanism could lower the cost of capital for water utilities while having no or little effect on the federal budget deficit. WIFIA would access funds from the U.S. Treasury at Treasury rates and use those funds to support loans and other credit mechanisms for water projects. Such loans would be repaid to the Authority – and thence to the Treasury – with interest.

The Water Infrastructure Finance and Innovations Act would:

- Provide for loans, loan guarantees, and other credit support for large water infrastructure projects and those with national or regional importance. Communities

undertaking these projects often find it difficult or impossible to access SRF loans in meaningful amounts, due in part to inadequate capitalization of the SRFs.

- Reduce the cost of leveraging for SRF programs by lending to them directly. WIFIA could lend to those SRF wishing to leverage their capitalization grants at the lowest possible interest rates. This would allow SRFs to make more loans and would increase their ability to offer special assistance to hardship communities if they chose to do so. Currently, about 27 states leverage their SRF programs on the bond markets. WIFIA loans to an SRF would offer another mechanism to accomplish the same goal and make such a practice more attractive to additional states.

It is also important for the federal government to continue to directly capitalize state revolving funds, which can be used to both broadly lower the costs of water infrastructure investment and to address the needs of communities in hardship or special circumstances. In concert with AWWA and AMWA, WEF proposes several enhancements to the State Revolving Fund programs to allow them to better serve our communities:

- Continue support for SRF capitalization. Despite growing needs and the implementation of new drinking water regulations, overall federal investment in the SRF programs has decreased significantly in recent years. We ask that Congress carefully consider the broad and important economic and public health benefits that flow from each dollar of support for the SRF programs.
- Provide states with flexibility in using SRF funds. This should include the ability to address the special needs of hardship communities they identify. This flexibility should also include the ability to use state procurement processes and standards that

minimize process and administrative "burdens" for grant recipients and for states themselves.

- Eliminate arbitrage restrictions. Allow SRF programs that issue bonds to keep arbitrage earnings on their invested funds to the extent such earnings are used to support additional investment in water infrastructure. Based on historical market rates, this would provide $200-400 million per year in additional funds for water and wastewater investment.
- Streamline the SRF application. Provide incentives to streamline the SRF loan review process. It can take almost a year to obtain an SRF loan. This deters many communities from using the SRF, and leads them to issue higher-cost municipal bonds instead. Due to the revolving nature of the Fund, increasing the pace of awards through streamlining will help increase the revolving flow of funds, allowing even more projects to get built, and so on into the future.

Finally, WEF supports tax-exempt private activity bonds for water and wastewater projects by removing the Internal Revenue Service volume cap on such bonds Private-activity bonds are tax-exempt bonds that allow the private sector to participate in financing public projects. The federal government limits the use of these bonds by the private sector for public projects. Each state has a cap on the amount of private activity bonds it can issue for eligible projects that include water and wastewater infrastructure projects. Lifting this cap would provide more low-cost capital to public-private partnership water and wastewater projects.

Developing innovative financing mechanisms to support construction of needed water and wastewater projects is critical to our nation's future. In my mind, our industry and

our nation also needs to re-imagine how we provide these vital services to make sure we are incorporating new ideas and innovations more broadly and consistently. Innovative approaches should allow us to provide better and sustainable service at lower costs, which ultimately reduces the pressure on financing needs and local utility rates. Fundamentally, we need to move from a wastewater treatment business to a water resource recovery business. We are now seeing at various facilities around this country and the world the ability of "wastewater treatment" plants to produce products and energy and new water. Some facilities are even net producers [rather than consumers] of energy. By fostering this approach, WEF hopes to work with all interested partners to transform our industry sector through such innovation.

Advancing innovation will require the buy-in of the general public. WEF has started the *Water's Worth It* campaign to expand and deepen everyone's understanding of the value of water[4]. We can demystify water and wastewater treatment by promoting the direct connections between what the water sector does and what the public values: jobs, health, security and clean water. Part of this outreach campaign will also focus on how water treatment processes can recover energy and other resources while protecting public health and the environment.

[4]For more about WEF's *Water's Worth It* effort, see: http://www.wef.org/watersworthit/

WATER INFRASTRUCTURE NETWORK

Testimony

Mr. Steven A. Fangmann, P.E., BCEE
Executive Vice President
D&B Engineers and Architects, Woodbury, NY

On Behalf Of

The Water Infrastructure Network
And
The American Council of Engineering Companies

Subcommittee on Water Resources and the Environment
Transportation and Infrastructure Committee
United States House of Representatives

February 28, 2012

Introduction

Chairman Gibbs, Ranking Member Bishop, and the distinguished Members of the Water Resources and Environment Subcommittee, my name is Steve Fangmann. I am the Executive Vice President of D & B Engineers and Architects, a Long Island-based firm with over 45 years of expertise in environmental engineering and ranked by the Engineering News-Record as one of the "Top 200 Environmental Design Firms." During my career I have worked for many communities on wastewater management and water supply services, and formerly served as Deputy Commissioner for the Nassau County Department of Public Works, responsible for the overall water and wastewater management of the Department, including two major wastewater facilities and the $400 million upgrade of both. I was also responsible for water management planning for Nassau's Sole Source Aquifer System, as well as 3000 miles of a separate sewer collection system including more than 30 pump stations.

I am testifying this morning on behalf of the Water Infrastructure Network (WIN) and the American Council of Engineering Companies (ACEC). WIN is a broad based coalition of the nation's leading construction, engineering, labor, conservation and municipal water and wastewater treatment providers. ACEC is the business association of America's engineering industry, with thousands of firms that specialize in water and wastewater design and consulting.

The Subcommittee is to be commended on the timeliness of today's hearing – our nation is facing a water infrastructure funding crisis and without decisive action the tremendous drinking water safety and water quality gains of the past four decades could be lost.

Throughout the 40-year history of the Clean Water Act, the Congress has made dramatic changes to the funding mechanisms for water infrastructure to reflect the fiscal and infrastructure challenges before our nation. Twenty five years ago, this Committee played a lead role in crafting the State Revolving Fund, a measure that has funded thousands of wastewater treatment projects across the nation and established a revolving fund that provides over $5 billion in low interest loans annually for the construction of wastewater infrastructure.

Our nation is at a crossroads with respect to how state and local governments, in partnership with the federal government, are going to fund our nation's water infrastructure. Twenty five years ago this Committee set our nation on a new direction with regard to water infrastructure finance and it appears that the Committee is again poised to lead on this critical endeavor.

This morning I will briefly discuss the water infrastructure financing challenges before us and provide specific commentary on the innovative water infrastructure funding proposals that the

leadership of this Subcommittee has advanced over the past six months. The Water Infrastructure Network and the American Council of Engineering Companies strongly believe that developing a comprehensive "toolbox" of water infrastructure financing options is the most effective and pragmatic approach to narrowing our nation's daunting gap in water infrastructure funding.

The Water Infrastructure Funding Challenge

The United States is facing a water infrastructure funding crisis. Recent studies conducted by the U.S. Environmental Agency, the Congressional Budget Office and the Water Infrastructure Network have all placed the shortfall in clean water infrastructure funding at over $400 B during the next two decades. And remarkably, most experts believe that this assessment of our nation's pending clean water infrastructure needs is probably low. Similar needs studies for drinking water infrastructure improvements show the same escalating demands.

Failure to address this infrastructure funding crisis has real and significant implications for public health, the environment and the long-term economic success of our nation. Water and wastewater treatment improvements that begun in the first part of the 20th Century stand today as the greatest public health measures that our nation has implemented. Cholera, dysentery, and hepatitis A and B have been nearly eliminated in our nation. We have only to look abroad to see the importance of our nation's water infrastructure – waterborne pathogens still kill millions of people each year around the globe.

America's success economically has been inextricably tied to our nation's rich endowment of clean water. Clean water-dependent industries such as agriculture, commercial fishing, and tourism contribute hundreds of billions of dollars annually to our economy. We simply cannot afford to postpone the critically-needed investments in our nation's water infrastructure.

Innovative Finance – "Tools in the Toolbox"

When it comes to closing a $400 billion shortfall in water infrastructure funding, there are no "silver bullets." It will take innovation and increased funding at all levels of government to effectively address America's water infrastructure funding needs. WIN and ACEC believe the analogy of a "Toolbox" is an appropriate metaphor for the paradigm shift that we must undergo. The water infrastructure financing challenges we face have been a century in the making and it will take all of the best ideas that have been presented to the subcommittee today as well as many that have yet to be developed to meet this challenge. For today's hearing, we would like to focus on just four proposals of the many that have been discussed this year and in previous Congresses.

The development of a "TIFIA" Program for water infrastructure as championed by Chairman Gibbs and the innovative finance tools in the "Water Quality Protection and Job Creation Act" as introduced by Congressman Bishop all must be tools in the toolbox. In addition, we commend Chairman Gibbs for including HR1802, the "Sustainable Water Infrastructure Investment Act," in his draft water infrastructure finance bill. The legislation enjoys strong bi-partisan support. It provides an exemption from private activity bond state volume caps for all water and wastewater projects. We also support reauthorizing the State Revolving Funds for water and wastewater projects, and encourage the Subcommittee to consider the numerous efficiencies and flexibilities in the Clean Water Act revisions to the SRF program that the House has passed twice in recent years.

A TIFIA Program for Water Infrastructure

WIN and ACEC believe that the development of a TIFIA-like program for water infrastructure makes eminent sense and we are pleased that water infrastructure funding legislation being advanced by Chairman Gibbs and Congressman Bishop has embraced this financing concept. Many members of WIN, including ACEC, the Associated General Contractors of America and the American Society of Civil Engineers have worked first-hand on the implementation of the TIFIA program in the financing of highway projects and believe that this program is even better suited for financing water infrastructure projects. Since FY 2005, TIFIA has leveraged $122 million in annual funding into $2.2 billion in annual funding for transportation projects.

Unlike highway construction projects, financing water projects with a TIFIA-like program would not be contingent on establishing a new toll or fee. Water and wastewater treatment and collection systems already impose usage rates and charge fees to their customers. Debt financing for capital replacement, expansions, and repaying loans is based upon and guaranteed by dedicated revenues raised for those purposes. While, according to the U.S. Department of Transportation, less than 7 percent of highway projects have the financing profile (the ability to collect tolls and fees) needed to participate in the TIFIA program, over 90 percent of water projects across the nation have the appropriate financing profile to participate in a Water TIFIA Program. WIN and its members have shared their thoughts on the development of a TIFIA-type program with the Committee and the Administration and is looking forward to working with the Members of the Committee to perfect this approach. I would ask that a summary of WIN's TIFIA proposal for water infrastructure and WIN's September 2, 2011 letter to President Obama on the importance of increased investment in America's water infrastructure be made a part of the record.

With respect to the "WIFIA" language developed by Chairman Gibbs, and the "Water Quality Protection and Jobs Creation Act," introduced by Congressman Bishop, WIN would suggest the following modifications:

1. We would urge that a WIFIA utilize the existing State Revolving Fund Program to the maximum extent practicable. Setting up a separate bureaucracy at EPA to assess water projects and distribute funding to communities will be less timely, less effective, and more costly than working through the existing State SRF financing authorities.

2. The WIFIA should be under the management of the Department of Treasury and funds distributed from the WIFIA should be distributed as direct loans to the 50 State SRF financing authorities. The State financing authorities have been effectively gathering project-specific data, and objectively evaluating water projects for the past 25 years. They have demonstrated expertise in evaluating and prioritizing water projects and have thousands of already-vetted water projects that are ready for funding. With a Department of Treasury-operated WIFIA program, the federal government would oversee approximately 50 loan agreements instead of hundreds or potentially thousands of loans to individual communities.

3. Project eligibility should reflect the needs and priorities of individual states. Limiting access to the WIFIA to projects in excess of $20 million dollars would dramatically limit the participation of many medium-sized and smaller communities and rural states in this program. A direct loan program to State SRF financing authorities would obviate this problem.

4. With our recommended approach, State SRF authorities, rather than individual communities, would be responsible for paying back loans to the Treasury. State SRF authorities must currently provide a 20 percent state match for SRF funds from EPA. A WIFIA would eliminate such a match requirement, although state SRF authorities would continue to be required to loan funds to communities at the same rates and terms as are offered under their existing SRF program.

5. Modifications to the SRF Program, such as extended loan repayments, that have been adopted in Clean Water Act reauthorization bills in previous Congresses should be included in a WIFIA proposal.

6. Loans under the WIFIA should not exceed the percentage of funds that are currently allocated to the state under the current SRF. For example, my state of New York currently receives approximately 11 percent of the Clean Water SRF. Under a WIFIA program, New York would be eligible to receive $1.65 billion annually in

funding, assuming there was a $1 billion federal investment in WIFIA and a leveraging of dollars of 15 to 1.

7. A WIFIA proposal must not supplant existing SRF funding to the States.

Private Activity Bonds

WIN and ACEC believe that Private Activity Bonds (PABs) have an important role to play in helping to close the water infrastructure funding gap, and should be a tool included in the toolbox. Currently, each state is limited by federal law in the amount of PABs that may be issued for nineteen categories of projects, ranging from housing projects to student loans. This volume cap results in water infrastructure projects having to compete with more visible projects. Because water and sewer projects tend to be "out-of-sight, out-of-mind," they don't attract public attention until there are disruptive water main brakes or massive sewer overflows. We would propose lifting the volume cap on PABs for water infrastructure projects, giving communities the option to access private equity partners that seek the advantage of tax-exempt bonds, and providing the infusion of billions of dollars of private capital investment for water and wastewater projects at a nominal cost to the federal government.

This is not a new idea; the federal government lifted similar volume caps when our nation was facing a financing crisis with respect to the development of adequate solid waste disposal facilities. The lifting of the volume cap for the financing of landfill projects made a significant amount of funding available for landfill and waste facility construction. Similarly, lifting the volume cap for water infrastructure projects could be an extremely beneficial tool for communities to have in their "toolbox" of financing options.

A Clean Water Trust Fund

Another water infrastructure financing tool which has received significant attention in recent years is the development of a Clean Water Trust Fund. WIN and ACEC continue to believe that long-term dedicated funding for water infrastructure must be one of the tools in the toolbox.

Dedicated trust funds are a time-tested method for financing our nation's critical infrastructure. Though not perfect, dedicated trust funds have financed the majority our nation's highway and airport infrastructure construction. This Committee, starting with Clean Water Trust Fund legislation developed by Congressman Duncan when he was Chairman of the Water Resources and Environment Subcommittee, has embraced the concept of establishing a Clean Water Trust

Fund for our nation's water infrastructure. As general funds become scarcer, we believe that a deficit neutral, long-term, dedicated funding source for water infrastructure construction must be one of the tools in the toolbox.

The Water Infrastructure Network remains committed to working with the Committee to identify viable funding sources for a Clean Water Trust Fund.

Conclusion

The Water Infrastructure Network and the American Council of Engineering Companies are extremely encouraged by the Subcommittee's efforts to develop the next generation of water infrastructure financing tools. The House Transportation and Infrastructure Committee, and this Subcommittee in particular, has a long history of developing water infrastructure funding legislation that can earn broad bipartisan support.

We look forward to working with the bipartisan leadership of the Water Resources and Environment Subcommittee to perfect the innovative water infrastructure financing tools discussed at today's Hearing. We are committed to delivering a "toolbox" to the President's desk this year.

Written Testimony of

Gregory M. Baird

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To

Committee on Transportation and Infrastructure

Subcommittee on Water Resources and Environment

US House of Representatives

2167 Rayburn House Office Building

On

A Review of Innovative Financing Approaches

for Community Water Infrastructure Projects

(March 2, 2012)

Chairman Gibbs and honored members of the subcommittee,

I respectfully submit this written testimony with a utility Chief Financial Officer perspective.

My name is Gregory M. Baird. I am an experienced municipal utility finance professional having served in California and as the CFO of Colorado's third largest utility with financial oversight to the Prairie Waters Project $754m in the front range that came in at nearly $95 million under budget during 2007-2010. I am a member of the American Water Works Association (AWWA) on the Rates and Charges Committee and Conservation/Affordability Subcommittee. I am the founding author of the Money Matters column in the AWWA Journal researching and reporting on the financial issues of the water, wastewater, and storm drain industry for the last two years. I also am the advisor to the Government Finance Officers Association (GFOA) Economic

Development and Capital Planning Committee for the US and Canada. I am the founder and lead of the GFOA Utility Finance Forum developed to meet the training and educational sharing needs of finance officers over utility services including training in infrastructure asset management practices. I have served as the Chair of Affordability for Win-Colorado, a coalition focused on addressing the infrastructure funding gap of $4.3b for the state.

Our Nation's Aging Water Infrastructure Crisis

I appreciate the time and effort which the subcommittee is focusing on our national water and wastewater infrastructure crisis. I call it a crisis because 85% of all water systems are owned or controlled by municipal governance structures which normally have the duel and confusing role of managing their general funds with public safety (police and fire) as their major concern with revenues supported by taxes AND the less understood water, sewer, and storm drain utilities set up as enterprise funds and supported by council and board approved user rates and fees. These enterprise funds should always be kept from general fund uses and as a best case be set up as separate legal entities.

The crisis occurs as year after year required rate increases are not approved. I have seen time after time where basic inflationary increases of very low single digit increases could have prevented double digit rate shock creating unnecessary public outcry and political turmoil.

If a utility was keeping up with increasing maintenance and operational costs, they are now experiencing a new dilemma that they have not had to face for several generations - the repair and replacement of their underground infrastructure. Developer charges normally paid to put new capacity and new infrastructure into our utility systems, but now it lies squarely on the users to pay for the repair and replacement of these critical backbone systems. 60% of the infrastructure costs fall into the area of the buried infrastructure – our extensive pipe networks.

We have three eras of iron pipes all coming to the end of their useful lives in the next twenty years. For some utilities, the process has already started to occur as sink holes and uncontrollable water main breaks occur throughout older parts of their communities. Some utilities are operating at a new service level that water service will be interrupted and with the expectation that one or more boiling order notices will be required for their customers also.

A Financial Perspective

When I have struggled as the CFO of a municipal utility to balance the overwhelming funding needs against cost and risk, I discovered a few principals to guide me.

1. It will not all fail at once- Apply Asset Management Practices
2. Update procurement practices – Allow open competition with all pipe materials
3. Push for more than a 1 year warranty on assets that are to have a greater than 50 year life
4. Break down silos between internal departments

5. Tell your infrastructure story to all of your stakeholders
6. Invest in technology (GIS, hydraulic business analytics, an asset management-work order management system)
7. Develop long-term infrastructure funding strategies

Asset Management is the Key to Making Better Infrastructure Investment Decisions

Infrastructure asset management, regardless of the myriad of flavors offered by different consulting firms, should still be focused on managing assets in a way in which the investment for each asset can be optimized producing a reduction in capital budgets and operating expenditures, an efficient and cost effective maintenance program based on risk and an overall reduction in the cost of capital. Many utilities are following a path that only shifts the mountain of replacement costs out into the future which depending on project cost escalations and inflation may not offer any real savings, but only a chance to buy time during an economic downturn or rate implementation process. This issue evolves, in part, when engineering drives the capital agenda and the needs of operations and maintenance are overlooked.

A comprehensive asset management approach with applied best practices will not only shift the mountain of costs to an accurate location (timing), but also work towards reducing segments of the capital investment and operating and maintenance expenditures. This process combined with a sustainable financial plan which includes a financial market and credit agency strategy can also help reduce the cost of capital (borrowing) with improved financial metrics or increase the utilities ranking in receiving low interest state revolving funds which may require asset management plans.

The EPA endorsed, and internationally tested and proven comprehensive 10 step process may seem rigid at first, but once merged with a unique utility environment, the best possibility of cost savings both short-term and long-term can occur. Short-cutting the process, like ignoring Level of Service (LOS) or the project validation process's Confidence Level Rating (CLR), Business Risk Exposure (BRE), Life Cycle Cost (LCC), and Business Case Evaluation (BCE) only allows the potential savings to be elusive and continue to slip away. Once the future requirements are known and understood, the work can be planned, budgeted and prioritized based on the business risk exposure in a way that delivers the desired levels of service at the lowest lifecycle cost.

Any type of arrangement whether a PPP, Privatization, DBBO, etc will not have the ability to make prudent operational and capital replacement decisions without an asset management plan including a funding plan.

The Cost of Capital Issue

As a CFO, the cost of capital is a huge issue as well interest income. On one side I seek the lowest cost of capital like 3-5% from tax-exempt municipal bonds and on the other side I try to make very safe investments to produce a rate of return. Various financing options exist including using my own capital only receiving a 2-3% rate of return to make an infrastructure investment that could achieve a much higher return. There is a cost of doing nothing, but if critical infrastructure fails-the costs are actually 2-3 times higher (like for most urban water main breaks). If a pension program wants to make a long-term safe investment in utility infrastructure, then a normal public pension has planned for a 7.5% to 8.5% on average return and the higher cost of this capital would need to be financed by the rate payers. Bank loans are at 8-12% and private equity ranges from 12% to 30%. Each scenario only puts more pressure to increase the customer rates at some point and some length of time. Delaying or deferring projects create the same type of issue as inflation increases and cost increase. A water infrastructure bank or other enhanced SRF loan program is always a welcomed benefit, but should still not take away the local accountability of prudent infrastructure planning.

For Our Infrastructure to be Sustainable It Must Be Affordable

The best scenario that I have seen is to have a willing authority to look at the condition and replacement needs of their infrastructure (Asset Management) and then make prudent self-help decisions of increasing local user rates in planned incremental amounts to meet overall funding strategies at the lowest cost of capital possible-while communicating the options to the public. If the local approving authority is caught in a political trap and cannot afford to make these types of decisions, then the governance model should be changed in order for the customers to still enjoy a chance for reasonable infrastructure costs and continued quality water and wastewater service.

There are additional actions that each utility can also take to try to reduce costs. Part of the problem is how we have traditionally gone about our business. Pipe failures predominately occur because of age and corrosion. In the past we always used iron pipes and each year installed iron pipes with thinner walls- thus the age of corrosion failures is also upon us. Some utilities do not have open procurement practices to allow for non-corrosive and alternative pipe materials to be used. As an example, it has been said that to replace a ductile iron mile of pipe is $1.4m but a non-corrosive, durable, long lasting (110 years+), environmentally friendly pipe like PVC would only cost about $500,000 per a mile. Ductile Iron pipe offers a 1 year warranty pushing all of the risk to the utility, but some PVC manufacturers have offered a 50 year warranty. Design build as a project delivery method can also reduce the cost and risk of installing pipes for utilities.

Technology investments are also key in better managing our infrastructure and water resources. Properly operating our systems reduces water main breaks and leaks. Conducting water audits and having water loss control programs help us better manage our water resources. Companies like ESRI with GIS offers a powerful geo-database to house all asset data and locations, Innovyze offers system operational control with genetic algorithms, embedded hydraulic models and asset management business analytics to help improve every financial decision.

Affordability is Always Central to any Financial Decision.

In analyzing the water and wastewater rates for nearly a third (88) of the cities and towns in Colorado, a majority of which are small rural communities, I discovered some interesting findings. For water user rates (including any taxed based revenue) as a percent of the jurisdiction's median household income (MHI), 60 cities and towns were in the EPA's "low" range of less than 1%. 27 were in the "mid-range" of 1-2% and only 1 town was a "high" of 2.73%. For wastewater systems, 73 cities and towns were considered "low" less than 1%, and 15 were in the "mid-range" of 1-2%.

As a low-income sensitivity test, when the MHI was reduced by 50% for water, 13 towns - all with populations of less than 10,000 surpassed the 2.5% threshold. For wastewater, 4 towns passed the 2.5% mark all with a population range between 1,000-3,000.

Under the EPA's definition of affordability of 2.5% for water and 2.5% for wastewater, (5% total of MHI) the EPA applied threshold could be interpreted that small and rural communities have the ability to sustain a 280% overall increase on average and larger cities nearly a 480% rate increase on average before the EPA would consider water and wastewater services user rates as being "unaffordable". The state's average income when the MHI was reduced by 50% demonstrated the state's ability to still sustain a 178% increase for wastewater user rates before reaching the EPA 2.5% threshold. One additional conclusion that could also be made is that small and rural communities face affordability concerns sooner and will require concessions or outside financial support.

This simple analysis demonstrates the EPA's threshold against current user rates in Colorado. What it fails to do is take into consideration the state of aging water infrastructure and new regulatory requirements which many of the cities and towns face. The state as a whole has identified over $4.3 billion on projects (most of which are sewer related) that still need funding. It also does not take into consideration that every jurisdiction is at some stage of addressing water quality, water supply and climate changes challenges. Many rural water systems still rely on deep wells that are not chlorinated. Under the EPA's assessment criteria, nearly every jurisdiction state-wide would need to drastically increase their water and wastewater rates over several years before regulatory negotiations would take place because of "affordability" concerns. Every agency has a portion of the customers living fall beyond even a 50% reduction on the MHI and these customers will require a mandatory level of subsidy for basic water services. One could expect similar results for almost every jurisdiction across the nation.

All of these competing issues make up our modern Aging Water Infrastructure Crisis. Public education, local elected officials accountability, application of infrastructure asset management practices, alternative materials and delivery methods best practices and long-term financial planning all must work together to meet this crisis. There is not a one- time action item to "fix" the problem. It requires a new way of thinking and doing business and a NEW PROCESS.

CLEAN WATER CONSTRUCTION COALITION

"Financing Tools for Water Infrastructure"

Subcommittee on Water Resources and Environment

Committee on Transportation and Infrastructure

U.S. House of Representatives

February 28, 2012 Hearing

Statement for the Record

Robert A. Briant

Chairman

Clean Water Construction Coalition

Robert A. Briant

P.O. Box 728 ♦ Allenwood, NJ ♦ 08720

Mr. Chairman and Members of the Subcommittee:

On behalf of the Clean Water Construction Coalition – an organization with 27 chapters in 22 states employing 10,6000 people and committed to securing much-needed funding for the Nation's clean water and safe drinking water programs – I am want to express our sincere appreciation for the opportunity to submit for the record our views on "financing tools for water infrastructure."

Clean, healthy, affordable water is something every American should be able to rely on. However, as the Nation's population grows and its infrastructure ages, our public clean water systems are facing grim realities. The American Society of Civil Engineers has given the Nation's clean water infrastructure a D- rating. Our pipes – some 72,000 miles of which are over 80 years old – are failing and need replacing. Outdated sanitation facilities are inadequate to handle new standards. Sewers are overflowing, causing environmental damage and beach closings. Federal agencies, states, and local municipalities all acknowledge that spending on clean water has fallen far behind systems needs. The Environmental Protection Agency estimates the funding needs for total water infrastructure works at more than $187 billion over the next 20 years.

Congress does provide some money for maintaining infrastructure thorugh the Clean Water State Revolving Fund. The SRF gives states seed money for low interest loans to municipalities, which then use those loans for the upkeep of their systems. However, in recent years the SRF has been perpetually underfunded and congressional appropriations are always subject to political pressure. In fact, the overall Federal government contribution to total clean water spending has shrunk dramatically, from 78% in 1978 to barely 3% today. States spend approximately $63 billion to compensate, but their efforts hardly keep pace with current needs, let alone future ones.

To address the challenges facing our clean water infrastructure, the Coalition believes that a public trust fund utilizing money collected and apportioned by the Federal government represents the best, and most realistic, solution. A national trust fund can address needs across the country, not just locally. It can address issues equitably, including the needs of small and rural communities. A trust fund will enable the Nation to reach water quality goals uniformly instead of focusing issue by issue. Clean water investments ensure that social and environmental objectives are met – as well as creating jobs across the country.

As you know, trust funds are widely used to address problems too big for states alone to handle. The General Accountability Office has identified more than 120 Federal trust funds currently in operation. In addition to support for pollution abatement, interstate highways and harbors, trust funds also finance botanical gardens, maintain the U.S. Capitol grounds, and restore wildlife habitats.

Clean water, a public resource utilized by all Americans, certainly deserves the same protection. While state programs can help, they are few and far between. More importantly, clean water issues cross state borders – discharges from one state's sewers may contaminate rivers, streams, and lakes in another. Current and future problems surrounding clean water infrastructure are serious and broad enough to warrant Federal intervention. A clean water trust fund would represent a dedicated and steady source of funding to begin addressing the Nation's public water needs. It would be free from political interference, would not contribute to the national debt and would ensure all American's continued access to an essential resource.

The Coalition recommends that the revenue for a clean water trust fund should be broad-based, equitable, and secure. That rules out residential sewer or water bills, because nearly all the funds for infrastructure are already collected from those bills. Imposing yet more of a burden on households alone is hardly equitable.

The following are suggested funding sources for a Clean Water Trust Fund:

- **Polluters**
  Funding sources for a Clean Water Trust Fund should follow the pattern established by most Federal trusts and come from industries that profit off of, or damage the quality of, clean water. A natural solution would be a "polluter pays" approach – industries and companies that hamper water quality (for example, industrial pollutant discharges) in the course of conducting their business would pay to maintain the systems they harm.

- **Pressure Industries**
  Many industries put pressure on our clean water systems. Manufactures of "flushable products" such as soaps and detergents, toiletries, toilet tissue, water softeners, and cooking oils depend on access to clean water to keep their businesses afloat. The same goes for the toxic chemical industry. Research indicates that most consumers would support fees on these types of industries to fund clean water projects.

- **Directly Benefiting Industries**
  Many industries benefit directly from our clean water systems. A contemporary and obvious example of this is the bottled water industry. Profits for this industry are huge, and the market continues to grow. Benefiting from our clean water system should also include the responsibility for financially supporting that system.

- **Consumers**
  The trend for most Federal trust funds is to financially support them through user fees. User fees are fees imposed for providing current services or for the sale of products (i.e., fees paid for the consumption of goods) in connection with general government activities. In the case of clean water, examples of consumer goods which may be candidates for user fees include bottled water, flushables, pesticides and fertilizers. Examples of services which may be candidates for user fees include water-based recreational fees such as fishing licenses or park entrance fees.

- **Property Developers**
  Impact fees are one-time payments from property developers for off-site improvements necessitated by new development. Based upon many factors, impact fees usually fund capital expenditures. To the extent that new development imposes new costs and demands related to water quality, developers should bear at least some of the financial burden of such costs and demands.

- **State, County, and Local Governments**
  State, county, and local governments also benefit from clean water and should pay for it; for example, from a dedicated portion of state-county and/or local government taxes or fees.

- **Public Community Water Systems**
  The owner or operator of a public community water system should be required to pay a water consumption fee (for example, an amount per thousand gallons) for water delivered to a consumer.

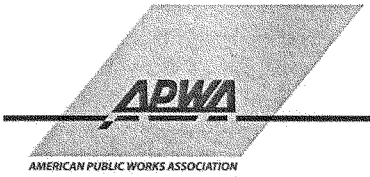
- **Diverters**
  Individuals who take or impound water from a river, stream, lake, pond, aquifer, well, other underground source, or other water body, whether or not the water is returned thereto, consumed, made to flow into another stream or basin, or discharged elsewhere, should pay a water diversion fee (for example, an amount per thousand gallons of water diverted for consumption use).

- **Corporations**
  Fees on corporate income across sectors discharging to wastewater treatment plants are another potential funding source.

The Coalition wishes to note that above suggested funding sources are not necessarily mutually exclusive. Rather, the goal of a National Clean Water Trust Fund should be to reflect in its financing mechanism a true public/private partnership. Clean water is a benefit enjoyed by all, and so, too, should the responsibility of financing a National Clean Water Trust Fund; i.e., it should be a combination of various funding sources, public and private.

Mr. Chairman, our clean water infrastructure needs help now. Instead of irresponsible private investment schemes, we need to plan ahead for future generations and create a dedicated source of public funding (see attached suggested sources of financing) so that communities across America can keep their water clean, safe and affordable. Water is a vital resource, critical for all of us. It deserves no less than the trust funds that help finance our highways, harbors, and wildlife habitat. It is time for a trust fund for clean and safe water.

Thank you.



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A Review of Innovative Financing Approaches for Community Water Infrastructure Projects

House Transportation and Infrastructure Committee
Subcommittee on Water Resources & Environment

Statement of
Diane Linderman, P.E., PWLF
President of the American Public Works Association

February 28, 2012

PRESIDENT
Diane Linderman, P.E., PWLF
Richmond, VA

EXECUTIVE DIRECTOR
Peter B. King

Mr. Chairman, Ranking Member Bishop, and members of the subcommittee, thank you for the opportunity to submit testimony relating to the recent hearing on *A Review of Innovative Financing Approaches for Community Water Infrastructure Projects.* My name is Diane Linderman, and I am President of the American Public Works Association (APWA). I submit this statement reaffirming APWA's support for action that creates increased funding for capital investment in water and wastewater infrastructure on behalf of the more than 28,500 public works professionals who are members of APWA and the communities they serve.

APWA is an organization dedicated to providing sustainable public works infrastructure and services to millions of people in rural and urban communities, both small and large. Working in the public interest, APWA members plan, design, build, operate and maintain transportation, water supply and wastewater treatment systems, waste and refuse disposal systems, public buildings and grounds and other structures and facilities essential to the economy and quality of life nationwide.

APWA supports the Water Infrastructure Finance and Innovation Act (WIFIA). WIFIA is one of the many innovative funding mechanisms that will be integral to closing the water infrastructure funding gap. Modeled after the popular Transportation Infrastructure Finance and Innovation Act or TIFIA, the WIFIA plan will lower the cost of borrowing funds for municipal water/wastewater agencies. This will be accomplished by leveraging funds directly from the U.S. Treasury which would subsidize borrowing costs and lend the money at a lower interest rate than is available in the municipal bond market.

APWA supports WIFIA because it gives local government agencies access to low cost funds for water infrastructure projects. However, APWA supports all efforts to establish increased funding opportunities for water, wastewater and stormwater treatment system enhancements. WIFIA should be one of the many tools that local government agencies can use to finance water infrastructure capital projects. WIFIA is not meant to supplant the existing funding resources such as the State Revolving Fund or SRF.

SRFs have proven to be successful mechanisms that provide local jurisdictions with needed funds for water infrastructure capital and APWA supports continued federal support for this program. Clean and Safe Drinking Water SRFs have provided $111 billion to local governments for water infrastructure since their inception. SRFs are a vital resource for

financial support, especially for small and rural communities. The Clean Water SRF provides 23 percent of water infrastructure funding for localities with fewer than 10,000 residents and the Drinking Water SRF provides 37 percent.

While APWA supports the WIFIA proposal, the current draft legislation raises some concerns. The draft legislation calls for dedicated funding for projects of national or regional significance, but the language does not specify what constitutes a project of national or regional significance. The ambiguity of this provision could deprive funding from where it is needed the most. APWA proposes that this provision be amended so that "projects of national or regional significance" are better defined so as to avoid this potential problem. Additionally, APWA is in support of a simplified and streamlined administration of WIFIA. A complicated process could put WIFIA funds out of reach of small cities and rural communities who may not have the resources to navigate the bureaucratic maze of excessive requirements and applications. To this end, we support the approach taken in the Water Quality Protection and Job Creation Act of 2011 (H.R. 3145) introduced by Representatives Bishop, Rahall, Petri and LaTourette. H.R. 3145 also creates a WIFIA program but instead of creating an entirely new program, H.R. 3145 would use the existing SRF model to provide loans. We think an approach that uses the existing SRF program model would be more practical and easier to implement quickly. By using this model, much needed money can begin to assist utilities with their infrastructure funding needs more quickly.

APWA also supports the establishment of a clean water trust fund as a complement to the WIFIA program. A trust fund could serve as the funding vehicle for a WIFIA program, or simply as another financing tool available to water infrastructure projects. The establishment of clean water trust fund will ensure that there is a permanent, dedicated funding source for clean water and drinking water infrastructure in the U.S. As discussion on the WIFIA plan progresses, stakeholders will begin to coalesce on specific ways to fund the clean water trust fund. Organizations such as the Water Infrastructure Network (WIN) propose using fees on objects such as bottled beverages, flushable products, pesticides, agricultural chemicals, and pharmaceuticals to finance such a trust fund. APWA supports these and many other innovative measures to ensure that there is a dedicated funding source for water and wastewater infrastructure projects in the future.

APWA members take a lead role in the effective management of facilities protecting water quality and are too familiar with the challenges local jurisdictions face keeping up with the

demand for clean safe water. The state of the nation's drinking water and wastewater infrastructure is dire. Local jurisdictions struggle to fund water infrastructure capital projects. The current infrastructure system is deteriorating and strains under the increasing demand for clean and safe water fueled by population growth in many areas. According to the EPA's most recent clean water and drinking water needs assessment surveys, local communities will need $300 billion in wastewater and $335 billion in drinking water infrastructure improvements for capital expenditures over the next 20 years.

In the face of these pressing challenges, APWA supports all efforts to establish increased funding opportunities for water, wastewater and stormwater treatment system enhancements with particular emphasis on funding priority for small to moderate and rural systems, or those currently operating under administrative orders related to the Safe Drinking Water and Clean Water Acts. Investing in and updating the nation's aging water system is beneficial to the environment and the economy. Studies show that up to 25 percent of treated water is lost. Sufficient funding of water and wastewater facilities will increase sustainability by ensuring that water loss is kept to a minimum. Additionally, the WI N estimates that every $1 billion invested in waster infrastructure capital creates nearly 28,000 jobs.

The creation of a variety of innovative funding mechanisms, such as WIFIA, to increase investment in water infrastructure and to provide public works directors with a range of options for determining how best to fund critical capital investment projects is crucial. The current economic environment compels localities to seek innovative solutions to the water infrastructure funding crisis. In addition, local jurisdictions should not and cannot solely rely on rate payers and public sources of funding. The creation of public private partnerships, raising the cap on private activity bonds, creation of a long term dedicated funding source such as a trust fund to fund local water system projects, or the establishment of a national infrastructure bank should all be available as potential funding vehicles for water infrastructure.

The consequences of inadequate investment in water infrastructure are serious. Without increased funding in water infrastructure, local communities will not be able to keep pace with growing demand for clean and safe drinking water and economic opportunities will be lost. Robust federal investment in water infrastructure, however, is smart investment that can address important public health and environmental concerns while also improving economic competitiveness and creating much needed jobs. Water infrastructure funding should be a national priority; the stakes are too high to neglect this problem.

Conclusion:

Mr. Chairman, Ranking Member Bishop, and members of the subcommittee, thank you for holding this hearing and continuing to pursue a solution to the nation's looming water infrastructure funding crisis. We are especially grateful to you and subcommittee members for the opportunity to submit this statement. APWA stands ready to assist you and your Congressional colleagues as you work to craft a solution to this critical problem.

NARC
Building Regional Communities

Hearing on

"A Review of Innovative Financing Approaches for Community Water Infrastructure Projects"

Before the United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment

Written Testimony of Mark Policinski, Executive Director, Ohio-Kentucky-Indiana Regional Council of Government and Vice President, National Association of Regional Councils

February 28, 2012

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Mr. Chairman and members of the Subcommittee, please accept the following comments for the written record on behalf of the Ohio-Kentucky-Indiana Regional Council of Governments (OKI), representing the Greater Cincinnati, OH region and the National Association of Regional Councils (NARC), a national trade association representing the nation's regional planning organizations and their local governments.

As is clearly documented, the infrastructure inadequacies plaguing our communities – crumbling bridges, aging highways, rail, ports, and deteriorating water and sewer systems – are in dire need of maintenance and improvement. The American Society of Civil Engineers estimates infrastructure upgrades will cost more than $2.2 trillion dollars over the next five years to maintain current status. However, federal, state and local budgets are under constraints. and innovative infrastructure funding and financing solutions are necessary for basic maintenance and improvements. OKI and NARC have been working for several years on a concept that would provide one solution in helping address these challenges – Regional Infrastructure Improvement Zones (RIIZs).

Introduced in federal legislation (H.R. 3780) on January 18, 2012 by Congressman Geoff Davis (R-KY, 3), RIIZs are a new, innovative solution to encourage private sector investment in public infrastructure through a favorable tax treatment of contributions through streamlined local government approval processes. RIIZs would allow private corporations or individuals in a community to contribute tax deductible funds toward the construction or maintenance of public infrastructure as long as that infrastructure is a part of an approved regional plan, which thereby can demonstrate local government and community stakeholder approval and support. Projects eligible to receive funds under a RIIZ are water, wastewater, stormwater, and surface transportation.

Unlike many other public-private partnership financing proposals, RIIZs will involve a change in the federal tax code that allows businesses and individuals to receive a tax deduction for contributions to the cost of a public good, like water infrastructure improvements. Unlike current tax law, this change would allow the deduction even if it benefited the private entity. This change would tap a new and immense source of funds from the private sector for infrastructure improvements. Importantly, RIIZs could provide localities, who own and operate much of our infrastructure, with local match to move needed projects. In addition, the private sector—inherently more efficient than the government—would be able to finance projects that would have the largest economic impact.

How Would It Work

RIIZs define a commitment to upgrading our infrastructure nationwide, while protecting our environment, boosting the economy and creating jobs by working directly with business, citizens and local governments. Businesses or individuals that want to establish a RIIZ and contribute to infrastructure improvements must petition through their local multi-jurisdictional regional planning organization, e.g. a Council of Government, Economic Development District, Metropolitan Planning Organization, Local Development District, etc. If there is no regional planning organization in a given area, RIIZ activities and responsibilities would fall to the appropriate local government entity and be subject to the local government comprehensive plan(s).The regional planning organization will determine, by examining approved long-range and comprehensive regional plans and discussing with the local governments and community stakeholders, if the investment fits within the approved plan. A certificate of approval will be issued and the RIIZ established to allow investment. This will be filed with the state's Attorney General and the Internal Revenue Service (IRS). Once this is complete, individuals/businesses can begin contributing tax deductible funds to projects within the RIIZ.

RIIZ contributions reduce taxable income and so the reduction in tax is only a fraction (the marginal tax rate) of the contribution . The deduction would be subtracted from gross income when the taxpayer computes his or her income taxes. As a result, the tax deduction will lower overall taxable income and thus lower the amount of tax paid. The exact amount of tax savings is dependent on the tax rate.

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Example
Due to the built-in flexibility of RIIZs, there are many ways the financing tool could be used to improve infrastructure. A RIIZ may be as small as a single street or as large as an entire city. One example of a RIIZ is as follows:

A regional planning organization in the Greater Charlotte, NC region created a Sewer Feasibility Study for a village that is currently without a sewer system, despite being home to residences, businesses and a university. The village has reached a point in which commercial and residential development is limited due to the lack of a wastewater system. The wastewater system is anticipated to cost $42,000. With the completed study and a system plan in hand, construction could begin within three to six months of the village's receipt of funding. This wastewater system would greatly improve the economy for the residents of the entire region. To address this, several of the businesses, including the university, a bank, a grocery store, dry cleaner and insurance company, could ban together and apply to their local regional planning organization for RIIZ status for the entire village, in order to build the wastewater system. Each of these businesses would be issued a receipt for deduction purposes in the tax year the donation on their individual corporate or individual annual tax forms.

RIIZs do not institute any new federal requirements or mandates, but are completely voluntary, and do not institute new federal infrastructure planning or project implementation requirements or mandates. RIIZs uphold established federal, state and local law, processes and requirements.

Benefits
RIIZs would provide a great number of opportunities for communities, businesses and government by supporting locally conceived public-private partnerships. RIIZs would:

- **Uphold proven regional and local infrastructure investment decision-making processes.**
  Using regional planning organizations, RIIZs maintain a level of consistency, transparency and accountability, tying infrastructure investments closely to approved plans, the local community's needs and the overall public good. Regional planning organizations and governing boards of appointed and local elected officials are knowledgeable about infrastructure issues, and have expertise in regional infrastructure financing, planning and development, and implementing new strategies for infrastructure investments.

- **Drive money directly to the local level in urban, suburban and rural areas alike.**
  In 2005, infrastructure spending by localities accounted for nearly 75 percent of total spending. However, many local governments are facing budgetary crises that will constrain a great majority of infrastructure spending. Additional avenues for infrastructure financing and investment like RIIZs are needed immediately in order to continue moving local projects forward, thereby stimulating the economy and creating jobs.

- **Include local governments and local elected and appointed officials as critical partners in the federal infrastructure process.**
  Local governments across the country are committed to creating safer, healthier and more environmentally friendly communities. Local governments own and operate the majority of our nation's infrastructure and the local elected and appointed officials are closest to the people, being accountable and responsive to community needs.

- **Offer new options to fund infrastructure improvements and construction projects that are already approved, needed and ready for funding.**
  Urban and rural America are sitting on billions of dollars of unfunded, dormant infrastructure projects—many of which are critical to the preservation, maintenance and safety of our systems.

- **Offset local government match requirements for infrastructure projects that use federal funds.**
  Besides a lack of federal, state and local dollars to complete or upgrade infrastructure projects, there tends to also not be sufficient local match funds. RIIZ contributions could be used as local match and, therefore, leverage the local contribution producing more outcomes on a longer term basis.

- **Be revenue positive for government.**
  When the private entity gives government a dollar under a RIIZ, the entity receives only the marginal tax rate on that dollar back from government.

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RIIZs offer many checks and balances to ensure that government processes are upheld and contributions are deemed an appropriate expense. RIIZs uphold proven regional and local infrastructure investment decision-making processes by going through the policy board (local elected officials) of a multi-jurisdictional local regional planning organization. They maintain consistency, transparency and accountability. And, RIIZ's tie infrastructure investments closely to a region's approved plans, the local community's needs and the overall public good.

Supporters
Many national, statewide, regional and local organizations support RIIZ's. Attached is a full list of those organizations.

Conclusion
Thank you for your commitment to improving our nation's infrastructure. I welcome working with the committee to determine the best approaches to fund and finance our critical water infrastructure and hope that the committee considers the immense benefits of RIIZs.

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Supporters of Regional Infrastructure Improvement Zones

NAME	LOCATION	COMPOSITION	POPULATION
Ohio-Kentucky-Indiana Regional Council of Governments	Greater Cincinnati, Ohio region	117 governmental and community members from 200 communities in the 8-county, 3-state region	1.9 million
National Association of Regional Councils	Nationwide	representing 220 regional councils and MPOs	Membership reaches 99% of the population
Ohio Association of Regional Councils	Ohio	21 regional councils that serve 1,525 local governments	10.5 million
Illinois Metropolitan Planning Organization Advisory Council	Illinois	13 MPOs	12.5 million
California Association of Councils of Governments	California	35 regional councils	30 million
Florida Regional Council Association	Florida	11 regional councils	15 million
Florida Metropolitan Planning Organization Advisory Council	Florida	26 MPOs	15 million
New England Association of Regional Councils	Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, Vermont	59 regional councils in New England	14 million
Gulf Coast Strategic Highway Coalition	Parts of Texas, Louisiana and Mississippi	governments, businesses, and regional councils	N/A
American Society of Highway Engineers	Nationwide	6,000-plus highway industry practitioners	6,000-plus
NAIOP, the Commercial Real Estate Development Association	Nationwide	15,000-plus commercial real estate developers, owners and investors	15,000-plus (with 56 local chapters)
Alliance for I-69 Texas	East to South Texas	public and private sector leaders from 34 counties	N/A
West Michigan Shoreline Regional Development Commission	Greater Muskegon, Michigan region	127 local governments in 6 counties	500,000
Southern California Association of Governments	Greater Los Angeles, California region	189 cities and 6 counties	19 million
Northeast Florida Regional Council	Greater Jacksonville, Florida region	7 counties and 27 municipalities	1.1 million
North Central Florida Regional Planning Council	Greater Gainesville, Florida region	11 counties and 33 incorporated municipalities	504,000
Treasure Coast Regional Planning Council	Greater Palm Beach, Florida region	4 counties and 50 municipalities	2.7 million

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NAME	LOCATION	COMPOSITION	POPULATION
Toledo Metropolitan Area Council of Governments	Greater Toledo, Ohio region	6 counties, 100 governments and 50 community organizations	790,000
Buckeye Hills-Hocking Valley Regional Development District	Greater Reno, Ohio region	8 counties and 2 cities	255,000
Eastgate Regional Council of Governments	Greater Youngstown, Ohio region	3 counties, 13 cities, 20 villages and 65 townships	585,400
Ohio Valley Regional Development Commission	Greater Waverly, Ohio region	12 counties	636,000
Deep East Texas Council of Governments	Greater Jasper, Texas region	12 counties	336,000
East Texas Council of Governments	Greater Kilgore, Texas region	14 counties	745,200
Capital Area Council of Governments	Greater Austin, Texas region	10 counties	1.4 million
Alamo Area Council of Governments	Greater San Antonio, Texas region	12 counties	1.8 million
Delaware Valley Regional Planning Commission	Greater Philadelphia, PA region (bi-state, PA & NJ)	352 municipalities (9 counties)	5.5 million
Southwestern Pennsylvania Commission	Greater Pittsburgh, PA region	10 counties	2.7 million
Greater Valley Forge Transportation Management Association	Greater Valley Forge, PA region	Business, municipal, county and state officials	N/A

February 28, 2012

The Honorable Robert Gibbs
Chairman
Subcommittee on Water Resources and Environment
House Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Gibbs,

NUCA, representing utility and excavation contractors, is a family of approximately 1,400 companies across the nation that build, repair and maintain underground water, wastewater, gas, electric and telecommunications systems. NUCA supports the introduction of new legislation from the House Transportation and Infrastructure Subcommittee on Water Resources and Environment that addresses America's water infrastructure challenges, and we thank you for its introduction.

The Water Infrastructure Finance and Innovation Act (WIFIA) would put countless Americans to work while repairing and rebuilding America's dilapidated underground environmental infrastructure and we encourage the subcommittee to advance the legislation through the committee process and to the House floor for a vote.

Companies that work on underground water and wastewater infrastructure continue to struggle in spite of reductions in national unemployment numbers. The ongoing turmoil in the municipal bond market coupled with the lack of state and federal resources available for water infrastructure improvements have delayed and even terminated projects over the past several years. The lack of a genuine federal commitment to traditional water infrastructure financing programs such as the EPA's State Revolving Fund (SRF) programs only exacerbates an already mounting problem that carries harmful impacts to America's economy, public health and environmental protection. It is increasingly clear that innovative financing for these projects is badly needed.

Regardless of which needs estimate you look at, America's water and wastewater infrastructure needs are in the hundreds of billions of dollars, and passage of this bill would provide needed resources to begin to address this massive and growing problem. However, in addition to enhancing public health and environmental protection, water infrastructure projects have a proven track record of job creation in 325 recognized industry categories, and carry several positive economic benefits. A 2009 study conducted by the Clean Water Council found that every $1 billion invested in water and wastewater infrastructure creates up to 27,000 new jobs with average annual earnings of more than $50,000, increases national output by up to $3.46 billion, and generates approximately $82.4 million in state and local tax revenue at a time when states and local communities need it most.

Your legislation would address America's water infrastructure challenges in two creative ways. The bill includes language contained in the Sustainable Water Infrastructure Act (HR 1802) which would lift the state volume cap on private activity bonds (PABs) that fund water and wastewater infrastructure projects. PABs are a form of tax-exempt financing for state and municipal governments looking to partner with a private entity to meet a public need, such as construction of a wastewater treatment plant. These tax-exempt bonds make infrastructure projects more affordable and shift the risk and long-term debt from the public entity to the private partner. Despite their proven effectiveness, the state volume cap on PABs that fund water projects substantially limits their potential to fund these critical infrastructure projects across America – which suffer from being "out of sight" (underground) and therefore "out of mind."

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Lifting the cap on PABs that fund water and wastewater infrastructure projects would generate up to an estimated $5 billion in annual private investment in exchange for a very small loss of federal tax revenue. Lifting the cap would also provide significant opportunities to put the water infrastructure construction industry back to work.

Following the model of the successful Transportation Infrastructure Finance and Innovation Act, the legislation would also offer credit assistance through the use of loans and loan guarantees to complement traditional financing programs for water and wastewater infrastructure improvements. These "WIFIA" resources would offer states and localities assistance to fund significant water infrastructure projects with very little impact on the federal budget. If structured effectively and in compliance with current law requiring the federal government to establish a capital reserve to cover anticipated credit losses, a WIFIA authority could use existing funding mechanisms such as the SRF to maximize its potential for success.

While no "silver bullet" exists to address the nation's water infrastructure challenges, enactment of WIFIA legislation that includes the PAB provision would be a big step toward job creation, economic recovery, enhanced public health and environmental protection. We thank you for your leadership, and look forward to working with you to see this bill enacted into law.

Regards,

Ryan Schmitt, Chairman, NUCA

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