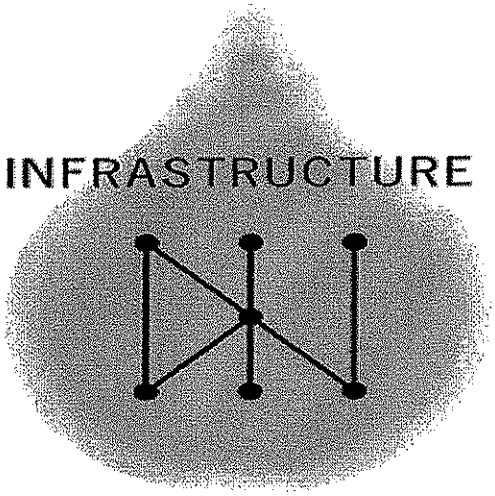
WATER INFRASTRUCTURE NETWORK



Testimony

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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

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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.

STEVEN A. FANGMANN, P.E., BCEE

Corporate Title
Vice President

Education
Manhattan College, B.C.E. (Civil Engineering) 1968
Manhattan College, M.S. (Environmental Engineering) 1973

Professional Licenses
New York
New Jersey
Michigan
Florida
Pennsylvania
Connecticut
Rhode Island

Professional Societies
Vice President New York Water Environment Association
Past President, Nassau Chapter NYSSPE
National Association of Clean Water Agencies (NACWA) NYWEA Representative
New Jersey WEA
Eastern Pennsylvania Operators Association
Water Environment Federation
American Water Works Association
American Society of Civil Engineers
American Council of Engineering Companies

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Professional Experience

Mr. Fangmann's professional experience includes over 35 years in the area of civil and environmental engineering with special expertise in wastewater facilities planning, investigations and detailed designs of municipal wastewater treatment plants and sewer systems, water management planning, water and wastewater regulations and project management.

Mr. Fangmann is an active member in a number of professional societies involving water and wastewater management serving on various committees and in executive positions. His efforts in this area were recognized by both the NYWEA and the Nassau Chapter of the NYSSPE.

Mr. Fangmann has extensive municipal experience in all aspects of environmental engineering in both private and public practice. He presently is directing the firm's General Engineering work for the Camden County Municipal Utilities Authority (CCMUA). This work involves yearly operational and design improvements to the Delaware No. 1 WPCF, as well as providing plant performance assistance. He is directing a Combined Sewer Overflow (CSO) project for CCMUA and the cities of Camden and Gloucester which involves program management and construction management services to CCMUA.

Mr. Fangmann presently is directing design improvements to the Bay Park STP Influent Pumping Station and Cedar Creek WPCP Grit Handling Facilities for the Nassau County DPW. He co-directed the Nassau County Master Plan project of the Bay Park STP, Cedar Creek WPCP and 37 pump stations. He directed an Interceptor Corrosion Survey for Nassau County, he assisted Nassau County in recovering Federal Grant Funds for its wastewater projects and he participated in the preparation of the first comprehensive plan to be developed for the County. Mr. Fangmann served as a technical advisor to Nassau County on its long-term sludge management project.

Mr. Fangmann is leading the firm's design effort for improvements for the Passaic Valley Sewerage Commissioners' (PVSC's) 330 mgd oxygen activated sludge wastewater facility in Newark, NJ. He directed an evaluation of secondary treatment facilities project and managed the design and construction of secondary grit removal and sludge screening facilities rehabilitation. At PVSC, Mr. Fangmann also directed the design team on final clarifier rehabilitation, including nocardia removal pilot and demonstration projects, concrete surface rehabilitation and drive replacement. Mr. Fangmann assisted PVSC in obtaining grant funding for a Transportation Enhancement Program (TEP) under the federal TEA 21 Program and he directed the preparation of a Capacity Assurance Plan for PVSC.

Mr. Fangmann was the Project Manager on design improvements to the wastewater treatment facilities at Brookhaven National Laboratory, including a new aerobic digester, and improvements to the sand filters and holding ponds. He updated BNL's Sanitary Sewer Master Plan and also served as the Project Manager on the advanced wastewater treatment improvements at BNL involving nitrogen control and ultraviolet disinfection. He recently directed a Quantification and Removal Study for BNL on its wastewater plant.

Mr. Fangmann directs the firm's work with the Town of Oyster Bay, which includes an underground storage tank monitoring and improvements project, oversight of the Old

Bethpage Solid Waste Disposal Complex operations, storm water Phase II implementation, design of various municipal infrastructure improvements and monitoring of observations wells, along with environmentally sensitive properties.

Mr. Fangmann completed 16 years of municipal service to the Nassau County Department of Public Works which covered all aspects of wastewater and water engineering including planning, design, construction, and operation. As Deputy Commissioner, he was responsible for the overall management of two major water pollution control plants which have a combined design capacity of 142 mgd, more than 3,000 miles of sewer system, and more than 30 pumping stations. This involved a yearly $80 million O&M budget and a $100 million per year capital budget.

As Chief Sanitary Engineer and Project Manager for Nassau County, he was responsible for the management of projects totaling more than $400 million for the Bay Park and Cedar Creek Plants. Consent decree schedules were met at both plants.

As Project Engineer and Manager on the Bay Park project, Mr. Fangmann was directly responsible for the day-to-day management of the rehabilitation of this 60-mgd plant and expansion to 70 mgd ($250 million phased project), while maintaining continued operation to meet state discharge permit limits. The expansion included preliminary treatment facilities fine bubble dome diffusers, odor control facilities, new power generation, sodium hypochlorite disinfection, and primary and final settling tanks.

For Nassau County's sludge management project, as Deputy Commissioner he was the "responsible official" for compliance with a consent decree schedule with the federal and state governments to end ocean disposal of sewage sludge. The project required a $40 million sludge dewatering facility to be constructed in less than a year at the Bay Park Sewage Treatment Plant.

In addition, at the Nassau County DPW, Mr. Fangmann was responsible for directing all water management planning for Nassau County's entire groundwater aquifer system. Programs accomplished included the collection and computerization of data into a single database containing all available pertinent information. He was instrumental in the development of a three-dimensional groundwater model which, for the first time, included saltwater intrusion components on portions of the north and south shores of Long Island. Mr. Fangmann has presented and promoted Nassau County's water management program with both public and technical groups.

Publications

Odor Control at Wastewater Treatment Plants, Public Works Magazine; April 1984

Biological Fluidized Beds - Innovative Secondary Treatment, Regulation, Design and Technology, American Society of Civil Engineers Spring Convention; May 1983

Application of Innovative Technology at the Bay Park Water Pollution Control Plant, Nassau County, NY, New York Water Pollution Control Association, Inc. Winter Meeting; January 1982

NIMBY and the Ocean Dumping Ban Act of 1988 (Nassau County, New York's Story", The Water Pollution Control Federation Specialty Conference; December 1990

Developing and Implementing a Water Conservation Program for Nassau County, New York, Conserv. 90, National Conference; August 1990

Nassau County Department of Public Works - Final Disposal Practices/Markets, American Society of Civil Engineers, NY Met Section - Regional Sludge Conference; April 1992

The Market for Compost and Pellets in Long Island, The Water Environment Federation Specialty Conference; July 1992

Nassau County Sludge Management Multiphased Environmental Assessment, American Society of Civil Engineers Water Forum '92; August 1992.

Grants and Low/No-Cost Loans for Municipal Projects, Empire State Report Magazine; August 1999.

The Benefits of CMOM: A Look at Several Case Studies, NYWEA Clearwaters Magazine; Summer 2003.

A Case for Implementing CMOM (SSO) Now, NYWEA Spring Technical Conference; June 2003.

The Blending Controversy: Potential Impact on Your Wet Weather Capital Budget, NYWEA 76th Annual Meeting; February 2004.

Development of a Wet Weather Operations Manual – A Case Study, NYWEA 76th Annual Meeting; February 2004.

Protests Finally Yield a Fragrant Solution, Public Works Magazine; February 2004.

Rehabilitation of Large Diameter Process Pipe in Unique Situation, New Jersey WEA, Annual Meeting; May 2007.

Large Diameter Process Pipe Rehabilitation, NYWEA Spring Technical Conference; June 2007.

CMOM: Will it be Mandated?, NYWEA 83rd Annual Meeting, February 2011

Comparison of Design, Construction and Operations of Biofilter Installations for Control of Odorous Air from Sludge Drying and Sludge Composting Facilities, NYWEA 84th Annual Meeting, February 2012

Awards

Engineer of the Year (2008), Nassau Chapter NYSSPE

Hall of Fame (2009) – NYWEA

Service Award (2009) – NYWEA

Chapter Achievement (1991) – NYWEA

SSSSS Silver (1996) – NYWEA

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Truth in Testimony Disclosure

Pursuant to clause 2(g)(5) of House Rule XI, in the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include: (1) a curriculum vitae; and (2) a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by an entity represented by the witness. Such statements, with appropriate redaction to protect the privacy of the witness, shall be made publicly available in electronic form not later than one day after the witness appears.

(1) Name:

STEVEN A. FANGMANN

(2) Other than yourself, name of entity you are representing:

WATER INFRASTRUCTURE NETWORK (WIN)
AMERICAN COUNCIL OF ENGINEERING COMPANIES (ACEC)

(3) Are you testifying on behalf of an entity other than a Government (federal, state, local) entity?

(YES) **If yes, please provide the information requested below and attach your curriculum vitae.**

NO

(4) Please list the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by you or by the entity you are representing:

NONE

Signature

2/27/12
Date