# FINANCING WATER INFRASTRUCTURE PROJECTS

**(109–21)**

# HEARINGS

BEFORE THE

SUBCOMMITTEE ON
WATER RESOURCES AND ENVIRONMENT

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

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# FINANCING WATER INFRASTRUCTURE PROJECTS

**Wednesday, June 8, 2005**

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, WASHINGTON, D.C.

The subcommittee met, pursuant to call, at 10:00 a.m., in Room 2167, Rayburn House Office Building, Hon. John Duncan [chairman of the subcommittee] Presiding.

Mr. DUNCAN. I want to, first of all, welcome everyone to our hearing today. Today is the first portion of a two-part hearing on financing water infrastructure projects. We will hold the second part of this hearing next week on Tuesday, June 14. These will be two very important hearings.

We are all well aware that our national wastewater infrastructure is aging, deteriorating and in need of repair and replacement. The American Society of Civil Engineers recently graded the condition of the wastewater infrastructure in our country and gave it a D-minus.

The Congressional Budget Office, the EPA and the Water Infrastructure Network have estimated it could take over $400 billion to address our Nation's clean water infrastructure needs over the next 20 years, twice the current level of investment when you consider what is coming from all levels of government. That is a staggering amount of money.

We can reduce the overall cost of wastewater infrastructure with good asset management, innovative technologies, increased water efficiency; and regional approaches to water pollution problems also could help reduce costs. But these things alone will not close the large funding gap that now exists between wastewater infrastructure needs and current levels of spending. Increased investment must still take place. That leads to the question, where is the money going to come from?

There is no single answer to that question. Municipal wastewater services are State and local responsibilities, but there is clearly a strong Federal interest in keeping our waters clean. So what we need is an effective partnership. That means, of course, that all partners would need to contribute.

At the local level, communities need to evaluate their assets, make capital improvement plans, identify sources of capital to implement those plans and ask for rate increases that will repay that capital over time. That last part, as we all know, is very difficult. No one likes to spend more, but if citizens understand the relation-

ship between clean water and wastewater infrastructure, they should be willing to make the necessary investments.

A recent survey by the Luntz Research Companies suggests that citizens do understand this relationship. The survey found that most Americans believe clean and safe water is a national priority and are willing to pay more money to get it. The survey also found that most Americans want a sustainable, dedicated source of funding for water infrastructure projects and that they would support the creation of a sustainable trust fund for wastewater infrastructure.

Supported by these findings, some are advocating the creation of a national clean water trust fund as a means for financing wastewater infrastructure needs. One of the most complex aspects of moving from the trust fund concept to reality, however, is determining the funding sources for such trust fund. The water and wastewater community has not supported a user fee for a trust fund, and so far no other water user has stepped forward in support of a fee or tax on their activities either. As a result, it remains unclear how a trust fund would be funded.

We will hear today from Dr. Frank Luntz about the results of his public opinion survey, including the public's perception of the need for clean water and of the trust fund concept. In addition, we will hear from representatives of the National Association of Clean Water Agencies, the Associated General Contractors of America, the American Water Works Association and the American Beverage Association on issues relating to a national clean water trust fund.

I hope our witnesses will bring forward ideas on how we can increase funding for wastewater infrastructure, identify potential willing revenue sources and ensure equitable means for generating revenues.

At next Tuesday's hearing, we will continue this discussion by focusing on funding mechanisms other than a trust fund.

Let me now turn to my good friend, our ranking member, Mrs. Johnson, for any opening statement she would like to make.

Ms. JOHNSON OF TEXAS. Thank you very much Mr. Chairman, and thank you for holding this series of hearings on the issue of water infrastructure financing.

The condition of the Nation's wastewater infrastructure is of a tremendous importance to the health of our citizens and the environment, as well as the economic health of our Nation. It is also virtually unnoticed and unappreciated by most Americans because we take it for granted. Of course, this out-of-sight and out-of-mind attitude changes when problems with infrastructure arise.

Our Nation faces the unprecedented possibility of failure of critical water and wastewater infrastructure and the reality of unmet infrastructure needs for the protection of the environment. The union of these issues poses a significant threat to the Nation and can lead to a reality of increased sewage overflows, closed beaches and contaminated drinking water. We cannot address these threats without increased infrastructure investment from Federal, State and local sources.

First and foremost, the Federal Government must acknowledge and meet its continuing role to work in partnership with States and local governments to address the existing issues. However, in

recent years, the Federal commitment falls short. The Federal contribution to State storage water infrastructure has averaged about $1.2 billion annually for wastewater involving local loan funds, and $700 million annually for drinking water funds. Compare this level of investment to annual needs of $10 to $15 billion or more as documented by the Congressional Budget Office and the EPA.

Worse still, in the past 2 years, the Federal contributions towards wastewater infrastructure have declined rapidly, dropping to $1.1 billion in fiscal year 2005 and are expected to be under a billion dollars for fiscal year 2006.

Last month, the House approved the fiscal year 2006 funding bill for EPA with only $850 million for the Clean Water State Revolving Fund, a 23 percent decline in funding in just 1 year. This reduction and the Federal commitment could not come at a worse time for our communities. Many medium-sized and small rural communities simply are not able to afford the needed investment in water infrastructure on their own. They need increased Federal assistance, not cuts. Even some larger communities have either been a significant—have seen significant erosion in their tax base or significant increases in needs such as they require to help to meet those needs.

Some say these are local issues, yet State and local governments already invest 10 times the amount contributed by the Federal Government. With polluted waters across the State boundaries and people traveling freely throughout the Nation, they expect safe drinking water wherever they go. Clean and safe water is essential to our way of life and the Nation's economic success.

There is still a strong Federal interest in water quality, and this committee has a history of support towards reauthorizing and increasing funding for the Clean Water Act. I question, however, whether that can be translated into real dollars, especially in light of the unrealistic spending limitations contained in the budget for the next few years.

Mr. Chairman, this series of hearings will explore whether there are other resources that have not been utilized, that can help address this problem. For example, for the past few years, there has been talk of creating a trust fund to meet water and wastewater funding needs, similar to the highway and aviation trust funds. This is an attractive idea and one in which the committee has significant experience. Unfortunately, however, the task for water will be much greater.

TEA-21 and AIR-21 both include dedicated resources of revenue financed by taxes directly related to highway and air transportation. But water, the challenge comes from identifying viable sources of funding that potentially could be tapped to pay for necessary water infrastructure repairs and improvements.

I am sure this will be a lively debate, but it is one that must occur if we are serious about meeting the challenge of addressing water and wastewater infrastructure needs. Regardless of the source of increased funding, we must work together to ensure that our commitment to the environment and to safe drinking water will not be diminished. We can either move forward or fall behind, but without additional funding, we will surely fall behind.

Again, Mr. Chairman, I thank you for your interest in calling these hearings, and I look forward to our witnesses' testimony.

Mr. DUNCAN. Thank you very much, Ms. Johnson. You have said something that I have said before, that there is nothing that the people of this country take so much for granted as our wastewater and clean water infrastructure.

But I will tell you, in the year since I have chaired this subcommittee, I have met personally with the Mayors of Los Angeles, Atlanta, Chicago, all over the country. Monday, I met with the Mayor of Miami and Mr. Pascrell, who has been an active member of this subcommittee, and has experience in his city in this regard. And the Mayors and the people on the front lines know how important this work is.

I would like to call on Mrs. Kelly.

Mrs. KELLY. I thank you, Chairman Duncan, especially for holding this hearing to spotlight the importance of our Nation's water infrastructure.

Members of this committee are pretty well aware of the tremendous funding gap that is in our Nation's wastewater infrastructure system. Many of us have been working for years to try to strengthen the Federal commitment to wastewater infrastructure programs. You know, for some time now, there has been this predictable pattern of budget proposals and enacted funding levels that clearly show that we have our work to do to put enough funding in to save our wastewater infrastructure.

Like I did in the previous Congresses, I have introduced a bill with my colleague, Ellen Tauscher, that is aimed at substantially increasing Federal investment in clean water infrastructure. H.R. 2684, the Clean Water Infrastructure Financing Act, would dedicate $25 billion over the next 5 years to the State revolving funds.

People may suggest that these funding levels fall short of what is needed. Well, actually, they do, but it is a place to start.

We have got to put attention into our Nation's wastewater infrastructure. We have problems with combined sewer overflows. We have problems with potential blending problems, because of our systems cannot carry what we have. We are a growing nation, and we are an aging nation. The combination puts a tremendous pressure on our need for this Clean Water Infrastructure Financing Act.

It is a complicated issue. It involves the critical question of how a trust fund is supposed to be spent. But it is an issue that is not going to be resolved in the short term. It is a long-term beginning, and I think it is very useful to have these conversations to see where we can get common ground. I look forward to getting the input from these witnesses today.

And I again thank you very much and congratulate you, Chairman Duncan, on your efforts.

Mr. DUNCAN. Thank you for your good work on this and your work with Mrs. Tauscher. I believe Mrs. Tauscher was next. We will go to her for any statement she wishes to make.

Mrs. TAUSCHER. Thank you, Chairman Duncan, for holding this hearing today on an issue which I know is of importance to all of our constituents. We must ensure clean water and protect our Na-

tion's waterways. This is a priority that should be of paramount importance to all of us.

Mr. Chairman, the need is not unknown. According to an EPA needs assessment survey, there is an investment gap for wastewater infrastructure in this country at around $12 billion a year, or 225 billion over the next 20 years. It is clear that without additional Federal support, our local communities and publicly held utilities will not be able to keep up with this demand.

In April, this subcommittee, under your leadership, Mr. Chairman, held a hearing on the EPA's proposed wastewater blending policy. Like many of my colleagues, I opposed the EPA's proposed policy because it is too broad and does not go far enough to protect the $650 million investment my constituents have already made to upgrade the community's wastewater infrastructure. However, at that same hearing, I made the case for increased Federal investment in infrastructure financing.

We cannot be silent players in the fight for clean water. We have a responsibility to ensure our local communities have the resources necessary to sustain the necessary environmental protections which this Congress should rightly mandate. Unfortunately, we have done less than an adequate job in ensuring that this financing is available to meet the growing need.

As many of my colleagues know, this year's Interior Appropriations measure decreased the Federal commitment to the Clean Water State Revolving Fund by hundreds of millions of dollars. Despite attempts by some Members to increase these funds on the floor, the Clean Water SRF remains woefully underfunded.

We have to get serious about solutions. With my colleague, Sue Kelly, we have again introduced the Clean Water Infrastructure Financing Act. Our legislation would dramatically increase the Federal investment in local communities' environmental infrastructure by helping to bridge the current funding gap by providing $25 billion over the next 5 years.

Mr. Chairman, as I said, it is time to get serious about our commitment to funding these infrastructure requirements. I look forward to hearing our witnesses today, especially my friend, Dr. Frank Luntz. And I am looking forward to working with you, Mr. Chairman, to moving legislation later this year. I yield back.

Mr. DUNCAN. Thank you very much.

Mr. Osborne?

Mr. Salazar.

Mr. SALAZAR. Thank you, Mr. Chairman and Ranking Member Johnson.

I know that many of us have just returned from traveling our districts and meeting with local groups. As I work back home on my own land and out in the district, I can never get away from the issue of clean water or plain water. As you see, I am a farmer. And in the Third Congressional District of Colorado, which is largely rural and agriculture to the bone, the issue we are discussing today, clean water, is about our way of life.

This past weekend, one of the big news items in Pueblo was the contamination of Fountain Creek and the overflow of some of the sewage from Colorado Springs into Fountain Creek, which flows into the Arkansas River. An estimated 26,400 gallons of untreated

water flowed into the Fountain and contaminated both Fountain Creek and the Arkansas River. This is just one of the many challenges we face in our community.

While we are sensitive to the need to invest in water and water infrastructure, these improvements are extremely costly, especially in rural America. This is a problem we have faced for decades and there is no easy solution. While most communities would prefer to hold their own, we know that Federal assistance is often the only way that large-scale projects can come through in rural America.

I understand the pitfalls that come with the idea of creating a clean water trust fund and who will pay for it, but it is something this Congress should tackle. As I think about the needs of my own family and neighbors, the issue of clean water hits home all too well. I look forward to hearing from you today.

Thank you, Mr. Chairman and Ranking Member Johnson.

Mr. DUNCAN. Thank you very much.

Mr. Pascrell.

Mr. PASCRELL. Mr. Chairman, as a former mayor, I can attest that sewer system modernization is one of the issues that can keep you up nights. Cities want to be in compliance with the EPA regulations, and they want to keep local rivers clean by doing what is right for the environment and for future generations. But when you mix large capital investments with severe budgetary constraints, many cities are simply unable to do what they need to do to meet Federal regulations; and the panel knows that better than I do.

Mr. Chairman, thanks to your leadership, this committee is well aware of the vast clean water infrastructure needs our Nation faces, but apparently we need to do a better job educating the rest of the Congress. The House-passed Interior Appropriations bill actually cuts water infrastructure investment.

Now, I have heard the word ″start,″ this is a ″good start for,″ 7 years, 7 years. I think we should end using the word ″start,″ because we are past that. This is a charade; there are no two ways about it.

You even state, Dr. Luntz, in your presentation that in the polling that you have done, what America's priorities are; and America's priorities are, they would rather have clean water than tax cuts. You can't make it any more simple than that. That is an Archie Bunker statement if I ever saw one.

Why can't we get it? Why can't we get it? The House-passed Interior Appropriations bill actually cuts water infrastructure investments, Mr. Chairman. That is unacceptable.

I understand the fact that we are facing record budget deficits and a growing Federal debt and that austerity is necessary. We actually say these things on this side of the table. But we did not come to this budget crisis in a vacuum. It has been through irresponsible management, misplaced priorities by the Congress, and we are forced to make cutbacks in public health priorities.

This is a public health issue. I mean, we talk about homeland security, protecting our streets and grandchildren, and you have heard all those things over and over again. We can't even protect the water supply of the country. Wow. If dedicating funding is good enough for highways and aviation systems, it is certainly good enough for our water.

Of course, like any new initiative, the devil is in the details. I look forward to working in a bipartisan fashion as this committee has worked in a bipartisan fashion. No one can accuse this committee, no one from the minority, can accuse the chairman or anybody on the majority side of trying to have it all ways. Either we are going to continue with the charade and continue to meet year after year and say the nice things that you want to hear and you come back with the statistics that indicate you are pretty supportive of what we have been attempting to do.

Is anyone listening? Is the administration listening? Does the administration know that cleaner water is more important than giving Sammy Sosa a tax cut? Do they understand that?

Let me also put in another plug for the bill this committee reported, to reauthorize 1.5 billion for a wet weather grant program. This legislation can give cities and towns the resources they need to clean up noncompliant combined sewer systems. I hope that everyone here will help us push this bill on the floor.

And, Mr. Chairman, you have done a fantastic job since I have been on this committee.

Mr. DUNCAN. Thank you, Mr. Pascrell.

Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman.

This is a huge issue for California. We have real water problems, as all of you know. We are putting a major transportation bill out that does a major study through the national forest, putting a tunnel in. And we have amended that to include the possibility of a major water line for MWD to meet the needs of California.

You have to be real creative today to try to keep up with the infrastructure needs. And I commend many of my water agencies for what they are doing. They are doing a great job of water banking, conservation.

This is a huge issue, and I am looking forward to the testimony today.

Mr. DUNCAN. Mr. Bishop.

Mr. BISHOP. Thank you, Mr. Chairman and Ranking Member Johnson, for calling this hearing on how we can improve the way local water infrastructure projects are funded.

Helping municipalities share this responsibility with the Federal Government will lead to a more efficient grant system that delivers the funding where it is needed the most. This is a vitally important issue throughout the country and for many of the municipalities of my district on Long Island.

I have heard from and met with a number of locally elected officials in my district who have experienced difficulty over the years with the current system and continue doing the best job they can to stretch the value of their grant dollars. In particular, as Suffolk County, New York, continues its rapid expansion, most of the area is constantly experiencing growing pains that stretch the limits of its water system. Every year, the county and a growing number of other communities implore me to help them find funding for water treatment facilities and antiquated delivery systems.

The need for reliable clean water is important to protect public health and maintain safe drinking water. The current funding system is riddled with problems that are taking a toll on smaller gov-

ernments that simply cannot afford to pick up the slack, particularly at a time when we are asking them to absorb cuts to Medicaid, community development block grants and other investments in our infrastructure.

In recent years, we have witnessed a disturbing shift away from fully funding clean water projects. We are aware of and sensitive to the need for fiscal responsibility, but the public's well-being should not come at the expense of keeping an outdated system that just needs a few adjustments, when other ways to pay for these projects exist.

My hope is that these hearings will lead to bipartisan legislation that creates a more efficient funding system that guarantees that the dollars arrive where they are needed the most and ensures that we have money to pay for overdue projects.

Thank you for holding this hearing.

Mr. DUNCAN. Mr. Shuster.

Mr. SHUSTER. Thank you, Mr. Chairman. I appreciate your holding these hearings today.

And hearing from my friend from New York—he was talking about the urban areas—I come from a rural area and the needs are great in rural Pennsylvania and, I am sure, all across America for us to have the kind of economic development, attracting industry through western Pennsylvania where it has lost so much industry. It is absolutely critical we have water systems in place to be able to handle the growth, although it is small at this point, but the future growth that we are trying to attract there.

I often say—and my press people cringe when I say this—but if you can't flush toilets and turn on spigots for clean water, people aren't going to go there, businesses aren't going to locate there. This is vital to western Pennsylvania. And I appreciate you for being here to testify.

Dr. Luntz, maybe you can tell me if that flushing toilets is a good thing or bad thing to use on the stump. I think it is effective and people can relate to that, I think.

Thank you, Mr. Chairman. I look forward to hearing the testimony.

Mr. DUNCAN. Ms. Schwartz.

Ms. SCHWARTZ. Thank you, Mr. Chairman. And Chairman Duncan and Ranking Member Johnson, I thank you for convening this hearing today and I look forward to the panelists.

I am very proud to represent the city of Philadelphia and for the history buffs in the room, just to let you know in 1801, the first water department in the United States to provide drinking water to the entire city was actually in the city of Philadelphia.

So we have historic waterworks. And it has been renovated; you can come see it, and hopefully some day we will be able to eat there with a new restaurant. There is no question that the Philadelphia Fairmont Waterworks—and anyone in the water business knows about it—was a model for almost 30 years just in terms of a delivery system for an entire system and doing it effectively.

Our water system is aging. You have heard it from my colleagues. One of the things that the public relies on and separates us from developing countries around the world is our infrastructure, particularly our drinking, wastewater and sewer systems.

And we know in places like Africa, there are diseases that are spread every day that we, in fact, no longer worry about because of the safe water that we rely on in this country and that our public relies on.

So we need to make sure that we are keeping pace, that we are a step ahead, that we are able to maintain the safety and security of our water systems and that we don't take it for granted. I think many of the public sort of does. And so we need to—it is our responsibility to step up to the plate and make sure that we are doing all that we can to ensure that our drinking water and that our water systems that were installed—many of them, 50 and 100 years ago; that 1801 system actually has been replaced, at least in part, over the years—but many of them are still showing their age of 50 and 100 years ago. They are leaking, cracking and breaking, and it is enormously expensive for us to locally replace it.

The introduction of disease and illness is certainly at stake. And as been briefly mentioned here, concern about our water system, the water treatment plant in my district, the concern about terrorism. We are looking to put a bike path along the Delaware River, and one of the issues is that they don't want us to go right by the water treatment plant that is there because of the fear of terrorists.

I don't know if they come on bicycles or not, but more seriously, the fact is, we can't take for granted that our major water systems are safe. But again, there is a cost to the potential security. The estimates are that $1.6 billion is needed to finance security enhancements for the 8,400 community water systems across the United States.

So it is my hope, at this morning's hearings, we will begin the much-needed discussion about ways we can work together—Federal, State and local officials in the company of the private sector—to invest in, improve and maintain the water infrastructure that we all rely on in this country.

Thank you very much.

Mr. DUNCAN. Mr. Higgins?

Mr. LaTourette?

Mr. LATOURETTE. No.

Mr. DUNCAN. Mr. Blumenauer? We will give you a chance to catch your breath.

Let us go to Mrs. Norton.

Ms. NORTON. Thank you, Mr. Chairman. This is an important hearing, and I appreciate your calling it. Particularly as you begin with these witnesses that you have called about where the American people are on this issue will help to educate us about what appears to be a silent crisis in our country.

I compare the transportation bill that we—that is now in conference and, obviously, our Federal interstate hooks into the national highway system. But the most important thing about that bill is that everybody can see its effects, and it becomes a top priority because everybody uses the roads and everybody uses mass transit and they wouldn't think of not having the Federal Government, the States and the private sector deeply involved in that part of our infrastructure.

This hearing is about an equally important part of our infrastructure, but the part that we most take for granted because we believe that clean water is our birthright and we think it is going to continue to happen no matter what happens. I am here to tell you, as the Congresswoman for the Nation's Capital, which experienced a lead water crisis that was extremely disconcerting 2 years ago, that it is time that we understood that even clean water is nothing to take for granted in our country.

I am particularly concerned about storm water overflow, because part of the reason for the overflow in this city is that the system, one-third of the system serves the Federal presence and the Congress of the United States. I am dealing with the waste of this body as a ratepayer. As we know, that is not enough here and it is not enough anywhere in the country to deal with what apparently is an increasing problem everywhere, that has gotten very little attention except at the local level where people do talk about it and do fret about it.

I am—the reason I think this hearing is important is that it is focusing on all the possibilities here. And we really do need to be creative here. Yes, the Federal Government over the years has contributed billions of dollars. Yes, there needs to be more there. Yes, there needs to be more State and private support.

Perhaps this national clean water trust fund—there needs to be something that structurally raises the level of this concern, not a few more dollars into a rising problem that drowns those dollars every time the toilet is flushed. We have got to look, stand back and see if there is a cosmic way to approach this problem so we can say, We have found a way to deal with clean water in our country.

And I think this is a very important step, because let us hear first about the possibilities, let us hear where the American people are, and then let us try to craft a structurally different approach to going at this very critical problem that lies below the surface of the water we drink.

Thank you very much, Mr. Chairman.

Mr. DUNCAN. Thank you. I read a nice article about you and your daughter, and I know you must be very proud of her.

Mr. Blumenauer.

Mr. BLUMENAUER. Thank you, Mr. Chairman. I deeply appreciate your continuing the tradition of this subcommittee, trying to have a broad and comprehensive look at the problems that we face with water infrastructure.

And this panel is, I think, well suited to help us focus on the range of problems that we face. I apologize in advance. I have a markup across the way and I am going back and forth. My staff and I are monitoring this very closely looking both at the testimony that is being presented and the interaction with the committee. And as time permits, I would like to come back.

I spent 10 years prior to coming to Congress as the Public Works Commissioner for the City of Portland, Oregon. One of the little problems we worked with is combined sewer overflow, along with 1,100 communities around the country. And I have been struck by how this is sort of the hidden and ticking time bomb.

I sat in on public hearings and had one guy sputter at the end saying, If you keep going with this program, in a couple of years, we are going to be paying as much for sewer and water as we are for cable TV. And let that sink in for a moment about the outrageous notion of protecting public health and families and economic development. And it was a truly horrifying prospect, I must admit.

But I think that there are opportunities that we will be able to have in terms of having the Federal partnership redefine—perhaps increase a little bit—that aren't going to cost an arm and a leg, but will help catalyze the potential benefits we have by protecting clean water in communities and being able to do so in ways that are cheaper and greener.

I think the panel's interaction today is an important first step. I appreciate the leadership of you and our ranking member and look forward to working with you, following up on this testimony.

Mr. DUNCAN. Thank you very much, Mr. Blumenauer.

We have put a lot of legislation through this subcommittee, but we certainly need to do more in this area. As has been pointed out at other hearings, unfortunately, we are spending more on the wastewater and clean water infrastructure in Iraq per capita than we have in the last couple of years here in the United States at the Federal level.

Now we have been doing, thank goodness, a lot of good things at the local and at the State levels, and the ratepayers have been picking up the bulk of it, but there is an important Federal role here.

But we are very pleased to have a distinguished panel here this morning. Our witnesses, from the Luntz Research Companies will be Dr. Frank Luntz, the President of that organization, from Alexandria, Virginia.

Representing the Associated General Contractors of America will be Mr. Jack Schenendorf, who is of counsel with Covington & Burling. He was the staff director for this committee for a number of years and really did an outstanding job in that role. I am not sure there are many people that know the work of this committee better than Jack Schenendorf.

Representing the National Association of Clean Water Agencies is Dr. Kenneth Rubin, the Managing Partner of PA Government Services, also from Washington, D.C.

Representing the American Water Works Association is Mr. Julius Ciaccia, who is the Director of the Cleveland Division of Water, Cleveland, Ohio.

And finally, representing the American Beverage Association is Ms. Susan Neely, who is the President and CEO of that association.

We are pleased and honored to have each of you here today. We will put your full statements in the record. We give you 6 minutes to make your statements. But in consideration of other witnesses, we will cut you off at that time and then we will get into more detail in the questions. And we always proceed in the order the way the witnesses are listed on the call of the hearing.

**TESTIMONY OF DR. FRANK LUNTZ, PRESIDENT, THE LUNTZ RESEARCH COMPANIES; JACK SCHENENDORF, OF COUNSEL, COVINGTON & BURLING, ON BEHALF OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA; DR. KENNETH I. RUBIN, MANAGING PARTNER, PA GOVERNMENT SERVICES; JULIUS CIACCIA, DIRECTOR, CLEVELAND DIVISION OF WATER, ON BEHALF OF THE AMERICAN WATER WORKS ASSOCIATION; AND SUSAN K. NEELY, PRESIDENT AND CEO, THE AMERICAN BEVERAGE ASSOCIATION**

Mr. DUNCAN. Dr. Luntz, you will go first.

Dr. LUNTZ. Mr. Chairman, I want to thank you for the honor and privilege of being here. In fact, this is the first time in 2005 that I have worn a tie. I assure you, this will be the last time in 2005. And to the Member from New Jersey, I would believe if you would to poll Baltimore Oriole fans, you would find the vast majority would deny Sammy Sosa his tax cut for this year. And to the Member from Pennsylvania, any mention of ″toilet″ is bad on a campaign trail.

My name is Frank Luntz and I am President of the Luntz Research Companies, a public opinion company out of Alexandria, Virginia. I am here today to convey to you America's strong bipartisan support for investing in America's water infrastructure.

Earlier this year, my organization, in partnership with Bill Clinton's former pollster, Penn, Schoen & Berland, conducted a nationwide telephone survey and found that nearly nine in 10 Americans support creating a Federal trust fund to guarantee Federal investment in clean and safe water. Fully 86 percent of adult Americans adopt the concept, a public opinion consensus rarely seen in America. In fact, not a single—there was a majority from every single subgroup, age, income, education, region. No matter how you define it, the majority of Americans support the concept of a trust fund.

And there are other findings I want to focus on briefly. Clean water is seen as a higher priority and a more important principle than investments that are made in more high-profile areas such as transportation and America's airways and airports. Ninety-one percent of Americans believe that—and I quote—if, as a country, we are willing to invest over $30 billion a year on highways and more than 8 billion a year on our airways, we certainly should be able to make the necessary investments in our lakes, rivers and oceans.

And when asked to prioritize—and this is where it gets important, because you can't do everything—71 percent choose investing in clean water and safe water, compared to only 20 percent who would choose roads and highways and just 3 percent who choose airports and aviation.

And more than two-thirds of Americans would rather have the Federal Government invest in our water infrastructure than introduce new tax cuts, as you so accurately and emphatically pointed out.

The reason for this overwhelming support and clearly articulated prioritization can be explained in three words, quality of life. Clean water affects everyone and it matters to everyone in their day-to-day lives, and that is why you have universal support and bipartisan support. It doesn't matter whether you are Republican or Democrat, it doesn't matter if you are from a red State or blue State;

an overwhelming majority of Americans believe that investing in water infrastructure is a ″responsibility.″ and that word is chosen deliberately: It is the ″responsibility″ of the Federal Government.

I have been involved in this for 20 years, and it is hard for me to imagine anything for 20 years. And you don't see that kind of consensus on any issue that faces America today. The reason why Americans so overwhelmingly believe that investing in a clean water infrastructure is a national issue is because they believe that keeping water safe and clean cannot be confined to any locality or, in their words, ″clean water has no boundaries.″

I am a message person, and I pay attention to words. Those are the words that were spoken to us when we surveyed the American people. Fully 71 percent believe in the statement, ″Clean water and safe water is a national issue that requires dedicated national funding. As a matter of principle, the Federal Government should become a true partner with States and localities and pay for the necessary sewage and wastewater treatment systems to guarantee clean and safe water for future generations of Americans.″

And that phrase is also important for future generations. The American people, when they talk about clean and safe water and an infrastructure, they are not speaking about today. They are speaking about 10 years from now, 20 years from now, because the public fundamentally believes that the environment should be getting better and status quo isn't good enough. And clean and safe water is an important component of that environment.

The consensus goes beyond perception and straight into fact. For example, when told that the Federal Government today pays only 5 percent of the cost of ensuring that our water is clean and safe, 80 percent of Americans say that is unfair and unacceptable.

This was an extensive poll. We dealt with facts, not just perceptions; and the public's opinion was clear.

I have heard politicians complain that voters say, It is important, but let someone else pay for them. This one is different. Four times as many Americans believe that there should be, and I quote, ″a dedicated funding source to ensure clean and safe water for future generations″ than believed that ″Our water infrastructure should not receive Federal funding, but should continue to be funded as it is.″ seventy-three percent want you to do it and 18 percent believe it should stay the same way.

And this is the amazing part: 80 percent of Americans are prepared to open their wallets and pay more in taxes because clean water is an important priority to them. Now you tell me any other issue that has 80 percent support on anything. Eighty percent of Americans wouldn't even say that my shirt is blue, but they support clean and safe wastewater.

My Democratic colleague, Doug Schoen, concurs with me in this interpretation. In his words, Environmental issues can sometimes be divisive, but clean and safe water is not seen by voters as a divisive issue. Instead, there is overwhelming support from both political parties for what is seen as a basic need that has to be protected, clean and safe water for our children and for the next generation.

And I could not agree more.

Thank you, Mr. Chairman.

Mr. DUNCAN. Thank you very much, Dr. Luntz. Very fascinating testimony.

Mr. Schenendorf.

Mr. SCHENENDORF. Thank you, Mr. Chairman and Ranking Member Johnson. I am pleased to testify today on behalf of the Associated General Contractors of America on financing the $300 to $500 billion water infrastructure funding gap identified by GAO and CBO.

Addressing this shortfall with general fund appropriations would be extraordinarily difficult in the current budget climate. Either the deficit would be increased or if deficit-neutral, other programs would have to be cut. Rather, I encourage the subcommittee to consider financing water infrastructure projects in the same way that transportation infrastructure projects are funded through self-financed, deficit-proof trust funds.

Trust fund financing would pay for itself. It would not increase the deficit or require cuts in other programs. Moreover, the funding stream would not be subject to the vagaries of the annual appropriation process, thereby providing the certainty that State and local officials need to commit to long-term infrastructure financing. The biggest challenge and controversy would be determining who should pay and how much should they pay.

In this regard, a look at the 1956 Highway Act and the financing of the interstate system may be instructive. In the 1944 Highway Act, Congress called for a 40,000-mile national system of interstate highways, but because of very limited funding, very few interstates were built between 1944 and the early 1950s. At that time, the Federal program was funded from general revenues. There was a Federal gas tax, but its proceeds were not earmarked. Meanwhile, the price tag on the interstate system was estimated at $27 billion over a 13-year period, equivalent to $185 billion investment in today's dollars.

Congress was faced with a similar problem that it is faced with today on the clean water funding. It took several years of controversy and several government studies to come up with a financing mechanism for the interstates. During this process, three financing alternatives were explicitly considered and rejected: general fund financing, tolling and bonding.

Finally, proponents of the interstate system embraced the controversial strategy of increasing Federal excise taxes levied on highway users. Affected interests from the oil industry to the trucking industry to the Teamsters Union were opposed for one reason or another.

In addition, during the early 1950s, the Governors Conference was not only opposed to increasing the gas tax, but they were pushing for full repeal of the tax, arguing it should be reserved to the States.

The overall opposition was so strong that legislation embodying this approach was soundly defeated by more than a 2-to-1 vote when the bill was considered on the House floor in 1955.

But supporters went back to the drawing board. They believed the basic approach in the 1955 bill was sound. They developed the 1956 Highway Act, which contained a variety of highway user

taxes, including a 50 percent increase in the gas tax, 50 percent increase in the tire tax and a new licensing fee on heavy trucks.

A key aspect of the 1956 bill was the creation of the Highway Trust Fund in which all these revenues would be deposited to be available for expenditure without further congressional authorization or appropriation. Supporters, including the construction industry, also realized that they needed to do a much better job of educating the American public, affected interest groups and Members of the Congress on the merits of the proposal, so they mounted an extensive lobbying and education campaign. In fact, this is where the highway lobby earned its reputation.

As a result, many of the groups that opposed the 1955 bill changed their minds even though the tax proposals either did not change or, in some cases, even got worse. Essentially, many of the critics have had a chance to rethink their positions, especially given that the trust fund mechanism linked revenues and spending. Many were more willing to accept the idea of increased taxes' focusing instead on a fair distribution of the tax burden.

Ultimately, the 1956 Highway Act passed the House and Senate by overwhelming votes. The rest is history. The battle to establish the trust fund was worth it. The 1956 Highway Act, one of President Eisenhower's most important achievements has been described as the best investment the Nation ever made. It often appears in the top five or top ten list of Federal legislation that really mattered.

And it is often described as the law that created the interstate system, but as we have seen, that is not really correct. The genius of the 1956 act was that it created the Highway Trust Fund, the financing mechanism that made the interstates a reality.

Today, the Highway Trust Fund continues to be one of the most successful Federal financing mechanisms, providing about 33 billion per year for highway investment. Moreover, its success persuaded Congress to create other transportation infrastructure trust funds, including the Airport and Airways Trust Fund and the mass transit trust fund.

These transportation financing mechanisms have been enormously successful in creating stable, dependable revenue streams for funding transportation infrastructure projects, but in each case, there was a contentious debate as to who should pay and how much should they pay. Congress concluded each time that the societal and political benefits of transportation infrastructure investment outweighed the negative consequences of establishing the revenue stream.

Clean and safe water infrastructure projects deserve no less. As Dr. Luntz has indicated, Federal legislation creating a long-term, sustainable and reliable trust fund for clean and safe water infrastructure has strong support among the American people. If Congress develops a fair system for raising the revenue, I believe the water infrastructure trust fund is achievable.

The benefits for the American people, American business and our Nation's environment would be enormous. In fact, I am convinced that a law creating a robust water infrastructure trust fund would easily make future top five lists of Federal legislation that mattered. Thank you.

Mr. DUNCAN. Thank you very much, Mr. Schenendorf. That is a very interesting and, I think, significant history that you gave us with many parallels of what we are talking about here today.

Dr. Rubin.

Dr. RUBIN. Mr. Chairman and members of the subcommittee, thank you for the opportunity to be here today. My name is Kenneth Rubin, and I am testifying on behalf of the National Association of Clean Water Agencies.

The subcommittee is obviously well aware of consensus figures from EPA, the Congressional Budget Office and others that over the next 20 years, America's wastewater systems will have to invest $12 billion a year more than current investments to replace aging and failing infrastructure and to meet the national goals of environmental and public health priorities of the Clean Water Act.

To overcome this funding gap, both national and local solutions must operate together. Some stakeholders have argued that local rate increases alone are sufficient to solve this problem. I don't believe that is the case. Financing the $12-billion-a-year gap with utility rate increases could result in a doubling or tripling of rates across the Nation. And if this were to happen, at least a third of the population of the U.S. would have to pay more than 2 percent of their household income for sewer services, which is often taken to be the conventional criterion for affordability.

The important part of that statistic, however, is that it would hit small, rural and low-income communities the hardest. And it is important to consider this against the backdrop that 60 percent of the U.S. population has experienced no increase or a loss in real household income over the last 20 years. For a significant portion of U.S. families, sharp increases in wastewater rates would have significant economic impacts.

Alternatively and importantly, there is ample precedent and clear economic principles supporting a Federal clean water trust fund. The importance of wastewater infrastructure has been recognized here today and has been well understood by this Congress and in the years leading up to the passage of the 1972 Clean Water Act. To avoid an environmental and public health crisis, significant U.S. dollars were dedicated to reverse the Nation's declining water quality at that time.

But today, despite increasing Federal mandates for cleaner water, despite shifts in population that strand wastewater assets in urban core cities with few ways to pay for needed improvements and despite the nearly universal need to replace hundreds of billions of dollars in aging and failing infrastructure, the Federal contribution to wastewater costs has declined from more than 50 percent in the early 1970s to 30 percent in 1980 and only 5 percent today. Under these conditions, I would submit that some localities are unlikely ever to meet the Federal goals for ambient water quality in this Nation.

Part of the reason for this is that investments in wastewater systems pay substantial national dividends to all Americans. It is well documented that municipal wastewater treatment plants prevent billions of tons of pollutants each year from reaching America's rivers, lakes and coastlines. They help preserve our national treasures, such as the Chesapeake Bay here locally.

Clean water supports a $50-billion-a-year, water-based recreation industry, at least $300 billion in coastal tourism, $45 billion in annual commercial fishing and shellfishing and hundreds of billions of dollars a year in basic manufacturing that relies on clean water.

Simply stated, America's waters are what economists would call ″public goods,″ that is, clean water processes, wastewater treatment plants, result in cleaner, healthier waterways for all to enjoy. These benefits are available widely throughout our society—of course, to those who pay for them; we call them ″local ratepayers″—but they are also available to many others who don't pay directly for those services, those living downstream. A trust fund can help overcome those kinds of inequities.

The trust fund concept also makes a lot of sense when considering population trends. Wastewater treatment assets wear out and must be replaced. For many urban core cities whose populations have shifted to the outlying suburbs, the cost of replacing wastewater infrastructure can be unmanageable. In many cities, a doubling, a tripling, even a quadrupling in sewer rates would not be enough to meet the replacement needs of existing infrastructure because too few people remain within the boundaries of these cities to pay for these fixed assets which, of course, operate on a network basis. In many locations, those who still populate urban centers, of course, have lower incomes, than those who can afford to move to outlying areas. Serious questions of equity arise when local sewer fees alone have to increase dramatically to serve these populations.

Beyond that, having a common standard or level of service for clean water makes it easier for businesses and for labor to move from place to place without fear of cutting production because of local capacity shortfalls. It provides cultural benefits by helping to bind together people from across the Nation that know their waterways are safe and clean.

The value of similar public outcomes and the recognition that a trust fund can be an appropriate way to help deliver them have long been recognized in Federal infrastructure policy. Of course, this has been the case in other basic infrastructure system such as highways, airports and transit; and to finance these systems, Congress has established Federal trust funds.

The rationale is simple. These basic infrastructure systems underpin the U.S. economy broadly and their benefits accrue widely to users without geographic limitations. Moreover, these infrastructure systems have benefits that are felt only after all, or substantial portions of, these networks are complete and functional. Wastewater systems share these characteristics, and accordingly, an appropriately structured clean water trust fund makes good economic sense.

You mentioned that the national debate centers on the need—not always on the need for a trust fund, but how it can be funded. Looking at the past trust funds, three sorts of strategies have been applied as to who should pay. Typically, polluters are asked to pay, beneficiaries are asked to pay or the Nation as a whole has been asked to pay.

All three of these strategies can be applied to the clean water problem we face today, generating sufficient income to meet the funding gap while generating predictable revenue streams well into

the future so the trust fund recipients can rely on support over long periods of time consistent with their own long-term capital planning needs and also while minimizing economic and trade disruptions.

Using these criteria, I worked with the National Association of Clean Water Agencies to review a wide range of potential revenue sources, all Federal excise taxes to capitalize the new Federal clean water trust fund at a target level of $7 billion a year. We found that while all of these sources could raise that level of money, no single revenue source met all funding criteria uniformly, and so a combination of sources appears to be the most likely choice.

Finally and in conclusion, it will be important to remind ourselves that even with an enhanced Federal financing role made possible through a new trust fund, local sewer rates will still pay 86 percent of the cost to provide wastewater treatment nationwide. Not only will the clean water trust fund deliver important dollars to the neediest of communities, it will help ensure meaningful, long-term, Federal, State and local fiscal partnership and continue our record of gains made under the 1972 Clean Water Act.

Mr. DUNCAN. Thank you very much, Dr. Rubin.

Mr. Ciaccia.

Mr. CIACCIA. Good morning, Mr. Chairman, members of the committee. My name is Julius Ciaccia. I am director of utilities in Cleveland, Ohio. I am also chair of the Water Utility Council for the American Water Works Association, AWWA. I am here today on behalf of the AWWA.

The association's 4,800 utility members provide safe water to over 80 percent of American people, and we commend you for holding this hearing addressing infrastructure and other challenges facing community drinking water systems.

AWWA has long believed that utilities should be self-sustaining through their rates and other local charges. Today we remain committed to that principle. Having said that, we know that some water systems will require assistance as they make the transition from rates they now charge to rates that make the system locally sustainable.

Some communities face especially severe problems due to the large amounts of ″stranded assets″ resulting from significant population declines in the service territory. Federal requirements to remediate combined sewer overflows and other Federal mandates also exacerbate funding problems in many communities.

Both drinking water and waste water utilities face enormously expensive Federal mandates that set the context for all other funding issues. The drinking water community faces a complex array of expensive new Federal requirements and new standards, including standards for arsenic, radon, disinfection byproducts, enhanced surface water treatment, and others. Waste water utilities face an enormously expensive Federal mandate, such as those relating to combined sewer overflows and sanitary sewer overflows. For both water and waste water utilities, these particular Federal mandates significantly skew financing for all other investments, including replacement of aging pipes and other infrastructure.

Local ratepayers are often seriously challenged to pay for these CSO and SSO mandates, and little, if any, room is left in the rate-

payer's budget for other vital spending. In many cases it appears that mandatory spending for CSO and SSO mandates has driven out the ability to raise rates for routine infrastructure repair and replacement in both waste water and drinking water systems.

We believe that significant Federal assistance, including grants, is necessary and justified to help meet the cost of CSO and SSO mandates on water utilities. Support is also justified to help meet the cost of infrastructure repair and replacement that have been in many cases deferred because the Federal mandates have consumed the ratepayer's budget. We would point out that in the case of CSO and SSO mandates, Federal support for the cost of those requirements is also justified by downstream benefits, including lower costs for drinking water utilities downstream in the form of improved water quality. These investments provide direct positive benefits to the entire Nation.

AWWA does not believe Federal assistance should be prioritized to protect sources of drinking water first. Because the Federal budget deficit has been such a serious issue in Washington, it is likely that significant increases in Federal assistance may be possible only if new dedicated taxes can be developed. We need to consider several questions with respect to any funding proposal that dedicates new tax revenues to infrastructure investments.

Most important, as you said in your opening statement, what is the source of funds? AWWA is unalterably opposed to a Federal water tax in any form. Will new revenues really be spent on infrastructure, or will some be diverted to other programs? Will expensive new mandates be attached? What criteria will determine who gets assistance? What communities or States will pay more taxes than they get back? Finally, how can we best encourage utilities and local officials to start now on the important work of raising rates, rather than tempt them to wait for Federal grants to begin the work ahead?

AWWA deeply respects the work required to develop infrastructure funding legislation and will consider legislative proposals that address the Nation's drinking water needs. At this time, however, AWWA has not endorsed any infrastructure funding proposal, as one really hasn't been put forward as of yet.

As you are probably aware, our local governments pay over 97 percent of the cost of drinking water infrastructure. We believe that under any scenario, including new taxes, significant increases in Federal systems, local sources, local sources will continue to pay the large majority of the costs providing safe water and water infrastructure.

Recognizing that most of the job is and should be up to local government, AWWA is focusing significant effort and money on giving utility managers and local officials the tools they need to meet growing costs of water service and local resources. We have recently sent all AWWA members reports detailing ways to adjust rates without causing rate shock, and without undue hardship on low-income households, something we all need to be sensitive to.

Again, we thank you for holding this hearing concerning drinking water issues. AWWA stands ready to work with this committee to develop responsible and fair solutions to the challenges facing America's community water systems.

Thank you very much.

Mr. DUNCAN. Thank you very much, Mr. Ciaccia.

Ms. Neely.

Ms. NEELY. Thank you, Mr. Chairman, Ms. Johnson, and members of the subcommittee for the opportunity to come and discuss the creation of a Clean Water Trust Fund with you.

I am Susan Neely, the president and CEO of the American Beverage Association. We represent the nonalcoholic industry in this country, and have been doing so for about 85 years. Our member companies employ about 211,000 people around this country, many of whom work in your districts. We manufacture and market hundreds of brands, flavors and packages, including soft drinks, ready-to-drink teas, coffee, dairy-based products, fruit juice, fruit drinks, sports drinks. So suffice it to say that along with the American public, who have spoken through Dr. Luntz's poll, and the eloquent comments of the subcommittee members, we, too, see the conservation as vital to this country.

Perhaps surprisingly, though, because our industry products account for almost half of what America drinks, we account for only a tiny fraction of total water use. Of the more than 400 billion gallons withdrawn each year in the U.S., the beverage industry uses 3/100 of 1 percent, or about 1 gallon out of every 3,300 gallons withdrawn from ground or surface water sources. This is because we are engaged in continuous quality improvement to use state-of-the-art recycling practices. On average, it takes about a gallon and a half or 2 gallons of water to make one finished—1 gallon of a finished product.

Beyond the water that goes directly into the product, we use water on the production line, we use it to clean production equipment, in washing our fleets, and in everyday employee use in the plants. Just some examples of our conservation efforts, they include use of deionized air to rinse cans and bottles prior to filling, reclamation of backwash water from our sand and carbon filtration processes, and conversion to automated ″clean in place″ systems that employ a closed loop for water.

Over the past 6 months, there have been press reports outlining a proposal that would levy a Federal tax on beverages to generate revenue for the recreation of a Clean Water Trust Fund. And, of course, I am here today to say that levying a tax on packaged beverages is an inequitable and aggressive way to raise funds for environmental infrastructure, and I will give you three reasons as to why.

First, as I have said, targeting our industry and consumers of our products places the burden on only a very small share of water users. As I have stated, products made by our members consume less than 3/100 of 1 percent of water supplied by public systems, and placing such a large tax estimated variously at 5 cents per container to 7 percent of sales on so few users just isn't equitable.

Second, it is not clear from the press reports how such a tax would be administered, and I understand that is what the subcommittee is exploring as part of its deliberations on this, but, of course, it may be necessary to set up a whole new bureaucracy to collect this tax.

And third, a tax on beverages is a tax on food. Beverages are a staple in the family grocery cart, and we all know that food taxes are aggressive, placing the greatest burden on working families, the poor and elderly.

So let me close by saying that, as the Chairman said in his opening comments, we do believe this is a partnership. Our industry will do its part to support infrastructure needs, but many commercial and industrial establishments use water as input to their products. Just as beverage companies buy water as a factor of production, so, too, do circuit board manufacturers, paper companies and food processors. Our role is as one of many users that could pay higher rates that reflect infrastructure needs, not as the sole source of these funds.

Thank you, Mr. Chairman.

Mr. DUNCAN. Well, thank you very much, Ms. Neely, very fine testimony.

I want to thank all the witnesses for being here. You have made an outstanding panel. I am going to reserve my questions at this point so we can try and get to as many Members as possible, and since Mr. LaTourette has been here the whole time and didn't give an opening statement, I am going to yield to him for any statement or questions that he has at this time.

Mr. LATOURETTE. Thank you very much, Mr. Chairman. And it might have been my double was here the whole time, but I appreciate having the opportunity to go first.

I want to thank all the witnesses as well for your excellent testimony. I bet every Member—I was listening to—in my office to Mr. Pascrell's observation during his opening remarks. I think every member on this panel has probably been to a waste water treatment plant, every member on this panel probably has had a water main break for a sewer break in his or her district, and our experience in the industrialized Northeast is that there was a lot of free money in the 1970s when the Clean Water Act came in where grants would develop—the waste water treatment system in Cleveland, for instance, and it all dried up. And we keep making the rules on CSOs and SSOs, but we don't send any money down to the locals to take care of their infrastructure needs. And I happen to think that that is a—we are not doing our job here in Washington.

But all of you have hit, I think, on the central point. I am all in favor of a Clean Water Trust Fund, but I think each one of you in your own way—and I think, Ms. Neely, in your last one, in who is going to pay for it, I think I have heard from you that the beverage industry doesn't feel like paying for it. And so the question—I have a couple of questions, Dr. Rubin and Mr. Schenendorf, and also Dr. Luntz. And Mr. Luntz, as an aside, if I were going to wear one tie a year, I might have picked a different tie. But anyway.

If we have a Clean Water Trust Fund, and going back to Mr. Schenendorf's great history lesson, I think, on the Highway Trust Fund, and, Dr. Rubin, you talked about the fact that you have done some modeling, and I guess I would start with you. Do you have somewhere, within your organization or the coalitions that you are working with, a model on who is—is it going to be people who

drink water, people who bathe in water in Pennsylvania, people who flush water? How are we going to get at this?

And I think Ms. Neely makes a compelling point. If they are only using 3/100 of a percent of water, should we put it on the people that drink bottled water and other beverages? So do you have a model as to where this money is going to come from for a trust fund? Which I happen to think is a great idea, by the way.

Dr. RUBIN. That is a good question. We looked at very broadly using a series of criteria, normal criteria that one might use for these things, effectiveness, efficiency, equity, and manageable economic effects,trade effects, those sorts of things; and using those criteria as our guide to where money might come from and who should pay, we looked at a full range of things and do, in fact, have models looking at these right now. Let me just read them off to you to give you a sense of where we looked.

In fact, we did look at beverage taxes. We looked at taxes on water-based recreational products and services. We looked at taxes on industrial discharges to surface waters. We looked at taxes on what we call flushable products, things that are used in households and commercial establishments and flushed down the toilet. We looked at a clean water restoration tax, similar to the environmental income tax used in part to fund a Federal superfund, and we looked at taxes on agricultural chemicals.

So with each one of these product bases, we looked at whether or not—or what the effects would be if one wanted to raise $7 billion a year. So that is what our model is addressing.

Mr. LATOURETTE. And going back to the formation of the Highway Trust Fund, two observations. I think, Mr. Schenendorf, you talked about the wide opposition to the excise tax, the tire taxes and so many other things that happened in 1955. Are any of you aware of—and, Dr. Luntz, even to you in your observation that 80 percent have indicated that they would pay for clean water, has anyone identified a segment that is going to be a willing participant in the Clean Water Trust Fund, that, yes, please hand over—please tax us, or please impose a fee?

And then the second observation to you, Mr. Schenendorf, if we are successful in creating a Clean Water Trust Fund, I would hope you would agree that the genius today—and it has to do with Mr. Shuster's father and your work on the committee—is making sure that if we are going to ask people to pay more for clean water, that we wall it off and put up some firewalls so that we don't do goofy stuff and spend it on everything but clean water.

So, first of all, has anybody identified a willing segment of society that says we will pay?

Dr. LUNTZ. Well, we actually asked the question which of the following sources would you most strongly support. I can tell you who the public would say should clean it up. And they are obviously going to have constituencies here, the agricultural industry, because it uses the water, and the chemical manufacturers and the hygiene product manufacturers because it is perceived that they pollute the water. The public would say that these industries that are most involved and most benefit from the water should be the ones who are most responsible for paying for it, and those who are

shown to have polluted it should have the highest burden financially.

Mr. LATOURETTE. Mr. Schenendorf, what about the firewall issue; would that be a recommendation that you would make?

Mr. SCHENENDORF. Yes. In my written testimony I made it very clear the attributes that a Clean Water Trust Fund should have, and that would clearly be one of the attributes. It ought to either be separate from the unified budget as trust funds used to be, or if it is within the unified budget, that the funding be protected with a guaranteed funding mechanism similar to the one that was in TEA-21.

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

Mr. DUNCAN. Well, I think that is one of the most difficult questions. I don't represent an agricultural district, but the agricultural community is percentage wise very small, but they use, I am told, 35 or 40 percent of the water. And yet to tax them in any significant way would be very politically difficult, it seems to me. So that is a big question here.

Ms. Johnson.

Ms. JOHNSON OF TEXAS. Thank you, Mr. Chairman. Let me just comment on that. At least the farmers provide us with food, so we all share in that responsibility, I guess.

Dr. Luntz, I wanted to ask you, do you know Karl Rove?

Dr. LUNTZ. Yes, I do. And he doesn't resent the ties that I wear.

Ms. JOHNSON OF TEXAS. Well, I was just going to say I have known him over 20 years, and he doesn't care whether you have on a tie or not; he didn't wear any until he came here. But I want you to understand he makes sure he gets this report, because I think you have some very interesting observations here, and we need the White House's support in order to get a bill moving with the kind of money that we need.

I would like to ask you, Mr. Schenendorf, how do you think we can structure a fund that would create a fund for water?

Mr. SCHENENDORF. Well, I think there are a couple of important things in this. First is, it is obviously—at the starting point you have to look at almost everything. You have got to look at everything that is out there that might be used, and at the end of the day what you would be trying to come up with is a fair grouping of those different items to actually fund the trust fund.

In addition, one of the points that I didn't make in my oral testimony on the interstate history experience was that one of the things that was done in the interstate, as you got closer to 1956, is they identified where the routes were going. And, in fact, in 1955, they came out with the final book that really showed where the urban routes were going. And they really used that to sell the interstate program and really build support for it. And that is something that we tried to do in TEA-21, and I think it would be essential here that it be more than just a trust fund for clean and safe water; that you actually took the next step and said if you were able to get this kind of funding, what would this mean in local communities, what kinds of projects, and really ask local communities and States to identify the kinds of projects they would get, and then make that known to the Members.

I mean, that is part of building the support for this, of taking it down right to the grass roots and showing people if you make this investment of whatever amount, here is what you are going to get for it in real terms, and that that would be very, very helpful not only in building overall support, but in also dissipating some of the opposition to the sources of funding that you come up with.

Ms. JOHNSON OF TEXAS. You know, I heard Dr. Luntz indicate that 80 percent of the people said they are willing to pay for clean water, but I also heard other testimony where people were not that willing or were not able to take increases for clean water, and some of those were farmers and low-income people. And the farmers do use a substantial—probably a larger percentage by proportion than others in water in order to produce whatever they grow.

Obviously, all of—everything to do with water would probably be addressed through any clean water fund we put together. Every State is facing a crisis with infrastructure. And just today in the Dallas Morning News, the State of Texas was indicating that.

So it would seem to me that it might take a little while, but we need the money right quickly. The infrastructure is crumbling around the Nation because of its age.

I don't know how we get through and educate in order to move as rapidly as possible. I know that at home, whenever something happens with the water, our water and sewage system is owned by the city, and they add a little fee to it, and they call it user fee, just as tools. So I wonder if you have in mind, or if you could recommend some way we could reach this decision rather rapidly. You have had a lot of experience with this committee and probably could predict as well as what we could here the direction we should go in order to try to address these problems as quickly as possible.

Mr. SCHENENDORF. I think having hearings like this is obviously very helpful, but I am not sure this is going to be something that is going to be solved quickly. Even with the interstate system, it took a few years of studies, and it took a few years of trying. The basic funding concept was brought to the House and defeated by a 2-to-1 vote the year before. It took another year to turn things around.

So it is not going to be an easy process. I don't think anybody is going to come volunteer and say, tax me; but at the end of the day what people have to see is what you have done is fair, and if it is fair and they can see the benefits, then it is possible.

Ms. JOHNSON OF TEXAS. We are late getting started, so we can't let it take too long to get started because we are in the midst of the crisis now; but I agree that it might take a while.

We have not passed a clean water bill in about 5 years or so, so I think we do kind of slow down when it comes to something like that. But if there are ways of which you can suggest that we can get a jump-start, I would appreciate it.

And, Dr. Luntz, you could help us get a jump-start if you could get this report in the right hands. Thank you.

Mr. DUNCAN. Thank you very much, Ms. Johnson.

That is a pretty dramatic turnaround, Mr. Schenendorf, from one year to the next on something that major.

Mrs. Kelly.

Mrs. KELLY. Thank you, Mr. Chairman.

Dr. Rubin, I would like to know, when you talked about the various abilities, the thought processes you had on applying taxes in various areas, did you look also at what market dislocations might occur if a tax occurred on those particular items? For instance, what kind of market dislocation would occur if we taxed bottled water? What kind of market dislocation would occur on the other items that you mentioned, agriculture, chemical? Did you look at those?

Dr. RUBIN. Yes, we did. I would like to clarify, though, before I talk a little bit specifically directly to your question.

The amount of money that we are talking about raising and dedicating to at least water treatment is still a small proportion of the total amount of funding. So, again, as I said in my testimony, even if we were to raise on the order of $7 billion, we are still talking about increases in local sewer rates to pay for a lot of the other work that needs to get done. So we are talking about financing the top margin of work that is currently being deferred and that is creating a lot of water quality impairment and lack of service locally, things that end up in polluting beaches so they get closed, or not achieving the nitrogen standards in the Chesapeake Bay, for example. It is the top margin of things that make a lot of difference in delivering benefits to people. As Mr. Schenendorf suggested, linking the funding mechanism to the real benefits people get is probably the most critical thing to do to seek broad consensus about a funding source.

Now getting to your question. For each of the options we looked at, of course we looked at the extent to which, if that tax were applied, whether the increase in payments, if you will, would be absorbed by the producer, would be absorbed by the importer, would be passed forward in consumer prices and so forth. And, of course, these are imprecise estimates and calculations based on literature values of elasticities and a lot of economic mumbo-jumbo, but the fact of the matter is, as we looked at these effects, in almost every case two or three very broad-based options—and that tends to be the key is the broader the base, the lower the effects, the more willing individuals should be and will be to pay. As Ms. Neely pointed out, they are not against taxes on bottled beverages, they are against just taxes on bottled beverages. They would be willing to do their part, and that is really a telling comment.

So when you lower the tax rate and broadenthe base, you tend to spread those economic effects so broadly across the entire Nation that you match the receipt of benefits of clean water with those payments, and those sorts of dislocations tend to go away. But very specifically, we did look at imports as well as domestic productions to avoid trade locations, specifically.

Mrs. KELLY. I am thinking in terms of actual user—market user, dislocations that would occur in the agriculture business, for instance, if certain types of chemicals that are currently being used were taxed. The same with flushables. It is an interesting question, and I don't know that anybody has actually done any kind of a deep dive on this, and that was really where I was going with it.

Dr. RUBIN. Well, you are very perceptive. In the area of flushables, for example, the range of products is very broad. For some of those products a 1 or a 2 percent price increase would re-

sult in reduced demand for those products. People would use less. Those who were on the edge couldn't afford to pay the next dollar, would not pay that dollar, and demand would probably go down, production might probably go down, some jobs could be lost.

Again, the key is to minimize it. We minimize it. We looked at particularly two types of fees where we felt broadening the base would reduce those economic dislocations on the users. The corporate environmental income tax, again modeling the program very much like the third of the superfund financing sources, imposing a very small, 1/2 of 1 percent or so, environmental restoration fee, clean water restoration tax on corporations. In fact, it was only those that paid more than $2 million in A and T. So it further narrows the impact of large corporations. And combining that with the flushables tax broadens the base very nicely to avoid those dislocations that we are worried about.

Mrs. KELLY. Thank you.

Mr. DUNCAN. Well, thank you very much, Mrs. Kelly.

Mr. Pascrell.

Mr. PASCRELL. Thank you, Mr. Chairman.

Mr. Chairman, I know down the road we are going to be talking about bonding, possibilities of bonding in this, and I would like our panelists to respond to the issuing of bonds, dedicated money to these water problems that we have in the United States, and particularly the private activity bonds.

You know, we have had exemptions; we have had exemptions in areas such as recycling. And I am wondering, in terms of the solid waste landfills that we had problems with back in the early 1990s, if we had an exemption for waste water and water purification investment, do you see this as a possibility? And what are your thoughts about that?

And, Dr. Luntz, what do you think will help us get through to the administration as to the significance of this issue, and where we should be going?

So anybody who wants to take a crack at the first one in terms of the tax—in fact, the tax-exempting private activity bonds, what do you think about that?

Dr. RUBIN. I am happy to give you an opinion. It addresses part of the problem, and, of course, not all of the problem. The act of floating a bond is just capitalizing downstream payments today so you can build something today and pay for it over a long period of time. But no matter how you raise that capital, you still have to pay for it, users would still have to pay.

Mr. PASCRELL. Well, we do that in education and in housing.

Dr. RUBIN. But there are limitations in the marketplace attributable to private activity bonds and so forth, the State caps being one, and obviously the fact that waste water private activity bonds are not exempt, as are solid waste private activity bonds.

Mr. PASCRELL. Would you support that?

Dr. RUBIN. For those communities that otherwise could pay and they are facing a private activity bond cap, and they wouldn't mind using private activity bonds, that is a viable option. That is a capital formation solution, not a payment solution. But yes.

Mr. PASCRELL. What about you, Mr. Schenendorf?

Mr. SCHENENDORF. Just to analogize, in the transportation area I think things have evolved to the point where people are willing to take the money wherever they can get it. They realize they are going to need multiple sources of financing in order to address the serious problems that are out there. So it would seem as though, again, any source of funding that can help with the clean water issues ought to be on the table and might be part of a final package that Congress would be able to enact.

Mr. PASCRELL. Would you support the exempting of what we are considering here as we have done in other areas? The cap, that is. I mean, we have caps on what the towns and States can borrow; there are exemptions depending upon the danger and the significance. It would seem to me that we have a pretty significant health situation on our hands here. And I understand the urgency; I would hope that the bond community would also.

Mr. SCHENENDORF. I think if it turned out that the expert said that this would be something that would really help and would lead to investment, then it would sound like a good thing.

I do think if you go back to the interstate example, though, you did see there is a natural reluctance in bonding because ultimately you are paying part of that in interest. And ultimately what won the day on the interstate program was taking that money and making real investments with it so that you knew you were raising the taxes, it was a pay-as-you-go system, and the Members found that far more preferable than—

Mr. PASCRELL. I know the easy way out might be in some States to bond. In fact, in States meeting their own obligations in terms of leveraging, for instance, the gas tax. States don't like to use the term ″tax″ any more than we do. So there is room for camouflage here. And what we are trying to communicate out there is that we will bond it. And, of course, there has to be interest paid on that, we all understand, but maybe a combination of these things. And it is important that we have the willpower to do this one way or the other and not debate the process in—which buries the whole issue.

Dr. Luntz, what about my question to you?

Dr. LUNTZ. I was hoping you would have used up your 5 minutes.

Mr. PASCRELL. I have a little extra time, Dr. Luntz, anyway, so—

Dr. LUNTZ. Well, first off, don't yell at people who support you is the first thing I would say. Second is that it is an issue of priorities. If you are going to spend as much as you do on transportation, and you ask the American public where would you like this extra money to go, to a Safe and Clean Water Trust Fund or to another element of transportation, they would tell you, as I said earlier, overwhelmingly, spend it on the Clean Water Trust Fund. It is a matter of setting up the priorities, and, frankly, you are using public opinion as a weapon.

Mr. PASCRELL. But isn't the umbrella here, Dr. Luntz—let's get down to the nitty-gritty—isn't the umbrella let's make government smaller? I mean, this is what we get when we start to talk about priorities. When everything is a priority, nothing is a priority. We think that this is a priority, all of us up here. You think it is a priority. Your numbers seem to indicate the American people think it is a priority. So how do you communicate with an administration—

you know, I am trying to learn here—how do you communicate with an administration that has this umbrella up—of course, there is nothing between the spokes, but there is an umbrella up, and we are talking about smaller government, meanwhile we are making government humongous in other areas. But in the area of public health, we can't find room to provide the impetus, as was asked before by the Ranking Member; we can't find it. I mean, what are we missing? What aren't we doing to communicate that? I mean, this is a lovely poll that you have here. Tell us what is the next step.

Dr. LUNTZ. The next step is to work across the aisle. And I have heard comments that, Chairman, you have done—

Mr. PASCRELL. This committee is on record over 7 years working across the aisle. The committee is not the problem. I mean, we are a lot of problems here in the Congress, but this is not one of them. So now what do you do?

Dr. LUNTZ. In my experience, when you have numbers that are this overwhelming—and I have got a chart—you get 91 percent of Americans that agree that this is a smart approach, usually public opinion in the end wins out. Usually people will find a way to adjust the individual details to their own philosophy.

This is not about big or small governments, and this is not just about health; it is actually also about safety. This is not about today's generation; this transcends generations. This is not about a region, the Northeast in New Jersey or the West, for instance; this is everywhere across America. And this becomes an issue of personal health, personal safety today and tomorrow. It is not an issue of big government.

I don't always agree with those that I have helped in the past on specific issues. That is why I gladly did this bipartisan poll. But I will tell you that rather than complaining to those who don't seem to see the light, you will be more effective by trying to mobilize America, the people through these cameras right here, that they actually should call Washington, they should write their Representative and say on this thing—as a Republican, I believe this can be done.

Mr. PASCRELL. As a former mayor—and there is no one closer than the mayors of small towns and large towns to the major problems in this country, whether you are talking about homeland security, whether you are talking about better water, better air. Talk to those mayors out there.

You know, I think this is critical. I don't see us listening to the mayors. I don't really think we appreciate what they go through day in and day out, and any council members. And if we did, we would have responded in a much better fashion. We have all the answers here.

Thank you, Dr. Luntz.

Mr. DUNCAN. Thank you, Mr. Pascrell.

And I want to apologize; I was going to try and wait until the end, but I have to go to another meeting, and I am going to have to turn this hearing over to Dr. Boustany in just a moment. But I want to thank all of you for coming and being such good witnesses. This has been a fascinating panel.

But before I go, I do want to ask you a couple of questions. Mr. Ciaccia, my first client, when I first started practicing law, was the water district in Knoxville, Tennessee. And I have worked with your association. You have 57,000 members, it is a good association, I have worked with them. But you point out throughout your testimony you mentioned that your group came out with this report entitled Dawn of the Replacement Era: Reinvesting in Drinking Water Infrastructure. And at another point you said the Federal Government should renew its commitment to significant support for compliance with health protective standards, security, and the repair and replacing of aging infrastructure. All of us have talked about the needs, and there are great needs there. But then you are adamantly opposed to any kind of a tax, and so obviously the only thing then is just more, larger contributions from the general revenues of the government. Is that what you are advocating? Is that your only solution that you can think of?

Mr. CIACCIA. Mr. Chairman, we are not adamantly opposed to a tax. We, like Congressman LaTourette and others, are waiting to see who is going to come forward or how the tax is going to be applied. We do not, we do not, support a tax that is going to go on the water bill; that is what we are unalterably opposed to. We don't think that adding another line item onto the water bill or sewer bill is the way to accomplish it.

So we are here today to—you know, this is a beginning of a process, as we see it, to work with our partner sewage agencies to determine what is the best method. We certainly support more money going into—

Mr. DUNCAN. Well, if you don't want the users, though, to pay anything, where do you go?

Mr. CIACCIA. Well, the user—when we are talking—when I am talking about users, I am talking about the out ratepayers. And that is just it, where do you go?

Mr. DUNCAN. That is the big question, isn't it?

Mr. CIACCIA. Exactly.

Mr. DUNCAN. Ms. Neely, you have pointed out some problems, but I also assume that there would be sort of a bureaucratic administrative burden or some problems that would be created if you tried to go to a bottle tax; would there not?

Ms. NEELY. Yes, that is correct. And it is something we have experienced in States where there are bottle bills in place, that it is a substantial bureaucracy that needs to be put in place to be able to administer the tax. So that would have to be factored in.

Mr. DUNCAN. Dr. Luntz, let me go back to you for just a moment. You heard me mention the agriculture industry a few moments ago, and certainly even if you don't represent agricultural districts as Ms. Johnson said, it is very, very important. The staff told me that the agricultural use has taken roughly 35 or 40 percent of our water in one form or another. How do we politically structure something that—this? I mean, all of us agree that the needs are there. Anybody who even looks at the surface of this knows that there are great needs.

Mr. Schenendorf, are there are any comments that you have about that. How can we do that? You say, well, the political support is there with the 91 percent, and you think that the actions

follow the political support. And if that is the case, and I probably would agree with you on that, how do we go about? What needs to be done in the most politically acceptable way? You are an expert on this. Tell us how you do it.

Dr. LUNTZ. But I am used to imparting my political advice not in public, and only for that side of the aisle; so this is very strange for me.

The answer is that everyone benefits, and therefore everyone should invest. You are trying to find a specific tax, a specific industry, a specific way to make this easier. The public would say that whatever you do to a river or stream up in Minnesota is going to affect what happens when that stream goes to Louisiana; that if something bad happens—and I have spent 4 years in Philadelphia—it is going to affect the people of Delaware, because there are no borders, because there are no boundaries. I will tell you that this could be an issue in the 2008 Presidential campaign if you decided that you wanted to run.

Mr. DUNCAN. There is no danger of that, I can assure you.

Dr. LUNTZ. And that this becomes—if you ask the American people, and you gave them things like education, health care, tax policy, even national security, the ability to have a clean glass of water is going to be one of the top one or two. And they will gladly—in fact, they would look at the C-SPAN stuff and they would say, what are they waiting for; just do it.

And that is how this message gets delivered. It is not by Democrats or Republicans, and it is not by political advantage, it is by someone holding up a glass of water and saying, I don't want to see anything else in this except for water.

Mr. DUNCAN. Okay. Thank you.

Mr. Schenendorf.

Mr. SCHENENDORF. What I would add to this is that at the end of the day you are going to come up with basically an array of interest groups that are going to have to pay into this trust fund. It is not going to be just one group. And the challenge at that point for each of the individual stakeholders who will be paying in is to show them that the trust fund isn't being financed on their backs, that they are just paying a fair share, and at the same time showing them the benefits and translating the benefits down to really what it will mean for that industry if you are able to achieve these investments, to then let them weigh as to whether or not this is a fair and reasonable approach.

And, you know, I think at the end of the daythat works. Nobody is going to volunteer to come up, and as long as they think it might be financed on their backs, they are going to be opposed; but at the end of the day, if you come up with something that is fair and equitable, then I think it is achievable.

Mr. DUNCAN. All right. Thank you very much.

Ms. Schwartz.

Ms. SCHWARTZ. I was going to ask a different question, that there is broad agreement that the American public expects us to take especially for clean and safe water. This is drinking water. People relate to that, and so we should do that.

There are going to be some interesting questions about how we use this trust fund. We are going to have to figure out how to pay for it. Obviously we have been discussing that.

But I was wondering if you could comment on the big differences here or the options that we have, the infrastructure we have been talking about. And there are also the security needs. And maybe you want to comment on this for the Water Works Association and just give some comment about how you would see the money being spent from the trust fund. Do you see that that principally has to go into the aging and building infrastructure, or on the Federal level do we have a greater responsibility on some of the security needs that are facing our water systems across the—well, certainly we don't want to see a disaster happen. Talk about galvanizing the public opinion, all you need is one water system be tainted in either a small or large city, it doesn't really matter where it happens, and the fear of the American public would be just tremendous and require a very rapid response on our part. We would, I think, many of us, like to see—prevent that from happening. And could you comment on whether the security issues between a Federal funding trust fund would trump infrastructure, or how you would see it being divided?

Mr. CIACCIA. Thank you, Mr. Chairman.

Well, speaking of Cleveland, we are spending—we plan on spending about $15 million on increased security in our system. That project is under way. And I know through my involvement through this association here that there are many other water utilities that are doing likewise. But it is—we are still trying to get our arms around exactly what type of—what is the standards that utilities should be looking at in the way of security.

So security is a big issue. It was an unexpected issue that has hit all of our capital improvement programs. And I would certainly think that, you know, this particular program here would be integral in addressing those issues, too. But I really can't give you a real good answer on it at this point in time because we are still working with the EPA and the Homeland Security to try to get our arms around the whole entire security issue.

Ms. SCHWARTZ. Do you think it would be important for us, once we have a trust fund, to establish those kinds of standards, expectations, and so to learn from what is being done out there now so that—one of the things the American people are also saying is let's be smart about how we do the security; let's just not throw barriers without really understanding whether that is the best way to spend the dollar. Let's learn from experience of some of the different water systems already doing some of this, what does work, what is the most cost-effective as well, so that we will learn from the experience.

But do you think that the system itself should set up standards for how the money would be invested in securityrelated to infrastructure?

Mr. CIACCIA. Well, Mr. Chairman, I think that is one of the concerns that we have as we continue to go through this process, not just for security, but for all the spending, what are the standards going to be for ultimately doling out the money here.

But as far as security goes, we are, as an association, and the other water associations are continuing to work very hard with the United States EPA and the Homeland Security, and we have formed the Water Sector Security Council, and we are working through those issues now. So I can't give you a really good answer on it at this point in time.

Ms. SCHWARTZ. Well, I look forward to—if we get to the point of having to worry about how to spend the money, we are in a good place. But it is really a serious issue, making sure that once we do this, we do spend that money effectively and appropriately to ensure safe as well as clean water for the American public.

Thank you, Mr. Chairman.

Mr. BOUSTANY. [presiding.] The Chair now recognizes Mr. Miller.

Mr. MILLER. Dr. Luntz, I like to see how those questions were asked because that is really unfair, because in California we had a recent Governor, Gray Davis, that realized that people really get angry when you apply taxes to them, when they raised the fees on licensing your cars.

But the phrase that has been said over and over, fair and equitable way of applying a tax, and yet I don't know which one it was talking about, that they would not like to see a tax on water bills or a tax on your sewer bill. And I am thinking every time I get my water bill in California, about 80 percent of the water to begin with goes to agriculture use. Residential gets a little over 5 percent in California. That is all we get.

The first base is at a reasonable rate, and then the next level they can put a surcharge, and then above that is another surcharge, and above that is another surcharge. By the time I get my tax bill, I have a sewer fee, then I have a storm drain fee.

So if we are going to try to create a fair and equitable way of applying a tax, it doesn't seem fair to go to this company who pays to clean their water and has to go out and compete in the marketplace and tell them we are going to tax them, but everybody who turns on a spicket in this country who might be—everybody drinks water. If you apply it, not everybody can afford bottled water, but everybody drinks water that they get from their tap. So what type of fair, equitable way would you apply a tax or fee on people that would not be applied to their water bill or sewer bill? And anybody can answer that. That is the problem: Nobody wants to answer that.

And I agree with you, because if it is fair and equitable—we can tax the rich, I mean, they can afford it. I guess we can go to one group out there, and that seems to be the one group we like to go to when tax increases. But if you are going to be fair and equitable, and you are going to say we need to make sure this water is safe, why wouldn't you apply it to everybody, because everybody drinks water? So if you go and you want to apply it to somebody who might buy a chemical, or somebody who produces that chemical, or somebody who produces bottled water, or somebody who produces a fertilizer, you go to businesses again and you place an additional burden on business. If clean water is the issue, why aren't we charging it to the people who use it? If it is farmers who use 80 percent of it, well, that cost goes out to the people who eat food.

And we all eat food last time I checked—some are even vegetarians more than others.

But what way is fair and equitable in something like water? You can't go and say it is like a telephone. When we originally started the telephone tax, it was a tax on the rich because only about 1,900 people had telephones, so we are now paying a luxury tax on telephones. Or gas tax; well, that makes sense because people use the highways, so if they are paying a gas tax, they are using the highway more than somebody who wouldn't use the highways much because they are not using gas. So if we are going to be fair and equitable, that is fair; and equitable, when that toilet flushes, that is equitable. So give me a fair and more equitable way than those to provide clean water.

Mr. SCHENENDORF. I think you have made a very valid point, and I think that this is similar to the debate that took place over the gas tax in the 1950s. The States were basically saying the Federal Government shouldn't tax gasoline because they really wanted to reserve it to the States.

Mr. MILLER. Don't like it, but it is a user fee.

Mr. SCHENENDORF. But the Federal Government, ultimately they didn't listen to that, and they did impose a Federal gas tax, and now the States and Federal Government both tax gasoline, and the system works fine.

Mr. MILLER. But you are in agreement with me on saying when you fill up your gas tank, you know you are going to take that car and drive it on the street. And if you are using it for other purposes, then they eliminate the tax if you are not using it to be consumed on the roads and highways. There is no doubt what that water is used for, you drink it; or if you want to waste it and pay a huge bill like I do, you water your plants with it. I wish I had an option, but my plants die in California if I don't water them, so I pay a surplus to be able to water those plants.

But if you look at some of the trust funds we have in the Federal Government right now, many are problematic. And if you want TEA-LU, you know how problematic they are. Many times it is trouble getting the appropriators to appropriate the money.

Formula allocations. I can't wait until you try to determine the formula allocations because—are you going to be punished if you do a good job cleaning your water locally, and you don't get Federal funds, to somebody who doesn't clean it, they get more Federal funds? And fund management, that has got to be huge. And then we are back to this—the main issue is where are you going to get the money for the trust fund?

So I agree with you on the water. I am shocked on the numbers because, Dr. Luntz, I get 700 letters every week, and I get probably about 10,000 hits on my Website a month. Nobody is talking about water except when it is not available. So I am trying to see how do we get there.

Fair and equitable, I understand fair and equitable. I would like to have somebody define fair and equitable rather than going to some business in the private sector and say we are going to burden them with it. I will be honest, burdening a water company who sells bottled water when bottled water costs more than gasoline right now—when you go out and buy it in the 7-Eleven or some-

thing, it is more expensive than gasoline, which doesn't make sense at all. So now we are going to place a greater burden, which puts them at a disadvantage to the public water agencies because now they have to charge $1.20 a bottle of water instead of getting it supposedly free over tap.

So I know my time has run out, but if you can think of a way that is fair and equitable, would you please send me a letter?

Thank you very much. I yield back.

Mr. DUNCAN. Mr. Shuster.

Mr. SHUSTER. Thank you, Mr. Chairman.

I am going to follow along the same line of questioning as Mr. Miller because that is the question I have. How do we come up with a system that is fair and equitable? In the end—I mean, we can tax the water company, we can tax everybody, but in the end the consumer pays the tax. When I go divide this bottled water, if the water company is taxed, it is going to be in the price of that.

So I guess the question is, do we be up front about it and say, okay, I think, as Mr. Miller was saying, fair and equitable was the end user has to pay that tax, whether it is on food or it is on bottled water or it is on whatever we are using it for, and not put it on the business because the business is going to pass it along to the end user.

First question I have, though, is in your polling, Dr. Luntz—and I might add that Mr. LaTourette rents a born again tieware, he went to Italy and got some new ties, so I was shocked when he mentioned your tie. So I just wanted to point that out to you—he is not here to hear that, but I just wanted you to know for future reference.

Your polling says 80, 90 percent of Americans support—I am not sure if I heard you say this, and I wish you would point it out. Do they believe it is something that we should pay for, fund? They want clean water; are they willing to pay the price? Are they willing to pay the user fee?

Dr. LUNTZ. They are absolutely, positively, without a doubt, unequivocally willing to pay a price for it. They want it fair and equitable. But when it comes to something that is so basic, so fundamental, so at the core of our day-to-day life, they will pay for it.

I should have responded to Congressman Miller, but I will respond to you. They will appreciate you debating the fund source to try and do it in the most fair way possible, but in the end, if they were to learn how old some of that infrastructure was, if they were to learn—and many of them in the cities—for Congresswoman Schwartz, I know Philadelphia, and I know how upset people were about the quality of the drinking water there, they don't want to put this off another day, another week, another month, and they will open up their wallets and their pocketbooks to pay for it. Just get it done.

Just get it done.

Mr. SHUSTER. So on that bill they get every month from the water company, if it is 1 percent, 2 percent, whatever the tax is, they are willing to do that?

Dr. LUNTZ. They are willing to do it if they know it is going to get done. I mean, I am now trying to show you their frustration. Their attitude is Nike, just do it.

Mr. SHUSTER. When I hear those numbers in my district, which is a conservative district, fiscally conservative, I have seen township supervisors lose races because they put in a system, raise rates from $30 to $45; they lose races because of that. So when I am out there, it is almost a disconnect. To me, I can't understand at times why somebody is willing to pay $100 to get cable but aren't willing to go from 35 to $45 to get clean water and take care of the waste.

Dr. LUNTZ. I will give you the statistic. If you learn your Congressman voted for the creation of a Federal trust fund that would guarantee annual funding for clean and safe water, how would it impact your vote? Among Democrats, 86 percent more likely to vote for that individual; only 5 percent less likely. Among independents, 79 percent to 10 more likely. Among Republicans, supposedly antitax, antigovernment party, 71 to 18 more likely to vote for that individual if you get the job done. They are not saying go ahead raise my taxes or increase the Federal bureaucracy, they are saying you create that funding and do what it is meant to do and we will pay for it and we will vote for it.

Mr. CIACCIA. Mr. Chairman, this is exactly how our members predicted that this debate would take place; that in the end, it would come into what is equitable and the discussion would start centering around, well, just put it on the water bill. And that is fine.

And with all due respect to Dr. Luntz, as long as I am getting at least 100 percent of my investment on that water bill back—but we know that can't happen because Cleveland has much greater needs than Anaheim, California. And so that is not going to happen. And so I am not so sure they are going to be willing to pay that extra dollar on that water bill if they are only going to get $0.75 back.

This is exactly what our members anticipated would—how the debate would go down. And so we just think if it comes to that, we might as well continue to deal with it locally. On the water side, drinking water side, we never had big Federal programs, so we have been doing this on a rate increase basis. But we are going into a different realm here now, and that is the basis of our concerns.

Mr. SHUSTER. I understand that concern. That is the real tricky part about this. Where I come from, our water flows right into the Susquehanna which feeds the Chesapeake. We are getting regulations from the EPA and our State DEP and it is causing a tremendous burden. Just like the interstate highway system. I know Congressman Miller's concern, because California doesn't get the return that Pennsylvania does, if you like, at interstate travel. Same with the water. It starts in Pennsylvania or starts in Minnesota and flows down. We are going to have a greater expense to keep it clean to the end user, and that is in Minneapolis or Philadelphia. So that has to be balanced out, and people don't like to hear that, but that is the reality of it.

If you could quickly—each of you represent an industry—quickly and succinctly, if it is possible, what would your industry see as a tax, a broad end-user fee, or a combination, weighted one way or the other?

Mr. SCHENENDORF. It would be a combination of things. Again, just like a broad gas tax, but there are taxes on trucks and the like. And in the highway trust fund, it is a broad base.

Mr. SHUSTER. Do you have another comment on that issue I was talking about?

Mr. SCHENENDORF. It is not all or nothing. If there is a tax on the water user, there would likely still be other taxes like the truck taxes that are in the highway trust fund that would supplement it.

Dr. RUBIN. Same answer. And it addresses the main question that you and Mr. Miller have been raising, which is what is a user? And in the case of the highway trust fund, it is very simple. If you want to use the highways, you have to buy gas.

It is not that simple in our case. And you characterized the users as those who drink water. That is only one kind of user. People who have recreational boats, they are users. People who go to the beach, they are users. Environmentalists who believe in supporting wildlife, they are users. So a very broad base of broadly defined users encompassing all of that.

Mr. SHUSTER. Not just people who drink water. If you use water in any way, you have to bear some responsibility.

Dr. RUBIN. They will benefit by the fact that it is cleaner.

Mr. CIACCIA. I would echo with Dr. Rubin. As far as the water utility bills themselves on the drinking water side, we think we can continue to invest through our local water rates; CSOs, SSOs on the sewer side being a much different situation. That is what has got us all here today.

Ms. NEELY. I think we are all liking Dr. Rubin's appraisal of a broad base of responsibility. We just want things to be applied equitably. We have statistics that say the agriculture and thermoelectric power production account for about 82 percent of the total withdrawals and paper and semiconductors or other large-scale industrial users. So again, broad base of responsibility.

Mr. SHUSTER. I appreciate all of your answers. It sounds like we have some consensus here already. I not only think that this is important. As Dr. Luntz's polls point out, in the future, 20, 30, 40, maybe not in my lifetime, water is going to be more valuable than oil. If we don't start looking at it today and figure out how to do this, we are going to be fighting over water. And we see what is happening in the southwest and they don't have enough water. At any rate, I appreciate all your answers. And thanks for being here today.

Mr. BOUSTANY. [Presiding.] Dr. Luntz, I have a quick question for you. In your polling, did you see any differences when you broke out urban versus suburban versus rural respondents?

Dr. LUNTZ. The biggest difference is partisan. There is some difference. The difference is that you have 90 percent of Democrats supporting these various principles. Low 80s among independents, mid to upper 70s among Republicans. There are some differences between States and regions, but not very significant. It is more of an ideological attitude than a regional attitude.

Mr. BOUSTANY. Certainly from the health standpoint—and I was wondering if any of the panels could share examples or studies that linked public health problems with inadequate water supplies in this country.

Dr. RUBIN. Not so much inadequate water supplies, but what comes to mind is inadequate wastewater management. Just look to any beach closing and our own closest beaches here, Bethany Beach or Ocean City. Last summer those beaches were closed for periods of time after heavy rains. That is due to runoff and inadequate CSOs, combined sewer overflows. The incidents in New Jersey 10 years ago with medical waste washing up, combined sewer overflows in Chicago. They are in the papers every day. There is a very clear relationship.

Mr. BOUSTANY. Thank you. Are any of you aware of any public awareness campaigns that have been waged locally or on a State level that have raised these issues? Obviously, I think one of the problems is that the general public really doesn't have a high level of awareness of many of the issues facing rural communities and some of the other older water structures in some of the cities. Are you aware of any public awareness programs that have been launched?

Mr. CIACCIA. Mr. Chairman, we have been educating our own utility managers, I couldn't give you any answers as to any broad-based public awareness programs at this time.

Mr. BOUSTANY. Seems we will have to start on that front as well.

I want to thank all of you on behalf of the subcommittee for sharing your testimony with us. We appreciate it and we look forward to working with you into the future as we try to solve some of these critical needs. Thank you.

We now stand adjourned.

[Whereupon, at 12:05 p.m., the subcommittee was adjourned.]

OPENING STATEMENT OF
THE HONORABLE JERRY F. COSTELLO
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
HEARING ON FINANCING WATER INFRASTRUCTURE PROJECTS
WEDNESDAY, JUNE 8, 2005

Thank you, Mr. Chairman, for scheduling today's hearing on financing water infrastructure needs. The protection and the improvement of water quality are among the greatest responsibilities of this Subcommittee, and at the heart of fulfilling these responsibilities is ensuring that our Nation's water infrastructure is adequate to meet the task.

The Clean Water Act is widely viewed as the Nation's most successful environmental law. This has occurred because of the critical partnerships that have developed and because of the willingness of the federal government to join with communities in financing critical wastewater treatment and conveyance systems. The common goals of environmental protection and protecting public health have kept us working together.

Various organizations have testified before this Subcommittee with estimates of current and future needs for wastewater infrastructure. Organizations and governmental agencies, such as the Water Infrastructure Network, the Congressional Budget Office, and the Environmental Protection Agency estimate a shortfall of between $300 to $450 billion over the next 20 years for necessary wastewater infrastructure improvements, with an annual funding gap of between $10 and $13 billion over current expenditures.

This Subcommittee and the House of Representatives have considered financing water infrastructure legislation in the past but have not been able to get legislation to the President for signature.

I am glad that this Subcommittee is again ready to examine legislation to reauthorize and expand the federal commitment towards meeting our Nation's water infrastructure needs.

I look forward to working with Chairman Duncan and Ranking Member Johnson to ensure that this Congress does not adjourn without passage of this important legislation, not only to fund existing needs, but to make real improvements towards meeting our Nation's water quality goals, as well.

I welcome today's witnesses, and look forward to your testimony.

American Water Works Association
The Authoritative Resource for Safe Drinking Water SM

**AMERICAN WATER WORKS ASSOCIATION**
**BEFORE THE**
**WATER RESOURCES AND THE ENVIRONMENT SUBCOMMITTEE**
**COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE**
**U. S. HOUSE OF REPRESENTATIVES**

**STATEMENT ON**

**FINANCING WATER INFRASTRUCTURE PROJECTS**

**JUNE 8, 2005**

**PRESENTED BY**
**JULIUS CIACCIA, DIRECTOR**
**CLEVELAND DIVISION OF WATER**
**CLEVELAND, OHIO**

## INTRODUCTION

Good morning Mr. Chairman. I am Julius Ciaccia, Director of Utilities for the City of Cleveland, Ohio. The Cleveland Division of Water provides drinking water to over 1.5 million customers in the Cleveland area. I am also the Chair of the American Water Works Association Water Utility Council and am here today on behalf of AWWA.

Founded in 1881, AWWA is the world's largest and oldest scientific and educational association representing drinking water supply professionals. The association's 57,000 members are comprised of administrators, utility operators, professional engineers, contractors, manufacturers, scientists, professors and health professionals. The association's membership includes over 4,800 utilities that provide over 80 percent of the nation's drinking water. AWWA and its members are dedicated to providing safe, reliable drinking water to the American people.

AWWA utility members are regulated under the Safe Drinking Water Act (SDWA) and other statutes. AWWA believes few environmental activities are more important to the health of this country than assuring the protection of water supply sources, and the treatment, distribution and consumption of a safe, healthful and adequate supply of drinking water.

AWWA and its members commend you for holding this hearing to address the growing infrastructure needs for financing water infrastructure projects in the coming years. In previous testimony before this Subcommittee and in our report entitled Dawn of the Replacement Era: Reinvesting in Drinking Water Infrastructure, published in May 2001, AWWA called for a new partnership for investing in drinking water infrastructure. AWWA recommended changing and expanding the existing Drinking Water State Revolving Fund to significantly increase federal funding for projects to repair, replace, or rehabilitate drinking water infrastructure to include the aging distribution pipes. We provided a copy of this report for the subcommittee at the hearing in April 2004. Although the Safe Drinking Water Act(SDWA) and the Drinking Water State Revolving Fund (DWSRF) are under the jurisdiction of another committee of the U.S. House of Representatives, we believe that the some aspects of the DWSRF may be useful for the subcommittee to consider in its deliberation of Clean Water State Revolving Fund (CWSRF) reforms. We also believe that Clean Water Act programs benefit drinking water utilities. In addition to providing cleaner sources of drinking water, Federal assistance to waste water infrastructure also can help drinking water utilities by freeing up local rate payer dollars that would have gone to fund federal wastewater mandates and thus enable drinking water utilities to adjust their rates to meet drinking water infrastructure needs.

## THE INFRASTRUCTURE CHALLENGE

The May 2001 AWWA study was an analysis of twenty utilities. The study found that all twenty will need to increase spending on infrastructure repair and replacement over the next several decades, not because they have underinvested in the past, but because infrastructure laid down over a 60-80 year period will approach the end of useful economic life in a more compressed timeframe. All systems studied could meet this need for additional spending by increasing water bills between $1 and $6 per month if they begin now, with steeper increases required if they delay. EPA has estimated that the nationwide "funding gap" can be eliminated by raising water and wastewater bills by three percent annually in real terms. For most utilities, that represents a challenge, but not a crisis.

Having said that, we know that some utilities are far more challenged than the average, by expensive federal mandates such as Combined Sewer Overflow controls; by population declines and resulting stranded assets; by the costs of meeting new standards or security enhancements; or by economic hardship in the community. AWWA supports a significant increase in federal support for water and wastewater infrastructure to help these communities. We believe that CSO mandates justify federal grants. Other communities needing assistance should find it in the form of low or no interest loans or combinations of such loans and grants, through a mechanism such as the State Revolving Fund (SRF).

An overarching principle for AWWA is our belief that the public is best served by utilities that are self-sustaining through their rates and other local charges. Water utilities should receive sufficient revenues from water service, user charges, and capital charges, such as system development charges, to enable them to finance all operating and maintenance expenses and all capital costs, including the cost of repairing and replacing infrastructure. This suggests that federal assistance should be a "helping hand" to utilities facing special challenges, and not a permanent part of utility financing.

## ASSISTANCE FOR COMMUNITY WATER SYSTEMS

Notwithstanding AWWA's commitment to full cost recovery through rates, some water systems will require assistance from time to time to smooth out large and unavoidable "humps" in their capital investment plans. The problems posed by such humps are especially severe in systems with large amounts of stranded assets resulting from significant population declines in their service territory or large federal mandates for investment to remediate combined sewer overflow (CSO) problems.

The federal government should renew its commitment to significant support for compliance with health-protective standards, security, and the repair and replacement of aging infrastructure. AWWA recommends the following for federal assistance for drinking water utilities:

1. The United States provide assistance to community water systems in the form of very low or no-interest loans with a 30-to-40 year repayment period. The federal government, or the states if the program is administered through them, should also have clear authority to make grants, or grants and loans in any combination, including negative-interest loans, and to use other financing tools to leverage public and private capital.

2. Congress clarify that projects to meet standards; repair, replace, or rehabilitate drinking water infrastructure; and to address security needs are eligible for assistance.

3. All community water systems be eligible for assistance, regardless of size or type of ownership.

4. Repayment terms and conditions be reasonable. They may include demonstrations of system viability and ability to repay a loan.

5. The application process and other procedures for those wishing to access these funds be streamlined and minimized.

6. There be a designated allocation in the program for large systems similar to the one in current law for small systems (15 percent), unless there are insufficient projects to use earmarked funds in a given year.

7. Funds be available and encouragement given for voluntary consolidation among water systems where such consolidation is practical and cost-effective.

8. At least $15 billion over the next five years be provided in federal assistance to community water systems for the purposes described above.

While these recommendations are specific for drinking water funding, the subcommittee may find some of them useful for changes to the Clean Water Act. Specifically, the DWRSF permits a form of grants that that are not permitted in the CWSRF.

## FEDERAL MANDATES AND THE CONTEXT FOR DRINKING WATER AND WASTEWATER INFRSTRUCTURE FUNDING ISSUES

Both drinking water and wastewater utilities face enormously expensive federal mandates that set the context for all other funding issues. The drinking water community faces a complex array of expensive new federal requirements and new standards, including standards for arsenic, radon, disinfection byproducts, enhanced surface water treatment, and others. Wastewater utilities also face enormously expensive federal mandates, such as those relating to Combined Sewer Overflows (CSO) and Sanitary Sewer Overflows (SSO). For both water and wastewater utilities, these needs significantly skew financing for other investments, including the replacement of aging pipes, appurtenances, and other infrastructure. Local ratepayers are often seriously challenged to pay for these mandates, and little, if any, room is left in the ratepayer's budget for other vital spending. In many cases, it appears that mandatory spending for clean water mandates has "driven out" the ability to raise rates for routine repair and replacement for both wastewater and drinking water.

We believe that significant federal assistance, including grants, is necessary and justified to help meet the cost of these very expensive federal mandates on water and wastewater utilities, and to meet the costs of infrastructure repair and replacement that have been, in many cases, deferred because federal mandates have consumed the ratepayer's budget.

We would point out that, in the case of CSO and SSO mandates, federal support for the cost of those requirements is not only justified in the community receiving federal support, it also lowers costs for drinking water utilities downstream in the form of improved water quality. This is especially true in critical source water protection areas. These investments are beyond the means of many communities to reasonably finance without assistance and provide direct positive benefits to the entire nation. AWWA believes that federal assistance should be prioritized to protect sources of drinking water first.

## MEASURES BY UTILITIES

Drinking water utilities currently provide more than 96 percent of all spending on drinking water infrastructure, and local sources will continue to provide a large majority of funds for such infrastructure investment. To address the challenge of local funding, AWWA recommends that:

A. Utilities examine their rate structures and strive to be fully self-sustaining through rates and other local sources of revenue. This should include on-going efforts to assess the condition of system infrastructure through sound management tools such as asset management programs, and budgeting for repair and replacement as necessary to maintain service standards over the long run.

B. Utilities be sensitive to the needs of their low-income water customers, and consider sponsoring, promoting, or adopting programs that help such customers pay for the water they need.

## DRINKING WATER SECURITY NEEDS

The al Qaeda terrorist network and others are known to have conducted research on drinking water systems in the United States and abroad. If the intent is to create terror in our society, water systems serving large, medium, and small communities could all be targets of opportunity for terrorists, not only to contaminate the water supply, but also to deny first responders water for fire protection in a coordinated terrorist attack.

Congress required drinking water utilities to conduct "vulnerability assessments" and to take a harder look at emergency response plans. These assessments identified areas where utilities need to add new security features and other safeguards against malevolent possible attack. Security needs will manifest themselves in different ways in different utilities. Some utilities may require additional and better fencing. Some may need to upgrade entrance access points for personnel and supply vehicles. Others may have to harden existing pump buildings, chemical storage buildings, and transmission mains, or add redundant infrastructure. And some may actually have to relocate facilities, including pipelines and distribution mains. The response to these concerns will be highly local, and it will be expensive. But without question, it will enhance the security of the American drinking water supply.

Cognizant of the many needs facing drinking water utilities, AWWA did an analysis to estimate the costs to undertake the immediate next steps in water system security: The cost of upgrading systems to ensure secure control of access to critical utility assets in community water systems subject to the Bioterrorism Act is approximately $1.6 billion. This does not include the capital costs of upgrades to address vulnerabilities identified in vulnerability assessments such as hardening pumping stations, chemical storage buildings, transmission mains, adding redundant infrastructure or relocating facilities and pipelines. Thousands of community water systems must make such investments to close vulnerabilities identified in the assessments done under the Bioterrorism Act. Nationwide, these needs undoubtedly total billions of dollars, and can be considered the cost of a secure water supply. Because homeland security is primarily a federal responsibility and the security needs are so large that they would swamp utility finances and funds through existing programs, Congress should consider providing water security improvement grants.

## POLICY CONSIDERATIONS

Because the federal budget deficit has become such a serious political issue in Washington, it is likely that significant increases in federal assistance may be possible only if new, dedicated taxes can be developed. We need to consider several questions with respect to any funding proposal that dedicates new tax revenues to infrastructure investments. Most important, what is the source of funds? AWWA is unalterably opposed to a federal water tax in any form. Will new revenues really be spent on infrastructure, or will some be diverted to other programs and used to reduce the federal deficit? Will expensive new mandates be attached to the infrastructure funding legislation, raising project costs and negating the advantages of the assistance offered? What criteria will determine who gets assistance? Which communities or states will pay more in taxes than they get back, and who will subsidize whom? How much should we look to Washington to address local problems? How much will still need to be done locally, even if there is a new federal program? Finally, how can we best encourage utilities and local officials to start now on the important work at hand?

AWWA deeply respects the work required to develop infrastructure funding legislation and will consider legislative proposals to that address the Nation's drinking water needs. At this time, however, AWWA has not endorsed any infrastructure funding proposal.

## AWWA ACTIVITIES

As you are probably aware, local governments currently pay over 97 percent of the costs of drinking water infrastructure. We believe that under any scenario, including new taxes and significant increases in federal assistance, local sources will continue to pay a large majority of the costs of providing safe water, and of water infrastructure.

Recognizing that most of the job is and should be up to local government, AWWA is focusing significant effort and resources towards giving utility managers and local officials the tools they need to meet the growing costs of water service with local resources:

- Last year we sent to all AWWA utility members a copy of our report "Avoiding Rate Shock: Making the Case for Water Rates."
- We recently sent to all AWWA utility members a new report entitled "Thinking Outside the Bill" about ways to assist low-income customers when water bills must rise.
- We are developing a new report describing ways to convey to local elected officials and customers the importance of starting now on asset management and infrastructure reinvestment.

## CONCLUSION

In summary, we are inheritors of magnificent water and wastewater systems built by previous generations. It is incumbent upon us to act as good stewards of those systems. We believe good stewardship implies the need to increase investment in infrastructure over the next several decades. While some communities need federal assistance, we believe that all utilities should strive to be self-sustaining through their rates and other local charges. This starts with adoption of an effective asset management program and an assessment of local rates. The time to start that important work is now.

How we address our emerging drinking water infrastructure and security needs is a critical question facing the Nation and this Congress. America needs a new partnership for reinvesting in drinking water infrastructure. There are important roles at all levels of government. To help reduce the burden on consumers, many water utilities have made great strides in efficiencies, with some utilities achieving a 20 percent savings in operations and maintenance. Water utilities will continue to reduce costs, seek cost-

effective financing and employ innovative management strategies. Regardless, there will be significantly increased costs for needed infrastructure investment.

AWWA does not expect that federal funds will be available for 100 percent of the increase in infrastructure and security needs facing the nation's water utilities. AWWA remains committed to the principle of full cost recovery through rates. However, AWWA does believe that due to concurrent needs for investment in water and wastewater infrastructure, security projects, replacement of treatment plants, new drinking water standards, and demographic changes, many utilities will be very hard pressed to meet their capital needs without some form of federal assistance. Much of our investment need is driven by federal mandates and new security needs. The nation has already accepted the principle that the federal government should help pay for what it requires other levels of government to do. Over the next twenty years, it is clear that Safe Drinking Water Act (SDWA) and Clean Water Act (CWA) compliance requirements and infrastructure needs will compete for limited capital resources. New security concerns, combined with the aging of many water systems, plus the capital cost of compliance with federally mandated regulations, such as lead service line replacement, drive the need to greatly increase the level of investment in water-related infrastructure now. Customers are likely to be very hard pressed in many areas of the country. Compliance, security and infrastructure needs under the SDWA and CWA can no longer be approached as separate issues. Solutions need to be developed in the context of the total drinking water and wastewater compliance, security and infrastructure needs.

AWWA and its members thank you for holding this hearing concerning the financing of water infrastructure projects. AWWA pledges to work with Congress to develop a responsible and fair solution to the Nation's growing water infrastructure challenges. We thank you for your consideration of our views.

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This concludes the AWWA statement on financing water infrastructure projects. I would be pleased to answer any questions or provide additional material for the subcommittee.

# Testimony of:

Dr. Frank Luntz
President

Luntz Research Companies
120 S. Payne Street
Alexandria, Virginia 22314

# To:

Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
US House of Representatives
2165 Rayburn House Office Building
Washington DC 20515

June 8, 2005

Good Morning. My name is Dr. Frank Luntz and I am the President of the Luntz Research Companies, a public affairs communication firm based in Alexandria, Virginia. I am here today to convey to you Americans' strong, bi-partisan, multi-regional support for investing in America's water infrastructure.

Earlier this year my organization, in partnership with the highly respected Democrat polling firm Penn, Schoen and Berland, conducted a nationwide telephone opinion poll that found nearly nine in ten Americans support creating a federal trust fund to guarantee federal investment in clean and safe water. Fully 86% of adult Americans backed the concept — a public opinion consensus rarely seen in America today.

There are several findings of our findings that deserve attention. First, clean water is seen as a higher priority and a more important principle than the investments made in the more high profile areas of transportation and airways. Fully 91% believe that *"if, as a country, we are willing to invest over $30 billion a year on highways and more than $8 billion a year on our airways, we certainly should be willing to make the necessary investments in our lakes, rivers and oceans."* And when asked to prioritize, 71% choose investing in clean and safe water, compared to just 20% who choose roads and highways, and 3% who choose airports and aviation.

And more than two thirds of Americans would rather the federal government invest in our water infrastructure than introduce new tax cuts. The reason for this overwhelming support and clearly articulated prioritization can be explained in three words: QUALITY OF LIFE. Clean water affects everyone and it matters to everyone in their day-to-day life.

It doesn't matter if you are a Republican or a Democrat. It doesn't matter if you come from a red state or blue. An overwhelming majority of Americans believe that investing in America's water infrastructure is a responsibility of the Federal Government here in Washington.

Now it's hard for me to believe but I have been a professional pollster for almost 20 years and I can tell you from personal experience that such an overwhelming consensus about the role of Washington doesn't happen often – but it exists here. The reason why Americans so overwhelmingly believe that investing a clean water infrastructure is a national issue requiring federal funding is because they believe keeping water clean and safe cannot be confined to any one locality or, in their words, *"clean water has no boundaries."*

Fully 71% of Americans agree with the statement *"Clean and safe water is a national issue that requires dedicated national funding. As a matter of principle, the federal government should become a true partner with states and localities and pay for the necessary sewage and wastewater treatment systems to guarantee clean and safe water for future generations of Americans."*

By comparison, only 23% agree with the statement: *"Clean and safe water is a local problem that requires a local solution. The federal government is already running a $500 billion dollar deficit. Clean and safe water is important, but the federal government just can't afford to spend any more money. Local communities need to step up and pay."* We raised the specter of the federal deficit, yet it did not move people to oppose federal funding. Clean water and effective wastewater treatment is such a high priority that not even the federal deficit can dampen public insistence in a funding role by Washington.

This consensus goes beyond perception and straight into fact. For example, when told that the fact that the federal government today pays just 5% of the costs of ensuring that our water is clean and safe, four-out-of-five Americans (79%) say this is unfair and unacceptable.

In my years as a pollster, I have heard politicians complain that voters say a particular program is important to them but only when someone else pays for it. New taxes of any kind are never an easy sell…except when it deals with clean water. Four times as many Americans believe there should be *"a dedicated funding source to ensure clean and safe water for future generations"* (73%) as those who believe our water infrastructure *"should not receive federal funding but should continue to be funded as it is today."* (18%). And more than 80% are willing to open their wallets and pay more in taxes because clean water is a priority to them.

Americans are sending their lawmakers a clear message: protect our nation's water or risk getting left behind by the voters. Nearly eight in ten voters (78%) describe themselves as more likely to vote for their Member of Congress if they learned he or she supported establishing a trust fund for water infrastructure. And almost two thirds of voters (63%) describe themselves as less likely to vote for their member if they learned he or she opposed the trust fund.

And for Members of this Committee, here is one final result as you ponder what to do. Fully 85% say that if there was a bill in Congress to create a long-term, sustainable and reliable trust fund to protect and guarantee clean and safe water, they would support it. 85%! When is the last time you have seen public opinion so unified?

Let me be blunt: this issue is not going to go away. It is not simply an environmental issue. It is not simply a health issue. Clean water and wastewater management is very personal to voters because it impacts Americans every single day of the year. This is not a local issue because water has no local boundaries. This is one of those areas — and there aren't many — where Americans *demand* that Washington take responsibility.

My Democratic colleague, Doug Schoen, of Penn Schoen & Berland Associates concurs with me in this interpretation of such overwhelming public support for federal investment in America's water infrastructure. "Environmental issues writ large can sometimes be divisive," he says "but clean and safe water is not seen by voters as a divisive issue. Instead, there is overwhelming support from both political parties for what is seen as a basic need that has to be protected — clean and safe water for our generation and for our children's."

I couldn't agree more.

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**Testimony of Susan K. Neely**
**President and CEO**
**American Beverage Association**

**Before the Water Resources Subcommittee**
**House Committee on Transportation and Infrastructure**

**June 8, 2005**

**Introduction**

Good morning, Mr. Chairman and members of the subcommittee. Thank you very much for the invitation to appear before the subcommittee to discuss the issue of creation of a federal clean water trust fund.

I am Susan K. Neely, President and CEO of the American Beverage Association (ABA). The American Beverage Association has been the trade association for America's non-alcoholic refreshment beverage industry for more than 85 years. Founded in 1919 as the American Bottlers of Carbonated Beverages and renamed the National Soft Drink Association in 1966, ABA today represents hundreds of beverage producers, distributors, franchise companies and support industries. ABA's members employ more than 211,000 people who produce U.S. sales in excess of $88 billion per year.

According to American Economics Group, Inc., direct, indirect and induced employment in the beverage industry means 3.02 million jobs that create $278 billion in economic activity. At the state and federal level, beverage industry firms pay more than $30 billion of business income taxes, personal income taxes, and other taxes with over $14 billion in taxes paid to state governments alone. In 2003 it is estimated that beverage companies donated $326 million to charities.

ABA members market hundreds of brands, flavors and packages, including carbonated soft drinks, ready-to-drink teas and coffees, bottled waters, fruit juices, fruit drinks, dairy-based beverages, and sports drinks. In this regard, our members play an important role in meeting our hydration needs to consume about 64 ounces of fluid each day. Proper hydration is critical to the function of the human body. All beverages produced by ABA members play a role in meeting this critical need.

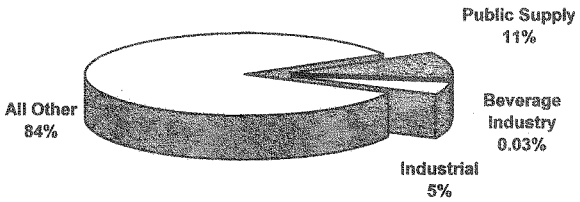
I am here today to discuss the importance of water to our industry and to our customers. Water is vital to humans, vital to consumers, and vital to our member companies. As the provider of a significant share of what Americans drink, it is critical that we manage water resources wisely to insure the quality and quantity of future supplies.

**The Beverage Industry – Efficient Water Users and Good Customers**

Considering that our industry's products account for almost half of what America drinks, we account for only a tiny fraction of total water use. Of the more than 400 billion gallons withdrawn each year in the US *(USGS)* the beverage industry uses about 3/100 of one percent or about one gallon out of every 3,300 gallons withdrawn from ground or surface water sources (Figure 1).

*Figure 1*

**Beverage Industry vs. Total Use**




Our industry has become extremely efficient in its production systems, incorporating reuse and reduction measures into our facilities. On average it takes about a gallon and a half or two gallons of water to make a gallon of finished product. This represents a water use ratio of about 1.5-2:1. That number has been improving over the last several decades as we continually strive to implement conservation efforts in our plants and increase efficiency. Beyond the water that goes directly into the product, we use water on the production line, we use it to clean production equipment, in washing our fleets, and in everyday employee use in the plants. Examples of our water conservation efforts include use of deionized air to rinse cans and bottles prior to filling; reclamation of backwash water from our sand and carbon filtration processes; and conversion to automated "clean in place" systems that employ a closed loop for water. Our current water use ratio is a dramatic reduction from the "old days" in the beverage industry where refillable packaging consumed vast amounts of water and produced high volumes of caustic waste water. Looking ahead, our members will continue to evaluate new processes and technologies that can lead to even more efficient use of water.

Beverage producers draw the overwhelming majority of their water from public water supplies; the remainder is self-supplied. Even if we assumed that *all* bottling uses came from public supplies, the total withdrawals for beverage companies would still only be about 1/3 of one percent of all public uses.

On balance, our industry has grown keenly aware of the importance of efficient water use. We account for a surprisingly small share of withdrawals from the total public water supply. And we are good contributors to our community systems, participating in planning activities and paying fair rates for our water.

With this as context for the discussion, let us turn now to the matter of taxing beverages to support water infrastructure needs in the U.S.

**Taxing Beverages Is a Bad Idea**

Over the past 6 months, there have been press reports outlining a scheme that would levy a federal tax on beverages to generate revenue for the creation of a federal clean water trust fund. Levying a tax on packaged beverages is an inequitable and regressive way to raise funds for environmental infrastructure. We acknowledge the substantial needs identified for our country's water supply and waste water systems. We also recognize that we, along with other commercial, residential, industrial, and agricultural users, must do our parts to fund necessary improvements and expansion to the infrastructure.

Targeting our industry places the burden only on a very small share of water users. As I stated, products made by ABA members consume less than 1/3 of one percent of water supplied by public systems. Targeting such a large tax – estimated variously at 5¢ per container to 7 percent of sales – on so few users is not equitable.

A tax on beverages is a tax on food. Consumers consider beverages as one of their staple grocery items. It is not clear from press reports how such a tax would be administered nor what the rate of taxation would be, although proposals floated have variously ranged from 5 cents per beverage to almost 7%. But the unpopularity of such a scheme was borne out in the first round of Mr. Luntz's recent research for the Association of Metropolitan Sewerage Agencies: only 13% of those surveyed would support a nickel tax on bottled and canned beverages.

In terms of levying the tax, I am not aware of any specificity given to its administration and collection. In my view it would be necessary to set up a whole new bureaucracy surrounding this tax which would undoubtedly be passed on to consumers, buried in the price of the product. This is not only discriminatory, but food taxes are regressive, unfairly impacting low-income consumers more than others. As a result, those least able to pay – working families, the poor and the elderly – bear the greatest burden.

Many commercial and industrial establishments use water as an input to their products. Just as beverage companies buy water as a factor of production, so, too, do circuit board manufacturers, paper companies, and food processors. As responsible and long-standing customers of municipal water agencies, our members are more than willing to bear their fair share of the financing needs for water infrastructure. But it is important to remember, we are a very small piece of the industrial use profile and shouldn't be targeted as the sole source of these funds.

**Summary**

Water resource management is a critical area of concern for our members and for our customers. We are committed to wise and efficient use of water to insure a safe and ample supply for our future. Though we produce much of what consumers drink every day, our use of water is minor compared to others. We encourage this committee to reject an inequitable and regressive tax on our products and consumers and look to fair, broad-based, comprehensive mechanisms to address funding needs instead.

# Testimony of:

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# To:

Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
US House of Representatives
2165 Rayburn House Office Building
Washington DC 20515

# On Behalf of:

The National Association of Clean Water Agencies
1816 Jefferson Place, NW
Washington, DC 20036

June 8, 2005

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to be here today to discuss the merits of a new Federal Clean Water Trust Fund. My name is Kenneth I. Rubin and I am here today at the request of the National Association of Clean Water Agencies (NACWA) for whom I have consulted over the past several years on this subject.

In my testimony, I would like to address three issues:

1. Why should the federal government take a stronger position helping finance America's wastewater treatment facilities?
2. What form of assistance is appropriate?
3. How can a new Federal Clean Water Trust Fund result in efficient investments in clean water?

Before addressing these issues, however, let me provide the relevant background.

**Background**

In April 2000, the Water Infrastructure Network (WIN) released its first report, *Clean & Safe Water for the 21st Century*. That report documented significant improvements in water quality and public health associated with America's investments in water and wastewater infrastructure. But, it also documented an unprecedented financial problem: over the next 20 years, America's wastewater systems will have to invest $12 billion a year more than current investments to meet the national environmental and public health priorities in the Clean Water Act and to replace aging and failing infrastructure. Independent analyses completed in September 2002 and November 2002 by the US Environmental Protection Agency (*The Clean Water and Drinking Water Infrastructure Gap Analysis)* and the US Congressional Budget Office (*Future Investments in Water and Wastewater Infrastructure*), respectively, corroborate WIN's figures.

In the words of the WIN coalition, which represents a broad spectrum of professional, technical, academic, environmental, labor, and government organizations involved in water infrastructure:

> "New solutions are needed to what amounts to nearly a trillion dollars in critical water and wastewater investments over the next two decades. Not meeting the investment needs of the next 20 years risks reversing the public health, environmental, and economic gains of the last three decades."

In a subsequent report released in early 2001, WIN recommended a series of public and private actions to meet the challenges for funding wastewater infrastructure over the coming decades. As part of this fiscal partnership, WIN recommended increasing the federal role where needs are great, public health or the environment is at risk, or local financing capability is inadequate. WIN suggested:

> "This enhanced federal role should provide for distribution of funds in fiscally responsible and flexible ways, including grants, loans, loan subsidies, and credit assistance."

**Why Should the Federal Government Take a Stronger Position Helping Finance America's Wastewater Treatment Facilities?**

There is little disagreement that investments in wastewater systems pay substantial dividends to the environment, public health, and the economy. It is well documented that municipal wastewater treatment plants prevent billions of tons of pollutants each year from reaching America's rivers, lakes, and coastlines. In so doing, they preserve our natural treasures such as the Chesapeake Bay, the Great Lakes, or the Columbia River. Clean water supports a $50 billion a year water-based recreation industry, at least $300 billion a year in coastal tourism, a $45 billion annual commercial fishing and shell fishing industry, and hundreds of billions of dollars a year in basic manufacturing that relies on clean water. Clean rivers, lakes, and coastlines attract investment in local communities and increase land values on or near the water, which in turn, create jobs, add incremental tax base, and increase income and property tax revenue to local, state, and the federal governments.

Most would agree that America's wastewater treatment plants provide benefits broadly to all Americans. But, why does this matter in the debate over how to finance wastewater infrastructure? First, it matters because America's waters are "public goods," and in protecting them, wastewater utilities create a "positive externality." That is, the cleansing of wastewater results in clean rivers and lakes for all to enjoy, and consequently, these benefits are available widely throughout society to those who pay for them (local ratepayers) as well as many others that pay nothing — those who live downstream, for example. When benefits of protecting a public good flow externally like this, utility managers setting sewer rates and citizens paying them receive weak or no market signals as to the right price to pay from society's point of view. In the US, federal and state regulations step in and establish minimum, and depending on local conditions sometimes much higher, levels of protection of public resources in place of market-derived prices. In the end, local wastewater utilities are asked to pay whatever it takes to meet these regulations and as regulations multiply, so do prices for ratepayers as do uncompensated clean water benefits to people and businesses downstream.

Consider the case of a large city on a river 50 miles upstream of a sensitive estuary and public beach. With no wastewater treatment, the city pays nothing, but pollution will destroy the ecosystem and drive people away from using beaches. Complete treatment is expensive, perhaps crowding out other priorities like police protection or roads, but will result in a healthy ecosystem downstream and clean beaches for all to enjoy. Should city residents pay nothing and all others pay through loss of environmental and recreational amenities? Or, should city residents pay whatever it takes to keep all downstream water clean for others to enjoy?

Second, it matters because of demographics. The process of producing clean wastewater effluent requires a significant investment in physical infrastructure — the pipes, pumps, meters, and motors needed to collect, treat, and move wastewater over long distances. These wastewater assets wear out and must be replaced, which for large and growing communities is usually not a financial burden. But for many urban core cities whose population has shifted to outlying suburbs, the cost of replacing wastewater infrastructure can be unmanageable for those who still live there. Not replacing these assets can result in failures in the wastewater function, reductions in local economic productivity, and pollution of local waters. In many cities, doubling, tripling, even quadrupling sewer fees would not be enough to meet replacement needs

because too few people remain within political boundaries to pay for the fixed assets needed to serve all within them. In many locations, those who still populate urban centers tend to have lower incomes than those who have moved to outlying areas, and consequently, serious questions of equity arise when local sewer fees have to increase dramatically to serve these populations.

Finally, it matters because sole reliance on local sewer fees creates broad issues of equity across income and ethnic groups and from one community to the next depending on their location upstream or downstream of clean or impaired waters. Not all communities can afford the same level of fees, raising serious issues about fairness in providing comparable levels of clean water to all citizens. Moreover, having a common standard or level of service makes it easier for businesses and labor to move from place to place without fear of cutting production because of local capacity shortfalls. It also provides cultural benefits by helping to bind together people from across the nation that know their waterways anywhere are clean and safe. The value of these common water quality conditions — and the recognition that a central source of funds is best to finance the network needed to ensure them — have long been recognized in federal infrastructure policy. Equitable treatment of all citizens and the attainment of network effects of infrastructure through pooled federal revenue collection and trust fund disbursements have driven the financing structures of our national programs to build and maintain highways, transit systems, airports, and inland waterways.

**What Form of Assistance is Appropriate?**

Many suggest that local solutions, like increased wastewater rates or operating efficiencies are all that will be needed to meet the future wastewater financing challenge. But, while local solutions are important, they can address only a portion of this problem. Financing the full $12 billion a year gap with utility rate increases would result in a doubling or tripling of rates across the nation. If this were to happen, at least a third of the population of the U.S. would have to pay more than 2 percent of their household income for sewer services, the conventional criterion for affordability. Small, rural, and low-income communities would be hit the hardest, since costs are high in small, dispersed systems and low-income households have little disposable income with which to pay higher rates. Some 60 percent of the U.S. population has experienced no increase, or a loss, in real household income over the last 20 years, so for the majority of U.S. families, sharp increases in wastewater rates can be expected to have significant economic impacts.

There is ample precedent for, and clear economic principal supporting, an appropriately structured federal trust fund for wastewater infrastructure. The importance of wastewater infrastructure was well understood in the 1960s as the nation watched the quality of its waters decline precipitously and chose in the 1972 Clean Water Act, to spend federal tax dollars to reverse this trend. Despite increasing federal mandates for cleaner water, despite shifts in population that strand wastewater assets in urban core cities with few ways to pay for needed improvements, and despite the nearly universal need to replace hundreds of billions of dollars in aging and failing wastewater collection systems, the federal contribution to wastewater investment has declined from 30 percent in 1980 to less than five percent today.

Interestingly, this is not the case in other basic infrastructure systems such as highways, airports, or transit systems. To finance these equally critical transportation systems, Congress has established federal trust funds that assure continuous funding to meet changing needs. The rationale is simple: these basic infrastructure systems underpin the U.S. economy broadly and their benefits accrue widely to users without geographic limitations imposed by local political boundaries. Moreover, these infrastructure systems have network benefits that are felt only after all, or substantial portions, of the network is complete and functional, affording Americans anywhere in the country access to minimum levels of services.

Wastewater systems share these same characteristics. Accordingly, a new Clean Water Trust Fund can make good economic sense, if it is structured appropriately.

**How Can a Federal Clean Water Trust Fund Result in Efficient Investments in Clean Water?**

Experience with a broad array of federal trust funds suggests an equally broad set of issues that presage an efficient federal funding structure. This subcommittee is well aware of the most important ones: rules for annual appropriations, budget scoring effects, linkage to non-federal recipients, allowable uses and terms of fund financing, distribution of fund disbursements, and the like. The combination of policies in these areas can lead to efficient investments.

But, perhaps the most important issue is the source or sources of revenue used to capitalize the fund. As demonstrated in the table below, Congress has chosen to establish and dedicate a wide variety of federal excise taxes to the many federal trusts over the years.

| Trust Fund/Special Fund | Excise Tax On |
|---|---|
| Federal Aid to Wildlife Restoration Projects Fund | • Bows and arrows along with their parts and accessories<br>• Pistols and revolvers<br>• Other regular firearms and ammunition |
| Aquatic Resources Trust Fund | Gasoline and special motor fuels used in motorboats |
| Boating Safety Account | Gasoline used in small engines |
| Sport Fishing Restoration Account | • Sport fishing equipment<br>• Electric outboard motors<br>• Fish-locating sonar devices |
| Highway Trust Fund | • Motor fuels<br>• Heavy trucks and trailers (on retail price)<br>• Use tax on heavy highway vehicles<br>• Heavy tires for highway vehicles |
| Land and Water Conservation Fund | Gasoline and special motor fuels used in motorboats |
| Airport and Airway Trust Fund | • Air passenger tickets<br>• International departures<br>• Domestic air cargo waybills<br>• Fuels for general aviation |
| Abandoned Mine Reclamation Fund | Domestically mined coal |
| Black Lung Disability Trust fund | • Domestically mined coal<br>• Penalties for misuse of a coal mine operator self-insurance trust |
| Inland Waterways Trust fund | Diesel and other liquid fuels used by vessels in commercial waterway transportation on specified inland and intracoastal |

| | |
|---|---|
| | waterways |
| Deep Seabed Revenue Sharing Trust | Imputed value of certain commercially recoverable hard minerals |
| Hazardous Substance Superfund | • Crude oil<br>• Feedstock chemicals<br>• Imported chemical derivatives |
| Leaking Underground Storage Tank trust Fund | Fuels, including gasoline, diesel fuel, special motor fuels, aviation fuels, and fuels used in commercial transportation on inland waterways |
| Oil Spill Liability Trust Fund | • Domestic crude oil<br>• Imported petroleum products |
| Harbor Maintenance Trust Fund | Value of commercial cargo loaded or unloaded |
| Vaccine Injury Compensation Trust | Certain vaccines, including DPT, DT, MMR, Polio |
| National Recreation Trails Trust fund | Fuels used by non-highway recreational vehicles |

Source: Congressional Research Service, *Excise Tax Financing of Federal Trust Funds*, January 5, 1993.

Underlying these choices of revenue sources are the applications of common principles regarding who should pay. In most cases, payers are either the recipients of benefits made available by trust fund investments or the sources of problems that the trust fund is designed to correct. In some cases, especially where benefits have "public goods" attributes, revenue sources are structured to capture as broad a base of payers as possible.

In the case of a Federal Clean Water Trust Fund, these principles would translate into three basic strategies:

- **Polluter Pays** — categories of polluters (industries, households, commercial establishments, transportation, resource extraction, agriculture, or land development/disturbance, for example) pay some sort of pollution tax in relation to their contribution to degradation of quality in the water column, degradation of sediments, or destruction of aquatic habitat;

- **Beneficiary Pays** — categories of clean water beneficiaries (public water supply, land development and improvement, tourism, recreation, fisheries, shellfisheries, and food producers, for example) pay some sort of benefits fee in relationship to their use or enjoyment of clean water; or

- **The Nation as a Whole Pays** — some broad-based fee or tax that spreads the cost of water quality improvement across as broad a base of Americans as possible under the theory that water quality is a public good, the benefits of which are broadly available to all people and the nation as a whole.

It is important to point out that these strategies are not necessarily mutually exclusive.

Regardless of the source of revenue, any federal trust fund should be evaluated from multiple perspectives to ensure delivery of an appropriate level of service to the nation. In recent work completed for NACWA, the following criteria were identified:

**Effectiveness** — will this source or these sources of revenue raise funds sufficient to meet objectives?

**Efficiency** — do payers pay in rough proportion to (1) their contribution to the marginal costs of water quality degradation or reduction in wastewater service levels/quality or (2) their marginal enjoyment of the benefits of clean water or the benefits of enhanced wastewater services?

**Equity** — does this source or do these sources of revenues overly extract wealth from one group of payers relative to other groups of payers or relative to the problem being solved with the collected receipts, using several different scales including location, income, time, and others that may be relevant?

**Administrative Simplicity** — are the costs associated with implementing this source or these sources of revenues reasonable in relation to other alternatives and/or in relation to the funds collected (sometimes referred to as "collectability")? Are existing administrative mechanisms adaptable?

**Stakeholder Acceptability** — recognizing that any proposal to collect new fees or taxes will be unpopular with at least some groups, could this source or these sources create unmanageable issues among the various affected constituencies?

Using these criteria, NACWA reviewed a wide variety of potential revenue sources — all federal excise taxes — to capitalize a new Federal Clean Water Trust Fund at a target level of $7 billion a year:

**Beverage taxes,** which attempt to capture the benefits of cleaner process water (and reduced treatment costs at the point of manufacture) used to produce these beverages.

**Taxes on water-based recreational products and services**, similarly attempt to capture the benefits of cleaner water from those that enjoy it through recreational pursuits.

**Taxes on industrial discharges** attempt to transfer the cost of pollution to the companies that produce it, in rough proportion to their waste flows.

**Taxes on "flushable products,"** including consumer goods that are typically introduced directly into wastewater following use, contributing to the treatment burden faced at facilities downstream;

**Clean water restoration taxes** imposed on corporations with an alternative minimum tax greater than $2 million, following a similar approach to the one successfully used in the past to fund the national Superfund program;

**Taxes on agricultural chemicals** that shift costs of non-point source pollution in rough proportion to those creating it and generate revenue to support non-point source control and prevention programs.

No single option was judged uniformly strong against all of the criteria. The ideal revenue option should seek the broadest base of economic activity related to clean water against which, the smallest possible unit tax rate can be applied equitably and in ways that minimize administrative costs. It should yield a predictable revenue stream well into the future, so that recipients of Trust Fund assistance can rely on support over long periods of time, consistent with their own capital planning and construction

schedules. Finally, the ideal revenue source should minimize social, economic, and trade disruptions.

Achieving all of these outcomes simultaneously appears challenging. Accordingly, combining the best of each option may prove the most appealing solution. The hybrid option has the effect of broadening the tax base substantially, reducing unit tax rates, and in turn, spreading payments across the widest group of economic activities that either rely on clean water or benefit from it in some way. Administrative activities increase under this option, but they may well be offset by an increased sense of equity. That is, water quality is essentially a public good, which is broadly available to the American public anywhere in the country. The cost of creating this good under the hybrid option would be spread equally widely across a range of beneficiaries and polluters.

Regardless of the revenue source, it may well be important to quantify or at least identify, the extent to which the Trust Fund generates benefits across society. Cleaner water, for example, has been shown to result in reduced health effects in the American public, increased access to water-based recreation, increased property values and development opportunities, stronger demand for water-based tourism and beach-going, and increased fisheries and shellfisheries. All of this new economic activity results in job creation, greater worker productivity, and increased tax bases at all levels of government. These benefits could be large and should not be overlooked.

Finally, and in conclusion, it will be important to remind ourselves that even with an enhanced federal financing role made possible through a new Trust Fund, local sewer rates will still pay for the majority of costs associated with providing wastewater management services to the American public. If, for example, a federal Clean Water Trust Fund was to meet the full $7 billion annual funding target in say, 2010, the federal share would only amount to about 14 percent of total expenditure to build and operate wastewater infrastructure in that year.

Despite the relatively modest increase in federal share that a Clean Water Trust Fund would deliver, these will be important dollars to the neediest of America's communities. Moreover, a new Clean Water Trust Fund will help ensure the sustainability of the Clean Water State Revolving Fund as well as a meaningful, long-term federal-state-local fiscal partnership to continue our record of gains made under the 1972 Clean Water Act.

TESTIMONY OF

JACK SCHENENDORF, OF COUNSEL
COVINGTON & BURLING

ON BEHALF OF ASSOCIATED GENERAL
CONTRACTORS OF AMERICA

BEFORE THE SUBCOMMITTEE ON WATER
RESOURCES AND ENVIRONMENT
COMMITTEE ON TRANSPORTATION AND
INFRASTUCTURE
U.S. HOUSE OF REPRESENTATIVES

ON

FINANCING WATER INFRASTRUCTURE PROJECTS

JUNE 8, 2005

**TESTIMONY OF JACK SCHENENDORF**
**OF COUNSEL, COVINGTON & BURLING**
**BEFORE THE SUBCOMMITTEE ON WATER RESOURCES**
**AND ENVIRONMENT**
**COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE**
**U.S. HOUSE OF REPRESENTATIVES**
**JUNE 8, 2005**

Mr. Chairman and Members of the Subcommittee:

My name is Jack Schenendorf. I am Of Counsel to the law firm of Covington & Burling in Washington D.C. My practice focuses primarily on transportation and legislative matters, including parliamentary procedure and the federal budget. I also had the honor of serving on the staff of this Committee from 1976 to 2001, including serving as Chief of Staff from 1995 to 2001.

I am pleased to respond to the Subcommittee's invitation to appear and testify on behalf of the Associated General Contractors of America on the financing of water infrastructure projects.

My Washington career started in 1975 as a staff member on the National Commission on Water Quality. The Commission, chaired by Vice-President Nelson Rockefeller, was established to determine whether Congress should

make mid-course corrections to the landmark Federal Water Pollution Control Act of 1972. As part of its charge, it issued a report.

Among its findings, the Commission's report identified an "inadequate rate of federal funding" as one of the primary reasons why publicly owned treatment works would not meet the Act's requirements in a timely way. And this was at a time when the Federal Government's share of the program was 75 percent and authorized funding was as high as $7 billion per year.

Not only has the situation not improved over the past 30 years, if anything, it has gotten worse. Today, the federal share has dropped significantly and federal funding has plummeted to less than a billion dollars per year. Not surprisingly, the Congressional Budget Office and the General Accountability Office have independently confirmed a water infrastructure funding gap of between $300 billion and $500 billion over the next 20 years.

Which brings us to the subject of today's hearing--how to finance this enormous water infrastructure funding gap.

Last Congress, this Subcommittee and the Senate Environment and Public Works Committee each sought to address part of this funding shortfall by authorizing a total of approximately $20 billion in general fund financing over a five-year period for wastewater treatment projects. By itself, this legislation--if it had been enacted into law--would not have provided a penny of funding. Appropriations would have been required, a tall order in the current budget climate. If the authorized funding was to materialize, either the deficit would have to be increased by $20 billion, or if deficit-neutral, other discretionary programs would have to be cut by $20 billion. Moreover, the funding would be subject to the uncertainty and vagaries of the annual appropriations process, making state and local governments reluctant to commit to long-term infrastructure funding projects.

There is, in my judgment, a better approach. I encourage the Subcommittee to consider financing water infrastructure projects in the same way that transportation infrastructure projects are financed--that is, through self-financed, deficit-proof trust funds.

Like the transportation trust funds, a water infrastructure trust fund would possess several attributes:

- A system of user taxes would be established;
- The revenues generated by these user taxes would be credited to the trust fund, ensuring that the revenues are spent for their intended purpose;
- Budget authority (e.g. contract authority) provided from the trust fund would not be subject to the annual appropriations process; and
- The trust fund would either be outside the unified budget or subject to a guaranteed funding mechanism to ensure a linkage between revenues and spending.

The guaranteed funding mechanism deserves further discussion. It was included in the Transportation Equity Act for the 21st Century (TEA 21) to end the practice of borrowing from the trust fund to mask the deficit or finance other general fund programs. This practice--which had been going on from the time the trust fund was incorporated into the unified budget--was a fraud and a sham. TEA 21 established budgetary firewalls and a point-of-order to end this shameful practice. It has worked well and should be included in infrastructure trust fund financing mechanisms that are part of the unified budget.

Financing water infrastructure through a trust fund would have several advantages over general fund financing. First, it would be deficit neutral. It would pay for itself. Second, the funding stream would not be subject to the vagaries of the annual appropriations process, thereby providing the certainty that State and local officials need to commit to long-term infrastructure financing. And third, it would get the job done provided revenues were sufficient to meet the need.

The biggest challenge to implementing this approach is establishing the system of user taxes to generate the revenue stream. Who should pay and how much should they pay? These issues will be controversial and, at times, may seem insurmountable.

In this regard, the history of the 1956 Highway Act and the Highway Trust Fund can be instructive. It shows how seemingly insurmountable financing and political problems can be overcome.

Prior to 1956, the federal highway program was funded from general revenues. There was a federal gas tax but its proceeds were not earmarked. A federal excise tax of 1 cent per gallon was first put in place in 1932 as a

temporary emergency depression measure and was increased to 1.5 cents in 1941 and 2 cents in 1951.

Once it became clear that this temporary tax was not going to be repealed, it was opposed by many groups, including the Association of State Highway Officials (AASHO), the automobile manufacturers, the trucking industry, the oil industry and certain farmer organizations. The opposition was strongest in the early 1950's when the Governors' Conference threw its weight behind repeal, arguing that the gas tax should be reserved for the states.

Against this background, Congress was trying to promote what would become the Interstate System. The 1944 Highway Act called for a 40,000 mile National System of Interstate Highways. But because of limited funding, very few of the Interstates were built between 1944 and 1955. In January 1955, the price tag on the Interstate System was estimated at $27 billion over a 13-year period. In 2005 dollars, this would be the equivalent of a $185 billion investment over 13 years.

In took several years and several government studies to come up with a way to finance the $27 billion investment. During this process, three financing

alternatives were explicitly considered and rejected--general fund financing, tolling and bonding.

Finally, proponents of increased investment embraced the strategy of financing the Interstate System by increasing the federal excise taxes levied on highway users. When legislation embodying this approach was first considered on the House Floor in 1955, it was soundly rejected by a bipartisan vote of 123 to 292. One of the major reasons that the bill failed was because of the strong opposition of the various interests and industries that would have paid the increased taxes. Included in the opposition were the rubber industry, motor fuel refiners and sellers, intercity bus companies, the trucking industry, the AAA and the Teamster's Union.

Between 1955 and 1956, there were two major developments. First, supporters of the pay-as-you-go approach, such as the construction industry, mounted an extensive lobbying campaign in 1956 and were far more effective than they had been in 1955. This is where the "highway lobby" earned its reputation. Second, many of the groups that had opposed the 1955 bill changed their minds, even though the tax proposals either did not change or in some cases got even worse. Essentially, many of the critics had a

chance to think their positions through more thoroughly. Some decided that the 1956 bill treated them a little better than the 1955 bill. Others were more willing to accept the idea of increased taxes and to focus instead on a fair distribution of the tax burden. Some became supportive once Congress agreed to include in the bill a study that would look at the fairness of the tax burden. Some groups, however, remained opposed. For example, the petroleum industry's goal remained repeal of the gas tax.

Ultimately, the 1956 Highway Act passed the House and Senate by overwhelming votes even though it raised a variety of highway user taxes, including a 50 percent increase in the gas tax and the tire tax and imposition of a new licensing fee on heavy trucks. A key aspect of the legislation was the creation of the Highway Trust Fund into which all of these revenues would be deposited, to be available for expenditure without further congressional authorization or appropriation. While there were many reasons for this turnaround, most noteworthy was the improved lobbying campaign that won over many of the critics.

The rest is history. The 1956 Highway Act--one of President Eisenhower's most important achievements--has been described as the "best investment a

nation ever made." It often appears on "Top 5" or "Top 10" lists of federal legislation that really mattered. And it is often described as the law that created the Interstate System. But that is not really correct. The Interstate System was really created in the 1944 Highway Act. The 1956 Act created the Highway Trust Fund--the financing mechanism that made the Interstate System a reality. That is the genius of the 1956 Act.

Today the Highway Trust Fund continues to be one of the most successful federal financing mechanisms, providing about $33 billion per year for highway investment. Moreover, the success of the Highway Trust Fund persuaded Congress to create other transportation infrastructure trust funds.

The second transportation trust fund to be established, the Airport and Airways Trust Fund, was established in 1970 to finance capital improvements to the nation's airport and airway system. Today, the Trust Fund raises about $11 billion per year through a variety of user taxes for capital improvements as well as FAA operating expenses.

In 1982, Congress created a third transportation trust fund--the Mass Transit Trust Fund (actually a separate account in the Highway Trust Fund)--to

finance capital spending on new and rehabilitated mass transit infrastructure. Today the transit trust fund raises about $5 billion per year through the gas tax for capital improvements to the nation's public transportation systems.

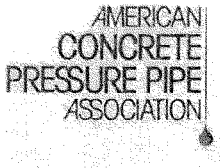
In addition, Congress created a number of smaller transportation trust funds, including the inland waterways trust fund, the harbor maintenance trust fund and the national recreational trails trust fund.

These transportation trust funds have been enormously successful in creating stable, dependable revenue streams for funding transportation infrastructure projects. But in each case, there was a contentious debate over who should pay and how much should they pay. Congress concluded each time, that the societal and political benefits of the transportation infrastructure investment outweighed the negative consequences of establishing the revenue stream.

Water infrastructure projects deserve no less. As Dr. Luntz has indicated, Federal legislation creating a long-term, sustainable and reliable trust fund for clean and safe water infrastructure has strong support among the American people. If Congress develops a fair and defensible system for raising the revenue, I believe a water infrastructure trust fund is achievable.

The benefits for the American people, business and the environment would be enormous.

Thank you.




**Confronting America's Water Infrastructure Crisis:**
**A Statement Regarding Federal Financing of Water Infrastructure Projects**

*Submitted to the House Subcommittee on Water Resources and Environment for Inclusion in the Record of the June 8, 2005 Hearing on Financing Water Infrastructure Projects by James S. Clift, Chairman of the Board, Price Brothers Company and of the American Concrete Pressure Pipe Association*

Chairman Duncan, Ranking Member Johnson and Members of the Subcommittee, thank you for allowing me to submit this statement to the record for the House Water Resources and Environment Subcommittee's June 8, 2005 hearing on the financing of our nation's water infrastructure projects.

My name is Jim Clift and I am Chairman of the Board of Price Brothers Company, a manufacturer of concrete pressure pipe and a member of the American Concrete Pressure Pipe Association (ACPPA). I represent the concrete pressure pipe industry as Chairman of the Board of the ACPPA. The Association and its members are well aware of the investment necessary to keep our water systems working effectively. Founded in 1949, ACPPA represents North American manufacturers of concrete pressure pipe – pipe made of cement, steel and aggregate that can be found wherever water must be contained and transported.

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The Association provides technical and educational services both to its members and the general public. It also manages the Compliance Audit and Certification Program, which assures pipeline owners and their engineers that the concrete pressure pipe used in their projects will dependably perform its job for years to come. Public utilities across the nation rely on our members to provide concrete pressure pipe that offers consistent water service for their communities.

ACPPA and its members work closely with the individuals and organizations that plan, design, and build water infrastructure projects in communities across the country. As a result, we have seen firsthand the state of disrepair into which wastewater and drinking water systems throughout the United States have fallen. Our industry recognizes that there is a growing gap between the improvements needed to the drinking and wastewater systems in communities across the country and the amount of money the federal government is providing to support these nationally vital projects. The purpose of this statement is therefore to encourage your subcommittee to work with your colleagues on the House Appropriations Committee, as well as your counterparts in the Senate, to protect the economic and physical health of towns and cities throughout the nation, by providing funding sufficient to address America's water needs.

Put simply, we cannot afford to ignore our water infrastructure. Our nation's wastewater system supports over $300 billion[1] in economic activity and provides an estimated 400,000 jobs annually.[2] Yet, over the past decade federal investment has stagnated and is now declining. According to the Environmental Protection Agency (EPA), as of 2000, wastewater needs in the United States required a *present* investment of $181.2 billion.[3] The EPA and the Water Infrastructure Network (WIN) further predict that over the next 20 years our water infrastructure will require as much as a $500 billion investment.[4] If investment remains at the current level, the result will be an estimated shortfall over the next two decades of $23 billion annually.[5] Despite this increasing need, in 2005, the federal government cut funding for water projects by 12 percent, from $2.2 billion to $1.93 billion.

In Tennessee, investment needs in 2000 were estimated at $604 million and in Texas they were $9.1 billion.[6] In addition, as of 2004, Tennessee had a total of 122 Clean Water State Revolving Fund (SRF) projects awaiting federal money, while Texas had 46 such projects.[7] These are just two examples of a backlog in water projects that spans the entire country. Given these looming

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[1] Water Infrastructure Network, CLEAN SAFE WATER FOR THE 21ST CENTURY: A RENEWED NATIONAL COMMITMENT TO WATER AND WASTEWATER INFRASTRUCTURE ES-1 (April 2000).
[2] American Federation of State, County, and Municipal Employees, et al., ALL DRIED UP: HOW CLEAN WATER IS THREATENED BY BUDGET CUTS 1 (September 22, 2004).
[3] Environmental Protection Agency, CLEAN WATERSHEDS NEEDS SURVEY 2000: REPORT TO CONGRESS 3-1 (AUGUST 2003).
[4] *Id.* at 3-17.
[5] Water Infrastructure Network, WATER INFRASTRUCTURE NOW: RECOMMENDATIONS FOR CLEAN AND SAFE WATER IN TE 21ST CENTURY 1 (February 2001).
[6] *Supra*, note 2 at 51 and 52.
[7] *Id.*

needs, and the current level of investment, it is clear that the nation is not headed towards a water infrastructure crisis – we are already in the middle of one.

Shortfalls in investment are not limited to replacing existing water networks. According to 2000 U.S. Census data, nearly 700,000 households throughout the country have substandard plumbing.[8] Tennessee has over 14,000 households that lack complete plumbing facilities, while nearly 55,000 households throughout Texas lack adequate plumbing.[9] Many of these households are in small communities that lack a modern water infrastructure. Even more distressing is the fact that small communities with limited access to the resources they need to enhance basic services are less likely to meet health and safety standards. According to the EPA, in 2003, 8.2 percent of water systems that served communities with less than 10,000 people were in violation of health and safety regulations for drinking water quality.[10] In short, inadequate water funding is placing our citizens' health in jeopardy. Without sufficient funding, the problem will only get worse.

The need for investment in our water infrastructure is growing. The level of funding required is already too cumbersome for many communities to handle on their own. Without federal support, these communities will be unable to make essential repairs and upgrades; however, this will affect more than just the

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[8] Rural Community Assistance Partnership, STILL LIVING WITHOUT THE BASICS IN THE 21ST CENTURY 12 (Feb. 2005).
[9] *Id.* at 159 and 162.
[10] *Id.* at 39.

members of these communities. The nation's water systems are interconnected. Failure to address the needs of one community can have serious consequences across town, county and state borders. We all share in the dangers of underinvestment, just as we all share in the benefits that will come from addressing this crisis now. The reality of our interdependent systems demands that the federal government make water infrastructure a national priority.

ACPPA believes that the Safe Drinking Water and Clean Water State Revolving Funds (SRFs) have been effective tools in addressing water needs. The requirement that states add money to the funds provided by the federal government means that the actual value of the investment is considerably more than the congressionally authorized levels for the SFRs. According to estimates, since its creation in 1987, the Clean Water SRF program has funded over $40 billion in projects with a federal investment of just over $20 billion.[11] Despite its success in spurring investment, the SRF program is threatened by tightening federal budgets and competition for limited general revenue funds.

For this reason ACPPA and its members support the creation of a dedicated trust fund to pay for federal water infrastructure investment. In 1956 Congress recognized the need for a national highway system and created the Highway Trust Fund as a dedicated financing source to pay it. In 1971,

[11] Environmental Protection Agency, CLEAN WATER STATE REVOLVING FUND PROGRAMS: 2004 ANNUAL REPORT 3 and 7 (April 2005).

Congress again turned to a dedicated trust fund, creating the Airport and Airways Trust Fund to meet the nation's aviation infrastructure needs.

Now, ACPPA urges Congress to examine the use of a trust fund for the nation's water infrastructure, financed through a dedicated revenue stream. The physical and economic health of our nation's citizens depends upon it. Providing robust funding for our deteriorating national water infrastructure will help fulfill the promise made through the Clean Water Act and the creation of the SRF program. A dedicated trust fund will guarantee funding for projects of critical national importance and allow communities throughout the United States to effectively address their growing water needs.

Thank you again for the opportunity to submit this statement for the record. ACPPA's members and I look forward to working with you to help enact new water infrastructure funding legislation in the months ahead.

# Statement of
# THE AMERICAN SOCIETY OF CIVIL ENGINEER!
## Before the
## Subcommittee on Water Resources and Environment
## Committee on Transportation and Infrastructure
## U.S. House of Representatives
## On The
## Financing of Water Infrastructure Projects
## June 8, 2005

Mr. Chairman and Members of the Subcommittee:

The American Society of Civil Engineers* (ASCE) is pleased to provide this stateme r the hearing on the financing of water infrastructure projects in the United States. The issue ıe of great importance, and the Subcommittee is to be commended for placing it on the nation ›licy agenda.

### I. BACKGROUND AND CURRENT CONDITIONS

The federal government has directly invested more than $72 billion in the construction ıblicly owned sewage treatment works (POTWs) and their related facilities since passage of tl ean Water Act in 1972. Nevertheless, the physical condition of many of the nation's 16,0( ıstewater treatment systems is poor, due to a lack of investment in plant, equipment and oth pital improvements over the years.

In March, ASCE released its *2005 Report Card for America's Infrastructure*, whi( sessed the physical state of 15 separate infrastructure categories. We gave the nation ıstewater treatment and collection systems a grade of D– due to the age of most urban system ɜ relative decline (in inflation-adjusted dollars) of federal financial assistance over the pa cade, and the spending cuts for publicly owned treatment works upgrades by Congress and tl esident in recent years. The complete 2005 *Report Card* can be found :p://www.asce.org/reportcard/2005/index.cfm .

Many systems have reached the end of their useful design lives. Older systems a ıgued by chronic overflows during major rain storms and heavy snowmelt and, intentionally ‹ t, are bringing about the discharge of raw sewage into U.S. surface waters.

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ASCE was founded in 1852 and is the country's oldest national civil engineering organization. ·epresents more than 137,000 civil engineers individually in private practice, government, lustry and academia who are dedicated to the advancement of the science and profession of ·il engineering. ASCE is a non-profit educational and professional society organized under rt 1.501(c) (3) of the Internal Revenue Service rules.

The U.S. Environmental Protection Agency (EPA) estimated in August 2004 that the volume of combined sewer overflows (CSOs) discharged nationwide is 850 billion gallons a year. Sanitary sewer overflows (SSOs) caused by blocked or broken pipes result in the release of as much as 10 billion gallons of raw sewage yearly, according to the EPA.

Federal funding under the Clean Water Act State Revolving Loan Fund (SRF) program has remained flat or seen sharp declines for the past decade. With one exception, Congress appropriated between $1.2 billion and $1.35 billion between 1995 and 2004.[1] But in FY 2005, Congress cut wastewater SRF funding for the first time in eight years, reducing the total investment to $1.1 billion.

The Bush administration proposed further cuts for FY 2006, with a budget submittal calling for an appropriation of only $730 million. That represented a reduction of 33 percent from the FY 2005-enacted level. The House Appropriations Committee increased that pitifully low level to $850 million, and the House went along with the Committee's recommendation. The House figure, while an improvement over the administration's funding proposal, is still woefully inadequate.

Federal assistance has not kept pace with the needs, yet virtually every authority agrees that funding needs remain very high: the United States must invest an additional $181 billion for all types of sewage treatment projects eligible for funding under the Act, according to the most recent needs survey estimate by the EPA and the states, completed in August 2003.

That is only part of the story. In September 2002, EPA released a detailed gap analysis, which assessed the difference between current spending for wastewater infrastructure and total funding needs. The EPA Gap Analysis estimated that, over the next two decades, the United States must spend nearly $390 billion to replace existing wastewater infrastructure systems and to build new ones (the total includes money for some projects not currently eligible for federal funds, such as system replacement, which are not reflected in the EPA State Needs Survey).

According to the Gap Analysis, if there is no increase in investment, there will be a roughly $6 billion gap between current annual capital expenditures for wastewater treatment ($13 billion annually) and projected spending needs. The EPA study also estimated that, if wastewater spending increases by only 3 percent a year, the gap would shrink by nearly 90 percent (to about $1 billion annually).

In 2000, the Water Infrastructure Network, a consortium of water and wastewater providers, researchers, environmentalists, engineers (including ASCE), and product manufacturers, released a study concluding that the annual investment need for all sewer treatment facilities is $12 billion.

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[1] The appropriation for state Clean Water SRF programs was reduced to $625 million in FY 1997.

The Congressional Budget Office (CBO) released its own gap analysis in 2002, in which it determined that the gap for wastewater ranges from $23 billion to $37 billion annually, depending on various financial and accounting variables.[2]

If the nation fails to meet the investment needs of the next 20 years, it risks reversing the public health, environmental, and economic gains of the past three decades. The case for increased federal investment is compelling. Needs are large and unprecedented; in many locations, local sources cannot be expected to meet this challenge alone and, because waters are shared across local and state boundaries, the benefits of federal help will accrue to the entire nation.

Clean and safe water is no less a national priority than are national defense, an adequate system of interstate highways, and a safe and efficient aviation system. Many other highly important infrastructure programs enjoy sustainable, long-term sources of federal backing, often through the use of dedicated trust funds; under current policy, water and wastewater infrastructure do not.

To remedy the situation, ASCE supports enactment of a federal water infrastructure trust fund with a dedicated revenue stream that would provide a reliable, long-term source of federal assistance for the construction and repair of POTWs to reduce the enormous funding gap.

## II. POSSIBLE FINANCING SOLUTIONS

### A. Annual Appropriations

Until a stable, long-term financing solution is available, ASCE supports annual congressional appropriations of at least $1.5 billion from the federal general fund for the Clean Water State Revolving Loan Fund (SRF) program. As we have seen, this is the least secure form of financing and one that is quite likely to cease to exist as an effective financing means within a few years if present trends continue. This is principally due to relentless political and economic pressures generated by huge federal budget deficits and the zero-sum game necessary for annual congressional appropriations due to the requirements for budgetary offsets in each federal budgetary line item.

Notwithstanding the budget and appropriations predicaments faced by Congress, ASCE supports enactment of H.R. 2684, the Clean Water Infrastructure Financing Act of 2005. This bill, introduced by Reps. Sue Kelly of New York and Ellen Tauscher of California, would authorize $25 billion in federal aid to sewage treatment plants nationwide through the SRF program. The Kelly-Tauscher bill is a short-term solution to the funding gap for treatment works but one this Subcommittee and the T&I Committee should act upon expeditiously.

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[2] None of the estimates cited includes the costs of operation and maintenance (O&M), costs that are borne entirely by the local utilities and are not eligible for federal funding. The 2002 Gap Analysis, for example, put the total O&M cost at $161 billion for the 20-year study period.

ASCE also supports increased federal funding for research into wastewater treatment technology, which may reduce capital expenditures, as well as operation and maintenance cost.

**B. Private Activity Bonds**

A significant (non-federal) source of financing for water infrastructure projects could be in the form of private-activity bonds for exempt facilities.[3] These tax-exempt bonds could be issued by or on behalf of local or state government for the purpose of providing special financing benefits for qualified projects. These bonds typically are used to attract private financing for projects that have some public benefit.

These bonds are not a magic potion, however. For one thing, there are strict Internal Revenue Service rules as to which projects qualify. The bonds must meet the "private business use test" established by regulation. This test requires the issuer to ensure that more than 10 percent of the bond proceeds are used for "any private business use."[4]

Moreover, Congress limits the use of private activity bonds through a statutory ceiling on the amount of the bonds that can be issued in a state in any year. No state can issue private activity bonds with proceeds that exceed 50 percent of certain per capita or statewide aggregate limits.[5] Issuing authorities other than a state agency also are limited to bond issues totaling not more than half of the state's aggregate ceiling.

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3 "Exempt-facility bonds" are private-activity bonds that are issued to finance various types of facilities owned or used by private entities, including airports, docks and certain other transportation-related facilities; water, sewer and certain other local utility facilities; solid and hazardous waste disposal facilities; sports stadiums; certain residential rental projects (including multi-family housing revenue bonds); and certain other types of facilities.

4 26 U.S.C.A. § 141(b) (West 2005). The U.S. Tax Court has held that municipal bonds issued to construct a pipeline to dispose of a city's treated wastewater were not private activity bonds under section 141(b)(1), and thus the interest from the bonds was excludable from income under section 103. In order to dispose of its wastewater, the city obtained bond financing to construct a pipeline to transport the city's treated wastewater to private companies that would use the water to generate electricity for sale to customers. The court determined that the utility's *private use of the water* at the end of the pipeline did not change the characterization of the *public* use of the pipeline, which is available for public use as an integral part of the city's sewage system. In this case, the utility paid nothing for the transportation or use of the wastewater, so the city's ratepayers will pay at least 95 percent of the cost of the bonds. *City of Santa Rosa v. CIR*, 120 T.C. 339 (2003) (holding that the city's bonds are not private activity bonds because "[t]he sewage disposal functions of [the city's] sewage system are available for general public use.")

5 The per capita limit for each state is $65 for calendar year 2005; the aggregate state limit for the year is $195 million. The limits increase to $70 and $210 million in 2006 and to $75 and $225 million in calendar year 2007 and thereafter. *See* 26 U.S.C.A. § 146(n) (West 2005).

Because each eligible activity must compete annually with every other eligible activity within a state in what is essentially a zero-sum game, the congressionally mandated bonding cap seriously restricts the potential use of private activity bonds for water infrastructure financing.

For example, if the current statutory statewide cap of $195 million for 2005 is multiplied by 50, one obtains a maximum bonding capacity for all projects of $9.75 billion for the entire United States. *Assuming no other private activity bonds are issued by state or local authorities for any other eligible activity anywhere in the U.S. in 2005*, the national capacity of private activity bonds would be more than enough to cover the estimated annual "gap" of $8.85 billion for wastewater infrastructure capital needs.[6] But presuming that no other eligible projects will apply for bonding anywhere in the United States in a given year is not a rational basis for providing a sound financial footing for critically needed infrastructure projects.

Present federal law, however, does exempt some facility bonds from the existing state aggregate limits, including bonds issued to support the construction municipal solid waste landfills.[7] Legislation has been introduced in the 109th Congress to enlarge on this waiver in order "to provide that the volume cap for private activity bonds shall not apply to bonds for facilities for the furnishing of water and sewage facilities."[8] ASCE supports passage of H.R. 1708 in order to free up the bonding capacity of state and local governments to build and repair critically needed water infrastructure.

There is another drawback to private activity bonds. Interest on a private activity bond that is *not* a qualified bond is taxable under present IRS regulations. As discussed above, a private activity bond generally is part of a state or local government bond issue that meets both of the following requirements: more than 10 percent of the proceeds of the issue is to be used for a private business use, and more than 10 percent of the payment of the principal or interest is secured by an interest in property to be used for a private business use (or payments for this property), or derived from payments for property (or borrowed money) used for a private business use. Also, a bond is generally considered a private activity bond if the amount of the proceeds to be used to make or finance loans to persons other than government units is more than five percent of the proceeds or $5 million (whichever is less).[9]

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[6] ENVIRONMENTAL PROTECTION AGENCY, THE CLEAN WATER AND DRINKING WATER INFRASTRUCTURE GAP ANALYSIS 25 (2002). The annual investment deficit is derived from EPA's presumed 20-year "gap" of $177 billion.

[7] 26 U.S.C.A. § 146(h) (1) (West 2005).

[8] Clean Water Investment and Infrastructure Security Act of 2005, H.R. 1708, 109th Cong. § 3 (2005).

[9] State law intrudes as well. State constitutions may limit the uses to which states and local agencies can spend or lend their funds, and expressly address specific spending techniques. These "public purpose" provisions narrow the range of government action and limit public-sector support for private-sector activities. *See* Richard Briffault, *The Disfavored Constitution: State Fiscal Limits and State Constitutional Law*, 34 RUTGERS L.J. 907, *908-909 (2003).

Another tax limitation on private activity bonds as an investment tool should be noted: while interest on a private activity bond that is a qualified bond *is* exempt from regular income tax, interest paid to investors who purchase qualified bonds still may be counted as taxable income under IRS rules when these taxpayers calculate their taxes under the labyrinthine alternative minimum tax (AMT) requirements for individuals.[10]

If private activity bonds are deemed one path to a long-term solution to the financing of water infrastructure projects, Congress may wish to consider legislation that would help to expand their use by:

- Exempting from the aggregate state ceiling each bond issue for state and municipal water infrastructure projects in order to free up more state bonding capacity.
- Increasing the aggregate state ceiling from $225 million as of 2007 to a maximum of $400 million or $500 million or more, thereby augmenting a state's bonding power.
- Repealing the provision requiring individual investors to pay the AMT on interest income from private activity bonds. (This last step effectively would increase the governmental subsidy for water infrastructure projects by reducing or eliminating the taxes that are now paid on the returns from the bonds.)

Nevertheless, even under present law, these investment instruments can be an attractive financing option for state and municipal governments due to (a) their reduced financing costs and (b) their somewhat limited interest exemption from federal income taxes. The bonds also can be calibrated at the local level more precisely to meet the needs of different communities because the issuers are themselves the beneficiaries of the final project. (Current ASCE policy does not advocate or oppose changes to federal tax law to accommodate changes in state aggregate bonding capacity.)

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10 The AMT applies to tax-exempt interest income on private activity bonds (other than qualified 501(c) (3) bonds) issued after August 7, 1986.

"The AMT is a parallel tax system with its own tax base, exemption amounts, tax rates, and usable tax credits. A taxpayer's AMT liability is essentially the difference between the liability calculated under the AMT and the liability calculated under the regular income tax." *See Blowing the Cover on the Stealth Tax: Exposing the Individual AMT: Hearing before the Senate Subcomm. On Taxation and IRS Oversight*, 109th Cong. (May 23, 2005) (testimony of Robert J. Carroll, Deputy Assistant Secretary (Tax Analysis), U.S. Treasury Department) at http://www.senate.gov/~finance/sitepages/hearing052305.htm (last visited May 24, 2005). "[T]he AMT has the effect of requiring more taxpayers to remit at least some funds to the Federal Treasury every year than would be the case if only the regular income taxes applied." JOINT COMMITTEE ON TAXATION, DESCRIPTION OF REVENUE PROVISIONS CONTAINED IN THE PRESIDENT'S FISCAL YEAR 2001 BUDGET PROPOSAL 176 (Mar. 6, 2000).

**C. Kucinich-LaTourette Plan**

Another non-federal solution appears in the plan offered by Reps. Dennis Kucinich and Steve LaTourette of Ohio. Several years ago, they introduced legislation that offered a unique solution to the problem of infrastructure financing, especially in periods of high budget deficits and lower federal and state taxes.[11]

The plan would fund capital projects undertaken by state and local governments through excess funds borrowed from the Federal Reserve System. It would use existing funds to create a stable, long-term funding source. It would work as follows:

The Federal Reserve System holds a large amount of Treasury securities in order to add liquidity to the monetary system. The Kucinich–LaTourette plan would transfer a portion of those securities to a new bank, the Federal Bank for Infrastructure Modernization, the FBIM.

The FBIM would act as a subsidiary bank, using the transferred funds to issue loans. Since the mortgages would be integrated by the central bank's Federal Open Market Committee (FOMC), the Federal Reserve would be better able to maintain economic stability. More importantly, no congressional appropriations would be necessary.

The plan would authorize FBIM loans to any state or local government, any Native American tribe, or any regional or multistate organization to fund certain types of capital infrastructure projects dealing with transportation, education, water, or hazardous waste.

The FBIM would be authorized to offer approximately $50 billion annually in loans over a period of 10 years. Thus, $500 billion would be lent out during the initial authorization of the FBIM.

The Federal Reserve's Board of Governors would direct the issuance of the loan amounts each year so as to integrate the FBIM's operations with its own. The FOMC would be able to vary the $50 billion dispersal if it decided that the economy needed a boost. This money would have a greater effect on the economy than a lowering of interest rates, which does no more than create an incentive to invest. Loans from the FBIM would represent actual investments and thus would have a direct effect on the economy. The FOMC would need to maintain some control over these funds so that it could vary the amounts available each year in response to economic conditions.

By providing zero-cost loans to states to fund infrastructure projects, the Kucinich-LaTourette plan would help slash the cost of infrastructure projects in half, making them much more affordable.

States would also be able to make decisions about which projects would be eligible for funding under the plan. According to the plan's sponsors, at least 20 percent of the total amount of loans would have to be invested in schools. Loan allocations would also be based on

[11] Rebuilding America's Infrastructure Act, H.R. 1564, 107th Cong. (2001).

population. Additionally, the loans would have to be paid back in 10 to 30 years, and each loan would bear an administrative fee of 0.25 percent.

All infrastructure projects financed under the plan would first have to be approved by a state certifying officer or, in the case of a regional project, by an officer from each of the states involved before the FBIM could clear a loan. In the case of Native American tribes, the Secretary of the Interior would have to give her approval.

Finally, the funds would be made available through the FBIM directly to the qualified agencies from the Federal Reserve, thereby having no adverse consequences for federal budget surpluses or deficits.

**D. Federal Capital Budget**

ASCE also believes that the nation needs a capital budget for the entire federal government to help reduce the constant conflict between short-term and long-term needs. The current federal budget process does not differentiate between expenditures for current consumption and long-term capital investments. This causes major inefficiencies in the planning, design and construction process for long-term investments.

A capital budget system would help to increase public awareness of the problems and needs facing this country's physical infrastructure, and would help Congress to focus on programs devoted to long-term growth and productivity.

**E. Conclusion**

That concludes our statement on possible financing alternatives for water infrastructure projects. We applaud the Subcommittee's effort to gain a better understanding of the issues that face the nation's aging wastewater infrastructure systems. If ASCE can be of additional assistance, please do not hesitate to contact our Washington Office at (202) 789-7850.

# # #

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Inge Calderon
Executive Vice President

Statement of the
American Supply Association

Presented by
Dottie Ramsey, President.
Before
United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
On
Financing Water Infrastructure Projects
June 8, 2005

The American Supply Association (ASA) is the national organization serving wholesale distributors and their suppliers in the plumbing, heating, cooling and industrial pipe, valves, and fittings industries. Members of ASA are distributors, manufacturers, service vendors and independent manufacturer's representatives.

A dedicated trust fund for clean water will ensure that infrastructure modernization and maintenance remains a priority. The U.S. Environmental Protection Agency, the Congressional Budget Office, and the Government Accountability Office all agree that the nation faces a national water infrastructure funding gap in the hundreds of billions of dollars over the next 20 years. Simply stated, without a sustainable federal recommitment to clean water funding, we risk losing the 30 years of water quality progress enjoyed under the Clean Water Act.

This hearing is an important step toward the introduction and passage of legislation to create a clean water trust fund. This would secure the long-term viability of the Clean Water State Revolving Fund (CWSRF), while also adding a significant grant component to help communities fully achieve the goals of the Clean Water Act.

An important component of a dedicated trust fund would be expanded eligibility under the Clean Water Act SRF to authorize the use of the SRF for water conservation measures. This would enable consumers to make more efficient use of treated water, including incentives for the modification, retirement, or replacement of customer-owned water-using equipment, appliances, plumbing fixtures and fittings, and landscape materials.

Saving water through improved efficiency can lessen the need to withdraw ground or surface water supplies for municipal or industrial demands. Strategic use of water conservation not only helps save the nation's water resources but also can help extend the value and life of both water supply and wastewater treatment infrastructure, extending the beneficial investment of public funds.

Thank you for your consideration of these comments. The American Supply Association looks forward to working with the Transportation and Infrastructure Committee on the creation of Clean Water Trust Fund.

**Statement for the Record**
**of the**
**Construction Management Association of America**

**"Financing Water Infrastructure Projects, Part I"**

**Subcommittee on Water Resources and Environment**
**House Committee on Transportation and Infrastructure**

**June 8, 2005**
**2167 Rayburn House Office Building**
**10:00 AM**

The Construction Management Association of America (CMAA) respectfully submits a statement for the record on the June 8, 2005 hearing being held by the Subcommittee on Water Resources and Environment titled: "Financing Water Infrastructure Projects, Part I."

CMAA is a twenty-three year old national industry association whose mission is "to promote professionalism and excellence in the management of the construction process." CMAA represents more than 3,000 private and public firms, agencies, and individuals throughout the nation who are dedicated to the practice of construction management (CM).

Construction management is a professional service that applies effective management techniques to the planning, design, and construction of a project from inception to completion. This discipline and management system has been developed expressly to promote the successful execution of capital projects for owners. More and more public and private owners are relying on construction managers to represent them on projects and to utilize their expertise to control time, cost, and quality—resulting in the successful completion of all types of projects, including water and wastewater infrastructure projects.

It is clear that our clean water infrastructure network is: 1) critically important to the daily life of all Americans; 2) becoming increasingly aged and deteriorating rapidly; and 3) in immediate need of substantial and consistent federal investment. For years, efforts to maintain and improve upon our nation's clean water infrastructure have been under-funded and in some regions—neglected. This is difficult to believe considering how essential it is for our drinking water to be safe and reliable, our wastewater to be properly treated and reclaimed, and for our environment to be protected. CMAA strongly believes that before we face a major clean water crisis

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throughout our communities, it is essential that our nation's water and wastewater infrastructure become a national priority.

Congress has long recognized the historical lack of adequate funding for clean water and wastewater infrastructure. Annually, Congress appropriates related funding through the Clean Water State Revolving Loan Fund (SRF) and the Drinking Water SRF. Although this funding has provided state and local communities with critical assistance in addressing their water infrastructure needs, it has proven to be woefully inadequate. The Environmental Protection Agency, Congressional Budget Office, and the Government Accountability Office have independently confirmed that a water infrastructure funding gap of between $300 and $500 billion will exist over the next 20 years. The result is that as much as $25 billion per year is needed over the next two decades to address problems associated with aging infrastructure, increasing demands on the system, and federal mandates for clean water and safe drinking water programs.

The status quo related to federal investment in clean water infrastructure is simply not getting the job done. CMAA supports increased and consistent federal investment in clean water infrastructure through establishment of a dedicated federal clean water trust fund. This trust fund should have a consistent, dedicated source of revenue and ensure that all revenues deposited into the trust fund are used only for clean water activities.

The trust fund concept is certainly not unique as dedicated federal trust funds exist for transportation infrastructure ($35 billion/year) and airport infrastructure ($8 billion/year). The question becomes—is clean and safe water any less important than our surface transportation and airport infrastructure networks?

In a recent poll undertaken jointly by the Luntz Research Companies and Penn, Schoen & Berland Associates, 89% of the poll respondents indicated that "federal investment to guarantee clean and safe water is a critical component of our nation's environmental well-being." In that same poll, 86% of respondents said that they "support legislation by the U.S. Congress that would create a long-term, sustainable and reliable trust fund for clean and safe water infrastructure." Simply put, dedicated funding for clean and safe water is a nationwide, bipartisan issue that is important to all Americans.

CMAA understands that establishing a clean water trust fund and identifying an adequate and reliable funding source for this trust fund is a substantial challenge and will not occur overnight. That is why the focus of this hearing is so important and the work of this Subcommittee, others in Congress, and key stakeholders is essential to not only clearly identify the challenges, but to work toward a solution such as the establishment of a dedicated funding source through a clean water trust fund.

CMAA commends Chairman Duncan, Ranking Member Johnson, and the entire Subcommittee on Water Resources and Environment for holding this important hearing. CMAA is committed to working with Congress on the establishment of a clean water trust fund in order ensure that our water infrastructure network is safe and reliable for generations to come.

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## Testimony for the Record

**Submitted by Wenonah Hauter, Director**
**Public Citizen's Energy and Environment Program**
**Washington, D.C.**

**Hearing on Financing Water Infrastructure Projects**
**Subcommittee on Water Resources and Environment**
**House Transportation and Infrastructure Committee**
**U.S. House of Representatives**

**June 8, 2005**

Chairman Duncan and members of the subcommittee, my name is Wenonah Hauter and I direct Public Citizen's Energy and Environment program. Public Citizen is a 30 year old consumer advocacy organization with 150,000 members around the country. Although the following comments have not been solicited, I am providing them in the belief that they lend an important consumer perspective regarding the critical need for a federal Clean Water Trust Fund for infrastructure. I ask that the following comments be included in the hearing record for the June 8, 2005 hearing on Financing Water Infrastructure Projects in the House Transportation and Infrastructure Committee, Subcommittee on Water Resources and Environment.

The systems that deliver safe drinking water to our homes and businesses, and then take wastewater away to be treated, have been neglected for years. Aging pipes, growing populations, increased use of water for industrial and agricultural uses and requirements to protect public health and the environment are among factors straining local governments' water and wastewater budgets from coast to coast. In other cases where there has been a gap between the need for infrastructure repairs and the funding available, Congress has established trust funds, funded by dedicated revenue sources. As an organization representing consumers, we believe that this approach should be used to address the vital need for investment in our nation's drinking water and sewage infrastructure .

The Environmental Protection Agency, in its *Clean Water and Drinking Water Infrastructure Gap Analysis*, concluded that the needs of water and wastewater infrastructure systems are far outstripping the amount of money being spent to upgrade and maintain those systems; at expected rates of expenditure, the gap between what needs to be spent and what is likely to be spent could total $500 billion or more by 2019. [1]

Cities are facing the enormous challenge to protect and maintain these crucial public services on their own, with scant assistance from the federal government. Since 1980, the federal government's funding of safe and clean water infrastructure in America

has decreased by 75 percent, and today the federal government funds a mere 5 percent of national infrastructure costs.[2]

The importance of improving sewage water treatment cannot be overstated for insuring the integrity of our country's water resources. Improving water quality will help insure that our nation's citizens have access to healthy drinking water, and will help restore and protect fisheries and other habitat.

The vast majority of people in the U.S. understand that clean and safe water is a basic service that the government should provide for the public good. Results of a 2005 poll conducted by the Luntz Research Companies for the Association of Metropolitan Sewerage Agencies, now renamed the National Association of Clean Water Agencies, found overwhelming support—86 percent—for legislation to create a trust fund for safe and clean water infrastructure.[3]

Unfortunately, budget pressures and other considerations have dictated spending levels that fail to reflect public sentiment. In four of the last five fiscal years, the administration has proposed cutting the budget for the Clean Water State Revolving Loan Fund to pay for wastewater system upgrades from $1.35 billion annually to $850 million, while resisting calls to raise the Safe Drinking Water Revolving Loan Fund, which provides assistance for water system upgrades.[4] While Congress typically restores funding to existing levels, those levels are a far cry from the billions that must be spent each year to upgrade systems.

At the same time—and despite the fact that municipalities are already carrying more than 90 percent of water and wastewater costs—the EPA is increasingly playing down the role of federal financial assistance while actively encouraging communities to pay for system upgrades by raising rates to consumers.[5]

Cost-conscious and cash-strapped communities nationwide are raising rates, issuing more debt and using tax revenues to help pay for increasing infrastructure costs. And in many instances, such as Phoenix, San Diego, Nashville, Miami and other cities, local system professionals have undertaken rigorous internal reforms that have saved money, improved service and empowered the employees who assure that our water and wastewater systems are operated cleanly, safely and efficiently.[6]

No "Apollo project" is needed to break new scientific and technical ground to provide safe and clean water service for our homes and businesses, schools and hospitals. Dedicated water and wastewater professionals in our communities already know how to do it.

What is needed, however, is a rededication among elected officials, policymakers and the public to whom they are accountable to make safe and clean water a national, public priority. The best way to achieve this goal is to establish a federal CleanWater Trust Fund that is dedicated to improving both drinking and sewage infrastructure. This is an investment bound to pay off many times over.

[1] "The Clean Water and Drinking Water Infrastructure Gap Analysis," Environmental Protection Agency, Office of Water, February 2002. EPA-816-R-02-020; http://www.epa.gov/owm/gapreport.pdf
[2] Testimony of Paul Pinault, vice president, Association of Metropolitan Sewerage Agencies, Subcommittee on Fisheries, Wildlife and Water, Senate Environment and Public Works Committee, Oct. 31, 2001; http://www.win-water.org/win_legislative/win_testimony/pinault10_31_01.html
[3] Luntz Research Companies memorandum, March 2005; http://www.citizen.org/documents/Luntz.pdf
[4] "Standing at the Crossroads: The Bush Administration and the Anniversary of the Clean Water Act," report prepared by the Democratic staff of the House Committee on Transportation and Infrastructure, Oct. 18, 2003; Letter to Senate Budget Committee from Sens. Dodd and Lieberman, Mar. 4, 2005, http://dodd.senate.gov/press/Releases/05/0304.htm
[5] "Sustainable Water Infrastructure for the 21st Century," Environmental Protection Agency fact sheet, http://www.epa.gov/water/infrastructure/index.htm
[6] "Public-public partnerships: A backgrounder on successful water/wastewater reeingineering programs," Public Citizen, November 2002, http://www.citizen.org/documents/waterreengineering.pdf

Financial Disclosure

In accordance with clause 2 (g) (4) of Rule XI of the Rules of the House of Representatives, I declare that Public Citizen has not received any funds or grants from the Government of the United States during this or the past two fiscal years.

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Wenonah Hauter, Director

Public Citizen's Energy and Environment Program

Statement of

Timothy F. Burns, President of The Vinyl Institute

to the

Subcommittee on Water Resources and Environment,

House Committee on Transportation and Infrastructure

on

Financing Water Infrastructure Projects

June 8, 2005

The Vinyl Institute

1300 Wilson Boulevard

Arlington, Virginia 22209

Mr. Chairman and members of the subcommittee, on behalf of The Vinyl Institute and its member companies, I would like to thank you for the opportunity to submit this testimony on the critically important issue of financing water infrastructure projects in communities throughout the United States. The Vinyl Institute is the U.S. trade association representing the leading manufacturers of vinyl (also known as polyvinyl chloride, or "PVC"), vinyl chloride monomer, vinyl additives and modifiers, and vinyl packaging materials. PVC is the global plastic of choice for infrastructure and diverse other applications. PVC pipe is one of the high-value products that the vinyl industry supplies, which currently is used extensively in wastewater and drinking water systems throughout the U.S.

The Vinyl Institute wishes to offer these comments on the growing need for enhanced water infrastructure financing in order to ensure adequate funds are available to protect the public's health and the environment for the current as well as future generations. We also wish to underscore the importance of designing wastewater and drinking water systems with pipe that protects the public's investment in these systems. New pipe systems need to be designed to minimize future maintenance and repair resulting from line breaks that occur in operating both wastewater and drinking water systems.

Investing in Wastewater Infrastructure is Critically Needed

The need for investing in wastewater and drinking water systems in the U.S. is well documented with numerous studies. These studies have shown about 2.2 trillion gallons of potable water are lost annually in the United States from leaking pipes and breaks.

This is enough to satisfy the drinking water needs for every man, woman and child in the world for a year. Lost revenue to water utilities is estimated to total $2.98 billion per year, at a time when many sewer and water utilities are struggling to generate enough revenue to keep up with increasing maintenance and repairs of deteriorating systems. The U.S. Environmental Protection Agency completed a study in 2002 titled, *Clean Water and Drinking Water Infrastructure Gap Analysis*, which estimated $534 billion more in water infrastructure investment is needed over the next 20 years to then existing levels of funding. Since this time, congressional funding has decreased further widening the gap between the need for and financing of water infrastructure programs. In still another report, members of the water infrastructure community calculated an additional $23 billion per year would be needed to meet national and public health requirements under the Clean Water Act and Safe Drinking Water Act.

What is happening to our wastewater and drinking water systems in the U.S. is clear – the country is losing ground in keeping up with growing demand for these essential systems as old systems fail and new systems coming on line are postponed. In putting off the commitment to invest in reliable water infrastructure, postponed decisions mean it will cost more in the future to fix the problems while running the risk of jeopardizing public health and environmental quality.

The Current Federal Funding System Does Not Address the Need for Water Infrastructure

The current level of authorized federal funding for wastewater and drinking water programs is insufficient to meet growing demand for financing these systems. If federal funding were to continue even at 2002 levels, EPA's *Gap Analysis* report indicates the U.S. would keep sliding further away from attaining adequate water quality performance. While The Vinyl Institute recognizes the primary jurisdiction over drinking water programs rests outside the purview of this committee, we respectfully urge a solution that addresses the financing needs of both sewer and drinking water systems.

Among the ideas being suggested by the water infrastructure community is a dedicated trust fund for this purpose. In concept, it has merit. Similar trust funds exist for highways and airports, which are important to interstate commerce, jobs creation, international trade, pollution reduction, and overall efficiency. Equally credible arguments can be made for a trust fund dedicated solely for water infrastructure on the same underlying premises that support individual trust funds for critical highway and airport infrastructure.

How such a trust fund should be structured and who should pay for it, however, require a careful analysis and balancing of public policies. As this subcommittee and others having jurisdiction over infrastructure trust funds consider establishing such a dedicated fund, we would encourage funding mechanisms that achieve the objectives of water

conservation, pollution reduction, fairness and proportionality, incentives for wastewater and drinking water system operators, and pipe system performance. The Vinyl Institute offers its assistance in assessing funding options, both public and private, and in working with Congress to see a trust fund for water infrastructure programs become a reality.

Congress Should Invest Federal Funds in Pipe Systems Designed for Maximum Performance and Durability

In considering any new trust fund for water infrastructure, it is imperative that Congress insist on investing public funds only in pipe systems with minimum leaks and breaks and a maximum life expectancy. It is senseless and wasteful to continue investing scarce public funds in water systems that use inferior materials that corrode, leak and break at an accelerated rate, accumulate biota inside drinking water pipes to a greater degree, require enhanced chemical treatment, and otherwise cost utilities, rate payers, and the general public more than systems with better materials, such as PVC. The average useful life of water infrastructure systems should be significantly improved as old pipe is removed from the system and new, long-lasting pipe made out of materials such as PVC, is added.

It is not by chance that PVC pipe is dominating the new pipe market because of its superior performance and durability. In a recent study, the National Research Council of Canada found PVC water distribution pipes had an outstanding performance record of only 0.7 breaks per 100 kilometers, versus 35.9 breaks for cast iron and 9.5 breaks for ductile iron. In a Calgary system of all-PVC pipe installed over the past 25 years, the break rate was found to be approximately 0.2 per 100 km. The capital and operating

budgets for enhanced ductile iron water distribution systems is 300 times greater than for PVC.

In addition to increased capital and operating costs for non-PVC pipe systems, liability claims for leaks are another dimension to the problem facing local utilities. These combined speak to using PVC pipe systems funded under any new water infrastructure trust fund.

Summary

In summary, The Vinyl Institute supports additional congressional funding of water infrastructure programs. A new federal water infrastructure trust fund for both wastewater and drinking water systems should be established with important objectives of water conservation, pollution reduction, and system lifecycles driving decisions on who should pay for such a fund. Future capital and operating budgets for wastewater and drinking water systems should be made more efficient for rate-payers and local government budget planners through better design and use of high-performance and durable PVC pipe systems.

I thank the Chairman and the members of the subcommittee for considering these comments. The Vinyl Institute is committed to assisting Congress in advancing much-needed legislation to enhance investment in water infrastructure and to replace outdated technology and the high costs associated with many existing water infrastructure systems.

**FOR IMMEDIATE RELEASE**

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# Vinyl Institute Urges Congress to Establish Trust Fund for Aging Water Infrastructure

## *Federal Government Should Promote Use of Best Performing Materials*

ARLINGTON, Va., June 8, 2005 – The Vinyl Institute, an independent trade association representing U.S. vinyl resin manufacturers, urged Congress to create a dedicated trust fund to help finance the growing needs of a rapidly decaying water infrastructure in the United States.

In testimony submitted to the House Subcommittee on Water Resources and Environment, VI President Tim Burns said with such a trust fund Congress should also insist that water projects call for the best available pipe materials – those that are durable, cost effective and have shown the lowest break rate.

"It is senseless and wasteful to continue investing scarce public funds in water systems that use inferior materials that corrode, leak and break at an accelerated rate…,"Burns said.

There are 700 water main breaks a day in North America and in the United States 2.2 trillion gallons of water is lost annually. That is enough water to quench the thirst of the world's population for one year.

PVC pipe continues to outperform competing pipe materials, and be a more cost effective solution for both delivery of potable water and for wastewater drainage. For example, the National Research Council of Canada found PVC water distribution pipes had only 0.7 breaks per 100 kilometers, versus 35.9 breaks for cast iron and 9.5 breaks for ductile iron.

####

# The Western Coalition of Arid States
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Testimony
(for the record)

of

Charlie Nylander
Chairman, Legislative/Budget Committee
Western Coalition of Arid States (WESTCAS)

For the House Committee on Transportation and Infrastructure
Subcommittee on Water Resources and the Environment

Hearing on Financing Water Infrastructure Projects

July 15, 2005

*The Voice of Water Quality in the Arid West*

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# The Western Coalition of Arid States
## W E S T C A S

The Western Coalition of Arid States (WESTCAS) is submitting this testimony to the Subcommittee on Water Resources and Environment regarding their hearing on Financing Water Infrastructure Projects. My name is Charlie Nylander, and I represent the interests of WESTCAS and serve as Chairman of the Legislative/Budget Committee.

WESTCAS is a coalition of approximately 125 water and wastewater districts, cities, towns, and professional organizations focused on water quality and water quantity issues in the States of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, and Texas. Our mission is to work with Federal, State, and Regional water quality and quantity agencies to promote scientifically-sound laws, regulations, appropriations, and policies that protect public health and the environment in the arid West.

Financing water infrastructure projects is of particular concern to our member's states, all of which are located in the Western United States. Over the past decade, the population of the Western states has grown 19.7 percent—greater than any other region of the United States. The demand for water has increased just as dramatically. Aging infrastructure, increasing environmental mandates, serious forest fires, and prolonged drought conditions have added to this demand, threatening the very communities and economies established throughout the West.

A number of important factors applicable to the arid West should be considered regarding the financing of water infrastructure projects, as follows:

- The rapid population growth in the arid West is challenging the districts and municipalities to provide quality utility services for water and wastewater due to the sheer number of potential customers, their water demands, and the volumes of wastewater produced requiring treatment.
- Existing utility infrastructure is often: aged, in need of upgrade or replacement, over-loaded, undersized, and constructed of materials that have not proven to have the life expectancy anticipated at the time of original installation or construction.
- Environmental regulations and standards are continuing to become more stringent over time regarding both water supply and wastewater treatment, requiring more sophisticated and expensive treatment processes prior to water supply distribution and consumption or wastewater discharge.
- Homeland security concerns have increased the costs associated with utility system surveillance, security protection, and response/mitigation planning for acts of terrorism and sabotage.
- The population growth in the arid West has a significant component of retired and aged citizens who are on a fixed and/or limited financial budget,

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and who cannot afford the escalating utility costs being distributed to the local customer base.

- Funding mechanisms for water infrastructure are constrained to a handful, and although local financing for the utility service area should bear the brunt of the required costs, utility rate increases alone cannot generate the capital required to maintain, replace, or construct new utility infrastructures.
- To-date funding for the U.S. Environmental Protection Agency's revolving loan funds for drinking water and wastewater projects have been inadequate to meet the growing national infrastructure demands. Federal funding has been steadily decreased in recent years; and yet appear to be viewed by EPA as "sufficient" federal "seed money" contribution to water infrastructure needs that EPA believes are a local government responsibility.

On February 16, 2005 Mr. Benjamin H. Grumbles, Assistant Administrator for Water, U.S. Environmental Protection Agency provided a statement before the Committee on Transportation and Infrastructure, Subcommittee on Water Resources and Environment, U.S. House of Representatives that is illustrative of the last bullet above. Regarding water infrastructure, Mr. Grumbles stated:

> "This Committee knows the value of water infrastructure and the size of the challenge—and so does EPA. To support sustainable wastewater infrastructure, EPA will continue to provide annual capitalization grants to the Clean Water State Revolving Funds (CWSRF). The budget provides $730 million for CWSRF. This investment will allow EPA to meet the Administration's federal capitalization target of $6.8 billion for 2004 through 2011 and enable the CWSRF to revolve over time at a level of $3.4 billion a year."
>
> "This continued federal investment, with other traditional sources of financing, will result in significant progress in addressing the Nation's wastewater treatment needs. It will also significantly contribute to the long-term environmental goal of increasing the number of watersheds attaining designated water quality uses. The President's budget also maintains the federal commitment to the Drinking Water SRF, providing $850 million, and seeks a one-year extension of the authority for States to transfer funds between two SRFs to maximize flexibility in meeting State and local needs."
>
> "Mr. Chairman, a cornerstone of our water budget is its focus on the "four pillars" of sustainable infrastructure. We must provide the tools that help water managers achieve sustainable infrastructure. The four pillars that are essential for sustainable infrastructure are: better management, full-cost pricing, water conservation, and restoration through the watershed approach."

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The funding cuts proposed in the President's budget decrease the Nation's ability to cope with the widening water infrastructure gap, rather than demonstrate "significant progress" in addressing the Nation's wastewater treatment needs as stated by Mr. Grumbles. According to the Congressional Budget Office, drinking water and wastewater infrastructure costs over the next 20 years may range from $492 billion to $820 billion. The EPA recent report, called the Gap Analysis Report, contains similar infrastructure cost ranges from $499 billion to $929 billion. While the Water Infrastructure Network, a coalition of industry, engineering, professional, and environmental groups, gathered data for a high-end estimate of $806 billion. With such large predicted cost for the water infrastructure needs, surely EPA cannot feel comfortable in their optimistic statements regarding "achieving sustainable infrastructure", especially when they reflect on their own gap analysis figures. Additionally, Mr. Grumble's philosophical testimony regarding the "four pillars" does not say anything that is truly helpful for addressing the widening gap in funding required for water infrastructure.

It is interesting to note that the above-mentioned figures for the infrastructure needs may indeed not be accurate, and in fact could be significantly underestimated. WESTCAS members understand that the processes employed to collect the infrastructure financial needs were based on a mixture of municipal planning predictions, based on disparate planning periods, e.g. 5-year, 10-year, and 20-year planning for capital improvement planning. In any case, the Congressional Budget Office, EPA, and WIN Coalition figures suffice to make the point on the widening gap in water infrastructure needs.

The WESTCAS members are troubled by the burgeoning population growth they are experiencing in their western communities, and the increased water and wastewater utility demands on their infrastructure systems. In consideration of the bulleted information that I have highlighted above, our members believe that the federal government must play a more significant role in the financing for water infrastructure, not a lesser role as implied by EPA. However, when confronted with the task at hand, i.e. finding the right solution to water infrastructure financing, WESTCAS members believe that any solution that is being sought should not be "singular", as in a "silver bullet" type of approach. Rather, WESTCAS members believe that the federal government approach should be "multi-disciplinary" and capable of being utilized as a menu of additive mechanisms that collectively solve the Nation's water infrastructure financing problem.

To this end, WESTCAS members believe that this Committee should consider a spectrum of mechanisms including such suggestions as have been made to-date (or are yet to be proposed) such as: tax deductions for water and wastewater utility fees; appropriate regulation of the quality of wastewater effluent discharges that is more dependent on site-specific conditions versus a "one size fits all regulatory

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approach"; the water infrastructure trust fund; improved EPA revolving loan funds; and other clever scientific, legal, and financial approaches that collectively narrow the gap on water infrastructure financing.

It is important to note that EPA's regulatory programs, developed pursuant to the Clean Water Act and Safe Drinking Water Act, are the most significant driver for the growing needs for water infrastructure financing. That is why seeking a financial solution must be coupled with developing regulatory solutions simultaneously. Wastewater treatment requirements are largely based on national water quality criteria that were based on aquatic species and flow regimes not necessarily representative of low flowing rivers, ephemeral rivers, and effluent-dominated rivers typical of the arid West. In order to properly consider regional differences in aquatic species and hydrology, methodologies and criteria must be developed through sound, scientific research studies that can support site-specific water quality standards. WESTCAS has historically served as a dominant supporter of such research, and was successful in supporting the establishment of the Arid West Water Quality Research Project (AWWQRP) in 1995 that resulted in a $5 million federal appropriation (Public Law 103-327) and the establishment of an Assistance Agreement between EPA and Pima County, Arizona. The establishment of the Agreement provided significant opportunity for Pima County, EPA Region 9 and others throughout the arid West to work cooperatively to conduct scientific research necessary to develop appropriate water quality criteria and standards for the region and improve the scientific basis for regulating wastewater and stormwater in the arid and semi-arid West.

This research has been progressing since 1995, but at present there is no continuing funding beyond FY 06. In the development of a program for water infrastructure financing, specific authorization and allocation should be considered for the conduct of water research in the broadest terms. Research regarding water quality criteria and standards, drinking water standards, water and wastewater treatment technologies, and water reuse and recycling technologies represent just a partial listing of the scientific and technical needs to address fundamental questions and support fundamental decision-making needed in water regulation, water infrastructure planning, development, and water resource management. Water infrastructure financing needs must be required by appropriate laws, regulations, and standards. In order to support their promulgation and amendment, the nation must have sound, scientific research at the foundation.

In reviewing draft language in a document prepared by the WIN Coalition, titled the "Clean Water Trust Act of 2005", WESTCAS has developed several comments regarding the concepts suggested. First, any forthcoming legislation should not contain limitations on funding assistance provided for growing communities and new development. Currently, the draft WIN Coalition states:

"(e) LIMITATION.---No assistance may be provided under this section if

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the project will provide substantial benefits to new communities, new subdivisions, or newly developed urban areas"...

Such limitations unduly penalize the western states and the burgeoning population growth they are experiencing, much of said growth occurring due to the influx of retirement aged persons on limited or fixed incomes. Our WESTCAS member's perspective is that the demand for new communities, subdivisions, and extended urban areas is in fact what is straining the present utility systems and the financing ability of local government.

Secondly, the extension of loan repayment periods is a valuable attribute in any draft legislation, in that it provides financial flexibility for the local governments responsible for constructing and maintaining the water infrastructure. Along this same vein, legislative provisions for set-aside grant funding for small communities with a population of 10,000 or fewer individuals is necessary to accommodate the typical growth patterns in most of our western states.

Lastly, the taxable source for the creation of a national trust fund for water infrastructure will likely be the most challenging aspect of the trust fund mechanism. No specific industry will voluntarily desire to be taxed to provide the basis for a water infrastructure trust fund. Early legislative concepts regarding the taxation of the beverage industry provoked heated discussion. However, this Subcommittee must not be persuaded to give up on a trust fund mechanism because it is too hard to find the appropriate tax base. WESTCAS recommends that consideration be given to taxing a base made up of entities that actually contribute influent to the Nation's wastewater treatment facilities; and who also create the most demand on our Nation's water treatment and supply systems.

Some common contributions to wastewater influent include paper products e.g. toilet tissue; cooking oils and grease contributed by household kitchen and restaurant use; soaps and detergents; dyes and other chemical products contributed both by household and commercial enterprises; and the newest category of concern, i.e. pharmaceuticals. In terms of wastewater treatment issues, oil and grease often create a difficult treatment issue. Pharmaceuticals are now rapidly becoming a significant concern in that they apparently pass through the treatment plants and are discharged into the Nation's rivers and lakes where they are capable of adversely affecting aquatic life, and/or becoming a public health concern regarding their impact on downstream public water supply diversions. In effect, the Committee may be prudent to consider broadening the group of industries targeted for taxation, so as to spread the impact of the taxation process.

One additional suggestion for the Subcommittee's consideration regarding source(s) of taxable base for a trust fund could include the industrial segments that actually contribute products and materials to the construction of water and wastewater infrastructure. Multiple industries contribute concrete, aggregate,

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reinforcement steel, plastic and metallic piping, pumps, motors, and of course electrical power to construct, maintain, and operate water and wastewater infrastructure. If such industries became part of the tax base for a water infrastructure trust fund, the industries would continue to see some degree of tax recovery simply due to the continuous growth in the demand for their materials and products.

Finally, a national trust fund for water infrastructure must be equitable to all of the United States. Special legislative language that focuses on specific regions of the country must not diminish the needs of those regions not mentioned specifically. WESTCAS believes that the western States must not be "short-changed" in the development of a national water infrastructure trust fund. Again, I direct your attention to the realities displayed in the bulleted information at the beginning of this testimony. Our western States are facing a plethora of regional challenges, from population growth to drought and wildfire. Water infrastructure funding processes and mechanisms must be equitable and realistic, and take into consideration the realities of the arid West.

At the time of submitting testimony, WESTCAS has become aware of a new piece of legislation introduced on July 14, 2005. The "Water Infrastructure Financing Act" introduced by Senate Environment and Public Works Committee Chairman, James Inhofe, ranking member Jim Jeffords, and Senators Lincoln Chafee and Hillary Rodham Clinton provides $38 billion of additional federal funding into wastewater infrastructure improvements. The legislation includes appropriations for wastewater and drinking water infrastructure, water resources study, cost of service study, State revolving loan fund review process, agricultural pollution control technology grant program, and a demonstration grant program for water quality enhancement and management (including specific water technology research). WESTCAS recommends that this legislation be considered by the Subcommittee, along with any other pertinent legislation in the conduct of Subcommittee work and derivation of recommendations.

On behalf of WESTCAS, I thank the Subcommittee for this opportunity to provide testimony.

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# FINANCING WATER INFRASTRUCTURE PROJECTS

**Tuesday, June 14, 2005**

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, WASHINGTON, D.C.

The subcommittee met, pursuant to call, at 9:59 a.m., in Room 2167, Rayburn House Office Building, Hon. John Duncan [chairman of the subcommittee] Presiding.

Mr. DUNCAN. I would like to call this hearing to order and welcome everyone here today. Today is the continuation of our two-part hearing on financing water infrastructure projects, a very important topic for this entire Nation.

We held the first part of this hearing last week, on Wednesday, June 8. At that hearing, we heard testimony about the concept of creating a national clean water trust fund as a means for financing wastewater infrastructure needs. Dr. Frank Luntz discussed the results of his recent public opinion survey, including the public's perception of the need for clean water, and more importantly, their willingness to pay money to get it.

The survey found that most Americans believe that clean and safe water is a national priority, and would support the creation of a sustainable trust fund for wastewater infrastructure. In fact, according to his survey, 71 percent would give a priority to clean water projects, 20 percent to highway funding, and 3 percent to aviation funding.

Representatives of the Association of General Contractors of America, the National Association of Clean Water Agencies, the American Waterworks Association, and the American Beverage Association all provide additional perspectives on creating and funding a national clean water trust fund. It is clear from last week's testimony that one of the most complex aspects of moving from a trust fund concept to reality will be determining the funding sources for such a trust fund.

Today we will build on the information we obtained from last week's hearing by focusing on other mechanisms for funding wastewater infrastructure. We will hear today from a representative of the City of Dallas who will talk about the financial pressures faced by local governments to meet their water infrastructure needs and what they are doing to meet those needs.

We will hear from a representative of the Texas Water Development Board representing the Council of Infrastructure Financing Authorities who will discuss the role of State financing authorities in advancing innovative debt financing techniques and assuring the availability and accessibility of adequate and economical funding for water infrastructure.

The Maryland Water Quality Financing Administration; the representative of that administration will discuss Maryland's Chesapeake and Atlantic Coastal Bay's Restoration Fund and its associated fee system.

A representative of Lehman Brothers will discuss private activity bonds as another potential means of making additional capital available to local communities.

A representative of the Rural Community Assistance Partnership will discuss State-level best practices in the delivery of financing to small communities.

Finally, a representative of the Coalition for Alternative Wastewater Treatment will discuss innovative ways for reducing infrastructure needs and costs through the use of decentralized and nonstructural approaches for managing wastewater.

I hope our witnesses will bring forward ideas on how we can increase funding for wastewater infrastructure, a great need in this Nation, and will help us identify potential willing revenue sources and ensure equitable means for generating revenues.

Let me now turn to our ranking member, Mrs. Johnson, for any opening statements she would like to make.

Ms. JOHNSON. Thank you very much, Mr. Chairman, for holding this second hearing, and I look forward to hearing the witness's suggestions and recommendations as to how we fund our Nation's water.

Our Nation's water and wastewater infrastructure is of critical importance to the health of our citizens, our environment, and our economic State. With our Nation facing an unparalleled possibility of failure of this infrastructure, we must address how to finance improvements in order to avoid threats such as increased sewage overflows, closed beaches, and contaminated drinking water.

During our last hearing on this topic, we held an important conversation on the possibility of creating a trust fund for water similar to those used by the highways and aviation. Today we will hear of other possibilities for funding besides those relying on Federal funds, trust funds. For example, the Deputy Mayor of the City of Dallas, who is my city councilman, will discuss the potential of modifying the Tax Code to allow for a tax deduction for water and wastewater utility fees similar to the deduction currently authorized for local property tax. Allowing the deduction of water and wastewater expenses could reduce the impact on customers of rate increases to fund the infrastructure projects.

Again, I am very interested in hearing our witnesses, and I thank you very much for holding this hearing.

Mr. DUNCAN. Thank you very much. I would like to call on now the vice chairman of the committee, Dr. Boustany, for any statement he wishes to make.

Mr. BOUSTANY. All I want to say, Mr. Chairman, is I thank you for holding the hearing and I am eager to hear the testimony. Thank you.

Mr. DUNCAN. Thank you very much. Mr. Salazar.

Mr. SALAZAR. Thank you, Mr. Chairman, and Ranking Member Johnson. Last week, this subcommittee heard testimony from Dr. Frank Luntz and the National Association of Clean Water Agencies and others on the public support and need for the dedicated source for funding for clean water projects. The cross of Third Congressional District of Colorado communities are struggling with how to pay for competing and costly infrastructure improvement projects.

For instance, in Mesa County, the Clifton wastewater treatment facility is in need of improvements for up to $2 million in order to meet the new Federal guidelines. In Alamosa, Colorado, as the EPA tightens the Federal guidelines on arsenic, they are required to build something to the tune of $6 million. But with only 12,000 residents in Clifton and 10,000 residents in Alamosa, and the struggling economies, the projects are nearly impossible without Federal assistance.

As my fellow subcommittee members know, Federal funding streams continue to dry up in most recent attempts by the House interior appropriations bill, which cuts funding for the Clean Water State Revolving Loan Fund.

Mr. Chairman, I would like to close by reemphasizing my sentiments from last week. This Congress must tackle issues of how to create a dedicated source of Federal funding for clean water projects. Water is a shared resource, and each one of us has a responsibility to protect and preserve it for our own use and future generations. Thank you, Mr. Chairman.

Mr. DUNCAN. Thank you very much.

We are always pleased to be joined by the former chairman of this subcommittee and the chairman of the Full Science Committee, Mr. Boehlert, for any comments.

I believe Mr. Baird doesn't have a statement, either. Is that correct?

Mr. Gilchrest.

Mr. GILCHREST. Thank you, Mr. Chairman, for holding this hearing. And I would like to welcome Mr. Jag Khuman from the State of Maryland, director of the Water Financing Administration. Mr. Chairman, there are always money problems and there are always water problems. So Mr. Khuman and the State of Maryland and our former colleague, Bobby Ehrlich have basically to a large extent, resolved most of that trouble by sharing the cost in a very equitable fashion among all the citizens of Maryland with what we affectionately call the flush fee.

So anybody who has flush toilets is going to pay a couple of bucks a month, raising millions of dollars to target the 60 most problematic sewer plants. And this will be a program that will not only resolve those nutrient issues from wastewater plants, but also from septic tanks, and be able to use the Federal dollars which are always limited to those more rural smaller areas of the State that need help as well. So I think Maryland has done a fine job, and I want to welcome Mr. Khuman here this morning. Thank you, Mr. Chairman.

Mr. DUNCAN. Thank you very much, Mr. Gilchrest. Always a very active member of this subcommittee.

Mr. Brown.

Mr. BROWN. Mr. Chairman, I just welcome the panel this morning. I know the panel we had last week was trying to find a dedicated fund to fund the water needs of this Nation, and I would hope maybe somebody here might come up with a good solution. I heard a $2 flush fee. If we could solve the whole water system with a $2 flush fee, I think that would be a super solution. But, anyway, thank you all for being here this morning. Thank you, Mr. Chairman.

Mr. DUNCAN. Thank you. Judge Poe. All right. Well, thank you very much. We are ready to proceed with our panel of witnesses. We have a very distinguished panel today. We have representing the City of Dallas, the Honorable Donald W. Hill, the deputy mayor of Dallas. He is a District 5 council member, and, of course, from Dallas.

We have representing the Council of Infrastructure Authorities Mr. J. Kevin Ward, who is executive administrator of the Texas Water Development Board from Austin.

We have representing the Maryland Department of the Environment Mr. Jack Khuman, who is the director of the Maryland Water Quality Financing Administration from Baltimore.

We have representing the Lehman Brothers Mr. Stephen Howard, who is the senior vice president of that organization from the city of New York.

We have representing the Great Lakes Rural Community Assistance Partnership Ms. Debra Martin, the RCAP program director from Fremont, Ohio.

And we have representing the Coalition for Alternative Wastewater Treatment Dr. Valerie I. Nelson, who is the director of that coalition, and she is from Gloucester, Massachusetts.

We thank all of you for being here with us today. Always, we proceed in the order the witnesses are listed on the call of the hearing. In this subcommittee, the staff usually puts the men first and the ladies last; maybe we should change that around sometime. At any rate, we won't do that today. Councilman Hill, we can begin with you.

**TESTIMONY OF DONALD HILL, DEPUTY MAYOR PRO TEM, DALLAS, TEXAS; KEVIN WARD, EXECUTIVE ADMINISTRATOR, TEXAS WATER DEVELOPMENT BOARD, REPRESENTING THE COUNCIL OF INFRASTRUCTURE AUTHORITIES; JAG KHUMAN, DIRECTOR, MARYLAND WATER QUALITY FINANCING ADMINISTRATION, MARYLAND DEPARTMENT OF THE ENVIRONMENT; STEPHEN HOWARD, SENIOR VICE PRESIDENT, LEHMAN BROTHERS; DEBRA MARTIN, RCAP PROGRAM DIRECTOR, GREAT LAKES RURAL COMMUNITY ASSISTANCE PARTNERSHIP; AND VALERIE NELSON, DIRECTOR, COALITION FOR ALTERNATIVE WASTEWATER TREATMENT**

Mr. DUNCAN. Let me say this. Your full statements will be placed in the record. In consideration of other witnesses, we ask that you limit your statement at this time to 5 minutes. We give you 6 minutes, but when that 6-minute time period runs out, to be polite to the other witnesses you will see me signal, and that means stop. All right. Thank you very much. Mr. Hill.

Mr. HILL. Thank you very much, Chairman Duncan, and Ranking Member Johnson, who I appreciate very much the pride in which she does identify herself as one of my council constituents, and I am very proud to have her. We really do appreciate this opportunity to testify today on this issue of vital importance to our city and the cities of our size and other sizes throughout the Nation. As you have identified, I am the chairman of our city's finance and audit committee, so that the responsibility of trying to fund

and finance these issues falls very squarely on my shoulders from a leadership standpoint.

Of all the services that local governments provide, none contributes as much to public health, the environment, and general public welfare as water and wastewater service. Maintaining and expanding the infrastructure needed to provide this critical service while meeting Federal mandates is a very costly challenge for our city and others as well. And I certainly do appreciate the fact that we are beginning this dialogue and discussion about how can we help local governments finance water and wastewater infrastructure projects.

Just to tell you a little bit about our city, we are a regional water provider. The City of Dallas provides drinking water and/or wastewater service to over 2.2 million people in Dallas and 28 neighboring communities spread over 699 square miles. A recently completed update to the city's long-range water supply plan indicates that Dallas will be providing water and/or wastewater service to more than 4.5 million people by 2060. Our Department was founded in 1881. It operates three drinking water treatment plants with 865 million gallons of capacity per day to wastewater treatment plants with over 260 million gallons of capacity per day, 4,700 miles of water mains, and over 4,100 miles of wastewater mains. Impressive statistic: If laid to an end, our water mains could reach from Dallas to London, and our wastewater mains would reach from Dallas to Honolulu. This is a very large and complex system. We certainly do recognize that. And, to some extent, citizens don't really know how much is really actually taking place as a part of this process until we have one of our major water breaks or some other kind of problem. As our Nation's wastewater and water infrastructure deteriorates with age, you and I will increasingly hear about those service problems from our constituents.

Our water department is funded solely by water and wastewater rates paid by our customers. In addition, the city issues revenue bonds back by its ratepayer base to finance major capital improvement projects. In fact, we just put a policy in place where we have stretched out the period of time in which we finance those from 20 years to now 30 years.

Dallas's drinking water currently comes from five surface sources: Grapevine Lake, Lake Lewisville, Ray Roberts Lake, Ray Hubbard Lake, and Lake Tawakoni. In addition, the city has water in reserve in Lake Fork and Lake Palestine. The City's Water Department maintains a proactive approach to long-range water planning, and recently completed an update to our long-range water supply plan that identifies water supply demands and sources to meet area demands through 2060. It includes conservation, drought emergency planning, and an increased use of recycled water for non-potable purposes, including irrigation and industrial uses and using recycled water for potable purposes to augment our existing supplies.

Our challenges are significant. Like many cities, Dallas faces the dual challenge of replacing aging water and wastewater infrastructure and meeting Federal demands related to safe drinking water and clean water. We are aggressively undertaking a comprehensive

program to replace our aging water and wastewater infrastructure, some of which dates back to the early part of the last century.

Over the next 10 years, we and our water department plan to call for spending, we are going to spend $2.5 billion on capital improvements ranging from replacing water and wastewater mains to increase the capacity and modernizing our treatment plants. Virtually all this work will be financed by ratepayers and the issuance of revenue bonds. This puts a severe strain on our city's finances and on ratepayers. Much of it is necessary for the city to meet Federal drinking water and clean water standards and environmental regulations.

Over the last 2 years, we have increased our water and wastewater, or sewage rates, rather, by 11.3 percent and 7.9 percent respectively, and we estimate in this new budget year that we will probably pass on increases of 7 to 8 percent, and it will be something along those lines in terms of percentage increases over the next several years to finance these costs of constructing new and replacing infrastructure. This has posed, as you would expect, a very, very significant issue for us both politically and just the financial burden of trying to handle the costs.

While we do recognize that providing water and wastewater service is a local responsibility, there, in our view, is an important role for the Federal Government to play in financing water and wastewater infrastructure. We strongly support the goals of both the Safe Drinking Water Act and the Clean Water Act. However, both laws place expensive mandates on cities that the Federal Government we believe should help to meet.

The Federal Government helps State and local governments finance many kinds of infrastructure, most notably highways, airport, and transit, and we believe there is a sound basis for Congress to provide this kind of assistance as funding, for all three easily translate into numbers of jobs and measurable mobility improvements. However, in our view, it is important to note that, without safe and reliable drinking water and sanitary sewage service, jobs and mobility mean very little. It is clear that wastewater and infrastructure financing would help local customer rates and make them more affordable. And we, again, thank you.

Mr. DUNCAN. Thank you very much, Councilman Hill. A very fine statement. In the 5 years I have chaired this subcommittee, I think I have been visited by about 70 or 80 mayors of almost every large city and many small cities to tell me that this is probably their biggest, most difficult problem. But thank you for your statement.

Mr. Ward.

Mr. WARD. Thank you, Chairman Duncan, Ranking Member Johnson, Vice Chairman Boustany, and members of the committee and staff. This conference for Infrastructure Finance Authority greatly appreciates the opportunity to be here today and share with you our views of what the needs are for investment and infrastructure across the country. We represent collectively almost every State and some of the territories, and we are the entities that are administering your clean water State revolving funds across the country as well as, in many cases, the drinking water State revolving funds.

We think our members are out there on the forefront of the development of these types of programs, and in many cases, our members represent agencies that have been doing these programs for decades and even before the Clean Water SRF came along. The Ohio Water Development Authority is a great example of that. They have got a long-standing program. And you will see some of the innovation that we have talked about in our testimony, evidences that those type of agencies that are entrusted with this valuable resource that Congress has provided to the States have been very effective at administering these programs and finding a way to make them apply at the State level.

I have got four major points that we decided as an organization we wanted to make here today. One, it is working. The congressional investment that you have continued since the appropriation authorization ended with the Act, since 1994, has been well spent. And it has, I guess, your continued investment shows us that you believe it is well spent. So we agree, and we want to make that point.

Also, it has been leveraged and in more than one way. We will get to that.

There has been innovation and flexibility created in the program, and it is because of the way it was set up, the way that the enabling legislation authorized the States to take some ownership of the process and establish priorities within the State under a structure that the Federal Government had designed.

Also, we want to work with you going forward and offer our assistance in trying to help Congress in their deliberations on how to change this program and help it meet the changing needs that are out there that you are hearing about, needs that were expressed very well here by Mayor Hill.

We, of course, have been feeling the pinch of the cuts that have come down lately on the programs, and we wanted to tell you what the real impact of that is. I think there has been a lot of analysis that has been shown to you that demonstrates of course that there is a corpus, an amount that you have in this investment. It is not a trust fund in a true sense, but, in essence, what you have is your investment in a vehicle at the State level that is a shared resource now. Congress sets the tone for the type of priorities it wants, then the States take that and they translate it in what the actual priorities are at the State level.

In doing so, we have developed different mechanisms for delivering these funds. I guess we would like to say, if it isn't broke, don't fix it, but, in essence, you have taken a little over $25 billion worth of investment over the years and we have turned it into almost $50 billion worth of projects now. And I would say that the more the States are leveraging, so we think that that will actually grow and be leveraged at a higher ratio going forward.

That is just the capital leveraging on this. When you get into the testimony, you will see we have also demonstrated that there are a multitude of programs out there that are designed for niches that we will put together with a comprehensive project in a community so that we meet the needs of the entire community, and we believe we walk away with a sustainable infrastructure for that community.

You know, examples of that exists not only in Texas, but also States like Ohio, Massachusetts. I think Montana being a rural State is an excellent example. We highlight that here because they have combined other Federal programs and actually do a singular application and make it easier for those rural applicants that don't really have the technical expertise to access these programs. And we all know that it is very complex.

You have had, I am sure, mayors of small communities and mid-sized communities tell you that this is not easy. It is rocket science in many cases. Well, this program is designed comprehensively to provide that technical assistance to bring those projects in as well as meet the needs of the largest cities like the Dallases of the world, the Houstons of the world, and get them off of compliance orders. Combined sewer overflows have been met, stormwater projects. We have even gotten to the point in some States where they link up deposits with banks and they will provide assistance to thousands of individuals to remediate septic tanks. So the program is very healthy and it has been operating quite effectively.

I would like to turn my focus right now to some of the improvements that we think could be helpful going forward.

First off, we endorsed H.R. 1560 in the last Congress. We believed that it was really a good template to work from, and we were willing to sit down and work out any of the details that would have made sure that it would be effective. We also believed that within that some of the priorities were the transferability of funds that is between the clean water and the SRF, because the drinking water is just getting off the ground; clean water is strong, and they need to be able to transfer those funds and also be able to let the State have the discretion and a little bit of the money in between.

Extended loan terms for the useful life of projects. We have seen 30-year loan terms be very effective, and the facilities do last that long, so we do believe that is important. Also, that will help disadvantaged communities immensely.

Those are the ones. And then fee language, of course. You know we run into that issue all the time. With the leveraged program, if you look at the percentage that you can allow in the program right now for the administration of the program, it is just not proportionate to an unleveraged program. So we would like to see some relief there.

Finally, in the area of tax law, there were some areas that we recognized in 1560 with regard to arbitrage rebate. Those really do need to be addressed. It is your investment. It is Congress's investment in the States. And then I think that, profoundly, everyone takes ownership of it. And if we want to see the investment maximized, then indeed we need to see these issues addressed. I thank you very much for the time you have given me.

Mr. DUNCAN. Thank you very much, Mr. Ward. We will get into more detail with questions from members.

Mr. Khuman.

Mr. KHUMAN. Mr. Chairman and members of the committee, my name is Jag Khuman. I serve as the director of the Maryland Quality Financing Administration, which is responsible for the financial management of the Maryland Water Quality Revolving Loan Fund,

the Drinking Water Revolving Loan Fund, and the recently enacted Maryland Bay Restoration Fund, fondly known as the flush fee.

Thank you for inviting me to speak about the Maryland Fee Restoration Fund, a major new State initiative for financing sewer infrastructure projects.

The 2004 water quality needs survey estimates that over $6 billion of sewer infrastructure needs in Maryland alone, which is a small State, over the next 20 years. One key needs category is the capital cost to upgrade wastewater treatment plants with advanced treatment for nutrient removal, primarily nitrogen and phosphorus, before the treated affluent is discharged into the Chesapeake Bay.

Under the 2000 Chesapeake Bay agreement, Maryland and its neighboring States have made certain commitments to reduce nutrients loadings, and Maryland's numerical limits is a maximum nitrogen loading of 37 million pounds per year and a phosphorus loading of 2.9 million pounds per year, and to be achieved by 2010. To meet this goal, Maryland still needs to reduce nitrogen by 20 million pounds per year and phosphorus by 1.1 million pounds.

Since 1985, the State implemented the biological nutrient removal program called the BNR program where the State provided 50 percent of capital costs in State grant funding for the design and construction of BNR at wastewater treatment plants with half amillion gallons per day or more of capacity. The remaining 50 percent of the costs were financed through the Maryland revolving loan fund as a low interest rate loan. State funding came in the form of State general obligation bond appropriation.

The goal of the BNR program is to reduce nitrogen levels in the treated wastewater down to 8 milligrams per liter. For example, a typical wastewater treatment plant discharges nitrogen at about 18 million grams per liter, and the BNR will bring that down to 8. Through 2005, the State of Maryland has provided $208 million in grant money, and it is estimated another $92 million is needed over the next 3 to 6 years.

Recognizing that significant efforts still needs to be made to reduce nitrogen loading by 20 million pounds per year and phosphorus by 1.1 million pounds per year to achieve the targeted nutrient reduction goals by 2010, Maryland Governor Robert Ehrlich proposed legislation during 2004 to create the Bay Restoration Fund. The BRF, the Bay Restoration Fund legislation was passed by the Maryland general assembly and signed into law in May 2004. The Bay Restoration Fund legislation created a dedicated source of new State funding to upgrade the sewage treatment plants from the BNR level to what we now call the enhanced nutrient removal levels, ENR, and will provide 100 percent in grant funding. Under ENR, the wastewater treatment plants will be upgraded for nutrient removals to bring nitrogen down to the state of technology 3 milligrams per liter discharge and 0.3 milligrams per liter for phosphorus.

The capital cost to upgrade the largest 66 facilities in Maryland would cost approximately $740 million. These wastewater treatment plants account for about 95 percent of the total sewage treated in the State. Once completed, these ENR upgrades will achieve an estimated 7.5 million pounds per year of additional nitrogen re-

duction and 260,000 pounds per year of phosphorus reduction. This action is only about 37 percent of the 20 million pounds per year goal for nitrogen reduction and 24 percent for phosphorus. The Maryland Bay Restoration Fund will be financed through a fee of $2.50, essentially $30 per year, on each household that is connected to a wastewater treatment plant.

Similarly, nonresidential users like businesses and commercial enterprises will be paying $2.50 per equivalent dwelling unit for the first 3,000 equivalent dwelling units, and then on a sliding scale pay $1.25 per EDU for the next 2,000. No single business will pay any more than $10,000 per month.

The BRF fee, the Bay Restoration Fee for users connected to wastewater treatment plants became effective January 1, 2005, and the fees will be collected by the local municipalities and building authorities that currently send out the water and sewer bills. It is estimated that $60 million per year will be generated.

The financing plan is essentially we will have $60 million a year coming in, we will leverage that to issuing revenue bonds, and we estimate some $510 million of revenue bonds will be issued so that we can complete these upgrades in the next 5 to 6 years.

The Bay Restoration Fund also instituted a fee on septic tank users, which is essentially the same $30 a year for everybody who is on septic tanks, and that money will be essentially used for 60 percent of the money to upgrade sewage septic tanks with nitrogen removal technologies and the balance for the Cover Crop program.

In summary, Federal funding is insufficient to meet water quality infrastructure needs, and the States are trying to develop their own funding programs to fill this gap. With over $6 million in future water quality needs, we believe increase Federal funding is necessary. Thank you.

Mr. DUNCAN. We will cut you off there, Mr. Khuman, and we will get into more detail in the questions from the members.

Mr. Howard.

Mr. HOWARD. Thank you. Mr. Chairman and members of the subcommittee, I am Stephen Howard, representing Lehman Brothers. On behalf of Lehman Brothers, we are very grateful to appear here before you today and offer our thoughts on possible tools to help bridge the funding gap that exists in the country's water quality infrastructure needs. I have been at Lehman Brothers for over 22 years, during which period I have financed over $7 billion of water, solid waste transportation, and public facility infrastructure projects in the tax exempt and taxable bond markets.

Today I want to present some thoughts on one tool that could be added to the financing toolbox that could provide an immediate benefit to the priority of unleashing capital to construct water quality infrastructure. I would like to note that the legislation has been introduced on this tool that is pending before the House Committee on Ways and Means. This bill would amend existing tax policy to allow local communities to leverage the capital markets in combination with other financing mechanisms.

Essentially, H.R. 1708 would provide for the unfettered use of tax exempt securities, known as exempt facility bonds or private activity bonds, so-called PABs, to finance water quality infrastructure projects. As an important aspect of this financing tool is that

it would not, according to the Joint Tax Committee, significantly affect the Federal Treasury. Stated another way, there would be negligible impact upon the Federal budget. I would encourage the subcommittee members to review this legislation and consider cosponsoring the bill as a means to help address our water quality infrastructure funding gap.

I would like to take the remaining time I have today to explain how this tool works and offer a real world example that illustrates how a scarcity in environmental infrastructure assistance was met using PABs, and thus addressed an environmental protection compliance issue. The financing options for infrastructure projects, tax exempt bonds, governmental purpose bonds, which most of you are familiar with, have been issued by governments for years. The second option with tax exempt is private activity bonds, which is the subject of this discussion. Taxable bonds are also possible but more expensive, as well as private equity from private participants and projects.

It is important to note that taxes and private activity bonds are typically used on project-financed public-private partnership transactions and are repaid by ratepayers through retail or wholesale user fees.

This is a graphic, sort of replaying the previous slide, talks about the costs and the spectrum of financing options, taxes and governmental purpose and private activity bonds are over on the left-hand side. The key point that this chart makes is that there are a variety of options that are available if we could use private activity bonds to optimize and expedite the development of water quality infrastructure projects.

This is a chart that shows the availability of governmental purpose bonds as well as private activity bonds on an asset-classed basis. As you know, that is a real patchwork currently in the Tax Code, and the only category that has access to private activity bonds across all ownership and project structure types is solid waste. And the reason solid waste has this option is because of the crisis that existed in the mid 1980s, it had to be addressed. And we want to fill the same, we want to fill the checks in for water/wastewater as well.

We will use solid waste as the means to determine what impact the availability of private activity bonds would have on the issuance of private activity bonds for water/wastewater projects.

As I mentioned, the municipal solid waste sector faced a crisis in the early 1980s due to declining landfill capacity and rapidly increasing disposal costs. U.S. Congress responded to this crisis by eliminating taxes and private activity bond cap for municipal solid waste disposal projects in the Tax Reform Act of 1986. As a consequence, over 15 billion of PABs have been issued since 1986 to help fund the development of new infrastructure to help solve the municipal solid waste disposal crisis.

This chart shows the amount of private activity bonds issued for water projects. In the past 25 years, you can see the blue for private activity bonds for water, and then the purple for governmental purpose. Private activity bonds are available for water projects, but they are subject to the State bond cap which severely restricts their use, as you can see in this chart.

This is a pie chart that shows, of all the taxes and bonds that have been issued for water/wastewater over the past, since 1986, only 1 percent was private activity bonds.

This shows the issuance of private activity bonds for solid waste projects. Again, private activity bonds are in the blue bars and governmental purpose are in the purple bars, much higher issuance, because private activity bonds are not subject to the State bond cap allocation. A much higher percentage. Over 40 percent of tax exempt bonds issued for solid waste projects were private activity bonds that released much more private participation in the development of this infrastructure.

Solid waste private activity bonds have equaled over 40 percent of total issuances compared to 1 percent for water/wastewater, an average of 700, almost 800 million of private activity bonds for waste projects since 1986 compared to only 240 million for water/wastewater.

Based on the experience in the solid waste sector, we believe private activity bond issuance for water/wastewater projects would significantly increase and help expedite the construction of new projects as it did in the solid waste sector. Actual issuance of PABs for water/wastewater projects will be based on the number of projects ready to be financed, particularly where the public sector wants the private sector to assume a greater role and assuming development technology and performance risk. With the elimination of the bond cap for water/wastewater projects, it is reasonable to expect that 1 to 2 billion of PABs would initially be issued annually and could double or triple annually over time as the Triple P, public private partnership, water/wastewater industry matures.

Mr. DUNCAN. We will have to stop there. But thank you. This has been very helpful and informative testimony, and we will get into more detail in a few minutes.

Ms. Martin.

Ms. MARTIN. Chairman Duncan, Ranking Member Johnson, and members of the committee, I thank you for the opportunity to testify before you today on the need for wastewater infrastructure for rural communities. I am the director of the Great Lakes Rural Community Assistance Program, and our RCAP serves seven midwestern States, including Indiana, Illinois, Kentucky, Michigan, Ohio, West Virginia, and Wisconsin. I am also pleased to attend this hearing on behalf of the Rural Community Assistance Partnership. With regional partners throughout the U.S., RCAP comes representing the interests of low income rural communities.

RCAP is a national network of nonprofit technical assistance organizations that work with over 2,000 communities throughout the U.S., Puerto Rico, the Virgin Islands, and Guam. For more than 30 years, our organizations have provided assistance with the development, management, financing, and operations of rural water and wastewater systems.

As many of you know, rural communities sit at a disadvantage in financing water and wastewater infrastructure. Rural residents are three times as likely as their urban counterparts to lack water and sanitary sewer services. When these services are available, they pay, on average, three times as much for them simply because they lack sufficient users to create economies of scale. The gap be-

tween the current need and existing financing for infrastructure in rural areas is well documented. Further, small communities face a growing set of challenges in terms of meeting increasingly stringent water and wastewater regulations.

At the same time, rural communities face a shrinking pool of government financing resources. Many rural residents are already paying a significant portion of their income for these services. It is unrealistic to expect that increasing user fees alone can solve the problem and eliminate the funding gap.

We have also become increasingly concerned with the inconsistency of infrastructure financing mechanisms across the U.S. Rural community financing varies significantly by State. Some States run chronically short of resources to meet growing community needs, and good practices in one State are unlikely to be transferred to others. It is for this reason that we support the notion of a clean water trust fund or other Federal financing mechanisms such as through the SRFs, not only to increase the resources available at the Federal level to address the gap, but also to promote better coordination of these resources while encouraging best practices.

We believe that a trust fund or a similar Federal mechanism could be used as an incentive to the adoption of infrastructure financing best practices at the State level.

The allocation of such funds could serve as a carrot, if you will, to encourage the adoption of practices that would make financing of infrastructure more coordinated, efficient, and rational. By coordinating financing, States could become better stewards of the resources available. In some States, wise investments of resources have allowed for a replenishment and even expansion of financial resources over time. Likewise, some States have streamlined and simplified the application process so that communities are less burdened in applying for financing. Additionally, some States have mechanisms for coordinating or cross-funding agencies. These practices could be encouraged at all States as conditions of receiving additional funding through a Federal mechanism.

One example of best practices from my home State is the creation of the Ohio Water Development Authority. OWDA was created in 1967 through the issuance of $100 million in State general obligation bonds. Through careful stewardship and creative financing mechanisms, the funds have been leveraged so that the initial investment is today worth about three quarters of a billion dollars. The authority continues to revolve these funds and improve its bond rating so that bonds can be issued to increase available funding without requiring the backing of the State and needlessly obligating precious State resources.

Key to the success of this program is the flexibility that OWDA possesses with few restrictions on how the funds can be employed. OWDA, while an agency of the State, has been given the freedom to operate much like a private sector entity. As such, they are have the flexibility to work with other funders and technical assistance providers in the State to create programs that respond to specific needs, utilizing surpluses from their other programs. Some examples include a bridged loan program that does interim financing for rural development borrowers, a research and development grant that allows systems to test and utilize new technologies, and a

community assistance program that offers very low interest rates and long-term financing to borrowers that already pay a significant portion of their income and utility fees. These programs have all been created by adapting existing resources to respond to areas of need.

OWDA was also instrumental in creating the Small Communities Environmental Infrastructure Group. This group includes all of the funding agencies in the State, technical assistance providers, private sector financiers, universities, electric cooperatives, and others who have an interest in infrastructure. Initiatives have been developed through this group to streamline and better coordinate funding, promote training for local officials, and promote the use of new technologies.

Other States have created similar mechanisms; the gentleman mentioned Montana, which is a good example, and was actually one of my examples so I won't repeat that. But New York State has developed a co-funding initiative. All of the funders have signed on to a memorandum of understanding that formalizes their intent to cooperate in the administration and coordination of financing. This group has developed online tools to allow communities to match their projects and their needs with the appropriate funding sources and technical assistance providers.

There are numerous other examples of this type of coordination that help to make the process of completing a project easier for small communities, while also ensuring that scarce resources are well targeted and efforts by the various agencies are not duplicated.

Technical assistance is also a critical component in ensuring that small communities take maximum advantage of the resources that are available to them. Most small communities lack the staff or the expertise to coordinate the multiple resources that they need. This is frequently the role played by RCAP or other technical assistance providers. In addition, training for local officials is critically needed to ensure that, once a system is created or upgraded, the capacity exists to continue its operation.

And we thank you for the opportunity to testify.

Mr. DUNCAN. Already. Thank you very much, Ms. Martin.

Dr. Nelson.

Ms. NELSON. Mr. Chairman and members of the committee, I very much appreciate the opportunity to testify before you this morning. I represent the Coalition for Alternative Wastewater Treatment, which is a national network of experts and advocate for alternatives to conventional approaches.

I would like to join in support this morning on higher levels of Federal assistance in meeting the looming gap in spending to repair America's aging water and wastewater infrastructure.

I would like also to introduce, however, a quite different question. How can the limited Federal share of overall spending be better used to prod the Nation's water and wastewater sector into higher performance at less cost.

The current Federal share of overall capital spending is only about 5 percent, and even a doubling of that still leaves the Federal Government as a minor actor in the overall spending pattern. And if those monies could be used to provoke a save and a 10 per-

cent cost efficiency, that would represent about $8 billion in savings in capital and O&M that is projected for the future.

So it is I think a worthy question to ask: Can the series of carrots and sticks be attached to the Federal financing to provoke the sector into becoming more efficient and innovative?

The current problem in water and wastewater infrastructure is not just that the infrastructure is aging, but that the basic technology paradigm of large-scale piping and treatment plant centralization is looking less and less sustainable, and that, relative to other countries, the U.S. is not yet seriously developing or implementing innovative approaches.

First, the U.S. has become a net importer of innovative water and wastewater technologies. Very little R&D is occurring in either the public or private sectors in the U.S. Further, America's policymakers and practitioners are largely unaware of the intensity and speed of innovation in other countries, and few have moved to adopt the kinds of regulatory, management, or technology reforms that are emerging overseas.

I suggest that this loss of American leadership in water and sanitation relative to the rest of the world is a problem that actually eclipses the definition of the gap because it means both that the U.S. sector is headed to relatively greater inefficiencies over time and, secondly, that the jobs and export income from high-tech water resource technologies and methods are being generated outside the U.S.

I have a lot more examples in my written testimony, but let me just cite three this morning. Asset management developed in the United Kingdom, Australia, New Zealand is an approach that involves a more business-like process of establishing customer service levels and life cycle management and financing of the assets. Without asset management, cities all across the U.S. Are wasting money in replacing pipes that don't need to be replaced, and paying more for emergency repairs of broken pipes that should have been receiving cheaper routine maintenance all along.

Secondly, distributed technologies and reuse. In major cities such as Tokyo and Singapore, high-tech membranes are being used to create zero water emission buildings involving reuse of wastewater and toilet flushing, landscaping, et cetera. Since 70 percent of the cost of conventional water resource infrastructure is in the underground pipes and not in the treatment plants, technologies that can avoid central collection systems lead to great cost savings. And this can apply to repairing existing older systems as well.

Third, integrated water resource planning. Over time, everywhere, including in the U.S., bureaucracies in utilities developed in separate silos of water, wastewater, stormwater, water supply, and flood control, and many large inefficiencies occur as a result. Countries like Australia have restructured regulations in utilities into catchments or watersheds where water is viewed in an integrated holistic framework, and these efforts are leading to both cost savings and environmental improvements.

The larger point is not so much that a tremendous amount of technological innovation is occurring overseas, but rather that U.S. policymakers, utilities, and advocates are so slow to wake up to these shifting realities. When you talk to various critics of the cur-

rent infrastructure, they will tell you that the deepening crisis of funding in the U.S. will eventually force municipalities and engineers to wake up to the need for fundamental redesign of U.S. infrastructure, but I believe instead that the Federal Government must assert a—reassert a major leadership role if such changes are to occur. Many of these kinds of approaches were incorporated in the original Clean Water Act but have lapsed in more recent years.

I would like to ask your committee to consider a number of legislative initiatives both to support and encourage the work of innovative scientists, engineers, companies, and local utilities, as Ms. Martin described in some of the States, and to insist that recipients of Federal funds comply with asset management, integrated water resource planning, and engineering alternatives analysis requirements. Specifically, authorize $250 million a year for science and technology research and development. I know this sounds like a lot, but in current dollars, the Clean Water Act authorized over $300 million a year in R&D on water. Authorize a national demonstration program for innovative technologies and management and grants for innovative and alternative projects proposed by local utilities. This would be similar to an old I&A program that was in construction grants.

Require that any applicant for an SRF loan or trust fund grant have prepared an asset management plan, coordinated with integrated water resource plans in a regional watershed and examined the full range of engineering alternatives.

Request groups like EPA and the National Academy of Sciences to start looking at long-term sustainability issues and the kinds of approaches that can be brought into this country. And initiate collaboration among congressional committees having jurisdiction over other agencies beyond EPA, USDA, HUD, DOE, Commerce, and others in an attempt to try to bring a greater coherence and innovation into the larger water and wastewater sector. Thank you.

Mr. DUNCAN. Thank you very much, Dr. Nelson. Very informative. And, you know, the Knoxville airport is attempting to experiment with some reuse technology that the preliminary results are pretty encouraging. As some people have said in other hearings we have had on this subject, this may not be a sexy problem, but I can tell you it is one of the most important significant problems that we have facing this country today. Those mayors and others on the front lines in dealing with this know it is very, very significant.

I am going to save my questions until the end so I can hopefully get to more members that way, and I am going to yield my time for questions at this time first to Mr. Gilchrest.

Mr. GILCHREST. Thank you, Mr. Chairman. The testimony was enlightening and a breath of fresh air, I must say, especially from Dr. Nelson, who, we as leaders of the free world, and you are looking at the leaders of the free world up here, here we are; we are the leaders of the free world. That gives you great confidence, I know, in your future. But I am sitting next to Vern Ehlers, who is a Ph.D. In physics, and he is always pushing for more science and more innovation. And certainly this country, with our resources, can put them to good use with initiative, ingenuity, and intellect. And this issue of wastewater treatment, I think, you know, within the decade could be solved.

But I had a question which is a little parochial and might have an effect on all of you. The question is the gentleman from Maryland, and we have this fascinating idea and a concept known as the flush fee, and it does generate a lot more money to resolve some of these more pressing issues with the larger wastewater treatment plants, and then the Federal dollars that come into the State can be distributed in a much wider fashion.

In the process of looking at the wastewater and the nutrient reduction into the Chesapeake Bay, and it is called the Chesapeake Bay Fund Restoration Project, has the State looked at a watershed approach so part of the funds from the flush fee and certainly money from the open space transfer tax can be looked at purchasing easements or outright purchase of land so there are larger areas in a broader sense in perpetuity that is pervious, rather than having to deal with the increasing problems of impervious surfaces, more development, more sewage treatment plants? While we reduce the amount of nutrients per liter, the more sewage plants we build and the more houses that are hooked up, we really don't gain anything because we are putting out more effluent.

So I guess the question is, have you looked at the watershed approach, and areas like New York City did to protect their water in upstate New York from Manhattan, to not only let nature do some of this for free, provide much more natural processes for nutrient removal in the process of dealing with the wastewater problem in the State of Maryland?

Mr. KHUMAN. Specific to the fee restoration fund, the flush fee, the statute is very narrow that the money from the sewage treatment plant uses must be used for the targeted 66 sewage plants that must be brought to the State-of-the-art technology. So that is very specific. However, the watershed approach is working from the State revolving loan fund perspective, the clean water revolving loan fund can provide monies for purchase of land and buffers for source water protection and also for water quality protection.

So we are using the revolving loan interest paid loans on the watershed approach.

Mr. GILCHREST. So the State revolving loan fund that we appropriate funds for here can also be used to purchase easements or land?

Mr. KHUMAN. Yes.

Mr. GILCHREST. Or buffers for the purpose of nutrient removal and those kinds of things? I understand how vital it was to get it through the general assembly, but that the dollars for the flush fee would be specifically targeted to those high-end treatment plants, and I think that is a good idea. What I would suggest, if I might, as a citizen of Maryland, that your office with those who work with the State revolving loan fund sit down with the Department of Agriculture and also maybe USGS to see how the hydrologic cycle works in Maryland, and then take a look at a watershed approach. From a scientific perspective where should the buffers be? Where should the pervious surface be preserved and even expanded? But I want to thank you, Mr. Khuman, for all your work and effort in this Bay Restoration Project. I think it is a sterling example of what actually can happen and what can work. Thank you. Thank you, Mr. Chairman.

Mr. DUNCAN. Thank you very much. Ms. Johnson.

Ms. JOHNSON. Thank you very much, Mr. Chairman. Mr. Hill, I was intrigued by the allowing the local ratepayers to deduct the portion of their water and wastewater utility bills from their taxes. Could you elaborate on that a little?

Mr. HILL. Thank you, Congressman Johnson. We do think that that is an approach that is consistent with some of the other things we do now allow deductions for property taxes that fund our municipal operations. And so we think that is consistent, and it also provides a way for what we have outlined as continuing escalating costs that we are confronting to in some way be able to be beneficial to that that ratepayer, because our systems are based entirely on the ratepayers bearing the costs of the replacement, the repair, and the improvement to the infrastructure. So we think that is a way to try to get some of the benefit back to the ratepayer and is consistent with what we do with our taxes.

Ms. JOHNSON. Thank you.

Mr. Howard, in your testimony, you suggested alternative financing through bonds. You are aware that we sent that through with the last bill, 107th Congress, Ways and Means struck it out. Has anything changed with the Ways and Means Committee that you are aware of?

Mr. HOWARD. It is due to come to hearing this year with the reintroduction of 1708.

Ms. JOHNSON. Thank you very much.

I will yield the rest of my time to Mr. Blumenauer.

Mr. BLUMENAUER. Thank you.

Mr. Chairman, again, you are helping, I think, frame these issues in a way that are extraordinarily useful. Two things that I am interested in is the range of financing options that we want to explore.

I appreciate what Mr. Howard is talking about, sort of rounding out the toolkit. Well, I must say that I hope that we circle back as a committee, not just looking at the financing options and the technical elements, but as Dr. Nelson was saying, look at the way that we use the Federal investment to encourage best practices.

I come from a community where there are people that are doing this on fairly extensive level. In fact, we are sending some of our local technologists overseas who actually are working in Singapore, same as the days I used to work with—back in my days as head of Public Works Commission for the City of Portland.

The extent to which we are able to craft, more specifically, programs that are going to encourage people to look at overall investment, I think is extraordinarily important. We did a little of this with Transportation in 1991 with our ISTEA legislation. We encouraged some planning, we encouraged innovative financing. We encouraged different ways of tying the elements together, whether it is mass transit or highways, or dare I even say, bicycles.

It has made a little—it has made some difference, because in the United States we will spend $2 trillion next year on transportation, but only 3 percent of that is Federal.

But I think the signals that we sent in 1991, and hopefully what we send with the reauthorization this time, help enhance the effi-

ciency of the transportation dollars. I don't think we have done that with Federal policy regarding water treatment.

You are right, it is not sexy, but I think there are so many areas of research, of decentralized efforts, homeowners can do—we can make this cheaper and greener. We are going to need all of the tools that people are talking about here, because we are still not investing enough.

But I think the work that we do on this subcommittee, we can encourage it to be spent more wisely, and it will make even more difference than rounding out the toolkit. I just want to thank you again for a provocative hearing. I would like to work with the subcommittee on ways to build the carrot and stick; that is not right, but incentives, we want these all to be incentives, no stick. We want them all to be incentives to coax more out of the overall investment.

Mr. DUNCAN. All right, thank you very much, Mr. Blumenauer. I certainly share some of those same goals and I hope we can make some specific recommendation after this series of hearings.

Dr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman.

I think this is one of the best hearings we have had on this topic. I was pleased to relearn a number of the things we learned particularly about the flush fee, private activity bonds and integrated planning. I agree with all of that.

As a scientist, I do bemoan our lack of research on some of the very fundamental issues. It is great that we want to go to the moon and Mars, but at the same time, we have to worry about what we are going to do with our human waste, both solid waste and other waste.

I think one of the big problems is the public's lack of understanding of infrastructure. They really don't know what it is. It is a term that doesn't really hit them. I think we are better off talking about water and sewage than about infrastructure. They understand that. Also, we could do a much better job in our schools by having fuel trips of wastewater treatment plants. That leaves a great impression on the kids. They understand the problem better.

It probably would help if Dr. Seuss had written a book such as "Where the Flush Went" so kids would understand these things. Because they grow up without an understanding. They take it for granted and then they have to start paying water and sewage bills and they say why does it cost so much?

We clearly need more research. One of my frustrations is we have an abandoned water treatment plant in my city, in Grand Rapids, Michigan. I have been trying to get the government to provide them the money to convert that into a research laboratory. EPA says Homeland Security should do it. Homeland Security says EPA should do it. An apartment developer wants to convert it to an apartment building.

At this point the developer is going to win. I predict not too many years in the future we will say we need a better place to do research and we will spend $100 million building something we could get right now for 15.

I am interested in ideas that the panel might have on better educating the public about wastewater and the need for funding for this and why it costs money. If anyone has any comments on that.

I am also—before we go into that, Dr. Nelson, I would appreciate your comments on how we can get communities to do integrated planning. I am not that excited about Federal mandates to do this. I am not even that excited about a lot of Federal money doing it, because I predict it will turn into a huge pork barrel once we get substantial amounts of Federal money, and the political power will decide who gets funded and not the needs of the people.

But a few comments from you and then any general comments we have in time remaining on better educating the public on infrastructure.

Ms. NELSON. Well, many people have described the great difficulties of doing integrated planning. The silo-ed bureaucracies and professions do not ordinarily talk together. It is quite amazing how uncommunicative storm water and a water and a wastewater and a flood control and transportation agencies can be and not integrating their infrastructure planning for the metropolitan area.

As I suggested, some analysts are sufficiently frustrated to say that cities have to suffer enough financially to try to finally force their own staffs and bureaucracies to begin to coordinate better.

I think that demonstration projects to cities that are willing, Portland, Oregon, maybe, to get their bureaucracies to start working better and achieving great efficiencies is one step, as far as an incentive goes. I do actually believe that the problem is serious enough and the money that could be saved is great enough that over time, that kind of planning should be required as a condition of financial assistance from the Federal Government.

The fact that demonstrations can be there in parts of the country to show other communities how to do that is very helpful.

Mr. EHLERS. We only have a minute or two left.

Any quick comments on infrastructure?

Yes, Mr. Ward.

Mr. WARD. In the State of Texas, we actually have an education program for 5th and 6th—or 4th, 5th and 6th graders that we have funded. The program is known as the Major Rivers Program, and it goes over the water cycle and how the treatment works in a very elementary way. But it yet raises the sensitivity of the children, not only to the, you know, the value of water and where it comes from and where it goes, but as well to water conservation.

Mr. EHLERS. Thank you. I see my time has expired, and we have a vote.

Mr. DUNCAN. Thank you very much, Dr. Ehlers.

People do say why does it cost so much. But I can tell you, really, what we pay for our water in this country is a bargain, especially compared to cable and cell phone bills which the people pay. They are paying much, much more. Unfortunately, we have a vote going on.

Mr. EHLERS. Mr. Chairman, could I just comment? All you have to do is compare what we pay on water treatment to the amount the public spends on bottled water. You would be amazed.

Mr. DUNCAN. Right, well unfortunately we have a vote going on. We will have to be in recess for about 10 minutes and then we will come back. Thank you.

[recess.]

Mr. DUNCAN. If we could get the witnesses all back to the table, we will go ahead and resume the hearing.

Mr. Blumenauer, since before you just had an opportunity to sort of make a statement. If you have any questions, I will let you ask any questions you might like to at this time if you have any.

Mr. BLUMENAUER. Thank you, Mr. Chairman, for your courtesy. Thank you, Ranking Member Johnson for allowing me to sort of slip in.

I was curious if we could get a sense, Mr. Howard, of what difference it would make in terms of the scale of things if we were able to make the statutory change that you talked about and eliminate the State cap for these private activity bonds. What are we talking about in terms of an overall range, do you think?

Mr. HOWARD. Well, drawing on the solid waste experience since 1986, over 40 percent of the total issuance of tax-exempt bonds has been private activity bonds that were used primarily for large projects that involved public authorities and cities, contracting with the private sector to build major facilities that help solve the disposal crisis that the Nation felt it was in the late—mid to late 1980s.

Water, as my charts showed, private activity bonds are also available, but they are subject to cap. As a consequence, only 1 percent of the tax exempt bonds that are issued are private active bonds. We don't think if we eliminated the cap for private water activity bonds, we would see as high a percentage in water as we have in solid waste, but we think we would see a significant increase. We are estimating probably initially 1 to 2 billion per year.

I think we were averaging about 750 million in solid waste. Obviously water is a much larger market and we think over time as the industry matures, that number would probably increase to 5 or 6 billion. Now these are very rough estimates, but it is based on our experience and knowledge of projects that are under development in the planning phase and the private sector's response to the public sector's need to construct these projects.

Mr. BLUMENAUER. Dr. Nelson, you may remember a moment ago I was talking about an analog to the ISTEA legislation in 1991 for Transportation that had some elements that encouraged comprehensive planning, more tools, that appeared to me to be in Transportation steering in the direction that you have suggested for our approach to water resources.

Have you given some thought to what the parameters of comprehensive legislation would look like for water infrastructure that might achieve that same objective?

Ms. NELSON. I actually was told by some of the earlier researcher on ISTEA that that was a good model, a good planning requirement for what could be done for water and wastewater. There has been some language in some of the reauthorization bills about—certainly in the Senate, one of the versions about requiring as a condition of a loan having an applicant coordinate with a regional planning process.

I have tried to ask a lot of people about how well that has worked in ISTEA, and generally been told that it is helpful to require a broader perspective that your applicant project fits into. So I think that rather than any large new piece of legislation for clean water, just in the financing system our requirement that any proposal comes in have been generated out of a larger coordinated planning process.

The interesting—I think there has been a lot more discussion about watershed planning such as Congressman Gilchrest brought up. But there is a lot of opportunity within a city itself to work across agencies, as I said. There are even some projects that can have energy and water and transportation benefits that you should do a total cost benefit comprehensive plan for.

Mr. BLUMENAUER. I see.

Ms. NELSON. I think both those requirements could be very, very helpful.

Mr. BLUMENAUER. I think, Mr. Chairman, it would be interesting if we could work with our staff to just look at some of the parallel elements that were in the original ISTEA that might have some application for what the water resources would look like. We don't have to reinvent the wheel, but some of the efforts to look at a broader scope, have some encouragement, deal with State planning initiatives to try and integrate it would be something that would be kind of an interesting mix.

Mr. DUNCAN. All right. Thank you very much.

Mayor Hill, you know, I am biased in this regard. Not only because I chair this subcommittee, but when I was a young lawyer, I was fortunate enough to sign on as a client the northeast Knox public utility district, which was a small water district. I had them as a client the whole time in my law practice.

So I have always felt that people get a real, real bargain in this area. Yet, I know that they are horrified by high utility bills. Of course, mostly that is over power, electricity, and not so much over water.

But I noticed that the City of Dallas has raised its water and soar rates by 11.3 and 7.9 percent over the past 2 years. I understand that you have staff estimates that you will need annual increases of that much or more for the next several years. Is that correct?

What I am curious about is how much opposition did you run into on those rate increases? Was there a big outcry or uproar? We had Frank Luntz in here last week, and he had taken a poll saying that there is tremendous support for water improvements in that people were willing to pay for those if they were informed or educated about it. What can you tell me about your experience?

Mr. HILL. Well, your question and your comments focus on one of the most significant issues for us. We do have that dichotomy of people really having significant concerns about almost, at this point, annual water increases, that significantly impact, not only our seniors and those on fixed incomes, and some of our poorer citizens, but in some respects, business as well.

So it is something that though we recognize the importance of it, and ultimately we are able to pass on these water increases, these

increases for, to fund the infrastructure, it is not with that much consternation and a significant amount of concern from our seniors.

I guess in response to, or just in addressing the slush, slush—flush, I keep saying slush, I don't mean to say that, flush fund—that is not Freudian—but on the flush fund, with that type of funding mechanism, combined with those increases you just talked about, would really create a lot of stress on us politically, because, again, I am not seeing these—and our fixed income people, our lower income people, so that may be a good approach from a major, a large urban area that is struggling with these kinds of costs. That is a real problem for us, I will say to you very clearly.

Mr. DUNCAN. Was there a big outcry? Was it very difficult or was it fairly easy to get those increases in that you have had the last couple of years?

Mr. HILL. Mr. Chairman, it was difficult. But what we were able to do, as a part of your overall process was really looked at what we were doing with water from the standpoint of conservation, a much-improved long-range planning process we put in place, and so I think our citizens were ultimately comfortable that we were doing everything we could and understood the importance of replacing the infrastructure.

So it was very difficult, but it called upon us to do a better job of communication and advancing our best practices, and implementing the best practices. So it was ultimately—we could get it done, but it was tough.

Mr. DUNCAN. Mr. Ward, what are some of the main obstacles communities are facing in funding these water infrastructure needs—and I am particularly interested in what you have seen or what you can tell us about if the clean water SRFs are structured in such a way that they are providing help to particularly the small and rural and disadvantaged communities.

Mr. WARD. Our experience has been that we have had to create some programs to complement the clean water SRF. If you contrast it against what was put in place in the drinking water SRF, which, of course, that law came on several years afterwards with the experience EPA had in administering the clean water SRF.

You can see without 30-year loan terms or some extended loan term for some small and disadvantaged communities, as well as the ability to offer and maintain a deeper subsidy, then you are going to really have difficulty with the smaller and rural communities in reaching these folks that are fixed incomes and areas that the infrastructure is high relative to the customer base.

Certainly, we have experienced that folks are willing to pay some amount when they can. In the testimony we have provided two examples from Texas. One showed where there was a community with a pretty strong base that needed a small amount of assistance from other programs to meet the outer needs of the rural part of the infrastructure. But then we have another one that contrasts with that which is the city of Roma, which is a 20,000 population entity. We were only able to give them a very small clean water SRF loan, and the rest had to be provided in heavier assistance.

That flexibility needs to be there. Also the flexibility with financing structures in general to help the clean water SRF.

Mr. DUNCAN. A couple of years ago we had T. Boone Pickens in here testifying about his efforts or his interest in speculating on water in Texas. I remember he said that his home county in West Texas had 550,000 acres, which is almost as big as the Great Smoky Mountains National Park, with 600,000 acres there. He said I think they had 967 people, and they were losing population.

So I remembered that. I am not talking about particularly areas that small, but I am curious as to—we know the problems are tremendous in these big cities. The inner cities sometimes are losing population, but people are still moving heavily to the urban areas. We know the problems are great in these big cities and especially close in suburban areas.

But have you found that they are as great in—you mentioned the city, some city of 20,000, I didn't catch the name.

Mr. WARD. Roma.

Mr. DUNCAN. Rome?

Mr. WARD. Roma.

Mr. DUNCAN. Roma?

Mr. WARD. Yes.

Mr. DUNCAN. Were about those size between 20,000, 50,000, 75,000? Are you finding the problems as similar or as great or greater there?

Mr. WARD. There is a tremendous issue with aging infrastructure across the United States, not just Texas. But that is what we are experiencing. The old construction grants program did help a number of those communities. But the life span of those project projects is over. In many cases, it has been expended to the repairs and maintenance programs that these cities have put in place.

But at some point you have to replace the aging infrastructure. Additionally, treatment requirements have gone up. You know, we are taking better care of the environment. All of those require greater investment, and the answer is, yes, we are seeing a tremendous need in those mid-size cities.

If you look at the evolution of the resolving funds, so to speak, we started off trying to address major compliance issues across the country. We still have a few of those left, CSOs in some area are a big problem still and some major cities need a lot of influx in capital.

However, some of the States have addressed those primary needs and are gone on now to these other entities on a maintenance schedule that will fail if they don't have an improvement done to their system soon and giving them the incentives—that are offered to these programs where the Federal Government believes it is a priority and essentially lowers the cost so they get to the threshold so they can afford the rates. It has been key and instrumental to having those treatment needs addressed in a very quick manner.

Mr. DUNCAN. Well, thank you very much.

Mr. Khuman, you heard Dr. Nelson mention her 5 percent figure, and most of us on this subcommittee feel that there is an important Federal role in regard to this water infrastructure problem that we have in the Nation and that we should do more. But you also may have heard Dr. Ehlers mention that he wouldn't want a fund set up that would turn into just gigantic pork barrel projects that were distributed very unfairly around the country.

Would Maryland support a Federal clean water fund of some type and if not, why not? But if so, how would you structure that so that it would be distributed on a fairly basis and go to the places where the needs were the greatest, let us say?

Mr. KHUMAN. If—

Mr. DUNCAN. Part of the question I will ask you is similar to what I asked Mayor Hill. What if we put in a Federal flush fund? How much opposition did you run into on the 250 in Maryland? That is several different questions, but I would be interested in your comments.

Mr. KHUMAN. Essentially in Maryland, we are fortunate that Maryland, relative to other States, is a wealthy State. Because if you look at the median household income, especially for the metro area, you know, you are talking about $60,000 plus per year. So for a reasonable fee of $2.50 per month, nobody with a straight face could come in and say it is unreasonable.

Having said that, certainly there are pockets of inner city, there are pockets of seniors on fixed income and there are pockets in rural areas that there was opposition to that. For that, the statute did allow for an exemption.

Mr. DUNCAN. That was going to be my next question, did you allow for exemptions?

Mr. KHUMAN. Yes.

Mr. DUNCAN. Total or complete exemption?

Mr. KHUMAN. Complete exemption. That if somebody made the threshold, that they were truly poor that they would not have to pay this fee. We believe in Maryland that would be a very small segment. So that is the premise from the opposition point of view—and that was under the premise that everybody was looking at $2.50 a month, how is that too expensive? So it was a reasonable number and that was a starting point.

Mr. DUNCAN. Okay. Thank you very much.

Mr. Howard, I was most interested and encouraged about your testimony about private activity bonds, because I personally think that may be a real important part of the solution to the problems that we hear about in this subcommittee. We just didn't hear about these problems today. We hear about them frequently.

But what restrictions exist now on the issuance of private activity bonds? In this H.R. 1708 that you mentioned, will it remove most of those restrictions? For instance, I understand there is a cap now of, is it 225 million or—

Mr. HOWARD. I believe it is the current minimum cap for small States. The cap is based on a—I am sorry, that is a per capita dollar amount allowance.

Mr. DUNCAN. $75 per capita?

Mr. HOWARD. Right. What, in effect, it does is that it limits the amount of private activity bonds that can be issued for any project in a given State for any type of project in a given state. The bulk of private activity bond issuance goes to—tends to go to housing, which is a high priority need in many States.

So there is, in many cases, very few—very little private activity bond capacity left for water projects, and what was—as I have said, what was done in the solid waste sector was private activity bonds were pulled out from under this cap which, in turn, he released a

lot of investment in the solid waste sector to help solve the disposal crisis that existed in the mid-1980s. In the water sector—

Mr. DUNCAN. I was very much interested in that. You know the proof is in the pudding.

Mr. HOWARD. Exactly.

Mr. DUNCAN. Boy, in the solid waste area, I don't remember your figures, but it seemed like it was three or four times the activity.

Mr. HOWARD. Right. Well, it was a higher activity in a much smaller sector. What happened in solid waste was that a lot of projects got built that would not have gotten built were it not for the availability of private activity bond cap. Because the private sector was willing to come in and take the risk of developing these projects. If they didn't perform, the private sector had to step up and pay the bonds off. We currently don't have that with water projects.

Mr. DUNCAN. I have got some more questions. But I have noticed that Mr. Miller and Dr. Boustany have come back.

Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman. Following up on your private activity bonds, in California, with housing—same as the Melarus in California—is that what you are dealing with?

Mr. HOWARD. Yes.

Mr. MILLER. You bought funds for your infrastructure. The local municipality usually puts them in the market. The private sector buys it. They put infrastructure in on a basic housing development or something like that.

Mr. HOWARD. Well, the case of California, private activity bond, taxes private activity bond issuance is allocated by the State.

Mr. MILLER. That is for public, though. It would only be tax exempt if it went for some city improvements, not for the private sector?

Mr. HOWARD. Well, it could be for private sector if, you know, they are available for the private sector as well, but they are subject to the cap.

Mr. MILLER. Yes, but they are generally for a much larger assessment per unit than you would if you passed some type of a private sector bond out there for water infrastructure. We had a hearing last week. I guess the thing that bothered me is we talked about creating a national clean water trust.

They were talking about local assessments. The problem is that wastewater and the clean water groups came in and nobody wanted to assess their people. They wanted to find somebody else to assess.

But, Dr. Nelson, in your testimony. I guess one of the problems I have here, you talked about water and water utility agencies, and you talked about some that had adopted asset management, Orange County, I represent part of that—which I am glad to see they are in here—because that at least as good.

But I am confused because you went on to say that without asset management, cities all across the country are wasting money on replacing pipes that don't need to be replaced and paying more for emergency repairs for broken pipes that should be receiving cheaper routine maintenance all along. That is basic management oversight or lack thereof.

So what could you adopt—if we talk about the Federal Government getting into this, we will not eliminate bureaucracies by doing that. We do not have oversight. I mean, we had Orange County—or Orange County CCI—they are much better off managing their own assets rather than me trying to do it back in Washington.

So how does the Federal Government get involved in something that should be State or local agency's oversight? How does that have a benefit?

Ms. NELSON. Well, overall, there are assets that asset management can save upwards of 20 percent.

Mr. MILLER. Yes, but asset management is basic management. If you have a water line—

Ms. NELSON. That is correct.

Mr. MILLER. — that needs—a minor break that needs to be repaired, you repair it. If you know you have an antiquated line that you know you will start having considerable problems repeatedly on because it is so old and needs to be replaced, you replace it. That is basic management. I mean, I was a developer for over 30 years—I had a water leak in my home 2 weeks ago.

Now I realize it was cheaper for me to fix, to bring an insurance company in—let us say the insurance company is the Federal Government. So I found a cheap way to repair it. I fixed the water line rather than replacing the whole line because the insurance company says I can't replace the whole water line. So how does bringing the Federal Government into something—especially when you realize bringing us into it, somebody has to pay that tax.

Ms. NELSON. The problem—

Mr. MILLER. So what better tax than the local people who benefit from the wastewater on assessment there. How does it benefit by bringing in the Federal Government, who has to tax a different way into it.

Ms. NELSON. One other way of stating what I tried to provide in the testimony is there is a widespread perception that other than places like Orange County, the water and wastewater sector in the United States is uniquely not adopting asset management. You find it widely used in electric utilities, manufacturing and transportation, not in wastewater.

Mr. MILLER. How does our involvement change that?

Ms. NELSON. My proposal is that an asset management planning process be a requirement for any applicant.

Mr. MILLER. Define that. How would you come up with some program that we could understand that would change what they currently do? What I am saying is that somebody comes in and issues a report to the Federal Government saying that a water line is antiquated and in such disrepair that it needs to be replaced, and we have received paperwork, but we have no knowledge firsthand whether that is true or they could repair the leaks. How does paperwork in a bureaucracy that has already proved to be failing increase the quality.

Ms. NELSON. I think the—

Mr. MILLER. In Orange County, they don't have the problem. But for agencies that do, how does that change the situation in—

Ms. NELSON. You know, I understand the GAO looked into asset management, believes it is a very, very significant reform of the

system that needs to happen and did raise issues about whether different forms of asset management need to be developed for different size communities or situations. I view those as technical challenges.

Mr. MILLER. And the local. Technical and local challenges?

Ms. NELSON. No, that what—that variation. I mean, all kinds of technical things like this are done with what SRF requirements are made of States. The ground rules for what qualifies as an asset management plan for different circumstances can be developed, I believe, and any applicant for Federal money ought to have evidence that they have gone through that process. SRF loans require that you have done certain amounts of things. People sit in the State offices for SRF and check off that that city has—

Mr. MILLER. But the problem that I am seeing is that lack of management, it is like how we required the locals to tell us how they are going to feed kids, and that the local school district prepares paperwork, who sends it to the State, and they keep some of it, the Nation and the Federal Government, and nobody knows what file cabinet that paperwork is in, but somehow those kids get fed. I see that happening here. That is basic lack of management.

Obviously, my area, Orange County, has done a good job managing their infrastructure and they have come up with a system whereby they anticipate how many years a water line is functional and then when replacements are necessary, what type of ongoing repairs are necessary to keep the system going. An organization locally who is not doing that, all the Federal dollars in the world is not going to change that.

That is just throwing more dollars and making it easier to continue to try to expand the problem that is currently existing. That is the problem I have. Local and State agencies are much more capable of understanding their own needs, because they change from area to area.

Ms. NELSON. I agree with that.

Mr. MILLER. The Federal Government isn't. It seems like the biggest problem we are having here is money. Our money doesn't come from heaven. I mean, we have got to put our hands in the same wallet that you have got to put your hands into and bring it back to Washington. The concept of doing that, rather than like the last panel we heard, they want to do—assess water bottle companies for potable water for the sanitation districts rather than assessing their local people. That was problematic for me. Because the best way to get a fair and equitable assessment on anything that people benefited from is fair, you know, fairly benefiting each individual and appropriating how much they benefit and they should be paying X amount for their benefit. But you go outside of that and that is what we talked about last week. Nobody was willing to accept the burden they were benefiting? They wanted to place the burden on somebody else.

I enjoyed your testimony. I am not impugning you. I look at this and say that is problematic. But throwing more money at groups who aren't doing the job isn't necessarily going to resolve the problem.

I understand paperwork. I could create paperwork to justify anything in the world to send it back to Washington. And when I read it in Washington, I think that is really good.

But that is not typical of what reality is in a local agency. That is my concern. I appreciate what you said here. It raised a huge red flag that; yes, there is guys that are doing the job, Seattle, Washington, Orange County. They are doing the job. But there is a whole lot of people that aren't doing the job—and throwing a whole lot of Federal dollars at those agencies who are not doing their job and expecting them to justify on paperwork that they are doing their job. You know, for enough money I could hire somebody to justify most anything in this world and that is what the problem is.

In California—I am not your opponent here. I mean, in California, the biggest issues we have are water and transportation. Our water—we have got to rely on everybody else. I will commend my local agencies, Orange County is doing a magnificent job of taking every drop of water and they are water banking it. I mean, I have got Prado Dam. That water doesn't get more than 1.5 miles from Prado Dam, and it is gone.

It doesn't go back into heaven. It went into the ground. So it is not getting into the ocean. They are taking—they are being so creative and I applaud them for using every drop of water because we are having to ask people for water from other States who don't want to give it to us.

So I look at agencies who are doing good, like Seattle and others, and I think that is really great. But if we are going to throw money out here and there is huge—like the health system is problematic in a few areas. Throwing more money is not going to make them more accountable, nor is it going to make them do a better job.

Yet instead of repairing that line, city line ought to replace it. That is not efficient. That is my biggest concern Mr. Chairman.

Mr. DUNCAN. All right.

Mr. MILLER. Like I said, this is huge in California water. I think we need to continue talking about this until we find a solution, but this area has to be dealt with. Your credit performance is an oxymoron, if, in fact, it doesn't happen. You know, it is there.

Thank you, Mr. Chairman.

Mr. DUNCAN. All right. Thank you very much. Everybody always wants somebody else to pay. That is part of the problem.

Ms. Johnson has another question. Then I will come to Dr. Boustany.

Ms. JOHNSON. Thank you. Mr. Ward, having the view of a huge State, which is mostly inland, if you had more flexibility and caps lifted, what kind of mix do you think that would solve most of Texas problem, rural versus urban?

Mr. WARD. Congresswoman Johnson, you are referring to the cap on the private equity bonds being lifted? We would support that because right now the State of Texas has created within its own cap structure the ability to draw on the cap for water projects, and we are utilizing that routinely.

But it does compete significantly with the housing interest in the State. So it hasn't been well received, because it is not a reliable source for a large amount of investment in projects. We have not

seen it be used across the boards. We have only seen it in rural settings, for the rural water project, primarily the ones that would have formerly gone to R&D for assistance, and of course, with dwindling resources going through that program, from our U.S. rural utilities services, we have had to replace that in Texas with the 40-year loan program where we access private activity bonds now to do that.

But in thinking about it in the rural areas, particularly if you kind of combine the concepts that this panel has here now, some of the, you know, decentralized systems all the way through to here, the reason it might hold a greater opportunity is that that private benefit test of having a private benefit, causing it to be a taxable function, when you are borrowing funds from the market, if you can take that and eliminate it for those projects, for water quality purposes and for drinking water purposes, and you are going to lower the overall cost of the investment and thus spur it.

So I just don't think that without people knowing that it is there, and that you can access it, that we can determine what how big the effect will be. My gut feeling is it will be very large, a lot larger than anyone would project initially. Because once it started going and people saw the tool and how to apply the tool, it would be applied more universally and by more entities across the board.

Ms. JOHNSON. Thank you very much.

Mr. DUNCAN. All right. Thank you, Ms. Johnson.

Dr. Boustany.

Mr. BOUSTANY. Thank you, Mr. Chairman. This has been a very helpful set of testimony here for me. It has been very informative. I come from a very rural district in southwest Louisiana, a lot of small towns, agricultural based communities, maybe 10,000, 15,000 population. Many of them are strapped financially, yet they have aged water systems. We are talking a lot about long-term solutions to our problems. But we need short-term solutions as well. Private activity bonds seem very interesting to me and that may be a possible short-term solution and a long-term solution. But what are some of the pitfalls of trying to apply these to rural communities?

Mr. HOWARD. I would say rural communities, based on my experience, would need some assistance up front in helping to engage the private sector in developing projects. But I think once that assistance in the form of seed money, programs, for helping to solicit private sector interest or negotiating contracts. But I think once that money is in place and has been spent, the private sector then would take the project and develop it on behalf of the public sector.

Mr. BOUSTANY. Do you see a Federal role there or would that be a State—

Mr. HOWARD. Again, drawing back on my solid waste experience, I actually started in that business working for the U.S. Environmental Protection Agency where we ran a series of demonstration grant programs and various seminars to help educate local communities on how to work with the private sector to develop these projects.

So there was a limited role, but it was a very effective role that the Federal Government took in helping to develop that infrastructure and solve that disposal problem.

Mr. BOUSTANY. Thank you. Dr. Nelson, a quick question for you. You talked a little bit about research and development and what is going on in some of the other countries and so forth. Why haven't we seen private sector investment in R&D in this area and in our water structure research and development, new technologies? Obviously, there are profits to be had in it, given the problems that are out there. What reasons do you see for the paucity of private investment?

Ms. NELSON. Well, I do think the foundation for private sector R&D is always a strong, Federal or university and research institute background in basic and applied science that we don't have any more in wastewater technology in this country. But beyond that, a lot of people who look at innovation say that we have fragmented regulatory structures that aren't quite creating big markets nationally for companies to get involved in.

So equipment manufacturers in the U.S. tend to buy patents from overseas and adopt innovations that have been developed, a lot with government funding in Japan and the European Union, for example. But not generate those ideas here at home.

Mr. BOUSTANY. What suggestions would you have other than further government investment and government taking the lead to stimulate such private investment?

Ms. NELSON. Well, I only briefly alluded to some of the regulatory problems, local ordinances often don't permit innovation. A lot of rural areas could benefit greatly from decentralized integrated solutions, and the State agencies don't permit those.

So I think, there again, a demonstration program to help innovative types, even in regulatory agencies, figure out better models for local ordinances and encouragement to make those kinds of changes also helps to open up private sector investment.

Mr. BOUSTANY. I thank you. That is all I have.

Mr. DUNCAN. Well. Thank you very much. Unfortunately, we have got to end this hearing at this point. But you certainly have been a very helpful and informative panel. There has been a lot of interest from members. I appreciate it very much, all of you taking time out of what I know are very busy schedules to be here with us. That will conclude this hearing.

[Whereupon, at 12:02 p.m., the subcommittee was adjourned.]

CITY OF DALLAS

# Testimony
# of
# The Honorable Donald W. Hill

## Deputy Mayor Pro Tem
## City of Dallas

## Water Resources & Environment Subcommittee

## Committee
## on
## Transportation & Infrastructure

## United States House of Representatives

## June 14, 2005

**Testimony of the Honorable Donald W. Hill**
**Water Resources & Environment Subcommittee**
**June 14, 2005**

## Introduction

Chairman Duncan, Ranking Member Johnson and members of the Subcommittee, thank you for this opportunity to testify today on an issue of vital importance to the City of Dallas and to cities of all sizes throughout the nation. My name is Donald W. Hill, Deputy Mayor Pro Tem of the City of Dallas. I represent Council District 5 and serve as Chairman of the City Council's Finance and Audit Committee.

Of all the services that local governments provide, none contributes as much to public health, the environment and general public welfare as water and wastewater service. Maintaining and expanding the infrastructure needed to provide this critical service while meeting federal mandates is a costly challenge. I appreciate the Subcommittee's interest in this important issue and hope that your work will help Congress find some creative ways to help local governments finance water and wastewater infrastructure.

## The City of Dallas Water Utility

The City of Dallas's Water Department provides drinking water and/or wastewater service to over 2.2 million people in Dallas and 28 neighboring communities spread over 699 square miles. A recently completed update to the City of Dallas's Long Range Water Supply Plan indicates that Dallas will be

providing water and/or wastewater service to more than 4.5 million people by 2060. Founded in 1881, the Department operates three drinking water treatment plants with 865 million gallons per day capacity, two wastewater treatment plants with 260 million gallons per day capacity, 4700 miles of water mains and over 4100 miles of wastewater mains. Laid end to end, our water mains would reach from Dallas to London and our wastewater mains would reach from Dallas to Honolulu. Although this is an incredibly large and complex system to keep up and running, it largely goes unnoticed by the average citizen. Unnoticed, that is, until there is a service problem. As our nation's water and wastewater infrastructure deteriorates with age, you and I will increasingly hear about those service problems from our constituents.

The City's Water Department operations are funded solely by water and wastewater rates paid by its customers. In addition, the City issues revenue bonds backed by its ratepayer base to finance major capital improvement projects.

Dallas's drinking water currently comes from five surface sources: Grapevine Lake, Lake Lewisville, Ray Roberts Lake, Ray Hubbard Lake and Lake Tawakoni. In addition, Dallas has water in reserve in Lake Fork and Lake Palestine. The City's Water Department maintains a proactive approach to long

range water planning and recently completed an update to our Long Range Water Supply Plan that identifies water supply demands and sources to meet area demands through 2060. The plan includes water conservation, drought emergency planning, and an increased use of recycled water for non-potable uses, including irrigation and industrial uses and using recycled water for potable use through augmentation of existing supplies.

**The Challenge of Financing Water & Wastewater Infrastructure**

Like many cities, Dallas faces the dual challenges of replacing aging water and wastewater infrastructure and meeting federal mandates related to safe drinking water and clean water. The City is aggressively undertaking a comprehensive program to replace our aging water and wastewater infrastructure, some of which dates back to early in the last century.

Over the next ten years, the City Water Department's plans call for spending $2.5 billion on capital improvements ranging from replacing water and wastewater mains to increasing capacity and modernizing treatment plants. Virtually all of this work will be financed by ratepayers and the issuance of revenue bonds. Though this work will put a severe strain on City finances and on ratepayers, much of it is necessary for the City to meet federal drinking water and clean water standards and environmental regulations. Over the past two years,

we have increased water and sewer rates by 11.3 and 7.9 percent respectively and City staff estimate that we will need annual increases of approximately 7 or 8 percent each year for the next several years to finance the costs of constructing new and replacement infrastructure. As an elected official, I am conflicted between the need to modernize Dallas's water and wastewater infrastructure and the burden that these increases place on working families.

While providing water and wastewater service is undeniably a local responsibility, there is an important role for the federal government to play in financing water and wastewater infrastructure. The City strongly supports the goals of both the Safe Drinking Water Act and the Clean Water Act. However, both laws place expensive mandates on cities that the federal government should help meet. The federal government helps state and local governments finance many kinds of infrastructure, most notably highways, airports and transit. There is a sound basis for Congress to provide this kind of assistance as funding for all three can easily be translated into numbers of jobs and measurable mobility improvements. However, it is important to note that without safe and reliable drinking water and sanitary sewer service, jobs and mobility mean very little. It is clear that federal assistance for water and wastewater infrastructure financing would help keep local customer rates affordable. As water and wastewater service rates continue to rise, high water and wastewater bills

present a growing challenge to homeownership as they become a greater percentage of household income.

**State Revolving Loan Funds**

Though both the Safe Drinking Water and the Clean Water State Revolving Loan Funds provide important assistance to many communities as they strive to provide their citizens with safe drinking water and sanitary sewer service, funds from these programs are prioritized to assist smaller communities with challenges in providing the most basic services or economically depressed communities with significant challenges in meeting basic public health requirements. While these programs do provide assistance, the public entities that receive this assistance, in the form of loans, must still include the costs for the infrastructure and financing in the rates of their customers.

There is no question that these programs provide important assistance to many communities and that Congress should continue to fund them. However, assistance in the form of federal funding for water and wastewater infrastructure similar to that for other forms of infrastructure, as mentioned previously, would provide a much greater benefit to communities that are required to comply with ever growing federal requirements related to water and wastewater systems. Providing federal funding for this work will also be translated into numbers of jobs

and measurable economic growth resulting from having high quality dependable services.

**Water & Wastewater Infrastructure Grants**

I understand that Subcommittee is exploring creation of a water and wastewater infrastructure grant program funded by a trust fund. The City of Dallas supports creation of a new grant program to provide direct assistance to local governments for water and wastewater infrastructure. We recognize that budget constraints make creation of such a program difficult at this time and that creation of a trust fund will require either cuts to other programs or new sources of revenue. However, the City has major concerns about any proposal to finance a trust fund with a tax on water and wastewater. I am particularly concerned about the impact of keeping housing affordable for working families. Any increase in water and wastewater rates should be decided locally and should directly benefit the local ratepayers that pay the increased rates.

Should Congress create such a new grant program, it would need to recognize that cities throughout the country have vastly different needs. Such a program would have to be flexible, affording opportunity for local priority setting, and adequately funded to assist with needs of communities throughout the country.

The existing grant programs run by the Environmental Protection Agency provide important assistance to many communities. However, these funds are difficult to obtain and the current process does not allow for long-term planning. Dallas has received these grants in the past and greatly appreciates the role our Congressional delegation has played in obtaining them as they have provided us with valuable and much-needed special purpose assistance. However, these grants do not represent a stable, reliable source of ongoing funding.

**Title XVI Program**

The City of Dallas is excited about the Department of the Interior, Bureau of Reclamation's Title XVI Program (PL 102-575), which provides federal assistance of up to 20 percent of total project cost for the construction of local water reuse systems. As our population grows and water demand rises, Dallas plans to vastly increase the use of reclaimed water for non-potable uses including irrigation and industrial purposes and for potable use as augmentation to our existing water supplies. Dallas is exploring participation in the Title XVI Program.

However, the Title XVI Program remains small and difficult for local governments to access. Each project must be individually authorized. Each individual project then needs its own yearly appropriation once it is authorized.

Given the environmental and water conservation benefits that water reuse can provide our nation, Congress should explore expanding the Title XVI Program into a broad grant program or make expansion of reuse capacity an eligible use of any new grant program. Such action would assist, encourage a significantly expand the use of reclaimed water throughout the nation in general and in drought prone areas specifically. This would be similar to the efforts of Congress in the 1960s to encourage study of collection systems and development of quality wastewater treatment plants to assist communities in their efforts and to encourage protection of the environment.

**Innovative Financing of Water & Wastewater Infrastructure**

Given the budget constraints Congress faces, I appreciate that creating new grant programs is difficult at best. For that reason, Congress may also want to look at some innovative ways of helping local governments finance water and wastewater infrastructure. For example, Congress may want to consider allowing taxpayers to deduct all or part of their water and wastewater expenses from their taxable income. Congress already allows the deduction of local property taxes that finance general local government operations. Allowing the deduction of water and wastewater expenses would lessen the financial impact to customers of the increased rates necessary to fund the required infrastructure

construction. While the City of Dallas seeks to minimize rate increases, our system is a self financing one which means that the significant infrastructure improvements needed will result in future rate increases. This is just one example of how Congress might look at innovative ways to help local governments and citizens finance water and wastewater infrastructure.

**Conclusion**

Chairman Duncan, Ranking Member Johnson and Members of the Subcommittee, I thank you again for the opportunity to testify on this important issue. Thank you also for your interest in how Congress might help local governments and the citizens they serve to meet the challenge of financing water and wastewater infrastructure. The City of Dallas looks forward to working with you on this issue and hopes that you will be able to identify a meaningful role for the federal government in this area.

# Testimony of Stephen E. Howard

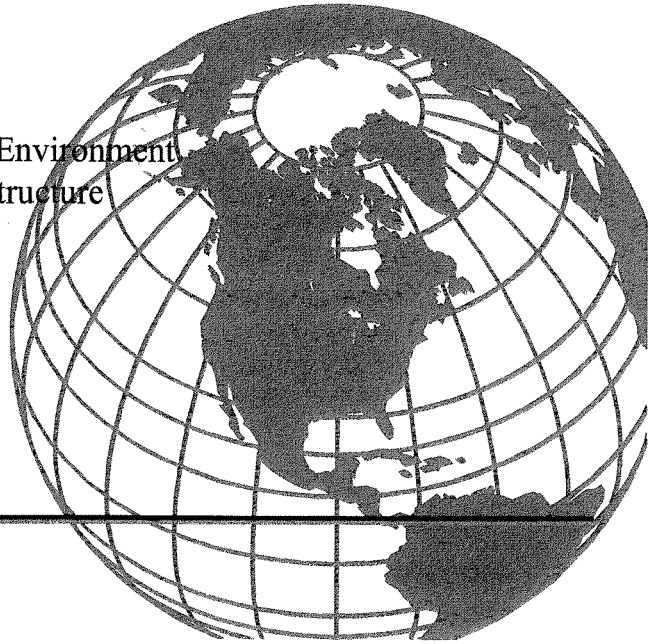
Senior Vice President
**LEHMAN BROTHERS, Inc.**

Before the:

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
U.S. House of Representatives

Financing Water Infrastructure Projects

June 14, 2005



## Introduction

Mr. Chairman and members of the Subcommittee, I am Stephen Howard, representing Lehman Brothers. On behalf of Lehman Brothers, we are very grateful to appear before you today and offer our thoughts on possible tools to help bridge the funding gap that exists with the country's water quality infrastructure needs. I have been at Lehman Brothers for 22 years during which period I have financed over $7 billion of water, solid waste, transportation, and public facility infrastructure projects in the tax-exempt and taxable bond markets.

During last week's hearing, I understand that the challenge that was put to the witnesses was to provide a viable solution to meet our nation's water quality infrastructure funding needs. I am here today to offer what I believe is part of a viable solution. At the outset, I want to state that no single solution exists to address the enormous demands to finance our water quality infrastructure needs. As a nation, we will need to ensure that the financing "tool box" has as many traditional and innovative financing tools so that local communities can finance the facilities that are mandated by state and federal water pollution control laws and regulations.

## Introduction (Continued)

As a starting point, the subcommittee is to be congratulated for recognizing that the existing framework to finance water quality infrastructure needs to be expanded and new financing models must be designed. Last week's hearing on this matter illustrated that consensus remains elusive on how we should proceed, but it was clearly demonstrated by the witnesses that we need new financing models. Whether the new financing models involve grants, loans, loan guarantees, or tax exempt financing, the key is to ensure that our local communities have the latitude to formulate financing strategies which can meet local needs and alleviate the financing burdens of federal mandates that local communities must comply with and ultimately pass on to the American ratepayer.

Today, I want to present some thoughts on one tool that could be added to the financing tool box that could provide an immediate benefit to the priority of unleashing capital to construct water quality infrastructure. I would also like to note that legislation has been introduced on this tool that is pending before the House Committee on Ways and Means. This bill would amend existing tax policy to allow local communities to leverage the capital markets in combination with other financing mechanisms.

## Introduction (Continued)

Essentially, H.R. 1708 would provide for the unfettered use of tax exempt securities known as exempt facility bonds or private activity bonds ("PABs") to finance water quality infrastructure projects. An important aspect of this financing tool is that it would not, according to the Joint Tax Committee, significantly affect the federal treasury. Stated another way, there would be a negligible impact upon the federal budget.

I would encourage the subcommittee members to review this legislation and consider cosponsoring the bill as a means to help address our water quality infrastructure funding gap.

I would like to take the remaining time that I have today and explain how this tool works and to offer a real world example that illustrates that how a scarcity in environmental infrastructure assistance was met using PABs and thus addressed an environmental protection compliance issue.

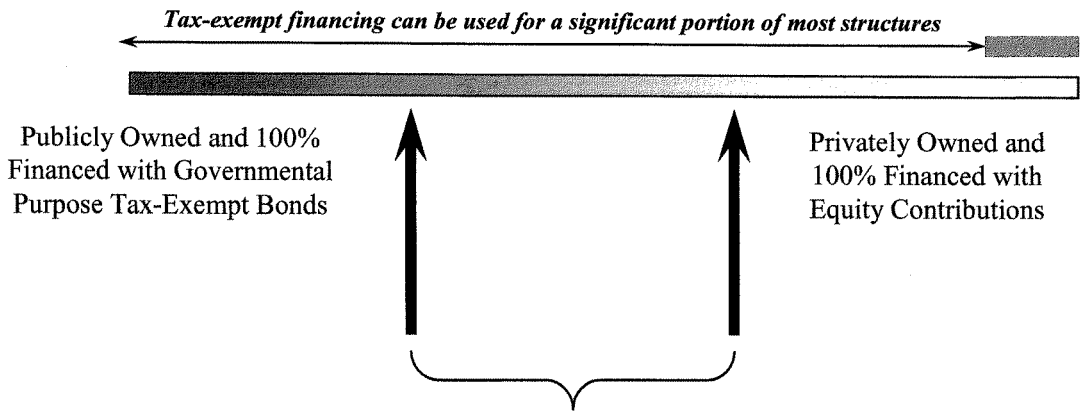
## Financing Options for New Infrastructure Projects

- Tax-Exempt Bonds
  - Governmental Purpose Bonds: Limits private participation
  - Private Activity Bonds: Allows private participation
- Taxable Bonds: Unlimited use, but potentially higher all-in cost
- Private Equity: Can be used in conjunction with certain types of Tax-Exempt Private Activity Bonds and all Taxable Bonds

Tax-exempt private activity bonds are typically used on project financed public-private partnership transactions and are repaid by rate payers through retail or wholesale user fees.

# Financing Options for New Infrastructure Projects

- There is a broad spectrum of project financing options:




**Between these two extremes, a variety of financing structures utilizing tax-exempt private activity bonds, taxable bonds and equity funding are possible to help optimize project development.**

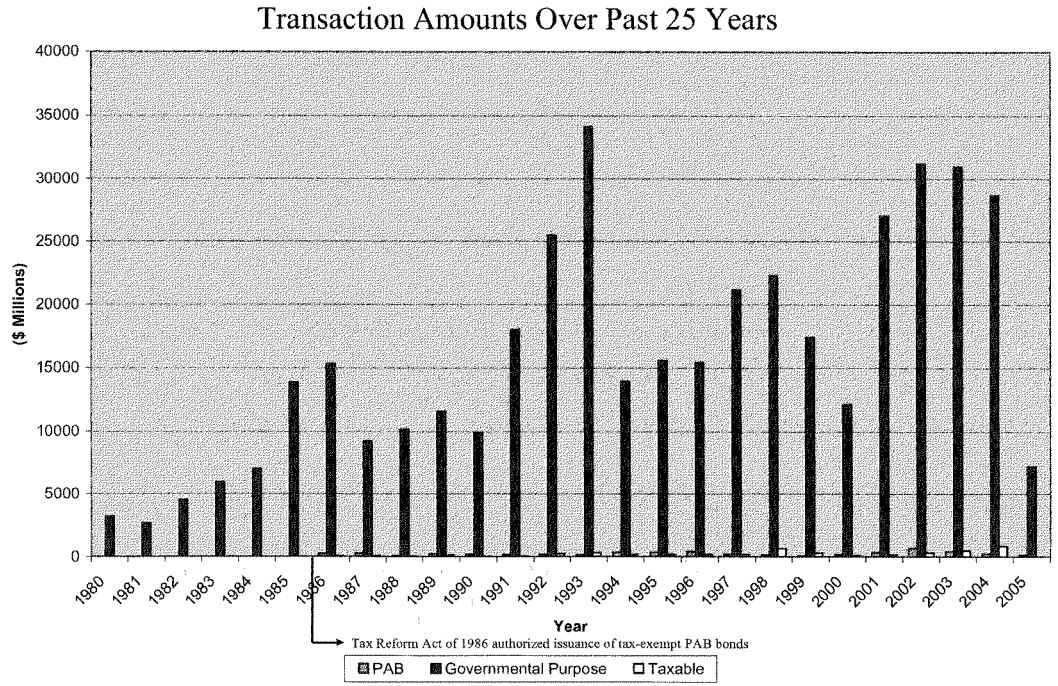
# Tax-Exempt Financing Availability

| *Type of Tax-Exempt Bond* | *Governmental Purpose Bond Cap Not Required* | *Private Activity Bond Cap Not Required* | *Private Activity Bond Cap Required* |
|---|---|---|---|
| **Ownership** | Public | Public | Private |
| **Asset Class** | | | |
| **Public Facilities** | ✓ | | |
| **Water/Wastewater** | ✓ | | ✓ |
| **Solid Waste** | ✓ | ✓ | ✓ |
| **Airport** | ✓ | ✓ | |
| **Surface Transportation** | ✓ | | |
| **Ports** | ✓ | ✓ | |
| **Housing** | ✓ | | ✓ |
| **Education** | ✓ | | |
| **Healthcare** | ✓ | | |

## Projected Water/Wastewater PAB Issuance

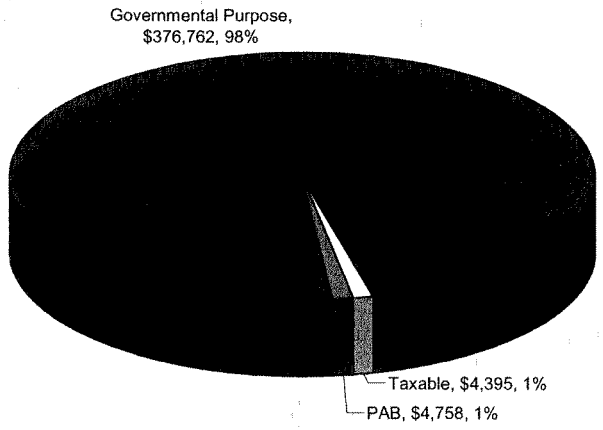
- In order to project the amount of water/wastewater PAB issuance if PAB cap allocation is eliminated, an analogy can be made with the municipal solid waste sector
- The municipal solid waste sector faced a "crisis" in the early 1980's due to declining landfill capacity and rapidly increasing disposal costs
- The US Congress responded to this crisis by eliminating tax-exempt private activity bond cap for municipal solid waste disposal projects in the Tax Reform Act of 1986
- As a consequence, over $15 billion of PAB's have been issued since 1986 to help fund the development of new infrastructure to help solve the municipal solid waste disposal crisis

# Water/Wastewater Historical Data



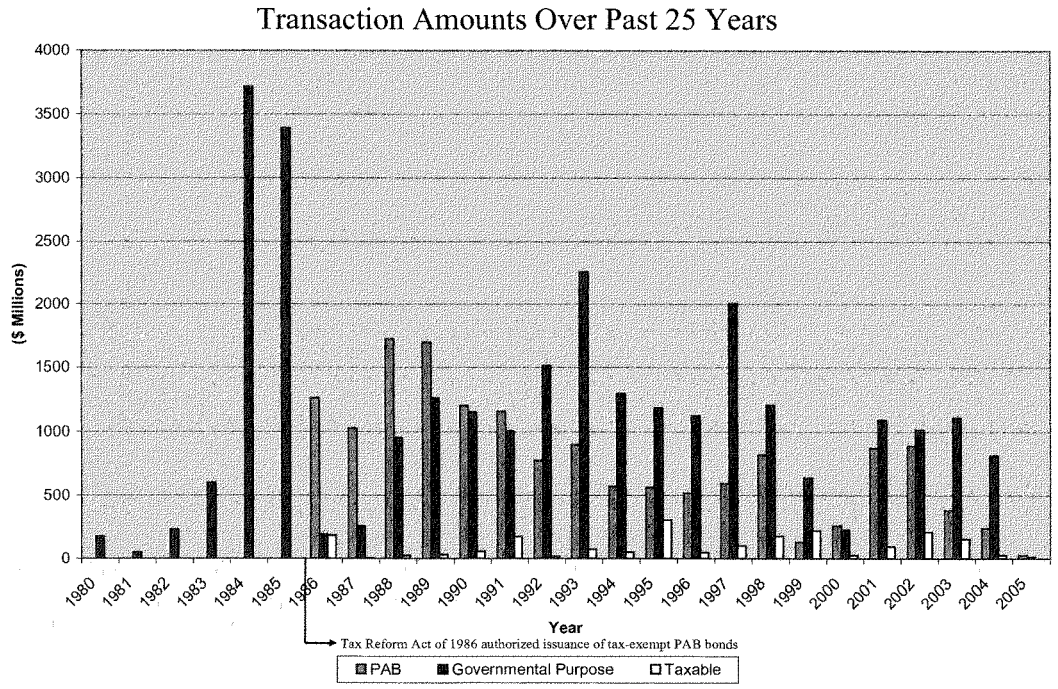
# Water/Wastewater Historical Data

Water/Wastewater Transaction Allocation ($ Millions)
Total Issuance: $385,915 Million
Years: 1986-2005



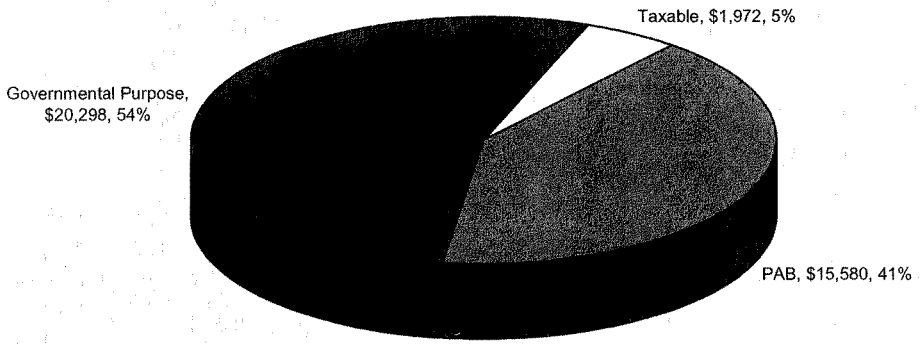

| Average Issuance/Year ($ Millions) | |
|---|---|
| PAB | $238 |
| Governmental Purpose | $18,838 |
| Taxable | $220 |

# Solid Waste Historical Data



# Solid Waste Historical Data

Solid Waste Transaction Allocation ($ Millions)
Total Issuance: $37,850 Million
Years: 1986-2005




| Average Issuance/Year ($ Millions) | |
|---|---|
| PAB | $779 |
| Governmental Purpose | $1,015 |
| Taxable | $99 |

## Projected Water/Wastewater PAB Issuance

- Solid waste PAB issuances have equaled 41% of total solid waste issuances compared to 1% for water/wastewater since 1986
- Average total solid waste PAB issuances/year equaled $779 million compared to $238 million for water/wastewater since 1986
- Based on experience in the solid waste sector, we believe PAB issuance for water/wastewater projects would significantly increase and help expedite construction of new projects
- Actual issuance of PAB's for water/wastewater projects will be based on the number of projects ready to be financed, particularly where the public sector wants the private sector to assume a greater role in assuming development, technology and performance risk
- With the elimination of bond cap for water/wastewater projects, it is reasonable to expect that $1 to $2 billion of PAB's would initially be issued annually and could double or triple annually over time as the PPP water/wastewater industry matures

## Projected Water/Wastewater PAB Issuance

- Tested and proven tax-exempt bond financing structures exist to finance public-private partnerships for water/wastewater infrastructure
- 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/wastewater market facilitate the structuring of long-term public-private partnerships
- Long term private partner risk assumption and equity investment for water/wastewater projects would increase with the use of PABs and benefit all public and private participants developing projects to meet water quality infrastructure needs

## Conclusion

In closing, Mr. Chairman, I want to re-emphasize the fact that we need to approach our water quality infrastructure funding gap with an open mind. The traditional ways of doing business do not provide an adequate level of funding support nor will such mechanisms suffice to meet the challenges of emerging water quality compliance mandates. We need to finance using creative mechanisms that will help communities comply with environmental mandates in as cost-effective manner as possible as we did during the 1980's solid waste disposal crisis which is now largely behind us due in part to the availability of PABs. PABs are just one tool, but an important one, that will provide our water quality administrators the ability to begin to meet the challenges of the next several decades. Mr. Chairman, this concludes my formal testimony. I would be pleased to answer any questions that the Subcommittee may have.

TESTIMONY OF

JAG KHUMAN, DIRECTOR
MARYLAND WATER QUALITY FINANCING ADMINISTRATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT

SUBMITTED TO THE
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

JUNE 14, 2005

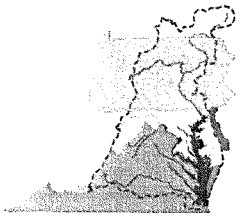
FINANCING WATER INFRASTRUCTURE PROJECTS

Mr. Chairman and members of the Committee, my name is Jag Khuman. I serve as the Director of the Maryland Water Quality Financing Administration (MWQFA). The MWQFA is a unit within the Maryland Department of the Environment, and is responsible for the financial management of the Water Quality Revolving Loan Fund, the Drinking Water Revolving Loan Fund, and the recently enacted Maryland Bay Restoration Fund. Thank you for inviting me to speak about the Maryland Bay Restoration Fund, a major new State initiative for financing sewerage infrastructure projects.

The 2004 water quality needs survey estimates over $6 billion of sewer infrastructure needs in Maryland over the next 20 years. One key needs category is the capital cost to upgrade wastewater treatment plants (WWTPs) with advanced treatment for nutrient removal, before effluent is discharged into the Chesapeake Bay and its tributaries. These WWTPs upgrades are necessary if Maryland is to meet its nutrient reduction commitments under the 2000 Chesapeake Bay Agreement.

The water quality of the Chesapeake Bay is vital to Maryland's economy and the region. The main cause of the Chesapeake Bay's poor water quality and aquatic habitat loss is due to elevated levels of nitrogen and phosphorous. Although nutrients are essential to plant life within the Chesapeake Bay, excessive amounts of nitrogen and phosphorus create dense algae blooms. These blooms reduce the amount of sunlight available to submerged aquatic vegetation. The loss of sunlight kills the grasses as a result of their inability to photosynthesize and produce the food needed to survive. As excess algae decomposes, oxygen in the water is depleted, causing fish and other species to die.

The 64,000 square mile Chesapeake Bay watershed includes parts of six states: Delaware, Maryland, New York, Pennsylvania, Virginia and West Virginia, and the entire District of Columbia. It is home to over 15 million people. Five major rivers feed into the Chesapeake Bay: Susquehanna, Potomac, James, Rappahannock, and York. Nutrients enter the Bay via rivers and streams form Point and Nonpoint Sources. The vast majority of point source discharges of nutrients are from WWTPs, with smaller contributions from industries. Nonpoint Sources of nutrients are runoff from farms, feedlots, lawns, parking lots, streets, forests and from air, groundwater and septic systems.



**Existing Financing Programs for Nutrient Reduction from WWTPs**

Based on Maryland's commitment under the 1983 Chesapeake Bay Agreement with its neighboring States, the State implemented a Biological Nutrient Removal Program (BNR). Under the BNR program the State of Maryland provided 50% of capital costs in grant funding to upgrade 66 large WWTPs with design capacity of 500,000 gallons/day or more. The remaining projects costs could be financed at below market interest rate through the Water Quality Revolving Loan Fund program. Funding for the State grant portion is provided through annual appropriation of general obligation bonds. The goal of the BNR program is to reduce nitrogen levels in the treated wastewater (effluent) down to 8 mg/l. Without BNR, a typical WWTP discharges nitrogen at a level of about 18 mg/l. As of 2002, nitrogen loading to the Chesapeake Bay from Maryland WWTPs has been reduced from the 1985 level by about 16.9 million lbs/yr and phosphorus loading by 1.7 million lbs/yr through a voluntary cooperative effort between the State and WWTP owners. Through FY 2005, the State of Maryland has provided $208 million in grant funding for the BNR program. It is estimated that an additional $92 million in State grant funding is needed to complete the BNR upgrades, and the State is committed to providing the funding through annual capital appropriations.

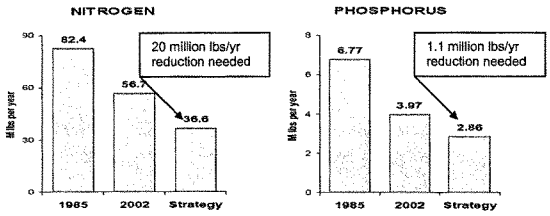
Under the 2000 Chesapeake Bay Agreement, Maryland and its neighboring States have made a commitment to correct the nutrient and sediment-related problems in the Chesapeake Bay and its tidal tributaries. The goal is to remove the Bay and the tidal portions of its tributaries from the list of impaired waters under the Clean Water Act, by 2010. To meet this goal, the six Bay States and Washington DC will have to limit the amount of nutrient loading to a maximum of 183 million lbs/yr nitrogen and 12.8 million lbs/yr phosphorus. Maryland's numerical limit is a maximum of 37 million lbs/yr nitrogen and 2.9 million lbs/yr phosphorus.

**Maximum Nutrient Loading Goals**

| | Nitrogen (Million lbs/yr) | Phosphorus (Million lbs/yr) |
|---|---|---|
| PA | 72 | 2.3 |
| ***MD*** | ***37*** | ***2.9*** |
| VA | 51 | 6.0 |
| DC | 2 | 0.3 |
| NY | 13 | 0.6 |
| DE | 3 | 0.3 |
| WV | 5 | 0.4 |
| Subtotal | 183 | 12.8 |

Maryland's Chesapeake Bay tributary strategy focuses on nutrient reduction from both Point and Nonpoint sources to accomplish the above goal. Under the strategy, Maryland still needs to reduce nitrogen loading by 20 million lbs/year and phosphorus by 1.1 million lbs/year.

**State of Maryland Tributary Strategy Goals**




**Maryland Bay Restoration Fund**

Based on projected future capital infrastructure needs and the limited funding currently available, the State of Maryland recognized that the current level of funding is not adequate to address the Enhanced Nutrient Removal (ENR) upgrades at WWTPs. Recognizing that significant effort is still necessary to achieve the targeted nutrient reduction goals by 2010, Maryland Governor Robert L. Ehrlich, Jr., proposed legislation during the 2004 legislative session to create the Bay Restoration Fund (BRF). The BRF legislation was passed by the Maryland General Assembly and signed into law on May 26, 2004.

The BRF legislation created a dedicated source of new State funding to upgrade WWTPs from the Biological Nutrient Removal level to the Enhanced Nutrient Removal (ENR) level by providing up to 100% in grants. Under ENR, the WWTPs will be upgraded to lower the nutrients in the treated wastewater to 3mg/l nitrogen and 0.3 mg/l phosphorus. The capital cost to upgrades the largest 66 WWTPs in Maryland with ENR is estimated at $740 million. These WWTPs account for about 95% of the total sewage generated in the State. These ENR upgrades will allow Maryland to achieve an estimated 7.5 million lbs/yr of additional nitrogen reduction and 0.26 million lbs/yr of phosphorus reduction. This action alone will accomplish about 37% of the 20 million lbs/yr nitrogen reduction goal and about 24% of the 1.1 million lbs/yr phosphorus reduction goal for Maryland. The BRF legislation also created a funding mechanism for providing grants and loans to upgrade onsite septic systems with nitrogen removal technologies and for providing grants for cover crops on agricultural land.

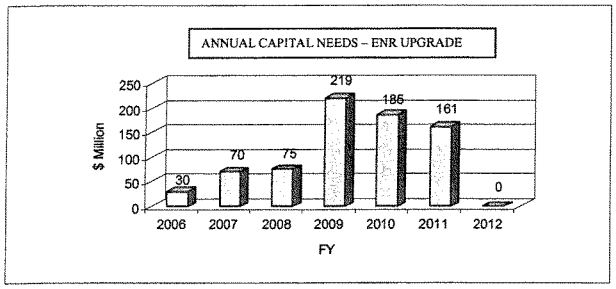
The Maryland BRF will be financed through a fee of $2.50/month ($30 per year) on each household that is connected to a WWTP. Similarly, non-residential users connected to WWTPs will pay a BRF fee of $2.50/month per equivalent dwelling unit (EDU), for the first 3,000 EDU, $1.25/month per EDU for the next 2,000 EDU, with a maximum fee of $10,000/month for a single user. One EDU is defined as the average daily water consumption of 250 gallons. The BRF fee on users connected to WWTPs became effective January 1, 2005 and will be collected by the water/sewer authorities along with their existing billing systems. It is estimated this will generate $60 million/yr.

Under the legislation, the BRF fees generated from users connected to WWTPs, can be used for:

- Providing grants up to 100% for the capital cost to upgrade targeted WWTPs from BNR (effluent nitrogen of 8 mg/l) to ENR (effluent nitrogen of 3mg/l and phosphorus of 0.3 mg/l) level.
- Providing grants for existing sewer system rehabilitation using up to $5 million per year during Fiscal Years 2005 through 2009.
- Providing grants to WWTP owners for ENR operations and maintenance costs (up to 10% of annual fee revenue), starting fiscal year 2010.
- Payment of Debt Service on Bonds if Bond proceeds are deposited in the Fund.
- Reasonable administrative expenses (% of fee revenue): State Comptroller's Office (up to 0.5%); Water/Sewer Billing Authorities (up to 5%); Maryland Department of the Environment (up to 1.5%).

**ENR Financing Plan**

Although $60 million/yr of revenue is expected from the BRF (WWTP) user fees, the State of Maryland's goal is to complete the ENR upgrades at the targeted 66 WWTPs, at an estimated cost of $740 million, by fiscal year 2011. Starting in FY 2006, the goal is to start planning/design at 15 to 20 WWTPs annually, followed by ENR construction, and complete all upgrades by FY 2011. The projected annual capital cash flow needed is shown below:



To provide the necessary funding, the MWQFA will use both BRF fee revenue and issue revenue bonds to meet the cash flow needs for ENR upgrades. Based on preliminary cash flow projections, approximately $510 million in revenue bonds will need to be issued between FY 2008 and FY 2011, to finance the $740 million of ENR infrastructure needs. A portion of the annual fee revenue will used to pay the debt service on the bonds. The table below provides a preliminary financing plan showing revenues and expenses by fiscal year.

**Maryland Bay Restoration Fund**
**WWTP Upgrade Cash Flow Projection**

| Fiscal Year | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Net WWTP Revenue (1) | $ 28,925,966 | $ 57,999,681 | $ 57,999,681 | $ 57,999,681 | $ 57,999,681 | $ 57,999,681 | $ 57,999,681 | $ 57,999,681 |
| Net Bond Sale Proceeds (2) | $ - | $ - | $ - | $ 49,250,000 | $ 128,050,000 | $ 167,450,000 | $ 157,600,000 | $ - |
| Total Revenue | $ 28,925,966 | $ 57,999,681 | $ 57,999,681 | $ 107,249,681 | $ 186,049,681 | $ 225,449,681 | $ 215,599,681 | $ 57,999,681 |
| **Expenditures** | | | | | | | | |
| **ENR Capital Grants** | **$ -** | **$ 30,000,000** | **$ 70,000,000** | **$ 75,000,000** | **$ 219,000,000** | **$ 185,000,000** | **$ 161,000,000** | **$ -** |
| Sewer Infrastructure Grants | $ - | $ 5,000,000 | $ 5,000,000 | $ 5,000,000 | $ 5,000,000 | $ - | $ - | $ - |
| ENR O&M Grants | $ - | $ - | $ - | $ - | $ - | $ 5,000,000 | $ 5,000,000 | $ 5,000,000 |
| Debt Service Reserve | $ - | $ - | $ - | $ 5,000,000 | $ 13,000,000 | $ 17,000,000 | $ 16,000,000 | $ - |
| Debt Service (Bonds) | $ - | $ - | $ - | $ - | $ 4,817,114 | $ 17,341,612 | $ 33,719,801 | $ 49,134,567 |
| Total Expenditure | $ - | $ 35,000,000 | $ 75,000,000 | $ 85,000,000 | $ 241,817,114 | $ 224,341,612 | $ 215,719,801 | $ 54,134,567 |
| **Fund Balances (3)** | | | | | | | | |
| Beginning Balance | $ - | $ 28,925,966 | $ 51,925,647 | $ 34,925,328 | $ 57,175,009 | $ 1,407,576 | $ 2,515,645 | $ 2,395,525 |
| Ending Balance | $ 28,925,966 | $ 51,925,647 | $ 34,925,328 | $ 57,175,009 | $ 1,407,576 | $ 2,515,645 | $ 2,395,525 | $ 6,260,640 |
| **Bond Issuance** | | | | | | | | |
| **Bonds Issued (4)** | **$ -** | **$ -** | **$ -** | **$ 50,000,000** | **$ 130,000,000** | **$ 170,000,000** | **$ 160,000,000** | **$ -** |

(1) Assumes no growth in revenue
(2) Net of bond issuance costs, estimated at 1.5% of bonds issued
(3) Assumes no investment income
(4) Assumes 15-year term bonds at 5% interest rate, level debt service

In addition to a dedicated source of funding, one key advantage of the BRF is that the State gets to manage the ENR schedule, with the goal of completing all the upgrade by FY 2011. Past experience has shown that under a voluntary program, where the WWTP owners have to partially provide the funding, there are considerable program implementation delays.

The BRF legislation also imposed a $30/yr fee per users of an onsite sewage disposal (septic) system or holding tank. The BRF fee on users of septic/holding tanks is effective October 1, 2005 and is to be collected by the County where the septic/holding is located. It is estimated this will generate $12 million/yr.

Under the legislation, 60% (approximately $7 million/yr) of the BRF fees generated from users on septic/holding tanks can be used for providing grants and loans to upgrade septic systems with nitrogen removal technologies. The other 40% (approximately $5 million/yr) can be used to provide grants for cover crops. In addition, a portion of the BRF fees (septic) revenue can be used for reasonable administrative expenses (% of fee revenue): State Comptroller's Office (up to 0.5%); County Billing Authorities (up to 5%); Maryland Department of the Environment (up to 8%); Maryland Department of Agriculture (up to 1.5%).

The Septic System Upgrade Program will be implemented through the Maryland Department of the Environment (MDE). The details on how the grant and loan funds will be distributed have not yet been finalized. The BRF (septic) fee will only address a small portion of the State tributary strategies goal of upgrading some 350,000 septic tanks with nitrogen removal technology.

The Cover Crop program will be implemented through the Maryland Department of Agriculture, which will involve providing grants to farmers to plant certain plants during non-harvest season to consume excessive nitrogen that would otherwise either runoff into surface waters or go into ground water. The BRF (septic) fee will only address a small portion of the State tributary strategies goal of 600,000 acres of cover crops, which at a cost of $40 per acre would require $24 million annually.

In summary, because existing federal funding is currently insufficient to meet the water quality infrastructure upgrade needs, the States are trying to develop their own funding programs to fill a portion of the funding gap. The Maryland initiative will provide an additional $740 million over the next 6 years and will reduce only 37% of the nitrogen and 24% of the phosphorous needed to reach the Chesapeake Bay nutrient reduction goals. With over $6 billion in future water quality infrastructure needs in Maryland, we believe that increased federal funding should be provided to help States and localities meet the water quality infrastructure improvement needs.

Thank you for the opportunity to testify. I would be happy to answer any questions that you may have.

**Title: Leveraging Infrastructure Resources for Rural Communities through Coordination of Diverse Resources**

**Debra Martin, Director, Great Lakes RCAP, Fremont, Ohio**

**Testimony:**

Chairman Duncan, Ranking Member Johnson, thank you for the opportunity to testify before you today on the need for wastewater infrastructure for rural communities. My name is Debra Martin, and I am the Director of the Great Lakes Rural Community Assistance Program (RCAP). Our RCAP operates in seven Midwestern states, including Illinois, Indiana, Kentucky, Michigan, Ohio, West Virginia, and Wisconsin. I am pleased to be here today in support of your efforts to secure more assistance to communities throughout the country to help meet their infrastructure needs. I am also very pleased to attend this hearing on behalf of the Rural Community Assistance Partnership (RCAP). With regional partners throughout the U.S., RCAP comes representing the interests of low-income, rural communities.

RCAP is a national network of six nonprofit technical assistance organizations that work with more than 2,000 rural communities throughout the U.S., Puerto Rico, the Virgin Islands, and Guam. For more than thirty years, our organizations have provided assistance with the development, management, financing, and operations of rural water and wastewater systems. These systems are essential to protecting and enhancing public health, maintaining the quality of water resources, and providing a basis for present and future economic growth in the communities.

Our testimony today will touch on the challenges that many rural communities face in financing necessary improvements to infrastructure. We are calling for new financing mechanisms to alleviate these problems. We will focus on opportunities that we believe exist to improve the availability of financial capital to rural communities. We will demonstrate that, if properly managed and distributed, the trust fund could help states to make the kinds of changes that will leverage significant monetary resources and target those communities truly in need of assistance.

**The Challenge of Water and Wastewater in Rural Communities**

As many of you know, rural communities sit at a disadvantage in financing water and wastewater infrastructure. Rural residents are three times as likely as their urban counterparts to lack water and sanitation. When these services are available, they pay three times as much on average for them because they lack sufficient users to create economies of scale. The gap between the current need and existing financing for infrastructure in rural areas is well documented. Further, small communities face a growing set of challenges in terms of meeting increasingly stringent water and wastewater regulations.

**Title: Leveraging Infrastructure Resources for Rural Communities through Coordination of Diverse Resources**

**Debra Martin, Director, Great Lakes RCAP, Fremont, Ohio**

At the same time, rural communities face a shrinking pool of government financing resources. Many communities are already paying a significant percentage of their income for these services. It is unrealistic to expect that increasing user fees alone can solve the problem and eliminate the funding gap.

We have become increasingly concerned with the inconsistency of infrastructure financing mechanisms across the U.S. Rural community financing varies significantly by state. Some states run chronically short of resources to meet growing community needs, and good practices in one state are unlikely to be transferred to others. It is for this reason that we support the notion of a clean water trust fund – not only to increase the resources available at the federal level to address the gap, but to promote better coordination of these resources while encouraging best practices. We believe that a trust fund could be used as an incentive to the adoption of infrastructure financing best practices at the state level.

The allocation of funds from the trust fund could serve as a carrot to encourage the adoption of practices that would make financing of infrastructure more coordinated, efficient, and rational. By coordinating financing, states could become better stewards of the resources available. In some states, wise investments of resources have allowed for a replenishment and even expansion of financial resources over time. Likewise, some states have streamlined and simplified the application process so that communities are less burdened in applying for financing. Additionally, some states have mechanisms for coordinating across funding agencies. These practices could be encouraged in all states as conditions of receiving additional funding through a newly-created trust fund.

**State Examples of Best Practices**

One example of best practices from my home state is the creation of the Ohio Water Development Authority (OWDA). The OWDA was created in 1967 through the issuance of general obligation bonds of $100 million by the state. Through careful stewardship and creative financing mechanisms, the funds have been leveraged so that the initial investment is today worth 0.75 billion. The Authority continues to revolve these funds and improve its bond rating so that bonds can be issued to increase available funding without requiring the backing of the state and needlessly obligating precious state resources. Key to the success of this program is the flexibility that the Authority possesses, with few restrictions on how the funds can be employed. OWDA, while an agency of the state, has been given the freedom to operate much like a private sector entity. As such, they have the flexibility to work with other funders and technical assistance providers in the state to create programs that respond to specific needs, utilizing surpluses from their other programs. Some examples include a bridge loan program that does interim financing through the construction period for USDA Rural

**Title: Leveraging Infrastructure Resources for Rural Communities through Coordination of Diverse Resources**

**Debra Martin, Director, Great Lakes RCAP, Fremont, Ohio**

Development borrowers, a research and development grant that allows systems to test and utilize new technologies, and a Community Assistance Program that allows for very low interest rates and long-term financing for borrowers that are already paying significant portions of their income in utility fees. These programs have all been created by adapting existing resources to respond to areas of need.

OWDA is well-positioned to coordinate with multiple funding agencies, as they were instrumental in creating the Small Communities Environmental Infrastructure Group (SCEIG). This group includes all funding agencies in the state, technical assistance providers, private sector financiers, electric cooperatives, universities, and others who have an interest in infrastructure. Initiatives have been developed through this group to streamline and better coordinate funding, promote training for local officials, and promote the use of new technologies.

Other states have created similar mechanisms to create greater efficiency and better customer service. Montana has developed a uniform application that serves as a good starting point for communities that need to seek funding through multiple sources. The New York State Co-Funding Initiative has developed a Memorandum of Understanding (MOU) between the various funders in the state that formalizes their intent to cooperate in the administration and coordination of funding. This group has developed online tools that allow communities to match their projects and needs with the appropriate funders and technical assistance providers. These practices allow funders to work together to determine the best way to meet the needs of communities.

There are numerous other examples of this type of coordination that help to make the process of completing a project easier for small communities, while also ensuring that scarce resources are well targeted and efforts by the various agencies are not duplicated.

**The Need for Technical Assistance**

Technical assistance is a critical component in ensuring that small communities take maximum advantage of the resources that are available to them. Most such communities lack the staff or expertise to coordinate the multiple resources needed. This is frequently the role played by RCAP or other technical assistance providers.

In addition, training for local officials is critically needed to ensure that once a system is created or upgraded, the capacity exists to continue its operation into the future. Such capacity development provisions are part of the Safe Drinking Water SRF, and this is a good start, but these provisions need to be broadened to include other funding sources and have greater uniformity in their implementation. The State of Mississippi, for example, requires that all utility board members receive training upon being elected to

serve. Such ongoing training requirements ensure that local officials understand their responsibilities and have the necessary tools to operate their system in a financially sound manner.

**Future Financing Options**

It is clear that new mechanisms are needed for financing what is indeed a growing rural infrastructure financing crisis. Additionally, critical elements must be present in any new sources that are developed. These include a streamlined approach for financing, a system for replenishing the account, coordination with other financing authorities, and coordination with technical assistance providers like RCAP to ensure that resources are appropriately directed and utilized. Such a mechanism could also require that communities complete long range planning (asset management) so that financing strategies could be put in place that account for depreciation and changes in the community over time.

In short, a proposed trust fund could provide incentives that would support this kind of rational approach to rural infrastructure financing. Through coordination among funders and technical assistance providers who have a direct connection to the community, in the future we could report on great accomplishments in community development, public health, and protection of the environment.

We thank the Committee for this opportunity to testify.

**Testimony of:**

**Valerie I. Nelson, PhD**

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**To:**

**Committee on Transportation and Infrastructure**
**Subcommittee on Water Resources and Environment**
**US House of Representatives**
**2165 Rayburn House Office Building**
**Washington, DC 20515**

**June 14, 2005**

Mr. Chairman and Members of the Subcommittee, I very much appreciate the opportunity to testify before you this morning. My name is Valerie Nelson, and I represent the Coalition for Alternative Wastewater Treatment, which is a national network of experts and advocates for alternatives to conventional methods of water and wastewater collection and treatment.

The Coalition would like to join in support of higher levels of federal assistance in meeting the looming "gap" in spending to repair America's aging water and wastewater infrastructure. I would like to introduce this morning, however, a quite different question: how can the limited federal share of overall spending be better used to prod the nation's water and wastewater sector into higher performance at less cost?

Currently, the federal share of capital investment by water and wastewater utilities each year is only about ten percent of total spending, and of this about half, or five percent, flows through the Environmental Protection Agency in SRF authorizations or grants, with the other 5% covered by USDA, HUD, and other agencies. Even calls for a doubling or tripling of EPA funding levels through higher appropriations for the SRF or a new Trust Fund would still leave the federal government as a minor player in what is essentially a local ratepayer service.

What if a $2 billion EPA appropriation each year for grants or loans were used to leverage greater efficiencies and reform, and not just to subsidize local requests for assistance? Various reports have suggested that with better management and planning throughout the sector, 15 to 20% savings in the projected total water and wastewater spending in the US could be achieved.[i] Increased environmental and public health protection could also be achieved with better methods of managing risks and with use of innovative technologies and designs. If the federal share of financing could leverage even ten percent, or about $8 billion savings on a projected $80 billion in yearly capital and operation and maintenance expenditures, that would clearly be a worthy federal investment with a very high rate of return.[ii]

Therefore, I would like to talk this morning about major ways that the U.S. water and wastewater sector needs to be pushed to achieve greater efficiencies and innovation and then to offer some specific suggestions for how federal financing legislation could create the appropriate "carrots" and "sticks" for such reform.

Background:

The current crisis in water and wastewater infrastructure has been defined since the issuance of the 2000 Water Infrastructure Network report, "Clean and Safe Water for the 21st Century", and the subsequent 2001 American Water Works Association report, "Reinvesting in Drinking Water Infrastructure: Dawn of the Replacement Era", as largely a question of where the money can be found to repair and replace the aging infrastructure of water and sewer piping and treatment plants. Most of the underground piping system, which constitutes about 70% of the investment, is decades old, and was

installed when sewer and water lines in cities created major advances in sanitation and public health protection, and established American infrastructure as the technology "gold standard" for the rest of the world.

The current problem is not just that this infrastructure is aging, but that the basic technology paradigm of large-scale piping and treatment plant centralization is looking less and less sustainable. Not only is it hugely expensive for communities to maintain the underground infrastructure, but these vast networks of pipes also can create massive disruptions of water supplies and natural hydrologies, and may be doing more damage to ecosystems than anticipated in earlier times. New pollutants, such as endocrine disrupters and pharmaceuticals, will also be an increasing challenge for central treatment plants, as will homeland security issues. There are better and cheaper methods, largely through more localized treatment and reuse, but these need to be strategically incorporated into the existing infrastructure over time, as discussed more below.

I have been privileged in recent months to travel to international water conferences and, prior to this testimony I have also made it a point to speak to a number of international experts in water resource infrastructure. Clearly, a new picture of America's declining role in the world of drinking water and sanitation is emerging. First, the U.S. has become a net importer of innovative water and wastewater technologies and approaches; very little R&D is occurring in either the public or private sectors in the U.S. Further, America's policymakers and practitioners are largely unaware of the intensity and speed of innovation in other countries, and few have moved to adopt the kinds of regulatory, management or technology reforms that are emerging overseas.

I suggest that this loss of American leadership in water and sanitation relative to the rest of the world is a problem that eclipses the "gap", because it means both that the U.S. sector is headed to relatively greater inefficiencies over time, and secondarily, that the jobs and export income from high-tech water resource technologies and methods are being generated outside the US. For example, Japan is now reaping the benefits from government investment in membrane technologies in the 1980's, and the European Union is currently investing heavily in research into innovative collection systems and source separation technologies, with the expectation that there will be huge markets both in Europe and in developing nations with growing middle class neighborhoods, such as China and India.[iii]

Many US utilities are fairly adept at incorporating new treatment systems from overseas, as in the local Blue Plains treatment plant recently purchasing innovative equipment from a European company. But, few utilities are taking the long-term (60-year) strategic examination of the future of their service levels and infrastructure approaches that has been forced upon utilities in other countries.[iv] It has been long believed that the US has the wealth and low interest rates to afford such gross inefficiencies, but the funding "gap" discussion is reminding us that we are unlikely to be able to afford such waste in the future.

Numerous reports in the last twenty years have recommended a resumption of federal funding of research and demonstration projects in water and wastewater.[v] The 1972 Clean Water Act had authorized $100 billion per year in R&D, and throughout the 1970's about $20 million per year (over $60 million in current dollars) of federal funding was plowed into research on innovative technologies. The federal grants program also provided for an additional subsidy of up to 15% when a utility installed an "Innovative or Alternative" technology. But these efforts by the federal government were phased out by the early 1990's, and other than a modest small business (SBIR) program or occasional funding for special technologies, such as for arsenic removal, the U.S. EPA to all intents and purposes has no technology research and development program to support water resource-related work in universities, research institutes, or in the private sector. Most of the agency's research budget goes to monitoring or environmental and health effects studies and to meeting the short-term research needs of its own regulatory programs, not to far-reaching exploration of sustainable technology innovations and reform.

The Congressional Budget Office was alert to this problem three years ago when it responded to your Committee's questions with a recommendation that a renewed federal role in water and wastewater R&D and dissemination projects was appropriate. Indeed, the CBO report stated that R&D was only one of two classic justifications for federal investment in the sector, the second being subsidies to keep rates affordable for particularly hard-hit communities. CBO also sharply questioned whether unrestricted subsidies to local communities were appropriate, given the tendency of cities to overinvest in technology and to shift their own monies to other city services once they had a federal subsidy in hand.

Perhaps there has been little attention to the CBO report recommendations, because generic recommendations for an expanded federal role in research lack a natural constituency and can't compete against more immediate calls to the Congress to address the looming funding "gap". But the need for the U.S. water and wastewater sector to start a long-term, and in many ways a wrenching, drive to more sustainability is ever more clear as the pace of reform quickens overseas.

I would like to describe three major areas where the U.S. water/wastewater sector has been slow to adopt reforms and is rapidly losing its stature as a leader in technologies and practices: asset management; distributed and nonstructural technologies; and integrated water resource planning and technologies, such as wastewater reuse.

Asset management:

Asset management for infrastructure, which was developed for the water sector in the UK twenty-five years ago and subsequently refined in Australia and New Zealand over the last fifteen years, is an approach that involves a more business-like process of establishing customer service levels and life-cycle management and financing of the assets. Condition assessments, targeting of repairs and replacements on infrastructure constituting greatest risks if they fail, and a better balancing of ongoing maintenance vs. new capital investments are all features in what has been characterized as a massive, top

to bottom reorientation in the way the utility operates. Implementation of these methods has been estimated to save upwards of twenty percent in the operational and capital costs of utilities, and asset management is widely used in the electric power industry, transportation, and other sectors in the U.S.

Unfortunately, only a few water and wastewater utilities, such as in Seattle, Washington, and Orange County, California have seriously begun to adopt asset management as a way of doing business. Without asset management, cities all across the country are wasting money on replacing pipes that don't need to be replaced and paying more for emergency repairs of broken pipes that should been receiving cheaper, routine maintenance all along. These breakdowns in equipment are also creating unnecessary threats to public health and the environment. Seattle, for example, has found that they can target resources on such risks as the large sewer pipes near the public hospitals and salmon streams, and have saved millions each year in lowered O&M and capital costs.

Distributed Technologies and Reuse:

In major cities such as Tokyo and Singapore, high-tech membranes are being used to create "zero water emission" buildings involving reuse of wastewater in toilet flushing, landscaping, etc. The old centralization paradigm of piping wastewater miles and miles away from the source was based on the lack of a technology to treat adequately the wastewater at the immediate source, whether the home or office building. But since 70% of the costs of conventional water resource infrastructure is in the underground pipes and not in the treatment plants, technologies that can avoid central collection systems can potentially lead to great cost-savings. A wide range of distributed and nonstructural technologies are becoming available, including point-of-use water treatment for a home or neighborhood, low impact development technologies, wetland restoration, water conservation measures, stormwater retention, and others. Advanced individual home or neighborhood-scale wastewater systems can also be used to replace failing septic systems in outlying areas, instead of constructing costly new trunk sewer lines which promote unplanned new development and runoff.

Integrated Water Resource Planning:

Over time, bureaucracies and utilities developed in separate "siloes" of water, wastewater, stormwater, water supply, and flood control. Many large inefficiencies occur as a result. For example, construction of sewer systems can reduce local groundwater tables and streamflows, which then can lead years later to an expensive search for new water supplies. Countries like Australia have restructured regulations and utilities into "catchments" or watersheds, where water is viewed in an integrated, holistic framework, and these efforts are leading to both cost-savings and environmental improvements.

In the US, the droughts of recent years have led to some awareness of the link between depleted water supplies and the loss of water through big networks of sewer and water pipes and ocean or river outfalls, but the federal government and local agencies have not yet taken the steps to force separate bureaucracies to work on integrated planning.[vi]

There are numerous other examples of reforms being researched and implemented overseas: stormwater retention and reuse in "green roofs" in Germany, in the process not only beautifying the cities but also avoiding expenditures on combined sewer overflows or new water supplies; innovative community collection systems in Brazil; elimination of petroleum use in fertilizers in Sweden by transitioning into reusing domestic sewage sources for nitrogen and phosphorous; and, integration of water/wastewater and energy infrastructure, such as mining sewer lines for heat energy in Vancouver, Canada or planting trees both to retain stormwater and to reduce air conditioning requirements.

The larger point is not so much that a tremendous amount of technological innovation is occurring overseas, but rather that U.S. policymakers, utilities, and advocates are so slow to wake up to these shifting realities. As stated above, only a very small number of US utilities are adopting asset management approaches to reforming O&M and capital investment programs. Only a few cities, such as Philadelphia, Chicago, Los Angeles, and Seattle have begun to explore urban reuse and stormwater retention systems as a serious alternative to expensive construction of underground stormwater storage tunnels and new water supplies. Few American engineers and academic researchers are attending "leading edge" conferences overseas. And it is the lone voice at EPA that is urging federal policymakers to take note of the dangers of obsolescence in the American water and wastewater sector. Interestingly enough, it is an eminent venture capitalist, John Doerr of Kleiner, Perkins, Caufield, and Byers, who warned last fall that the centralized water/wastewater paradigm of the US was "unsustainable", and his firm is investing heavily in "distributed" water (and energy) technology development overseas. [vii]

A Revitalized Federal Role in Promoting Reform:

Some critics of the current infrastructure think that the deepening crisis of funding will eventually force municipalities and engineers to wake up to the need for fundamental redesign of US infrastructure. But I believe instead that the federal government must reassert a major leadership role if such changes are to occur. As CBO and others have pointed out, there are many reasons why local agencies and utilities will continue to resist innovation.[viii] The risks of using new technologies are seen as high, and local communities can't be asked unilaterally to fund costly projects when the primary benefits of success accrue to the nation at large. Entrenched bureaucracies and professions find it immensely difficult and painful to learn new practices, absorb significant risks, and potentially lose jobs. Fragmented and outdated regulatory structures across the country also destroy incentives for the private sector to invest in research. Fundamental reform of an infrastructure paradigm, requiring so many disparate actors to work together for change, can only occur with federal leadership.

In this context, I would ask your committee to consider the following legislative initiatives, both to support and encourage the work of innovative scientists, engineers, companies, and local utilities across the country, and to insist that recipients of federal funds comply with asset management, integrated water resource planning, and engineering alternatives analysis requirements:

- Authorize $250 million a year for science and technology research and development in water and wastewater infrastructure. This funding would stimulate university and research institutes to rebuild US capacity in water-related science and engineering, and would include funding for basic research in biomimicry and other efforts to redesign fundamental treatment approaches, and for management and socio-economic research. Projects would also be developed in partnership with qualified and interested research organizations such as the Water Environment Research Foundation, the American Water Works Association Research Foundation, the National Association of Homebuilders Research Center, the Electric Power Research Institute, the Water Reuse Foundation, the National Decentralized Water Resources Capacity Development Project, and others;
- Authorize $250 million a year for a national demonstration program in use of innovative technologies and management, including asset management, innovative collection systems, and nonstructural and distributed approaches (decentralized wastewater, Low Impact Development, stormwater retention, water conservation, and others);
- Authorize $1 Billion in grants for innovative and alternative projects proposed by local utilities, including funding for asset management and new technologies. Several steps in the right direction would be to require all designated State and Tribal Assistance Grant projects to be innovative or alternative, and to transition the recent voluntary CWSRF set-asides for zero-interest loans for distributed and nonstructural projects into a mandatory program for the states;
- Require that any applicant for an SRF loan or Trust fund grant have prepared an asset management plan, coordinated with integrated water resource plans in the regional watershed, and examined a full range of engineering alternatives;
- Request the National Academy of Sciences to report to the Congress on long-term issues of sustainability in water and wastewater, new directions and innovation in management and technology internationally, and how such practices can be successfully integrated into US infrastructure over time;
- Request the Environmental Protection Agency to develop a long-range plan for research and development in sustainable water and wastewater infrastructure, including initiatives in basic and applied science, engineering research and development, pilot and bench scale applications, and dissemination strategies;
- Initiate collaboration among Congressional committees having jurisdiction over EPA, USDA, HUD, DOE, Commerce, and other federal agencies with water-related programs, for the purposes of considering alternative means to streamline and integrate sources of funding for research and for federal subsidization of local water resource projects, so as to promote reform and innovation across the country.

None of these proposals are radical. Over the years, various of these programmatic approaches have been included in either 1972 CWA language or in SRF reauthorization

language that has not yet been passed by the Congress. Other elements, such as required coordination with regional plans, have been successfully used in ISTEA funding assistance. Finally, one of the earliest and most successful of federal programs has been the support of research, education, and extension in America's land-grant universities. What is unique in these proposals is the level of funding requested to transform the role of the federal government from a minor player in a perpetuation of the status quo into an active agent for change. I urge your Subcommittee's consideration of the importance of that shift and I thank you again for the opportunity to appear before you this morning.

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[i] Congressional Budget Office. 2002. Future Investment in Drinking Water and Wastewater Infrastructure, p. 3-5 and Allbee, Steve. 2005. America's Pathway to Sustainable Water and Wastewater Systems. Water Asset Management International. P. 14

[ii] While estimates of expenditures vary, the 2002 CBO predicted a range of $70-90 Billion a year in combined capital and O&M spending.

[iii] The recent Washington Post series of articles on Finland contains a description of fast-growing wastewater technology firms like Green Rock Oy, which are looking at new markets being created in Europe by stringent new phosphorous regulations, as well as in China. June 1, 2005.

[iv] Allbee, S. op cit. and Byrne, Roger. 2004. What Drove the Change for AAM Improvement in Australia. GHD Asset Management Group. P 14.

[v] These reports include: Technology for a Sustainable Future, Office of Science and Technology Policy, 1994; Permitting and Compliance Policy: Barriers to U.S. Environmental Technology Innovation, EPA, 1991; Industry, Technology, and the Environment: Competitive Challenges and Business Opportunities, Office of Technology Assessment, 1994; Closing the Gap: Innovative Solutions for America's Water Infrastructure, EPA, 2003; as well as the 2002 CBO report.

[vi] Both American Rivers and EPA have been studying these links between sewer diversions and water supply problems.

[vii] John Doerr spoke on the November 16, 2004 Charlie Rose program on PBS. Mr. Doerr cited distributed water and power technologies as the second ranked area of their investments. Tom Friedman in his new book, The World Is Flat, has described Doerr as the legendary figure who had the foresight to invest in Netscape, which widely broadened public access and use of the Internet in the 1990's.

[viii] Nelson, Valerie, 2000. Advanced On-Site Wastewater Treatment and Management Market Study cites many of these barriers.

**J. Kevin Ward**

**Executive Administrator**

**Texas Water Development Board**

**On behalf of the Council of Infrastructure Financing Authorities**

**Subcommittee on Water Resources and Environment**

**Committee on Transportation and Infrastructure**

**June 14, 2005**

Mr. Chairman and Members of the Subcommittee:

My name is Kevin Ward and I am here today in my capacity as an Officer of the Council of Infrastructure Financing Authorities. CIFA very much appreciates the opportunity to present testimony to the Subcommittee.

CIFA is a national organization made up primarily of state officials engaged in the development and financing of water and wastewater pollution control projects and the operation of State Revolving Funds for infrastructure financing. Our members have been in the forefront of developing financial structures that maximize the use of federal and state dollars while meeting the requirements of statute, federal oversight, accountability and fiscal responsibility.

We welcome the opportunity to share our views with the Subcommittee on the financing of water infrastructure projects. It is obviously a subject to which we give a great deal of thought as we attempt, as State managers, to meet the challenge of addressing pressing needs with often limited resources.

This Subcommittee has sought in the past to increase the level of Federal support for the Clean Water State Revolving Fund and we hope that effort will continue. We believe increased funding is essential to realizing our nation's water quality goals. We also share your interest in pursuing different options and innovations that will make the best possible use of that funding. One of the primary roles of CIFA has been to facilitate the sharing of information among the States about how to run SRF programs more effectively and meet new challenges and opportunities.

Following the adage, "If it ain't broke, don't fix it" we hold strongly to the view that the State Revolving Loan Funds should remain the foundation for future progress in meeting water infrastructure needs. Innovation, new approaches and new priorities can and should be addressed in the context of the SRF concept. It is vital that the SRF partnership between federal and state government continue as the basic mechanism for assistance to communities in addressing water quality issues.

In the past two decades, few federally authorized programs have proven as effective in realizing their intended goals as the CWSRF. The CWSRFs have provided a sustainable source of funding to protect and restore our nation's rivers and streams. The assistance

made available to communities is more than double the federal investment as a result of state match, loan repayments, issuance of bonds and interest earnings.

The numbers tell the story. EPA's 2004 Annual Report of the CWSRF program indicates assistance provided between 1988 and 2004 was $47.9 billion, funding a total of 15,286 projects. SRF loans save recipients 20% on average which means that communities saw a reduced cost of approximately $17.5 billion in interest charges between 1991 and 2004 due to below-market interest rates in the CWSRF program. For a typical $10 million project with a CWSRF loan, the saving is $3.2 million.

The majority of funding goes to the highest priority projects that clean up polluted streams, rivers, lakes and estuaries. CWSRF assistance primarily finances projects addressing the safeguarding of public water supplies, restoration of fish habitats and expanding recreational opportunities.

States, as the recipients of CWSRF capitalization grants, recognize that they incur a number of responsibilities. We must manage those funds in a fiscally responsible manner and be accountable. We must give priority in our funding decisions to the water quality benefits that will result and the urgency of environmental problems needing resolution. We need to give particular attention to the challenges faced by small and rural and disadvantaged communities. And, we must be creative financial stewards seeking to identify every appropriate avenue for delivering as much assistance as feasible to

communities and ensuring that this assistance achieves the fullest potential impact in terms of improved water infrastructure.

We see our mission as using all the possible tools and strategies, allowable by law and consistent with prudent financial management, to achieve the largest "foot print" in terms of achieving the goals of the Clean Water Act. In the broadest sense of the term, States, whether issuers of bonds or not, are "leveraging" the resources at their disposal to maximize the federal CWSRF dollar.

Currently, 27 States take advantage of the capacity within the SRF to leverage the funds. Using that term now in the traditional financial sense, States employ the federal capital grants, as well as their matching share, as collateral to borrow in the bond market for purposes of increasing the pool of available funds for project lending. This is a very useful tool for States facing loan demand that outpaces available capitalization grants. When combined, SRF cap grants and borrowed funds can significantly increase near term loan capacity and allow more projects to be funded sooner. Leveraging the SRF has dramatically increased the funds available for assistance.

Let me provide a couple of examples of what has been accomplished in that regard.

In Massachusetts, the SRF was established as a leveraged program back in the late 1980's with the Federal grant dollars and the State match dollars being leveraged in the tax-exempt bond market. The initial leveraging ratio for the program was 2 to 1, meaning

that for every $1 of grant money received, $2 was raised on the open market for project funds. Currently, Massachusetts leverages at a ratio of 3 to 1.

Since 1989, Massachusetts has received $798 million in Federal funds and contributed $175.4 million in state matching dollars for a total of $973.4 million available for projects. Through leveraging, Massachusetts has been able to issue more than $2.7 billion in construction/project loans to local governmental units, funding almost 900 projects. This assistance has financed projects across the full range of categories allowed under EPA regulations. These have included secondary and advanced treatment; inflow and infiltration; sewer rehabilitation; collection systems; interceptors; CSO's; storm water, and other non-point source type projects.

Oklahoma is a State that has only recently moved to the leveraging process. The Oklahoma Water Resources Board began leveraging in 2003 when the demand for funding from communities was rapidly exceeding the funds available from capitalization grants and state match. The first leveraged SRF transaction was in the drinking water program for $127 million. This was followed by a second transaction in which clean water, drinking water and state match bonds were issued raising $216 million. Oklahoma is the first State in EPA Region 6 to leverage the drinking water program and the first state to cross-collateralize its clean water and drinking water programs. The OWRB has further stretched these SRF bond funds by combining them with state program loan and grants, along with funding through Rural Development, Community Development Block

grants, State and Tribal Assistance grants, Indian Health Service grants as well as other sources.

Both these examples illustrate States maximizing use of Federal dollars to meet water quality needs as quickly as possible with available resources.

In addition to the leveraging of SRF funds through the bond market, States are leveraging their assets in the larger sense of the word: marshaling resources, integrating funding, and accessing other sources of support to stretch the SRF dollar and finance more water infrastructure projects.

Rural states with small populations face particular challenges. Wastewater infrastructure is expensive but necessary for small communities and often several funding sources must be tapped to pay for one project. The State of Montana has been very active in addressing the rural/small community challenge. The Montana State Revolving Fund program worked with other Federal funding agencies such as the Community Development Block Grant program, USDA Rural Development and other State agencies to produce a single application process which is used to apply for all the state and federal loans and grant programs. This is of tremendous benefit to communities with limited staff resources and expertise. Montana "markets" the advantages of this integrated funding approach to communities as they begin the process of addressing their water infrastructure needs. The State program has even produced an educational video that is

shown at town council and public meetings so communities can better understand their options and the process involved.

In my State of Texas we aim for the largest footprint from the use of Clean Water SRF dollars to produce the optimal impact in terms of services provided. In the case of the City of Eagle Pass, a $17,340,000 CWSRF loan was combined with EPA grants through both the Colonia Wastewater Treatment Assistance Program (CWTAP) in the amount of $18.4 million and $4 million through the North American Development Bank, along with a state grant of $2.4 million. The combined funds were used for the construction of upgraded and expanded wastewater treatment, interceptor capacity, a reuse system and new service to replace failed septic systems in colonias and a Kickapoo Tribal Reservation. This has allowed the City to become a regional service provider that will serve over 50,000 residents through a project that ensures sustainable compliant wastewater treatment capacity for a rapidly growing community and brings first time wastewater service to 2,700 homes.

Another successful Texas project that demonstrates the benefits of leveraging CWSRF appropriated dollars is the City of Roma. In Roma's case, a $4.2 million CWSRF loan was combined with $29.6 in funding from various state and federal agencies ($20.5 million EPA grant program through the CWTAP program; $1.7 million grant from the Office of Rural Community affairs (HUD); $.5 million through the USDA Rural Development program; $5.6 million EPA grant through the North American Development Bank and a state grant of $1.3 million) to realize a $33.8 million funding

package. This enabled the City to construct a new wastewater plant, expand its collection system and replace inadequate on-site systems. In addition to providing compliant service to the City's 20,000 residents, the project brings first time service to approximately 2,764 economically distressed homes representing 14,000 residents.

States are also "leveraging" resources to address water quality beyond what is contemplated or required by the Clean Water Act. States have taken ownership of their respective water agendas to achieve the most comprehensive response to water quality needs. For States, improving water quality is a response not only to Federal law; it is a response to a priority concern of their citizens.

An illustration of this type of State initiative is the Community Septic Management Program administered by the Massachusetts Water Pollution Abatement Trust, the state SRF agency. This program is designed to rehabilitate or replace failing, on-site septic systems. Using $30 million appropriated by the state legislature and leveraging the funds on a 2 to 1 basis, $60 million is being provided for the remediation of septic systems. Already over 5,000 on-site systems have been rehabilitated.

Ohio is demonstrating the versatility of the CWSRF. Ohio has developed a way to use CWSRF loans to encourage improvements that will maintain and restore aquatic life in water bodies impacted by non point source pollution. In the last five years, their SRF has funded the protection and restoration of over 69 miles of stream corridors and 4,200 acres of wetlands. Ohio has also pioneered the use of linked deposit financing for the

CWSRFs. With this funding mechanism, SRFs can provide below-market interest rates through local lenders so that private borrowers can carry out a wide variety of non point source pollution controls. The Ohio CWSRF has saved those borrowers over $3.8 million by investing in more than 1,000 loans that implemented agricultural best management practices for water quality and improved home sewage treatment systems.

As the Subcommittee weighs the future of SRF reauthorization legislation, as well as other initiatives to spur water infrastructure development, we would hope that you will keep the record of accomplishment by States and the perspective of State program managers uppermost in your consideration. If progress is to continue, it will be in the hands of each individual State to deliver on the goals of the Clean Water Act.

Our organization shares this Subcommittee's concern with the far-reaching implications of the current status of FY '06 appropriations for the Clean Water State Revolving Funds. With the significant reduction in funding experienced in FY '05 and the drastic cut proposed in this year's Budget, the future of the CWSRF is at a critical juncture. With the documented huge need for water infrastructure, which will only escalate in the future, if this Subcommittee desires that the CWSRF continues to be the primary tool for Congress to ensure the states are maintaining an appropriate pace in addressing priority needs consistent with the Clean Water Act, then full consideration will have to be given to appropriate funding levels to accomplish that task. This organization is prepared to assist the committee in any way to ensure Congress is fully aware of the impacts of various funding levels on the CWSRF program.

We have long sought SRF reauthorization legislation and CIFA endorsed H.R. 1560 in the past Congress. Reauthorization of the CWSRF at significantly higher funding levels is, of course, a very important component of increasing the flow of SRF loans to meet the demand for projects. Our support for reauthorization has been somewhat tempered by efforts to use the legislation as a vehicle for imposing new requirements and obligations on the States. After years of successful program operation it is clearly the experience of CIFA State members that the more latitude and operating flexibility the States are allowed, the greater is our ability to accomplish the environmental and financial goals of the program. Certainly States need to be fully accountable for their use of federal dollars but excessive oversight or administrative control by EPA stifles innovation and the ability of States to best respond to local needs. The success of this program derives from the flexibility of the SRF model that allows each State to decide the best approach to meet its individual water quality needs. Efforts to mandate certain approaches or set aside funding for particular types of projects fail to recognize that water quality needs vary and States are in the best position to decide priorities consistent with statute.

Among the specific items we would like to see included in CWSRF reauthorization legislation are the continued ability to transfer funds between the CWSRF and the DWSRF; extended loan terms to the useful life of the project; provisions for assistance to disadvantaged communities parallel to the drinking water program and loan fee language as was contained in H.R. 1560 of the last Congress.

While we are certainly aware that tax legislation is no more this Subcommittee's purview than are appropriations bills, we do want to point out two issues in the tax arena that could significantly impact the SRF program.

As was recognized in H.R. 1560, a change in arbitrage rebate rules could make available significant additional funds for States that operate leveraged SRF programs. These States are currently forced by the arbitrage rules to limit and pay rebate on their earnings on those portions of the SRF funds which are considered under these rules to be bond proceeds. This reduces the resources available to provide financial assistance to communities. Applying the arbitrage rules in the case of SRFS does not make sense since by law these funds can only by used for the purpose of financing water and wastewater facilities and prompt lending is ensured by oversight and program audits by the EPA. Fixing this either by legislation or administrative action by the Treasury Department could mean a good deal more money for water infrastructure without additional appropriations.

In turn, leveraged State SRF programs would be negatively affected should Congress move to adopt some of the municipal bond provisions contained in the recent Joint Committee on Taxation report, "Options to Improve Tax Compliance and Reform Expenditures." Provisions in the report pertaining to tax-exempt financing may increase federal tax revenues but would constrain the ability of States to issue bonds, force significantly higher borrowing costs, and thus limit financing available for infrastructure.

Chief among the concerns are the recommendations to eliminate advance refunding and greatly restrict pooled financing. If SRF programs are caught up in these proposed bond restrictions it will limit our ability to augment assistance to communities with no benefit to the Federal Treasury. We hope the Subcommittee will keep this potential impact in mind should the tax-writing committee move in this direction.

Mr. Chairman, we very much appreciate the opportunity to share our views and look forward to continue working with you, Representative Johnson and the members of the Subcommittee as you address how best to finance the water infrastructure needs of this nation.



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