



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

**James L. Oberstar**  
**Chairman**

**John L. Mica**  
**Ranking Republican Member**

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July 13, 2009

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**SUMMARY OF SUBJECT MATTER**

**TO:** Members of the Subcommittee on Water Resources and Environment

**FROM:** Subcommittee on Water Resources and Environment Staff

**SUBJECT:** Hearing on “Opportunities and Challenges in the Creation of a Clean Water Trust Fund”

**PURPOSE OF THE HEARING**

The Subcommittee on Water Resources and Environment is scheduled to meet on Wednesday, July 15, 2009, at 2:00 p.m., in room 2167 of the Rayburn House Office building to receive testimony on the opportunities and challenges in the creation of a Clean Water Trust Fund. This hearing will be the first of several hearings related to addressing the need for increased investment in wastewater infrastructure improvements, and meeting the water quality goals of the Clean Water Act.

The Subcommittee will hear from Members of Congress, a representative of the Government Accountability Office (GAO), representatives of State and local governments, and other stakeholders on issues related to the creation of a Clean Water Trust Fund with a dedicated source of revenue to finance wastewater infrastructure projects and improve national water quality.

**BACKGROUND**

The Subcommittee on Water Resources and Environment has jurisdiction over water quality and wastewater infrastructure programs administered by the Environmental Protection Agency (EPA) under the Federal Water Pollution Control Act, commonly known as the Clean Water Act.

I. *The Importance of Investment in Wastewater Infrastructure*

To a great extent, improvements in water quality since the passage of the 1972 Clean Water Act have resulted from a significant investment in wastewater infrastructure improvements throughout the country.

Since 1972, the Federal government has provided more than \$82 billion for wastewater infrastructure and other assistance, which has dramatically improved water quality and the health of the economy and the environment. During the same time period, overall investment in the nation's wastewater infrastructure, from Federal, State, and local sources, has been over \$250 billion. Today, the nationwide system of wastewater infrastructure includes 16,000 publicly owned wastewater treatment plants, 100,000 major pumping stations, 600,000 miles of sanitary sewers, and 200,000 miles of storm sewers.

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

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

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

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

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

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

Another looming need centers on upgrading aging infrastructure to control and eliminate combined sewer overflows. Combined sewers are found in 33 States across the United States and the District of Columbia. To eliminate combined sewer overflows, communities must redesign their sewer systems to separate sewage flows from stormwater flows, to provide significant additional capacity to eliminate the possibility that combined flows will exceed the limits of the infrastructure, or to implement measures that decrease the amount of stormwater that can enter the system (i.e., non-structural or green infrastructure). Either way, this will be a massive undertaking: EPA estimates that it will cost more than \$50 billion.

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

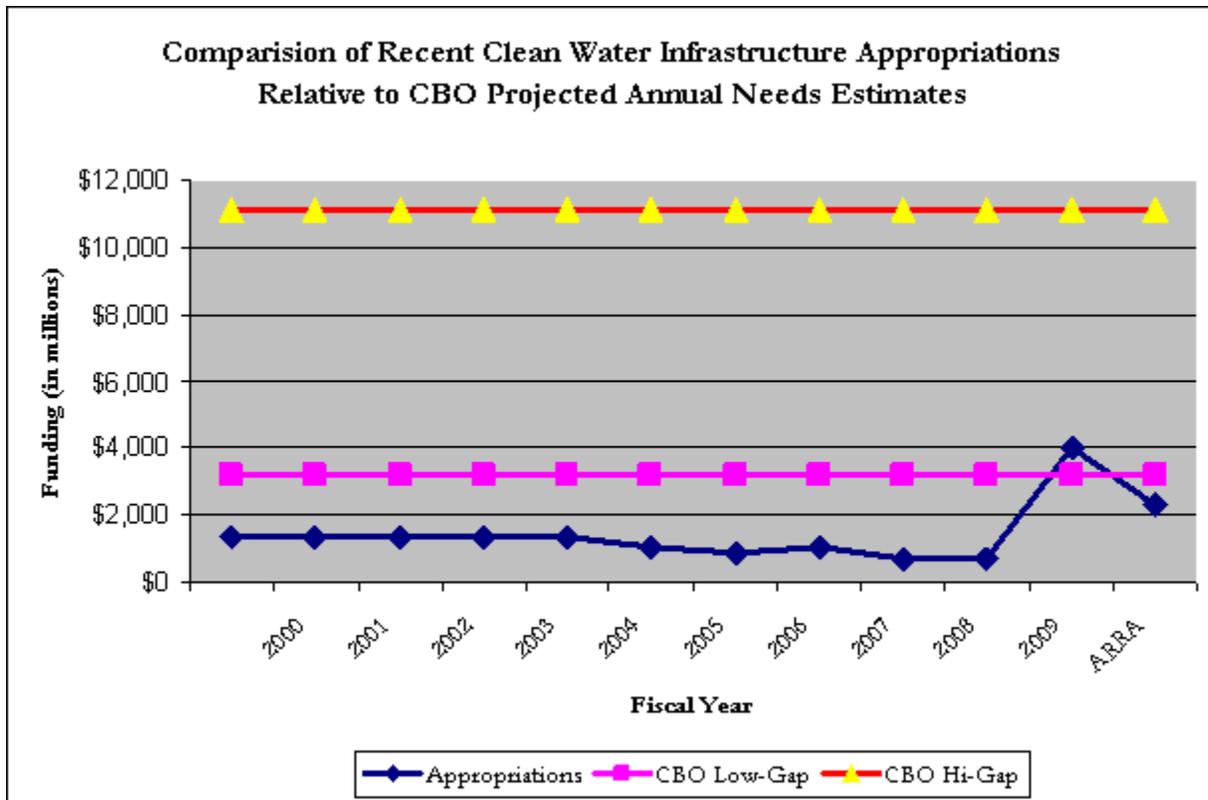
The Clean Water Act requires EPA to report to Congress every two years with a detailed estimate of the costs of needed water infrastructure in each State. This report, which is compiled through a survey of the States, includes estimates of needed projects to achieve the improvements in water quality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

These state surveys show that the financial resources necessary for wastewater infrastructure improvements are substantial. According to EPA's most recent assessment of wastewater infrastructure needs, the "Clean Watersheds Needs Survey 2004 Report to Congress", the existing documented needs for the nation are \$202.5 billion. In addition, according to EPA's Clean Water and Drinking Water Infrastructure Gap Analysis, between \$300 billion and \$400 billion in capital investment is needed over the next 20 years for restoration and replacement of the nation's aging wastewater infrastructure. Considering the lack of predictability on the average annual appropriations to the Clean Water SRFs, a consistent level of increased investment is necessary to address these needs and close the current funding gap for wastewater infrastructure projects.

**RECENT FUNDING HISTORY OF THE CLEAN WATER STATE REVOLVING FUND**

Fiscal Year (FY)	Presidential Request	Congressional Appropriations
FY 1998	1,075,000,000	1,350,000,000
FY 1999	1,075,000,000	1,350,000,000
FY 2000	800,000,000	1,350,000,000
FY 2001	800,000,000	1,350,000,000
FY 2002	850,000,000	1,350,000,000
FY 2003	1,212,000,000	1,341,225,000
FY 2004	850,000,000	1,342,035,000
FY 2005	850,000,000	1,091,200,000
FY 2006	730,000,000	886,758,840
FY 2007	687,550,000	1,083,817,000
FY 2008	687,554,000	688,450,000
FY 2009	555,000,000	689,080,000
American Recovery and Reinvestment Act	n/a	4,000,000,000
FY 2010	2,400,000,000	(House) 2,307,000,000

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



EPA is also examining how improved technologies and innovative financing options might help close the gap between projected needs and current expenditures. For example, over the last decade, innovative technologies have emerged that provide similar (or increased) benefits to traditional wastewater infrastructure projects, but in a more cost-effective, sustainable, and environmentally-sensitive manner. These technologies, such as on-site source controls to capture stormwater, pervious pavement, green roofs, stream buffers, and other water reuse technologies, mimic natural processes to protect and enhance environmental quality, reduce wet-weather related “peak” loads, and promote water conservation and reuse. When used independently, or in conjunction with other traditional treatment technologies, the use of water-efficient technologies can provide the same, or greater, water quality benefits at a reduced cost, both in terms of capital investment and long-term operation and maintenance.

In the same manner, investment in technologies that improve the overall energy efficiency of a publicly-owned wastewater treatment facility will enable owners and operators of such facilities to provide their essential services in a more cost-effective and environmentally-sensitive manner. As noted in a recent hearing of the Subcommittee on Water Resources and Environment, the potential for energy conservation and operation and maintenance cost savings from implementation of energy efficient technologies are substantial – including energy savings ranging from between 10 and 30 percent for the replacement and upgrading of existing components (e.g., aerator pumps and motors), and the possibility for a treatment facility to generate 100 percent of its own power from the use of biogas (methane recapture), cogeneration (combined heat and power), or renewable sources of energy (wind and solar).

However, even if wastewater systems are able to implement cost savings and improved efficiencies, significant increases in investment will be needed to meet projected needs.

In addition, a significant number of small, rural, and disadvantaged communities throughout the nation face challenges financing wastewater infrastructure, either because of a lack of sufficient financial resources or a declining ratepayer base to address stranded infrastructure needs. In many of these communities, even with the assistance of below-market rate loans from the state revolving fund, communities still face difficulties affording the increase in local wastewater rates that would otherwise be necessary to finance wastewater infrastructure needs. In many cases, addressing these affordability issues may require an increased level of Federal assistance through additional technical assistance, financial flexibility, or subsidization to targeted communities or ratepayers.

## II. The Clean Water Act Program

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

Title VI of the Clean Water Act provides for the establishment and capitalization of Clean Water SRFs to aid in funding the construction of wastewater infrastructure for the improvement of water quality throughout the nation.

Since 1987, the majority of Federal assistance for wastewater infrastructure improvements has been through the Clean Water SRF program. EPA has approved 57 States and territories for funding under the Clean Water SRF program. Through this program, individual states and territories maintain revolving loan funds to provide low-cost financing for approved infrastructure projects. Funds to capitalize the Clean Water SRF programs are provided through Federal capitalization grants and State matching funds (equal to 20 percent of Federal Government grants). Since 1987, Congress has appropriated more than \$31 billion in capitalization grants funded through general taxpayer revenues. Clean Water SRF revenues also include receipts from the sale of bonds, loan repayments, and interest earnings.

Through fiscal year 2008, the Clean Water SRFs have provided a cumulative of \$69 billion in loans for wastewater projects, including nearly \$5.8 billion in loans in FY 2008 alone. Yet, the demand for financial assistance from the Clean Water SRFs continues to exceed available funds, forcing communities to look elsewhere for the additional capital necessary for wastewater infrastructure, or to defer wastewater infrastructure improvements. For example, in a recent survey of State wastewater infrastructure needs under the American Recovery and Reinvestment Act (P.L. 111-5) conducted by the Association of State and Interstate Water Pollution Control Administrators and others, 31 States reported that they are unable to fund 6,943 projects submitted for Recovery and Reinvestment Act funding (valued at \$37.6 billion) because of a lack of available financial resources.<sup>1</sup>

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<sup>1</sup> The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), the Environmental Council of States (ECOS), the Council of Infrastructure Financing Authorities (CIFA), and the Association of State

Several States have taken steps to supplement funding for water infrastructure and other clean water projects. A number of States have approved special issuances of bonds to assist local communities.

In 2004, the State of Maryland enacted legislation that established the Chesapeake and Atlantic Coastal Bays Restoration Fund (the Fund), supported by a \$2.50 per month fee on sewer bills and an equivalent \$30 annual fee on septic system owners. The Fund is to be used to upgrade wastewater treatment plants, repair failing septic systems, and finance a cover crop program to reduce nitrogen and phosphorous loadings to the Chesapeake Bay and coastal bays.

Similarly, in 1996, the North Carolina General Assembly established the Clean Water Management Trust Fund. This trust fund is financed through annual appropriations from the State of North Carolina General Assembly. Since its creation, the North Carolina Clean Water Management Trust Fund has administered over \$300 million in grants for more than 200 wastewater treatment and stormwater projects.

### III. *Creation of a Clean Water Trust Fund*

A potential national solution to meet the long-term, sustainable capital needs for wastewater infrastructure is the creation of a national Clean Water Trust Fund. The creation of a national trust fund, with an appropriate sustainable source of revenues, would provide for a deficit-neutral, long-term federal contribution to protecting existing water resources, and enable the country to make continued progress towards its water quality goals uniformly instead of focusing on a piecemeal basis. In addition, the creation of a Clean Water Trust Fund should help provide greater certainty to State and local governments on the availability of sufficient revenues to meet existing and future water quality needs, both through capital expenditures for wastewater infrastructure repairs and replacements, as well as potentially addressing other Clean Water Act authorities, such as non-point source control programs (under section 319 of the Act) and grants to State pollution control programs (under section 106 of the Act). This long-term predictability on wastewater infrastructure funding would allow State and local governments to develop long-range planning for wastewater infrastructure repairs and replacements, and provide for more cost-effective coordination of such repairs and replacements with other long-term capital investments (e.g., coordinate sewer line replacements with surface transportation projects).

Several Federal trust funds exist within the context of the Committee on Transportation and Infrastructure to finance capital improvements and maintenance needs for the nation's infrastructure, including the Highway Trust Fund, the Aviation Trust Fund, the Harbor Maintenance Trust Fund, and the Inland Waterways Trust Fund.

The Highway Trust Fund was created by the Highway Revenue Act of 1956. This trust fund collects revenue from taxes on motor fuel, sales of trucks, trailers, and truck tires, and the use of heavy vehicles to help pay for the maintenance of the national roadways. In FY 2008, the Highway Trust Fund collected approximately \$44.5 billion, and expended approximately \$43.1 billion.

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Drinking Water Administrators (ASDWA), *American Recovery & Reinvestment Act: State Responses on CWSRF & DWSRF Funding Demand and Needs*, <http://www.asiwpca.org/home/docs/ARRASurvey.pdf> (last visited on July 10, 2009).

The Airport and Airway Trust Fund was created by the revenue title of the Airport and Airway Development Act of 1970. This trust fund receives the majority of its funding from a 7.5 percent tax on domestic airlines tickets, as well as funding from a tax on air cargo, an international departure tax, and taxes on fuels used by aircraft operators to help provide funding for capital improvements to the nation's airport and airway system. In FY 2008, the Airport and Airway Trust Fund collected approximately \$12.5 billion, and expended approximately \$12.9 billion.

The Harbor Maintenance Trust Fund was created in the Water Resources Development Act of 1986. The Harbor Maintenance Trust Fund is supported by an *ad valorem* tax paid by the shippers (not including exporters) of cargo loaded or unloaded at a U.S. port. The funds are used to conduct maintenance dredging of harbors and to provide for disposal facilities for dredged material. In FY 2008, the Harbor Maintenance Trust Fund collected approximately \$1.6 billion of which \$786 million was utilized for maintenance expenditures.

The Inland Waterways Trust Fund was created in the Inland Waterways Revenue Act of 1978, as amended by the Water Resources Development Act of 1986. The Inland Waterways Trust Fund is supported by a 20-cent per gallon tax on commercial fuel used on specified inland waterways. The fund is used to pay for half of the Federal cost of constructing navigation improvements on those waterways; the remaining half is paid from general revenues. In FY 2008, the Inland Waterways Trust Fund collected approximately \$93 million; however, in the same fiscal year, approximately \$202 million was transferred from the fund for the construction of projects on the inland system.

In January 2008, Chairman James L. Oberstar, Chairwoman Eddie Bernice Johnson, and Representative Blumenauer requested that the Government Accountability Office (GAO) undertake a study of potential funding mechanisms and revenue sources available to establish a Clean Water Trust Fund, including options that can be “efficiently collected, are broad based, equitable, and that support annual funding levels of at least \$10 billion.”<sup>2</sup> In May 2009, the GAO released the study titled “Clean Water Infrastructure: A Variety of Issues Need to be Considered When Designing a Clean Water Trust Fund.”

GAO found that stakeholders identified three main issues that would need to be addressed in designing and establishing a Clean Water Trust Fund: how a trust fund should be administered and used; what type of financial assistance should be provided; and what activities should be eligible to receive funding from a trust fund.

While a majority of stakeholders said that a trust fund should be administered through an EPA partnership with the States, they differed in their views on how a trust fund should be used. Some said that a trust fund should be used only to fund the existing Clean Water SRF, while a few suggested that the fund support only a new and separate wastewater program. Some supported using a trust fund to support both the Clean Water SRF and a separate program, while others opposed the establishment of a trust fund.

A number of financing options were identified in the GAO report to generate revenue for a Clean Water Trust Fund, including excise taxes on specific products that may contribute to the wastewater stream, an additional tax on corporate income (similar to the Corporate Environmental

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<sup>2</sup> Ranking Member John L. Mica was later added as a co-requester of this study.

Income Tax that traditionally funded the Superfund trust fund), a water use tax, and an industrial discharge tax. However, GAO identified several challenges to the creation of a Clean Water Trust Fund, including: defining the products or activities to be taxed; establishing a collection and enforcement framework; and obtaining stakeholder support for a particular funding option or mix of options.

GAO also suggested that it would be difficult to generate the requested \$10 billion in annual revenue to address the estimated wastewater funding gap from any one source. Rather, it would be more practical (and likely more acceptable) to raise the requested revenue through a combination of funding options. This approach would be consistent with several other Federal trust funds, including the Highway Trust Fund, the Aviation Trust Fund, and the expired Superfund Trust Fund.

A representative of GAO will testify on the results of this study at the July 15, 2009 hearing.

**WITNESSES**

**Panel I**

**The Honorable Earl Blumenauer**  
Oregon's Third District  
U.S. House of Representatives

**Panel II**

**Ms. Anu Mittal**  
Director, Natural Resources and Environment  
U.S. Government Accountability Office

**Dr. Robert M. Summers**  
Deputy Secretary  
Maryland Department of the Environment

**Mr. Thomas Walsh**  
Engineer-Director/Treasurer  
Upper Blackstone Water Pollution Abatement District  
*Testifying on behalf of the National Association for Clean Water Agencies*

**Ms. Dereth Glance**  
Executive Program Director  
Citizens Campaign for the Environment

**Ms. Kristine L. Young**  
President and Chief Executive Officer  
Miller the Driller  
*Testifying on behalf of the Associated General Contractors of America*

**Mr. Bill Hillman**  
Chief Executive Officer  
National Utility Contractors Association

**Mr. Dale Jacobson, P.E.**  
Jacobson Satchell Consultants, Inc  
*Testifying on behalf of the American Society of Civil Engineers*

**Mr. Hamlet J. “Chips” Barry**  
Manager  
Denver Water  
*Testifying on behalf of the American Water Works Association*