STATEMENT OF
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INTRODUCTION

Good morning, Mr. Chairman and Members of the Subcommittee. I am Tracy Mehan, Assistant Administrator for Water at the U.S. Environmental Protection Agency. I welcome this opportunity to discuss the Nation's investment in drinking water and wastewater treatment facilities to protect human health and the environment.

As a Nation, we have made great progress over the past quarter century in reducing water pollution and assuring the safety of drinking water. The Clean Water Act and the Safe Drinking Water Act have served us well and provide the solid foundation we need to make sure that all Americans will continue to enjoy safe drinking water and clean river, lakes, and coastal waters.

Our success in improving drinking water and surface water quality is the result of many programs and projects by local, State and Federal governments in partnership with the private sector. But our cooperative investment in water infrastructure -- in pipes and treatment plants -- has, more than any other single effort, paid dramatic dividends for water quality and public health.

I would like to take a moment to recognize the events of September 11. This hearing was originally scheduled for the thirteenth of September and, as such, this testimony was developed prior to the tragic events of September 11. Reviewing the testimony again after one month, I was struck by how much the world, even the somewhat circumscribed world of the water industry, has changed. As you know, EPA has established a Water Protection Task Force to accelerate work that had been ongoing on critical infrastructure protection. For the last month, my staff has been working diligently with other federal agencies, states, and water industry representatives to ensure that measures are in place to protect our population from security threats that could endanger our drinking water supplies or pollute our nation's waterways.

But this morning I want to move forward with our original testimony and give you a brief overview of the progress we have made in improving water quality and challenges we still face. I will summarize what EPA knows about the need for future investment in clean water and drinking water facilities.

Clean and Safe Water-- Accomplishments and Challenges

Most Americans would agree that the quality of both surface waters and drinking water has improved dramatically over the past quarter century.

Thirty years ago, the Nation's waters were in crisis -- the Potomac River was too dirty for swimming, Lake Erie was dying, and the Cuyahoga River had burst into flames. Many of the Nation's rivers and beaches were little more than open sewers.

The 1972 Clean Water Act has dramatically increased the number of waterways that are once again safe for fishing and swimming. The Act launched an all-out assault on water pollution, including new controls over industrial dischargers, support for State

efforts to reduce polluted runoff, and a major investment by the Federal government to help communities build sewage treatment plants.

The Federal government has provided over $80 billion in wastewater assistance since passage of the Clean Water Act, which has dramatically increased the number of Americans enjoying better water quality. The economic and social benefits of improved water quality are readily evident all across the country. Some of the most dramatic improvements are seen in urban areas such as Boston, Cleveland, St. Petersburg and Baltimore, where the efforts to restore the health and vitality of our waters has also led to economically vibrant, water-focused urban environments.

The dramatic progress made in improving the quality of wastewater treatment since the 1970s is a national success. In 1968, only 86 million people were served by secondary or advanced treatment facilities. Today, of the 190 million people served by wastewater treatment facilities, about 165 million people are served by secondary or better treatment.

We have also made dramatic progress in improving the safety of our Nation's drinking water. Disinfection of drinking water is one of the major public health advances in the 20th century. In the early 1970's, growing concern for the presence of contaminants in drinking water around the country prompted Congress to pass the Safe Drinking Water Act. Today, the more than 265 million Americans who rely on public water systems enjoy one of the safest supplies of drinking water in the world.

Under the Safe Drinking Water Act, EPA has established standards for 90 drinking water contaminants. Public water systems have an excellent compliance record -- more than 90 percent of the population served by community water systems

receive water from systems with no reported violations of health based standards in place as of 1994. In the past decade, the number of people served by public water systems meeting Federal health standards in place as of 1994 has increased by more than 23 million.

Despite past progress in reducing water pollution, almost 40 percent of the Nation's waters assessed by States still do not meet water quality goals established by States under the Clean Water Act. On a national scale, States report that the leading sources of pollution include agriculture, municipal point sources, and urban runoff and storm sewers. Other sources, ranging from factories to forestry operations, cause water pollution problems on a site-specific basis. Point-source pollution has been so greatly reduced that now non-point sources (i.e., diffuse runoff) are the leading cause of water pollution.

Clean Water and Drinking Water State Revolving Loan Funds

The primary mechanism that EPA uses to help local communities finance water infrastructure projects is the State Revolving Fund (SRF) established in the Clean Water Act and the Safe Drinking Water Act. The SRFs were designed to provide a national financial resource for clean and safe water that would be managed by States and would provide a funding resource "in perpetuity." These important goals are being achieved. Other Federal, State, and private sector funding sources are also available for community water infrastructure investments.

Under the SRF programs, EPA makes grants to States to capitalize their SRFs. States provide a 20% match to the Federal capitalization payment. Local governments get loans for up to 100% of the project costs at below market interest rates. After

completion of the project, the community repays the loan, and these loan repayments are used to make new loans on a perpetual basis. *Because of the revolving nature of the funds, funds invested in the SRFs provide about four times the purchasing power over twenty years compared to what would occur if the funds were distributed as grants.*

In addition, low interest SRF loans provide local communities with dramatic savings compared to loans with higher, market interest rates. An SRF loan at the interest rate of 2.6% (the average rate during the year 2000) saves communities 25% compared to using commercial financing at an average of 5.8% (see Chart 1).

The Federal government has provided more than $18 billion in capitalization grants to States for their Clean Water SRFs through FY2001. With the addition of the State match, bond proceeds, and loan repayments, the cumulative funds available for loans from the Clean Water SRFs were more than $34 billion of which $3.4billion was still available as of June 30, 2000.

Since 1988, States have made over 9,500 individual loans for a total of $30.4 billion. In 2000, the Clean Water SRFs issued a record total of 1,300 individual loans with a value of $4.3 billion (see Chart 2). The Clean Water SRFs have provided about $3 billion in loans each year for several years and are widely considered a tremendous success story.

In 1996, Congress enacted comprehensive amendments to the Safe Drinking Water Act which created an SRF program for financing of drinking water projects. The Drinking Water SRF was modeled after the Clean Water SRF, but States were given broader authority to use Drinking Water SRFs to help disadvantaged communities and support drinking water program implementation.

Through fiscal year 2001, Congress has appropriated $4.4 billion for the Drinking Water SRF program. EPA has reserved $83 million for monitoring of unregulated contaminants and operator certification reimbursement grants. Through June 30, 2001, States have received $3.65 billion in capitalization grants, which when combined with state match, bond proceeds, and other funds provided $5.2 billion in total cumulative funds available for loans. Through June 30, 2001, States have made close to 1,800 loans totaling $3.7 billion. Approximately 74% of the loans (39% of dollars) were provided to small water systems that frequently have a more difficult time obtaining affordable financing. States also reserved a total of approximately $575 million of SRF capitalization grants for other activities that enhance the management of water systems, protect sources of drinking water, and support the drinking water program. Although the Drinking Water SRF is considerably newer than the Clean Water SRF, it is showing the same promise as an infrastructure financing success story.

Congress should consider adding some of the flexibilities of the Drinking Water SRF program to the Clean Water SRF program and should extend the provision which allows States to transfer funds between their Clean Water and Drinking Water SRFs in order to allow States the flexibility to better direct funds towards priority needs.

Water Infrastructure -- Future Needs

The Clean Water Act § 516 (b)(1) and the Safe Drinking Water Act §1452 both require that EPA periodically develop a “needs survey” to identify needed water infrastructure investments.

In February of this year, EPA released its second report on drinking water infrastructure needs showing that $150.9 billion is needed over the next 20 years to

ensure the continued provision of safe drinking water to consumers.

The survey found that water systems need to invest $102.5 billion, approximately 68% of the total need, in what the report calls “current needs.” In most cases, current needs would involve installing, upgrading, or replacing infrastructure within the next few years to enable a water system to continue to deliver safe drinking water. A system with a current need, therefore, usually is not in violation of any health-based drinking water standard. For example, a surface water treatment plant may currently produce safe drinking water, but the plant’s filters may require replacement due to their age and declining effectiveness, if the plant is to continue to provide safe water. Future needs account for the remaining $48.4 billion in needs; for example, projects that systems would undertake over the next 20 years as part of routine replacement such as reaching the end of a facility’s service life.

The survey includes needs that are required to protect public health, such as projects to preserve the physical integrity of the water system, convey treated water to homes, or to ensure continued compliance with specific Safe Drinking Water Act regulations (see Chart 3). Transmission and distribution costs are the largest category, at 56% of the total need, or $83.1 billion. Treatment projects make up the second largest category of needs (i.e., 25%) and have a significant benefit for public health.

Approximately 21%, or $31.2 billion, is needed for compliance with current and proposed regulations under the Act. Nearly 80% of the regulatory need is to comply with rules which protect consumers from harmful surface water microbial contaminants, such as Giardia and E. coli. Most of the total needs derive from the costs of installing, upgrading, and replacing the basic infrastructure that is required to deliver drinking

water to consumers -- costs that water systems would face independent of any Safe Drinking Water Act regulations.

EPA's most recent survey of clean water infrastructure needs was released in 1996, and we plan on releasing a new clean water needs survey in 2002. The 1996 clean water needs survey estimated needs of $140 billion, including $26.5 billion for secondary treatment projects, $17.5 billion for advanced treatment, and $73.4 billion for various types of sewage conveyance projects, including collectors, interceptors, combined sewers, and storm water, and $10 billion for nonpoint pollution control projects (see Chart 4).

EPA is working to supplement the 1996 clean water needs survey as more accurate information becomes available. For example, the Agency has developed a model that better predicts costs associated with reducing sanitary sewer overflows.

Broader Context of Water Infrastructure Financing

Over the past year, several stakeholder groups including the Water Infrastructure Network, the Association of Metropolitan Sewerage Agencies, and the American Water Works Association issued reports estimating water infrastructure needs. These estimates were all substantially above those of EPA's Needs Surveys. Generally, these cost estimates differ from EPA's because the methodologies and definitions for developing them differ. For example, EPA Needs Surveys include only projects that are eligible for SRF funding under the Clean Water Act and Safe Drinking Water Act. Also, EPA requires that costs included in the Needs Surveys be established by planning or design documentation.

The Agency also decided to undertake a broader review of needs and spending

for water and wastewater infrastructure, including estimating whether there is a quantifiable gap between future needs and current spending. This analysis – known as the Gap Analysis – has just recently undergone independent peer review by external subject matter experts. We expect the final analysis will be ready for public release later this year.

EPA recognizes that effective decision-making concerning water infrastructure financing benefits from a better understanding of the broader context of this effort. Key components in the broader context of water infrastructure that need to be more fully evaluated include the following:

- **Population Growth**: Steady growth and shifts in population put substantial pressure on local governments to provide expanded drinking water and sewer services. While EPA does not provide funding for projects related to population growth per se, this is an important factor for locals.
- **Aging Infrastructure**: Many sewage and drinking water pipes were installed between 50 and 100 years ago, and these pipes are nearing the end of their useful lives.
- **Current Treatment Issues**: In 1998, States, Tribes, and interstate commissions determined that wastewater treatment facilities and combined sewer overflows were two of the leading causes of impairment to estuaries. A June 2000 EPA report "Progress in Water Quality" estimates that by 2016, pollution levels could be similar to levels observed in the mid-1970s if there is no increase in treatment efficiency.

- **Research and Development:** Innovation, research, and development are essential elements of promoting the use of more effective, efficient, and affordable technologies in water and wastewater treatment. A recent EPA report on public and private R&D expenditures associated with water pollution abatement ("A Retrospective Assessment of the Costs of the Clean Water Act 1972-1997") showed that expenditures decreased by half from the early 1970s to the late 1990s. The Federal investment in drinking water research has increased substantially over the past 5 years.
- **Increasing Operation and Maintenance Costs:** As the size and complexity of water and sewer systems increase, and facilities get older, the costs of operations and maintenance tend to increase.
- **Affordability:** Although water has historically been underpriced, some systems may find it difficult to replace or update aging water and sewer systems and keep household user charges at affordable levels, especially for low-income households and communities.

A number of stakeholder groups have called for a significant increase in Federal investment in water and wastewater infrastructure. Certainly, there will be a continuing role for the Federal government in helping to meet the challenge of extensive infrastructure investment need, but it cannot be the only solution. The solutions will have to be multi-faceted with Federal, State, and local, public and private investment of time, energy, money, research, and, perhaps most needed, innovative thinking and bold actions. We must encourage states and local governments to think strategically as they plan for forthcoming rules and program requirements, infrastructure repair and

replacement, and overall protection of the water that sustains their communities.

Ensuring that our water infrastructure needs are addressed in a sustainable manner will require a shared commitment on the part of the Federal, state and local governments, private business, and consumers. Governor Whitman and I are committed to working in partnership with Congress, States, local governments, the private sector, and others to better understand the water infrastructure challenges we face and to play a constructive role in helping to define an effective approach to meeting these challenges in the future.

CONCLUSION

We believe that the SRF mechanism has proven to be a powerful and effective tool in helping states and utilities achieve their public health and environmental goals. As your Committee continues to study water infrastructure needs, the Administration would like to encourage a constructive dialogue on the appropriate role of the federal government in addressing these needs. Thank you, Mr. Chairman, for giving me the opportunity to speak with you this morning.