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**STATEMENT OF
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U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENT AND HAZARDOUS
MATERIALS
OF THE
COMMITTEE ON ENERGY AND COMMERCE
U. S. HOUSE OF REPRESENTATIVES**

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Good morning, Mr. Chairman and Members of the Subcommittee. I am Ben Grumbles, Deputy Assistant Administrator for Water at the U.S. Environmental Protection Agency (EPA). First, please let me convey Tracy Mehan's regrets for being unable to attend today's hearing.

I welcome your invitation to discuss the Nation's investment needs for drinking water infrastructure -- the pipes, treatment plants and other critical components that deliver safe drinking water to our taps. The challenge of preserving the integrity of this infrastructure -- so that public health can continue to be protected -- will form the basis of my comments.

As a Nation, we have made great progress over the past quarter century in ensuring the safety of drinking water. Our success in improving drinking water quality is the result of many programs and projects by local, State and federal governments in partnership with the private sector. More than any single effort, however, it is the cooperative, intergovernmental investment in drinking water and wastewater infrastructure facilities that has paid dramatic dividends for public health.

Today, I will summarize what EPA knows about the need for future investment in drinking water and identify the key challenges I see in meeting this need. I will conclude with some thoughts about how Congress and others could proceed when addressing the problems of financing drinking water infrastructure.

Safe Water -- Accomplishments and Challenges

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

We have made significant 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, however, growing concern for the presence of contaminants in drinking water around the country prompted Congress to pass the Safe Drinking Water Act -- which now forms the cornerstone of a solid foundation that ensures that all Americans can continue to enjoy safe drinking water.

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 the past decade, the number of people served by public water systems meeting federal health standards has increased by more than 23 million. Although compliance with

drinking water contaminant standards is good, a substantial investment is needed to ensure the safety and security of our drinking water.

Water Infrastructure -- Future Needs

The Safe Drinking Water Act requires that EPA develop -- every four years -- a survey to assess the Nation's drinking water investment needs. The first survey report was released to Congress in 1997.

Last year, we published the second infrastructure survey report. The new survey showed that \$150.9 billion is needed over the next 20 years to ensure the continued provision of safe drinking water to consumers.

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, and to ensure continued compliance with specific Safe Drinking Water Act regulations.

Transmission and distribution projects -- that is, the pipes that convey water from a source to a treatment facility and then to consumers -- represented the largest category of need (56%), with \$83 billion needed over the next 20 years. This result is not surprising given that, for most water systems, the majority of their capital value exists in the form of transmission and distribution lines. Treatment projects, which have a significant benefit for public health, make up the second largest category of needs at 25%.

The survey also distinguished between "current needs" and "future needs." About \$103 billion, or 68% of the total need, is needed now to protect the public health and

maintain existing distribution and transmission systems. That systems require such a large investment to meet the current need reflects the age and deteriorated condition of their infrastructure. However, it is important to note that in most cases, current needs would involve installing, upgrading or replacing infrastructure that would enable water systems 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 its filters may require replacement due to age and declining effectiveness to ensure the continued provision of safe water.

Future needs account for the remaining \$48.4 billion in needs. Future needs generally include 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.

Although all of the 74,000 projects in the survey would promote public health protection, water systems also identified capital needs directly related to specific regulations under the Safe Drinking Water Act. Approximately 21% of the total need, or \$31.2 billion, is needed for compliance with current and proposed regulations under the Act. Therefore, most of the investment needs documented in the survey (i.e., approximately 79%) stem 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. These findings indicate that most of the total need derives from the inherent costs of being a

water system, which involves the almost continual need to install, upgrade, and replace the basic infrastructure that is required to provide safe drinking water.

The survey also examined investment need by system size. The survey found that small systems (serving fewer than 3,300 people) comprise more than 80% of the nation's community water systems, but they account for only 22% of the total national need. By contrast, large systems (serving more than 50,000) constitute just 2 percent of the nation's water systems, yet account for more than 44% of the national need. This finding reflects the fact that small systems collectively serve far fewer people -- about 26 million -- than large systems, which serve about 138 million people.

Although the total small system need is modest compared to the needs of larger systems, the costs borne on a per household basis by small systems are almost 4-fold higher than those of large systems. Small systems often face challenges in obtaining financial assistance to address these costs -- which is one of the reasons Congress created the drinking water State Revolving Fund.

Other Estimates of Investment Needs

Several groups, including the Water Infrastructure Network and the American Water Works Association, have also issued reports estimating water infrastructure needs. These estimates were all substantially above those of EPA's assessment. The difference owes to the dissimilar methods used to calculate the needs. The other studies used models to estimate needs, whereas EPA's estimate is derived from projects that systems themselves identified and documented on a questionnaire. However, regardless of which number is used to characterize the magnitude of investment needs, all of these estimates are significant -- as are the challenges faced by the Nation's water systems in meeting these needs.

Broader Context of Investment Needs

EPA believes the key to understanding the water infrastructure financing challenge is to consider a broad context of factors, including: aging infrastructure, population growth, increasing operations and maintenance costs, and affordability -- especially for low-income households and communities.

To better understand the issues related to water infrastructure investments and financing, the Agency is reviewing issues related to long-term needs, assessing different analytical approaches to estimating those needs, and estimating the gap between needs and spending. Last summer, EPA presented a portion of this analysis -- known as the Gap Analysis -- to a diverse panel of experts drawn from academia, industry, think tanks,

and consulting firms. Overall, the reviewers commended the report as a credible effort to quantify the gap. We have made revisions to the analysis based on the peer review and we expect to release the Gap Analysis shortly.

In considering these studies and analyses, it is important to keep in mind a few points. First, there is no single “correct” number to describe the gap. Any gap study must be built using methods and definitions of need, which in turn rest on varying assumptions about present conditions nationwide, and desirable or appropriate policies to follow in the future. The second point is that these gap studies are limited to quantifying the investment gap, and therefore they cannot themselves be a clear guide to policy; for example, they do not consider how the various roles of federal, State and local governments should be balanced. Third, under any of these studies, funding gaps are not inevitable. They occur only in the unlikely event that capital spending remains -- for the next 20 years -- unchanged from present levels. An honest evaluation would conclude that a funding gap will result only if the challenge posed by an aging infrastructure network -- a significant portion of which is beginning to reach the end of its useful life -- is ignored.

I believe that most decision makers at the federal, State and local levels would agree that, through our partnership, the Nation needs to put more resources into water infrastructure in the future than we have been doing. At the same time, we need to reduce costs by ensuring a more efficient and productive use of such resources through an approach that emphasizes the development of a system’s self-sustaining capacity to operate, manage, and fund its infrastructure.

Drinking Water State Revolving Loan Fund

The primary mechanism that EPA uses to help local communities finance drinking water infrastructure projects is the State Revolving Loan Fund (SRF) established in the 1996 Safe Drinking Water Act amendments. The SRF was 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 program, EPA makes grants to each State to capitalize its SRF. 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, the dollars invested in the SRF 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 2.4% (the average rate during the year 2001) saves communities approximately 23% compared to using commercial financing at an average of 5.3%.

The drinking water SRFs, which this Committee created as part of the 1996 amendments to the Safe Drinking Water Act, were modeled after the clean water SRFs, but included a few differences.

States were given broader authority to use drinking water SRFs to help disadvantaged communities, and to provide technical assistance for management and operations of drinking water systems.

In addition, the law provided each State the flexibility to transfer funds between its clean water and drinking water SRFs. The Administration supports continuing this mechanism to help States fund their priority needs.

Through fiscal year 2002, Congress has appropriated \$5.3 billion for the drinking water SRF program. Through June 30, 2001 States had received \$3.6 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 had made close to 1,800 loans totaling \$3.8 billion, with another \$1.4 unallocated or available for loans. Approximately 75% of the agreements (41% 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 \$576 million of SRF capitalization grants for other activities that support the drinking water program, such as protecting sources of drinking water and providing technical assistance to small systems.

Infrastructure Investments and Fiscal Sustainability

The President's FY 2003 budget continues to maintain federal support for drinking water infrastructure and requests \$850 million for the drinking water SRF. By the end of FY 2002, we expect loans issued by State drinking water SRFs to reach 2,400, with about 850 SRF funded projects having initiated operations by that date.

This proposed FY 2003 funding will help communities across the country finance important drinking water projects. As your Committee continues to study the drinking water infrastructure needs, the Administration would like to encourage a constructive dialogue on the appropriate role of the federal government in addressing these needs.

Ensuring that our drinking water infrastructure needs are addressed will require a shared commitment on the part of the federal, State and local governments, private business, and consumers.

To meet these future challenges, the Administration believes that the touchstone of our strategy should be building fiscal sustainability. In particular, several basic principles should guide our pursuit of safe drinking water:

- < Utilizing the private sector and existing programs: Fostering greater private sector involvement and encouraging integrated use of all local, State, and federal sources for infrastructure financing.
- < Promoting sustainable systems: Ensuring the technical, financial, and managerial capacity of water systems, and creating incentives for service providers to avoid future gaps by adopting best management practices to improve efficiency and economies of scale, and reducing the average cost of service for providers.
- < Encouraging cost-based and affordable rates: Encouraging rate structures that cover costs and more fully reflect the cost of service, while fostering affordable water service for low-income families.

- < Promoting technology innovation: Creating incentives to support research, development, and the use of innovative technologies for improved services at lower life-cycle costs.
- < Promoting smart water use: Encouraging States and service providers to adopt holistic strategies to manage water on a sustainable basis, including a greater emphasis on options for reuse and conservation, efficient nonstructural approaches, and coordination with State, regional, and local planning.
- < Promoting watershed-based decision-making: Encouraging States and local communities to look at drinking water source water protection on a watershed scale and to direct funding to the highest priority projects needed to protect public health and the environment.

Conclusion

This is an important and serious challenge, and I commend your Subcommittee for holding this hearing and gathering such experts, advocates, and colleagues. Already, we see the means to realize these principles in practice, taking shape all across the country. Many States and local governments have been changing the way they do business. As a result, they've successfully managed many of these infrastructure needs, using creative, individualized approaches that are cost-effective, environmentally protective, and socially equitable -- efficient, clean, and fair.

Thank you, Mr. Chairman, for this opportunity to discuss EPA's view of the drinking water infrastructure challenges that the Nation is facing. I pledge that EPA will continue to work in partnership with Congress, States, local governments, the private sector and others to better understand the drinking water infrastructure needs we face and to play a constructive role in helping to define an effective approach to meeting these needs in the future.

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I will be happy to answer any questions.

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