

DRINKING WATER

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Report Card for America's Infrastructure

American Society of Civil Engineers

America faces a shortfall of \$11 billion annually to replace aging facilities and comply with safe drinking water regulations. Federal funding for drinking water in 2005 remained level at \$850 million, less than 10% of the total national requirement. The Bush administration has proposed the same level of funding for FY06.

Conditions

The nation's 54,000 drinking water systems face staggering public investment needs over the next 20 years. Although America spends billions on infrastructure each year, drinking water faces an annual shortfall of at least \$11 billion to replace aging facilities that are near the end of their useful life and to comply with existing and future federal water regulations. The shortfall does not account for any growth in the demand for drinking water over the next 20 years.

In 2001, the U.S. Environmental Protection Agency (EPA) released a national survey of drinking water infrastructure needs. The survey results concluded that approximately \$151 billion would be needed over 20 years to repair, replace, and upgrade the nation's 55,000 community drinking water systems to protect public health.

A year later, the agency issued *The Clean Water and Drinking Water Infrastructure Gap Analysis*, which identified potential funding gaps between projected needs and spending from 2000 through 2019. This analysis estimated a potential 20-year funding gap for drinking water capital, and operations and maintenance, ranging from \$45 billion to \$263 billion, depending on spending levels. Capital needs alone were pegged at \$161 billion, a \$10 billion increase from the 2001 estimate. ¹

The Congressional Budget Office (CBO) concluded in 2003 that "current funding from all levels of government and current revenues generated from ratepayers will not be sufficient to meet the nation's future demand for water infrastructure." The CBO estimated the nation's needs for drinking water investments at between \$10 billion and \$20 billion over the next 20 years. ²

Federal assistance has not kept pace with demand. Since FY 1997, Congress has appropriated only between \$700 million and \$850 million annually for the Safe Drinking Water Act State

¹ Operation and maintenance (O&M) costs are paid for by the local water utilities, not the federal government. ² The CBO approximation does *not* include the \$178 billion to \$331 billion in anticipated pipe replacement costs over the same 20-year period.

Revolving Loan Fund (SRF) program, enacted in 1987. The enacted funding level for FY 2005 was \$850 million, less than 10% of the total national requirements. The Bush Administration has proposed an appropriation of \$850 million for FY 2006.

Policy options

New solutions are needed for what amounts to nearly \$1 trillion dollars in critical drinking 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 past three decades.

Without a significantly enhanced federal role in providing assistance to drinking water infrastructure, critical investments will not occur. Possible solutions include grants, trust funds, loans and incentives for private investment. The question is not *whether* the federal government should take more responsibility for drinking water improvements, but *how*.

The case for 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. These latter infrastructure programs enjoy sustainable, long term federal grant programs; under current policy, water and wastewater infrastructure do not.

Equally compelling is the case for flexibility in the forms of federal investment including grants, loans, and other forms of assistance. Grants will be needed for many communities that simply cannot afford to meet public health, environmental and/or service level requirements. Loans and credit enhancements may be sufficient for communities with greater economies of scale, wealthier populations and/or fewer assets per capita to replace.

- The American Society of Civil Engineers (ASCE) supports enactment of a federal water infrastructure trust fund act that would provide a reliable source of federal assistance for the construction and repair of water treatment plants to reduce the enormous funding gap.
- In the interim, ASCE supports annual appropriations from the federal general fund for the State Revolving Loan Fund (SRF) program at a minimum of \$1 billion annually.
- In addition, ASCE supports the establishment of a federal capital budget to create a mechanism 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 investment. This causes major inefficiencies in the planning, design and construction process for long term investments. A capital budget system would help 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.
- The American Society of Civil Engineers supports the funding of research into improved water reuse and purification technology, which may reduce capital, operations and maintenance costs for producing safe drinking water.

Sources

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