

**TESTIMONY OF
THE AMERICAN SOCIETY OF CIVIL ENGINEERS
BEFORE THE
SUBCOMMITTEE ON INTERIOR, ENVIRONMENT AND RELATED AGENCIES
U.S. HOUSE OF REPRESENTATIVES
ON THE
ON THE FY 2013 BUDGETS OF
THE ENVIRONMENTAL PROTECTION AGENCY
AND THE UNITED STATES GEOLOGICAL SURVEY
MARCH 21, 2012**

Mr. Chairman and Members of the Subcommittee:

The American Society of Civil Engineers is pleased to appear before the Subcommittee today to present its views on the budgets of the U.S. Environmental Protection Agency (EPA) and the U.S. Geological Survey (USGS) for Fiscal Year 2013.

A. THE ENVIRONMENTAL PROTECTION AGENCY

The president's proposed budget plan for EPA in FY 2013 continues an unfortunate administration trend of short-changing America's critical public-health infrastructure. The president proposes to reduce spending on drinking-water and wastewater infrastructure from the \$2.388 billion enacted in FY 2012 to \$2.025 billion—a cutback of fully 15 percent in federal funding for aging water infrastructure in the face of mounting needs.

ASCE has undertaken a series of four economic studies to identify the long-term consequences to the nation's economy due to our deteriorating infrastructure.

In December 2011, our report, *Failure to Act: the Economic Impact of Current Investment Trends in Water and Wastewater Infrastructure*, answers the question of how the condition of the nation's deteriorating wastewater and drinking-water infrastructure impinges on economic performance.¹ In other words, how does that D- for water treatment and transmission affect America's economic future? The answer is sobering. Water infrastructure in the U.S. is clearly aging, and investment is not able to keep up with the need. Our findings indicate that investment needs will continue to escalate.

¹ The full report is at www.asce.org/failuretoact

We found that, if current trends persist, by 2020 the anticipated capital funding gap will be \$84 billion. Even with the increased use of sustainable practices and cost-effective development of other efficiency methods, the growing gap between capital needs to maintain drinking-water and wastewater treatment infrastructure and investments to meet those needs will likely result in unreliable water service and inadequate wastewater treatment.

Our analysis assumes that the mounting costs to businesses and households will result in a number of scenarios or choices:

- Doing nothing and living with water shortages, and higher rates (rationing through price increases); major outlays by businesses and households, including expenditures incurred by moving to where infrastructure is still reliable, purchasing and installing equipment to conserve water or recycle water, and increasing reliance on self-supplied water and wastewater treatment (i.e., installing individual wells and septic waste systems when municipal facilities and services are not available options).
- Responses to failing public infrastructure will vary by location, size, household characteristics, and type of business. Expenditures due to moving, or from installing and operating new capital equipment for “self-supply,” are estimated for households, commercial establishments, and manufacturers.
- Movement across regional boundaries and relocation of businesses outside of the U.S. is certainly a response that may be triggered by decreasing reliability of public water and sewer systems.
- Households and businesses that do not self-supply are assumed to absorb the higher costs that are a consequence of disruptions in water delivery and wastewater treatment due to worsening infrastructure. The assumption for this category is that these households and businesses will pay the \$84 billion associated with the 2020 capital gap in terms of higher rate costs over and above the baseline projected rates for water and wastewater treatment.

The \$84 billion funding gap may lead to \$147 billion in increased costs for businesses and a further \$59 billion for households. In the worst case, the U.S. will lose almost 700,000 jobs by 2020.

By 2020, the average annual effect on the U.S. economy is expected to be \$416 billion in lost GDP. Putting the problem in terms we can all understand, the average family household budget will increase about \$900 annually to cover the cost of increased water rates and lost income.

Our 2009 *Report Card for America's Infrastructure* gave the nation's wastewater and drinking-water systems identical grades of D-, marking them as systems in near total failure. We estimated then that the physical condition of many of the nation's 16,000 wastewater treatment systems was poor due to a lack of investment in plants, equipment, and other capital improvements over the years, while federal funding under the Clean

Water Act State Revolving Loan Fund (SRF) program had remained flat for more than a decade. Federal assistance has not kept pace with the needs, yet virtually every authority agrees that funding needs remain very high, a condition that has not improved in the last two years.

As a snapshot at a moment in time, the *Report Card* identifies five-year funding needs; it does not answer critical questions about the impact of delayed or reduced investments in key infrastructure systems as the nation grapples with its aging public works.

The most recent “Clean Water Needs Survey” from EPA put the total wastewater and stormwater management needs for the nation at \$298.1 billion as of January 1, 2008. This amount includes \$192.2 billion for wastewater treatment plants, pipe repairs, and buying and installing new pipes; \$63.6 billion for combined sewer overflow correction; and \$42.3 billion for stormwater management. Small communities have documented needs of \$22.7 billion. These numbers are unlikely to have improved with the passage of four years of continuing under investments.

In addition to the \$298.1 billion in wastewater and stormwater needs, the report documented needs of \$22.8 billion for nonpoint source pollution prevention and \$23.9 billion for decentralized wastewater (septic) systems. An estimated \$334.5 billion and \$81.5 billion in needs are potentially eligible for assistance from EPA's Clean Water State Revolving Fund and Nonpoint Source Control Grant programs respectively, the agency reported.

Meanwhile, the nation's drinking-water systems also face staggering public investment needs over the next 20 years. Although America spends billions on water infrastructure each year, drinking water systems face an annual shortfall of at least \$11 billion in funding needed 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. Nevertheless, the agency's drinking-water budget proposal for FY 2013 represents a four percent decrease from the FY 2012 enacted budget of \$965 million.

We recognize of course that Congress is dealing with enormous deficits and a growing federal debt, but the remedies for these problems must not come at the expense of programs aimed at protecting public health from the dangers of increased contamination in our rivers, lakes and streams and our drinking-water supplies.

ASCE recommends an appropriation of \$2 billion for the Clean Water State Revolving Loan Fund (SRF) and an appropriation of \$1.5 billion for the Safe Drinking Water Act SRF in FY 2013.

B. UNITED STATES GEOLOGICAL SURVEY

The U.S. Geological Survey (USGS) is one of the nation's foremost science agencies. It produces the scientific data essential for the protection of the quality of economically vital water resources, for the prediction of earthquakes and volcanoes, for the cataloging of America's vast biological resources and for dozens of other critically important technical needs.

We support the administration's overall FY 2013 budget request for the USGS, which is \$1.1 billion, an increase of \$32.75 million (three percent) over the FY 2012 appropriation. Nevertheless, we remain concerned that the FY 2013 budget request contains cuts in many programs that are offset by increases in other areas. We are troubled by the proposed budget of \$210 million for the Survey's water resources programs.

Among the programs being cut from the FY 2012 level are the Groundwater Resources Program's studies of regional groundwater availability (a reduction of \$2 million and 11 employees); the National Water Quality Assessment Program (NAWQA), which is responsible for providing nationally consistent descriptions of current water-quality conditions and changes in water quality in the nation's aquifers and freshwater streams (\$6 million and 35 employees); and the National Streamflow Information Program, which supports the vitally needed streamgaging network (\$2.8 million, with no reduction in staff).

NAWQA is one of the nation's major sources of information on the flow and volume of rivers, streams and groundwater formations. The least harmful effect of these cuts would postpone the implementation of real-time technology for water-quality monitoring necessary to public health programs at the state and local levels. At their worst they would eliminate funding for monitoring and assessment of groundwater in 33 states. This information is used to identify contaminants in public drinking-water wells and manage groundwater to meet future needs for potable drinking-water and uncontaminated irrigation flows.

The USGS operates approximately 7,000 stream gages nationwide. These gages provide real-time data typically are recorded at 15- to 60-minute intervals, stored onsite, and then transmitted to USGS offices every one to four hours, depending on the data relay technique used, through the stream-gauging program. These data are used to predict floods, allocate water supplies, provide water flow data for publicly owned treatment works (POTWs), and assist in the design of flood-resistant bridges. We urge the Congress to restore funding for these programs to preserve essential scientific data collection and analysis.

ASCE recommends an appropriation of \$1.2 billion for the USGS in FY 2013.