



Investing More Now in America's Clean Water Infrastructure: Good for Jobs, the Economy, and the Environment

America's roughly 22,000 wastewater utilities provide valuable services to our environment, our economy, the health of our families, and our community well-being. By collecting and treating wastewater from households and businesses, these facilities deliver cleaner rivers, lakes, and coastal waters that sustain growing fish and shellfish populations, enable water-based recreation, increase adjacent property values, and improve and protect public health. These outcomes, in turn, generate jobs that stay in America, increase economic output, and enable firms to locate and grow.

Of course, the opposite also is true — if we disinvest in these critical facilities, we will backslide on hard-earned environmental gains and lose substantial economic and public health benefits associated with a cleaner environment. This is precisely what has been happening slowly since the 1980s and is about to accelerate if clean water infrastructure funding is reduced as a result of prospective federal fiscal cutbacks. A picture of what the world looks like when our water infrastructure systems are disrupted was made clear with Hurricanes Katrina and, just recently, Irene.

Federal Investment in Clean Water Creates Jobs and Lasting Environmental Benefits

Since 1972, total investment in wastewater infrastructure has increased an average of 3.4% annually, which on a cumulative basis, amounts to \$1.4 trillion to build, operate and maintain wastewater facilities and collection systems. More than 90% of this investment has come directly out of the pockets of residents and businesses in communities that generate wastewater. Because of these investments, we can point to impressive cases of once impaired waters that are now fishable and swimmable. Communities that once shunned sewage-laden waterfronts have turned these areas into economic drivers of regional revitalization efforts across the country.

But nationwide, EPA and state monitoring data over the last several decades suggest broad declines in the miles of streams, shoreline and acres of lakes that meet water quality standards sufficient to meet the designated uses such as drinking, fishing, or swimming. These declines in water quality have occurred in lockstep with declines since the early 1980s in federal funding for clean water infrastructure, both in absolute terms and in terms of the federal share of total clean water spending.¹

How could total investment increase but overall results decline? Because these investments, including federal funding, have been stretched thinner and thinner due to increasing Gross Domestic Product (GDP), growing population, and expanding regulatory mandates. Since 1972,

¹ The exception is slight federal funding increases in 2009 and 2010 as a result of the federal stimulus program under the American Recovery and Reinvestment Act (ARRA).

real GDP has grown by 3.3% a year on average, which has led to higher volumes of wastewater treated daily by wastewater treatment facilities. At the same time, the population served by wastewater utilities has increased by about 1.6% a year over the same period, so a large portion of our investment has gone toward simply keeping up with growth. Finally, federal regulations to address concerns such as wet weather, biosolids management and air quality have expanded, leading to more expensive levels of treatment under the Clean Water Act (CWA), stretching total investment still further.

The result is predictable — utilities must defer some capital needs due to lack of funding. The Nation now faces a \$23 billion (and growing) annual gap between what is currently being invested and the actual needs for clean water infrastructure in order to maintain and meet the nation's water quality standards. Thus, in the case of the American Recovery and Reinvestment Act (ARRA), there were \$40 billion of identified project needs but only \$4 billion of funds made available to help address them.

Increased Federal Clean Water Investment Spurs Economic Growth and Jobs

While it is difficult to argue against reducing our federal deficit, federal priorities should ensure that economic growth continues and jobs are created, not lost. Increasing federal investment in clean water infrastructure by several billion dollars a year, at a minimum, not only would help reverse declines in water quality and meet a well-documented investment gap, but more importantly would expand GDP and create hundreds of thousands of jobs. In fact, for every \$1 billion spent on clean water infrastructure in the U.S., 28,500 new jobs are added, \$3.4 billion is added to the GDP, and personal income is boosted by \$1.1 billion.²

Capital invested in clean water infrastructure is proven to generate more jobs per dollar than a comparable investment in schools, transportation infrastructure, energy infrastructure, or broad-based tax cuts.³ Moreover, about half the jobs created from clean water investments are located in small communities with high unemployment and few prospects for reducing it. Much of the remaining investment goes to larger cities that have the highest costs to finance their wastewater infrastructure while often facing large hurdles in terms of high rates of poverty, increasing debt loads, and shrinking rate-bases.

Clean water infrastructure is critical for private sector development as well. For every \$1 billion in new investment in core infrastructure, we can expect an extra \$840 million added to GDP each year from the private economy, of which about \$141 million is increased output from the manufacturing sector.⁴ Several mechanisms deliver these outcomes:

- Treatment capacity and cleaner input water enable expanded private production;

² For details, see testimony of Stephen S. Fuller on behalf of the Associated General Contractors of America before the Committee on Transportation and Infrastructure of the US House of Representatives, January 22, 2009.

³ For details, see: James Heintz, Robert Pollin, and Heidi Garrett-Peltier, Political Economy Research Institute of the University of Massachusetts, *How Infrastructure Investment Supports the US Economy: Employment, Productivity and Growth*, prepared for the Alliance for American Manufacturing, January 2009.

⁴ Ibid

- Healthier ecosystems deliver more productive commercial fisheries ;
- Cleaner water delivers higher rates of water-based recreation with an accompanying stimulus to local economies;
- Agricultural and tourism output increase with better water quality; and
- The wealth created through increased land values adjacent to clean water bodies translates into enhanced demand for new construction, furnishings, appliances, and the like.

Decreasing Federal Investment Will Have Long-term Negative Impacts on GDP, Jobs, Local Governments and Households

Most wastewater utilities issue bonds or borrow privately to finance capital investments. So, reducing federal wastewater funding as part of a broader federal budget cutback will have worse long-term effects on the ability of cities to borrow than just the direct withdrawal of federal wastewater funds.

At first, local debt will have to increase to offset the withdrawal of federal support. This will cause rates and costs of debt to increase. Then, as federal spending is cut back on such big-ticket programs as defense, infrastructure, health and education, the economies of cities and even entire states that depend on federal programs will contract, jobs will be lost, and more households and businesses will be unable to pay for basic services like wastewater treatment.

These trends, in turn, could reduce credit-worthiness and credit ratings for these municipal utilities, increase costs of capital, and ultimately cause wastewater rates to inevitably, and even dramatically, increase. At the margin, businesses will relocate, some overseas, and the cycle will spiral further downward. Today, fully 40% of households across America are already paying more out of their disposable incomes for wastewater management than EPA says is affordable. Together, financial realities in the wastewater sector coupled with declining housing prices (and as a result household wealth) and stubbornly high unemployment have pushed many households and businesses to or beyond their financial tipping points.

Conclusion

This is no time to be cutting back on federal clean water infrastructure funding. It is time to increase it, even if that means raising new revenues to offset increased funding. Existing spending must be protected, especially from construction-based accounts like the SRF that add jobs and economic value. Furthermore, a long-term, deficit-neutral, and sustainable federal funding policy for clean water investments is needed.

While more spending is the first step, we also should demand improvements in national returns from an expanded clean water investment program by, for example, allowing municipalities to determine their own investment priorities under the Clean Water Act, continuing to drive capital decisions down to those closest to the problems, keeping administrative processes simple and economical, and eliminating uncertainty in the funding stream.

The attributes of clean water infrastructure, however, set it apart from many other types of public investment. Not only is clean water investment so clearly a win-win for the environment, jobs, and the economy, but it is also a public good. Benefits like fishing, swimming, and freedom from disease “flow downstream,” and are available collectively for all to enjoy without restriction. A California resident, for

example, can enjoy a day of swimming and fishing in a New York stream without paying anything to ensure the stream is safe to swim in or that fish can thrive there.

For this reason, national policy has always relied on an intergovernmental partnership to fund clean water investments. To be sure, much of the investment has always and should continue to come from local ratepayers, but abandonment or even reduction from an already lower-than-optimal level of federal funding will undermine our national priority for clean water and violate principles of fiscal efficiency and social equity.

This exact thinking has resulted in federal infrastructure trust funds for highways, transit, aviation, and inland waterways. A certain portion of the benefits from these equally critical infrastructure networks — mobility of people and goods on highways, safe and efficient airways for passengers and freight, and efficient urban transport of the workforce — accrues to the entire nation, not just to the local users of portions of the network. Federal participation in funding these trust fund mechanisms ensures continued, reliable creation and equitable distribution of these benefits, coupled with local investment decision-making and low-cost capital allocation.

Putting it all together, we face an historic opportunity to create a similar trust fund for clean water. Such a trust fund would continue the intergovernmental partnership needed to deliver more clean water to the entire nation while at the same time, create jobs that stay in the U.S. and benefit the neediest of communities, support growth in economic activities that depend on clean water, and build wealth for households and businesses that need clean water.

Our 50 State clean water revolving funds are mature, sophisticated, and efficient lenders that are fully capable of handling distributions from a federal trust fund far in excess of current flows. As such, it is difficult to imagine a more effective or efficient distribution mechanism. With only modest efforts to identify and dedicate a revenue stream, the nation will be well on its way toward a brighter future for clean water and community well-being.