

**STATEMENT OF  
THE HONORABLE JAMES L. OBERSTAR  
SUBCOMMITTEE ON WATER RESOURCES & ENVIRONMENT  
HEARING – SUSTAINABLE WASTEWATER INFRASTRUCTURE  
FEBRUARY 4, 2009, 10AM  
2167 RAYBURN HOUSE OFFICE BUILDING**

Wastewater infrastructure plays a vital role in maintaining our nation's economic, environmental, and public health. Yet, it is an area that has been sorely neglected over the past decade. This Committee recognized the central role that upgraded wastewater treatment systems and facilities play in keeping the nation's waterways clean when it passed the Clean Water Act in 1972. However, an unwillingness to invest in an aging national infrastructure has left our wastewater systems stressed and broken. Their current state of disrepair threatens to erase the gains made through implementation of the Clean Water Act, and places the public's health at risk. Wastewater treatment facilities have been forced to make do with what they have. This includes the use of inefficient technologies and operational approaches that have been used for literally decades.

Wastewater treatment facilities are also among the largest consumers of energy across the country. The U.S. Environmental Protection Agency estimates that approximately \$4 billion is spent annually on energy costs to operate water and wastewater utilities. The Department of Energy's Energy Information Administration estimates that water utility energy consumption is between 30 to 60 percent of a city's

energy bill. In these stressed economic times, municipalities are therefore stressed on two fronts: not only are they devoting significant resources towards energy costs, they are saddled with an increasing share of the costs for maintaining their wastewater infrastructure.

We can do better. The commitment of this Congress and the Obama administration to address the economic downturn presents multiple opportunities to address many of the challenges facing our wastewater infrastructure. The House, through the American Recovery and Investment Act, has already committed to providing a significant increase in resources to resuscitating these vital systems. While it is not the figure that this Committee initially recommended, it is a start, and I am hopeful there will be opportunities for revisiting that figure in the future. This funding will enable localities with projects that are shovel-ready to build and repair their wastewater infrastructure systems. This will yield jobs and long-term environmental payoffs.

The economic recovery proposal also provides grants for communities to incorporate sustainable technologies and approaches into their wastewater treatment systems. It is on this matter that today's hearing is focused.

Sustainable wastewater infrastructure includes both water efficiency and energy efficient technologies. The adoption of this provision can have very real impacts on the operating costs of a treatment facility, and, in turn, on the fiscal situation of a community. Very small changes in either operations or equipment can result in significant energy savings. And small moves towards energy efficiency can yield very large and positive financial impacts. For example, the EPA notes that a 10 percent reduction in energy usage at water utilities could result in \$400 million and 5 billion kilowatt hours in annual savings.

Not only does energy efficiency result in energy cost savings, it also means that wastewater utilities will be responsible for fewer greenhouse gas emissions. As a sector of the economy responsible for a high proportion of energy use, increases in energy efficiency can result in demonstrable progress in mitigating against climate change.

Progress towards energy efficiency is something that is happening now – which means that some municipalities are already making savings on energy costs. For example, Bath Water District in Bath, Maine, is saving more than \$30,000 a year as a result of new variable frequency drives on two of its pumps. The new drives adjust the speed of the pumps according to the volume of water they need – as opposed to a single speed. This technology has saved Bath about 376,000 kilowatt hours (kWh) annually since the upgrades in 2003 - the same amount of energy used by 35 homes in

a year. This upgrade also has a tangible climate-related impact: the energy savings translate into a reduction of more than 208 tons of carbon dioxide a year.

Similarly, the municipal wastewater treatment plant in Charlemont, Massachusetts installed a 15 kilowatt (kW) photovoltaic solar array in 2005 that has reduced its energy costs by 54 percent. The project consists of 96 solar panels mounted on 8 poles connected to 3 inverters. In addition to the financial savings the solar panels generate for the plant, the solar panels reduced the facility's CO<sub>2</sub> footprint by nearly 17 tons in the first 2 years of operation.

These are real and tangible savings for communities. They help to make wastewater treatment facilities more energy efficient – and potentially energy independent. Unfortunately, however, wider usage of these technologies and approaches has been hindered by a lack of awareness within water and wastewater utilities on the potential benefit of these technologies, approaches, and savings. It is my hope that this hearing will initiate an educational process that will – in the not so distant future – make these technologies and approaches mainstream.

Today's hearing explores some of these opportunities. It also focuses on other mechanisms for adopting a more sustainable wastewater infrastructure. Sustainable technologies and approaches exist for increasing water efficiency and conservation, mitigating stormwater runoff through infiltration, and promoting "green" planning, design, and construction. All of these can yield a more effective, more efficient, and more economically feasible approach to achieving our environmental and public health goals.

Finally, it is important to note the secondary or indirect benefits of promoting sustainable wastewater infrastructure. Switching out 30 year-old equipment with more energy efficient technologies will promote the development of new designs and increased product manufacturing. This results in job growth beyond the traditional construction and engineering employment traditionally associated with wastewater infrastructure.

In my own congressional district, the port of Duluth is a primary example of the economic and employment benefits that can accrue through a green economy and infrastructure. As wind farm sites have developed throughout the Midwest, Duluth has become one of the primary gateways for the import and export of wind turbine components. In fact, the port has added space and capacity to store equipment, such as wind blades that can be more than 100 feet long. Duluth's role and experience in

the “green economy” is a telling example of the positive multiplier effects that can result through the promotion of a more sustainable infrastructure.

The nation must turn towards the promotion of advanced and energy efficient technologies if we are to maintain our position as the global economic leader. I look forward to our witnesses today to inform us on potential paths forward in this regard.