



Protecting Our Future

The nation's water and sewer infrastructure is aging. The Congressional Budget Office estimates that between \$485 billion and \$1.2 trillion will be needed to repair and replace this infrastructure in the next 20 years. The US Environmental Protection Agency (EPA) 2004 Gap Analysis states that in 10 years, water pollution levels may deteriorate to those observed in the 1970s if we do not invest in our infrastructure.

It's easy to forget how far we have come. The improvements in treatment of water and wastewater in the last century were responsible for the eradication of waterborne diseases such as typhoid, cholera and Hepatitis A, and helped to increase life expectancy by almost 30 years. But lapses in treatment can be fatal, with more than 50 deaths from a water system failure in the 1990s. Water is also crucial to our economy, used by many industries and supporting \$400 billion per year for recreation, coastal tourism, and seafood, fishing and agriculture. Wastewater treatment prevents millions of tons of pollutants from reaching our waterways.

America has thousands of water treatment and wastewater treatment facilities, 800,000 miles of water pipe and 600,000 miles of sewer lines. Many systems are more than 50 years old, with the last major influx of money to build new water and wastewater infrastructure in the 1970s. With a useful life of 30 to 50 years, a new influx of funding is desperately needed. Where will that come from? Right now, in most places ratepayers do not pay for the full value of clean water and treatment of wastewater. Ratepayers and elected officials have not been educated about the value or the cost of keeping their water supply and environment safe.

Educational Outreach Plan

The Water Environment Federation (WEF) has just launched a new program titled, "Water is Life and Infrastructure Makes It Happen." The New York Water Environment Association (NYWEA) has been chosen as a pacesetter member association (MA) and is one of six MAs that will implement the program this year. The program will provide educational materials for utilities, ratepayers and public officials. Metrics to assess the actions include numbers of editorials, published articles, presentations, brochures and fact sheets distributed, and the number of people exposed to the message. Metrics to assess the outcomes include before and after surveys, the number of elected officials who champion infrastructure funding, the number of rate increases, and the increase in dollars actually invested.

Over the next few months our Public Education Committee and Government Affairs Committee will be developing NYWEA's program. In addition, two New York utilities have volunteered to be pilot utilities, the towns of Tonawanda and Orangetown. These utilities will utilize the WEF materials, tailored to New York, to advise their ratepayers of the costs of clean water and to address their elected officials.

Materials including fact sheets and PowerPoint presentations will be made available to our members. Look for opportunities in the

coming months to educate your friends, neighbors, employers, colleagues and elected officials. Consider making a presentation to your civic association or Parent Teachers Association, or sending a letter and fact sheet to your local legislators. More information is available at www.waterislife.net.

This is only a first step – it will take a concerted effort by our members to educate the ratepayers and elected officials so that adequate funds are procured to meet water and wastewater infrastructure needs.

But there is more we need to do. In our field, 30 to 50 percent of the workforce will retire in the next 10 to 15 years. Who will be the operators, scientists and engineers of tomorrow? Who will perform the cutting edge research that will ensure clean water and cost-effective treatment technologies? Who will operate our water and wastewater treatment facilities? Who will design, manufacture, sell and service the equipment?

Our nation is falling behind many industrialized countries technologically. The number of college students pursuing careers in science and engineering has dropped. What can we do about it? We can inform young people about careers in the environmental field and we can encourage them to pursue those careers by providing scholarships to the best and brightest of our New York students.

The NYWEA's scholarship program has raised over \$420,000 in just over five years. We have provided over \$86,000 in scholarships to 47 students who have pledged to pursue careers in the environmental field including science and engineering. With an ambitious goal of raising \$1 million and awarding \$50,000 in college scholarships per year, we will not be able to reach our goal without major corporate donations. Major corporations and foundations require that we demonstrate strong support by our own members before they will donate. Therefore, we need each and every member's help. The minimum pledge is \$100 over five years, and a \$250 pledge over five years is only \$1 a week. Please log onto <http://www.nywea.org/schol/schol-don.cfm> and fill out a pledge form.

Thank you in advance for your support of "Water Is Life and Infrastructure Makes It Happen," and the NYWEA Scholarship Fund.

Janice Jijina, PE, AICP

