United States Environmental Protection Agency



# **U.S.-Mexico Border Water Infrastructure Program**

## Did you know?

Without properly functioning wastewater systems, communities are exposed to serious health risks from waterborne illnesses such as hepatitis and gastrointestinal diseases.

## Did you know?

Every new household connected to a collection and treatment system in the U.S. prevents approximately 200 gallons per day of raw sewage from flowing into rivers, lakes and streams.

### Did you know?

Investments in wastewater programs along the U.S.-Mexico Border save the U.S. **\$6** million from avoided diseases and over **\$13** million from ecological EPA's U.S.-Mexico Border Water Infrastructure Program (BWIP) provides funding for planning, design and construction of critical water and wastewater infrastructure in underserved communities along the U.S.-Mexico border. Many of these communities are economically distressed and lack access to safe drinking water and adequate wastewater collection and treatment service.

This Annual Report highlights program accomplishments for federal fiscal year 2013 and aspects of the program that make it unique.

The BWIP is the only federal program that can fund infrastructure projects on both sides of the border. Preventing raw sewage discharge at the source is the most cost-effective and technically sound way to protect the health of U.S. residents and the quality of our water resources. Providing safe drinking water reduces the spread of waterborne disease and protects public health.

Since its 1995 inception, the BWIP has completed 84 projects. These projects provided first-time access to safe drinking water to over 63,000 homes and first-time access to wastewater collection and treatment services to nearly 570,000 homes. Over 8 million border residents are benefitting from these projects. The six projects completed in FY 2013 provided over 3,400 homes with safe drinking water and close to 26,000 homes

with adequate wastewater collection and treatment services. The BWIP is also one of the few federal programs that assists communities in the planning, design and construction of wa-

planning, design and construction of water infrastructure projects. Communities lacking sufficient technical expertise and financial resources to develop projects on their own receive development assistance that prepares them to apply for construction funding under the BWIP and other programs.

By the end of FY 2013, the program was assisting 26 communities with project development, including environmental and engineering review, design, financial analysis and public participation. Some of these projects incorporate sustainable infrastructure components that allow communities to reduce environmental impacts and energy costs. These measures ensure the environmental and economic sustainability of the projects. Once completed, approximately half a million border residents will benefit from these projects.

# U.S.-Mexico Border Water Infrastructure |Annual Report 2013

## http://water.epa.gov/infrastructure/wastewater/ mexican/index.cfm

## Addressing Infrastructure Needs of Border Tribes

The **Manzanita Band of the Kumeyaay Nation** is located in the western part of the Carrizo Desert of California. The tribe's sole source of drinking water comes from the reservation's wells and springs. Due to their proximity to septic tanks and excessive sanding, these wells had significant water quality problems that threatened public health. Contaminants included nitrates and coliform bacteria. In 2009, the Tribal Border Program awarded \$346,660 of U.S.-Mexico Border Program funds to rehabilitate 21 wells, drill three new wells and install four small water storage tanks with water lines. This project, completed in FY 2013, provided 20 tribal homes and four community buildings with safe drinking water.



Final installation of two 20,000-gallon water storage tanks



#### **Addressing Arsenic Contamination**

For residents of **Anthony, N.M.**, completing a water system improvement project meant having access to a sustainable water supply. Before the improvements, some wells in Anthony had arsenic levels as high as 16.55 parts per billion. The improvements reduced arsenic concentrations to 10 parts per billion. The project included construction of two water wells with a combined capacity of 1,700 gallons a minute, installation of new pump equipment in two other water wells, a reverse osmosis unit with a capacity of 600 gallons per minute, and more than 14,900 feet of PVC water lines. The BWIP provided \$261,000 to the City of Anthony for the planning and design phase, and \$2.8 million in construction funds.

New well station in Anthony, N.M.

## **Addressing Failing Septic Tanks**

**Rio Grande City, Texas**, decommissioned 27 failing septic tanks, installed 27 home wastewater connections, and constructed 1,480 linear feet of wastewater collection line. The project now provides wastewater collection services to approximately 111 residents along Water Street in Rio Grande City and eliminated the individually owned septic tanks, which did not meet the Texas Commission on Environmental Quality's new design guidelines. The BWIP provided Rio Grande City with \$77,950 for the planning and design phase, and 100 percent of the \$227,191 in construction funds.



Replacement of wastewater collection line in Rio Grande City, Texas (photo courtesy of NADB)



2