



U.S.-Mexico Border Water Infrastructure Program Annual Report 2014

The U.S.-Mexico Border Water Infrastructure Program (BWIP) funds the planning, design and construction of high-priority water and wastewater infrastructure for underserved border communities. The program protects U.S. public health and the environment by funding essential drinking water and wastewater projects that otherwise would be financially unfeasible for these communities.

Program Accomplishments

Since 2003, the program has funded more than 114 projects, 96 of which have been completed. These projects provided first-time access to safe drinking water to approximately 65,000 homes and first-time access to wastewater collection and treatment services to more than 580,000 homes. In fiscal year 2014 the BWIP provided 1,470 homes with safe drinking water and 12,800 homes with adequate sanitation. Working closely with U.S. and Mexican federal, state and local partners, the program eliminates untreated sewage discharges, improving the quality of surface and groundwater essential to the border area.

Our Communities

Many residents of small, economically distressed communities along the U.S.-Mexico border have inadequate or no access to basic drinking water and sanitation. These communities often lack the resources to plan and secure construction funding of critically needed infrastructure. The BWIP provides financial and technical assistance so these communities can afford access to safe drinking water and wastewater infrastructure, reducing disproportionate public health risks and environmental impact from raw sewage discharges.

Highlight: BWIP Impact on Wastewater Distribution in Colonia Las Pampas, Presidio County, Texas



Colonia Las Pampas is an economically distressed community of approximately 6,500 residents with no access to viable water supply sources. For years, Las Pampas residents have been hauling water from the city of Presidio for their basic water needs. The city applied for BWIP funding to extend services to Colonia Las Pampas. BWIP efforts included a water use audit, which showed the city was facing high levels of water loss, failing infrastructure and low billing rates requiring supplemental funding. BWIP is assisting Presidio with the planning and design of critical rehabilitation of the existing system and expansion of water lines to bring safe drinking water to approximately 30 homes in Colonia Las Pampas. Once planning and design is complete, Presidio will be able to apply for construction funding, which is estimated at \$870,000.

FY 2014 Case Studies

Providing Technical Assistance for Planning and Design

The BWIP is one of the few federal programs that assists communities in the planning and design of water and wastewater infrastructure projects. This assistance provides the critical bridge between proposed projects and their construction through hands-on management and technical oversight for planning, engineering, environmental review and design. Communities that lack the resources and technical capacity to move a project forward are able with this assistance to complete all planning and design requirements and have greater opportunities to apply for construction grants from federal programs such as BWIP and U.S. Department of Agriculture Rural Development.

Highlight: Wastewater Collection System for the Community of Tintown in Bisbee, AZ



EPA partnered with USDA to benefit residents of Tintown, a small community within Bisbee that lacked wastewater collection services and relied on septic tanks or nonconforming cesspools for its wastewater disposal. BWIP provided over \$245,000 to support the planning and design of a wastewater collection system, which helped the city apply for and secure \$1.628 million in construction grant funding from BWIP (\$1 million) and USDA (\$628,000). The EPA-USDA partnership allowed both agencies to leverage their investments and bring first-time service to a border community in need of technical and financial assistance, providing public health and environmental improvements. The project was completed in July 2015.

Binational Efforts to Protect U.S. Health and Shared Waters

The BWIP is the only federal program that can fund water and wastewater infrastructure projects on both sides of the border to protect U.S. public health and the environment. Through a joint investment agreement, EPA collaborates with Mexico on projects to reduce disease outbreaks from unsafe drinking water and contamination from untreated sewage. BWIP projects have reduced discharges of organic waste by more than 120 million pounds per year into transboundary surface waters and groundwater. Removal of other contaminants, such as suspended solids, toxic ammonia, nutrients and pathogens, has improved water quality at beaches and in rivers throughout the border region. Treating contaminated water after it reaches the U.S. is not technically feasible or financially viable.

Highlight: Reducing Public Exposure to Raw Sewage in El Millón, Jesús Carranza and Tres Jacales, Mexico

El Millón, Tres Jacales and Jesús Carranza are three small communities in the municipality of Juarez, which is on the other side of the Rio Grande from El Paso, TX. These communities had no wastewater collection or treatment services. Sewage was being discharged to latrines, cesspools or open-air drains, contaminating surface and groundwater, including the Rio Grande, and risking the transmission of diseases due to potential contact with raw sewage and contaminated water and soil. The BWIP funded 30 percent of the total construction costs, about \$1 million USD, for wastewater collection and treatment infrastructure. CONAGUA (the Mexican National Water Commission) and the Mexican State covered the remaining project costs. The project prevented an estimated 88,340 gallons per day of untreated wastewater from directly discharging into the Rio Grande, contributing to a cleaner, healthier environment for local residents and U.S. communities downstream of the river. The project was completed in 2014.



Partnering to Protect Human Health and the Environment

The BWIP capitalizes on strong partnerships with U.S. and Mexican federal, state and local governments to address border drinking water and basic sanitation needs by leveraging resources and coordinating policies and procedures. To date, EPA's investments of \$600 million on border water and wastewater infrastructure have leveraged more than \$1.1 billion in funding from other sources.

Highlight: Wastewater Improvements for Failing Septic Systems and Transition Main in Holtville, CA



Holtville is located 12 miles north of the border. The 3.2-mile gravity transmission main conveying wastewater from the city to the wastewater treatment plant was 84 years old. It experienced frequent pipe and manhole collapses, posing threats to adjacent highways and agricultural irrigation and water supply canals. Its condition also allowed infiltration of agricultural water, significantly increasing flows to the treatment plant. The BWIP provided \$400,000 towards \$1.3 million in planning and design costs, which helped Holtville secure \$4.4 million in loans and grants from USDA and a \$1.3 million grant from BWIP to complete project financing while maintaining affordable sewer rates. The project replaced the transmission main, benefiting 6,500 residents, and extended service to a cluster of 23 homes with failed septic systems and substandard wastewater connections.