



U.S.- Mexico Border Water Infrastructure Program: Tribal Border Infrastructure Program

Public Health Benefits:

Investments that provide sanitary sewer services and access to clean drinking water drastically reduces the spread of infectious diseases such as legionellosis, typhoid fever, and shigella.

Environmental Benefits:

Protecting water quality from untreated or inadequately treated wastewater discharge improves ecosystem health and the food on which these communities depend.

Economic Benefits:

Sanitation improvements can increase overall worker productivity by minimizing number of missed days due to illness. Additionally, infrastructure projects create jobs in tribal communities.

There are 154 Native American tribes, totaling 881,070 Native Americans, living within the four U.S. border states and 25 Native American nations within the 62.5 mile region north of the U.S.-Mexico border. These border tribes constitute a multinational mosaic of culture, language, history, governance, topography, and remoteness that pose complex challenges when addressing issues of disproportionate poverty and infrastructure needs.

In 1997, the U.S.-Mexico Border Water Infrastructure Program (BWIP) established a Tribal Border Infrastructure Program (TBI) to address water and wastewater needs for U.S. federally-recognized Indian Tribes along the California and Arizona border. Funded from BWIP appropriations, the TBI program in turn funds high priority drinking water and wastewater infrastructure projects through Interagency Agreements (IAs) with the Indian Health Service or direct grants to tribes.

Due to resource limitations, funding is allocated to this effort every other year to help address tribal border infrastructure needs.

The program focuses on providing safe drinking water and adequate sanitation to the 25 Tribes eligible for TBI funding out of 147 federally-recognized border tribes in California and Arizona. The Indian Health Service (IHS) has identified 80 high-priority tribal drinking water and wastewater projects, 25% of which would provide first-time connections to safe drinking water and sanitation facilities. Such connections minimize the risk of pathogen outbreak, opportunity cost of travelling for water collection and wastewater disposal, and severe impairment of land and water resources.

Since 1997, the program has awarded \$36 million dollars of BWIP funds to meet tribal border infrastructure needs. To date, the program has funded over 70 projects and provided safe drinking water or adequate sanitation services to over 10,000 tribal homes. In FY13, the program received approximately \$1.4 million of BWIP's funds that will provide 222 tribal homes with critically needed drinking water and wastewater infrastructure.



Tribal Border Program Highlights in 2013

Manzanita Band of the Kumeyaay Nation Safe Drinking Water Project

Located in the western part of the Carrizo Desert of California, the Tribe's sole source of drinking water comes from an aquifer threatened by water quality problems related to the proximity of septic tanks, coliform bacteria, nitrate, and excessive sanding in over half the wells.

The TBI program awarded \$346,660 to restore 21 wells, drill 3 new wells, and install 4 small water storage tanks. This project provided reliable drinking water to 20 tribal homes and 4 community buildings, minimizing the risk of waterborne illnesses.



The project, which includes the two newly installed water tanks above, was completed in FY13. Photo: EPA

La Jolla Band of Luiseno Indians Poomacha Tank Rehabilitation

La Jolla Band is located near Mount Palomar in Southern California. The TBI program provided \$296,000 in BWIP funds for the rehabilitation of the 96,000-gallon water storage tank serving the Poomacha community and construction of a chlorine booster station to increase the chlorine residual within the system.

These improvements will increase the tribe's access to safe drinking water and directly impact 39 homes.



Before improvements were made, the tank had several leaks which can affect storage capacity and introduce bacteria into the system. Photo: Josh Newcom, IHS STARS database

Tohono O'odham Nation Gu Vo Lagoon Repair

The Tohono O'odham nation, the second largest tribal nation in the U.S., is located in the Sonoran Desert. The community of Gu Vo utilizes the lagoon as a means of cost-effective wastewater treatment to serve 73 homes. Gu Vo Lagoon's capacity was reaching critical limits, with existing berms experiencing erosion issues and levels rising near the point of overflow.

The TBI program allocated \$610,000 in BWIP funds to expand the existing lagoon system to avoid an overflow situation which can increase the risk for public health-related issues and even more costly repairs. Project construction started in December 2013.



A view of Gu Vo Lagoon before the repairs. Photo: Tanya Davis, IHS STARS database

San Pasqual Band of Mission Indians San Pasqual Tank Replacement

The San Pasqual band lives in the drier, wildfire-prone region of Southern California, where maintaining reliable water systems is paramount. The quality of the community's only drinking water tank had diminished to a level in which significant water leaks were occurring at the tank base and joints, causing corrosion to the tank shell.

The TBI program provided \$431,465 in BWIP funds to replace the water tank and minimize system loss of this valuable resource. The project is estimated to serve 103 homes.



San Pasqual fire truck. Photo: © San Pasqual Tribe Image Gallery

