



Upgraded Sells Lift Station, Tohono O'odham Nation

The Clean Water Indian Set Aside Grant Program

Promoting access to sustainable safe drinking water and basic sanitation in Indian country through integrated appropriate infrastructure and sustainable resource entities that link the development goals of the tribe with the need for such services and infrastructure*.

Environmental Benefits:

Since 2003, more than 56,875 tribal homes have been provided access to wastewater sanitation.

Public Health Benefits:

Nationwide, 12% of tribal homes lack access to safe drinking water or wastewater facilities compared to less than 1% for non-tribal homes. EPA uses the Indian Health Service's Sanitation Deficiency System to identify and prioritize important projects that benefit public health for CWISA funding.

Economic Benefits:

Water infrastructure projects stimulate local economies and create construction jobs in tribal communities (see Nambe Pueblo case study, pg 6).

The Clean Water Indian Set Aside (CWISA) Grant Program, in conjunction with the Indian Health Service, assists federally recognized Indian tribes in the U.S. in gaining access to basic sanitation. In FY2012, EPA awarded \$30 million for wastewater treatment construction projects in Indian country, financing 89 projects. These projects will serve over 9,000 tribal homes and 78% of these projects will provide first-time access to safe wastewater services. To ensure the long-term benefit from these investments, the CWISA Grant Program emphasizes system sustainability and continued operations and maintenance of the infrastructure. These construction

programs also provide opportunities for tribal members to develop job skills.

Since 1987, about \$400 million in CWISA Grant Program funding has been made available to finance a total of 1,062 projects in Indian country. Between 2003 and 2012, in coordination with other federal partners, EPA provided 63,087 tribal homes with access to basic wastewater sanitation. While great progress has been made in Indian country to reduce the number of tribal homes without access to wastewater collection and treatment, more work is needed. In FY2011, there continued to be over 120,000 tribal homes

*2011 Revised Infrastructure Task Force Focus



Between 2003 and 2011, in coordination with other federal partners, EPA provided **63,087** tribal homes with access to **basic wastewater sanitation**.

without access to basic sanitation. The American Indian and Alaskan Native populations have been growing by 18.4% between 2000 and 2010, compared to the total U.S. population which increased by only 10% over the same period (U.S. Census). As American Indian and Alaskan Native populations rapidly grow, the universe of homes without access to safe drinking water and basic wastewater sanitation is

also growing, and the need for these services becomes more prominent. The latest Indian Health Service annual report from the Sanitation Facilities Construction program (FY2010) estimated the wastewater need totaled \$900 million in Indian country.

Federal and Tribal Partnerships Effectively Support Tribes

The CWISA Grant Program relies on a number of federal partners to achieve its goals. EPA uses the Indian Health Service's (IHS) Sanitation Deficiency System priority lists to identify and select projects for CWISA funding. This partnership maximizes the technical and financial resources available through both agencies to address tribal wastewater treatment needs.

The Tribal Infrastructure Task Force is an inter-agency group initiated under a memorandum of understanding among EPA, IHS, U.S. Department of Agriculture, Department of the Interior, and Department of Housing and Urban Development. In November 2011, the task force renewed its commitment to support increased access to safe drinking water and basic sanitation in Indian country and defined a broader focus to encourage increased sustainability of tribal infrastructure. With this renewed focus, the task force invited 825 tribal leaders, tribal housing directors, and water organizations to join

the efforts of the federal partners through participation in a federal steering committee. The committee continues to provide direct input on how to increase sustainable access to safe drinking water and basic sanitation in Indian country.

The federal agencies and tribal members of the task force worked together to draft a document defining sustainable management entities and appropriate infrastructure to help maximize and protect investments in Indian country. The federal agencies on the task force have also been working together to streamline grant paperwork requirements for programs that fund water infrastructure projects in Indian country. These efforts will improve tribal access to program funding and benefits by awarding funds both more quickly and with less administrative burden for tribes.

Addressing Public Health Challenges

Native Americans lack access to safe drinking water and basic sanitation in disproportionate numbers, increasing the likelihood of public health threats such as the risk of disease exposure and water-borne illnesses. Twelve percent of tribal homes (as reported by IHS) do not have access to safe drinking water and/or wastewater disposal facilities compared with approximately two-thirds of 1% of non-native homes in the United States (U.S. Census Bureau 2000). This disparity is greatest on the Navajo Reservation and in Alaskan Native Villages.

Congress recently granted authority to allow for the transfer of funds between the CWISA and the Drinking Water Infrastructure Grant Tribal Set Aside. This ability to transfer funds increases EPA's ability to target infrastructure funding to the highest priority drinking water and wastewater public health needs in Indian country. Transferring funds will allow EPA Regions to focus EPA funding on more projects that will immediately address critical public health issues involving the lack of safe drinking water access and basic sanitation. EPA plans to implement this authority in FY2013.



Ramah Lift Station Inspection, Navajo Nation May 2011.

Protecting America's Waters In and Around Tribes

Since 2003, more than 63,000 tribal homes have been provided access to wastewater sanitation. Failing wastewater systems can significantly impact the environment as old and deteriorated pipelines or straight pipes allow untreated wastewater to flow into rivers, streams, and other bodies of water. Many of these inadequate systems often discharge raw, untreated sewage to streams and rivers which may have recreational, aquatic life, and sacred tribal uses. These waters sometimes serve as a source of subsistence fishing for tribes as well, compounding significant environmental degradation with public health risks.

Economic Health Benefits

In general, systems serving small, economically stressed tribal communities face various challenges, including remote locations that can be difficult to access and limited institutional capacity. When tribal households must manually transport water for daily use, such as some homes in Navajo Nation, there are significant costs to productivity due to the time spent obtaining water. Tribes often have difficulty ensuring sustainable access to services due to the lack of technical, financial, and managerial capacity to oversee these systems. Unemployment on tribal lands can reach as high as 70%. When possible, CWISA-funded projects hire local residents to assist with building wastewater infrastructure that will serve their community.

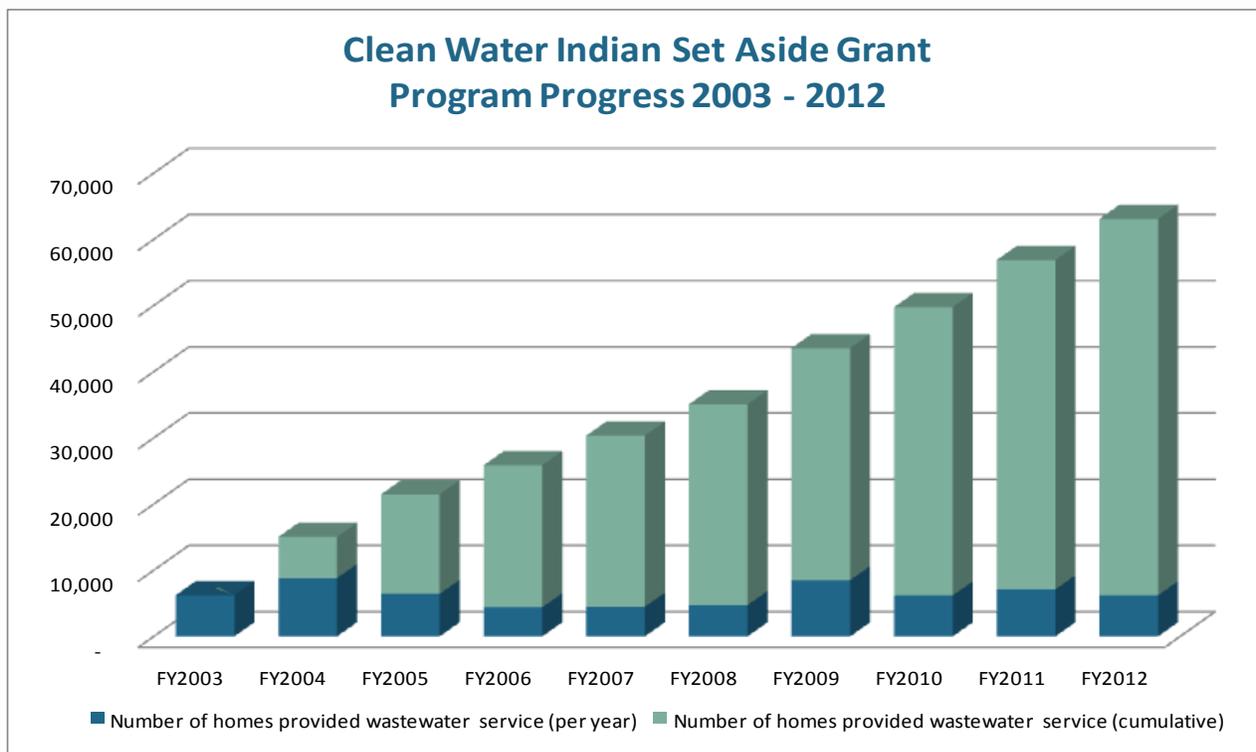


Reverse Osmosis Water Treatment Plant, Gila River Indian Community.

Tribal Capacity Development

Training in operation and maintenance is a critical component to promoting sustainable water and wastewater infrastructure. Trained system operators and managers help ensure that systems function properly and reach their designed life cycles, helping to protect the original federal investment. In 2011, EPA launched a nationwide initiative to train tribal operators and managers on how best to efficiently and effectively use and maintain their water and wastewater infrastructure, protecting federal investment and increasing national facility sustainability. In 2011-2012, nine trainings were delivered to tribes across the country to improve the skills and knowledge of water infrastructure operations and maintenance, further improving the technical capacity of local tribal operators and managers and the longevity of infrastructure. Each of the three-day training courses educated a wide range of participants, including tribal environmental managers, utility operators, and elected officials. EPA has also released a series of on-line training modules covering an array of operation, maintenance and system management issues at smaller drinking water and wastewater facilities. The training modules can be found at: <http://water.epa.gov/type/watersheds/wastewater/smallsystemsoperatortraining.cfm>

The Water/Wastewater Training in Billings, MT, was excellent. It covers every aspect of tribal community water/wastewater systems, planning, operations, trouble shooting, maintenance, record keeping and required reports. The Training improves and evolves with every session."
 - Dave Tonasket, Colville Confederated Tribes Environmental Trust Division, Onsite Wastewater Permitting



CASE STUDIES

Protecting Groundwater Quality in the Nambe Pueblo

Nambe Pueblo,
New Mexico



Nambe Pueblo Wastewater
Treatment System
Construction Project

Since 1968, the Nambe Pueblo had utilized an unlined lagoon system to handle the community's wastewater needs. The sandy soils in the area are subject to a high degree of percolation, which allowed untreated or undertreated wastewater to seep from the lagoon into the local groundwater aquifer. This lagoon system also contributed to high nitrate concentrations in downstream wells.

With a \$1 million investment from the EPA's Clean Water Indian Set Aside (CWISA) Grant Program, the Indian Health Service designed and contracted the construction of a new wastewater treatment facility for Nambe Pueblo that would adequately treat the community's wastewater. This CWISA project spurred the construction of modernized infrastructure and provided local small businesses and their employees valuable on-the-job experience. The work to construct these facilities was completed by local businesses, including Saigan Construction, a local Indian-owned small contracting business. Saigan Construction was struggling to maintain construction jobs for the company in 2010 due to the poor economy. Working on this project changed that, allowing Saigan Construction to keep current employees employed and to hire approximately nine new employees.

The local community, including 41 Indian homes, non-Indian homes in the Nambe area, small business owners, and the tribal wastewater facility, benefited from this project, helping to improve public health, the environment, and the economy.

Tribe Takes 'Control' Of Sells Lift Station

Tohono O'odham
Nation, Arizona



Sells Lift Station
Construction Project

In Tohono O'odham Nation, 66 American Indian homes suffered from inadequate wastewater collection and treatment. Outdated and poorly functioning wastewater equipment was allowing raw sewage to contaminate local waterways. Since 1981, the Tohono O'odham Utility Authority had relied on an old lift station in the community of Sells that was causing frequent problems with its interconnection to the main pipeline. Any failures due to the pumping equipment would allow raw sewage to dump into the Sells Wash.

Through the CWISA Grant Program, EPA awarded \$71,880 in ARRA funds and the community was able to make necessary replacements to a sewer main, forcemain connection and manholes, as well as to install new supervisory control and data acquisition (SCADA) controls. The upgrades, which were completed by the Tucson Area Indian Health Service, eliminated lift station failures and ensure that basic sanitation needs are met.

This project included new automation and a submersible lift station, which is a much more efficient technology and, therefore, lowers power costs. With the SCADA remote capabilities, the lift station can be monitored and operated from a

Tribe Takes 'Control' Of Sells Lift Station *continued*

laptop through the Internet from anywhere in the world. As a result of this innovative infrastructure, the utility authority will not only expect a reduction in their maintenance costs, fuel costs, and personnel time, they will also extend the life of the lift station.

"Working with IHS and EPA has been a great experience for the Tribe," said David Saddler, manager at the Tohono O'odham Utility Authority. "The [ARRA] funds enabled us to improve and enhance our physical plants. Without these funds, we would have been maintaining an old plant that had outlived its recommended useful life."

For more information, please visit:

www.epa.gov/cwisa

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