

FY 2024

Water and Wastewater Infrastructure: Grants to U.S. Territories and D.C.



Program Summary

The U.S. Environmental Protection Agency (EPA) supports public health and environmental protection in D.C. and the U.S. territories by helping communities develop and maintain their water infrastructure through funding, tools, training, and technical assistance. EPA allots a portion of the Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF) as grants to the District of Columbia (D.C.) and the U.S. territories of the U.S. Virgin Islands (USVI), Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (CNMI) for drinking water and wastewater infrastructure. EPA Regions award and manage these grants.

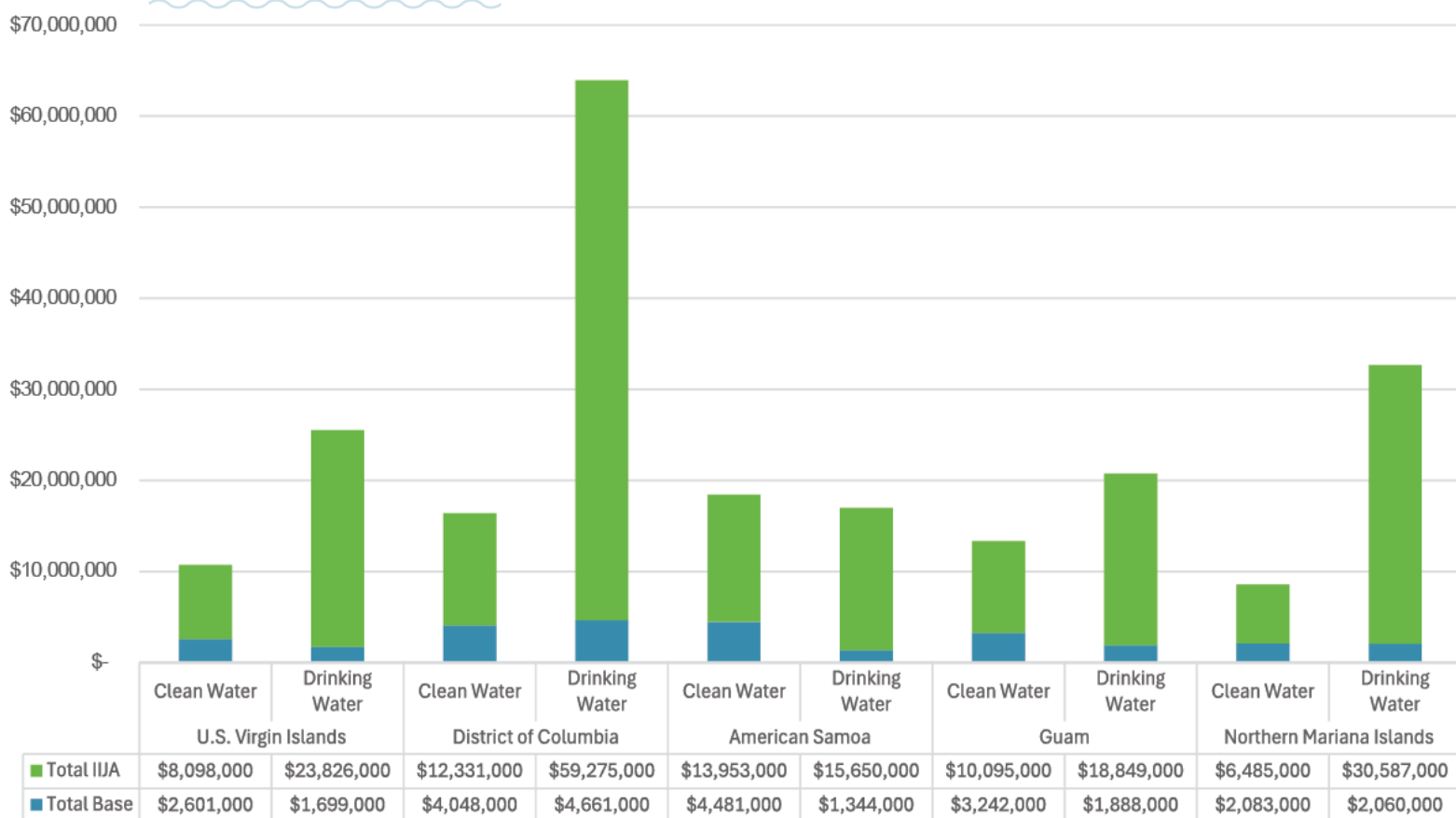
The Water and Wastewater Infrastructure Grants to Territories and D.C. program allows the U.S. territories and D.C. to improve compliance with the Safe Drinking Water Act and the Clean Water Act, provide safe drinking water, and protect human health and the environment. These resources fund wastewater and drinking water projects including those that address emerging contaminants, replace lead service lines, construct infrastructure, and develop watershed-based programs that improve the quality of D.C. and U.S. territories' water systems.

Funding Distribution Data

The grant program provides funds to the U.S. territories and D.C. from annual, or base, appropriations from the DWSRF and CWSRF funding programs, as well as the Infrastructure Investment and Jobs Act (IIJA). These funds support efforts to address both general infrastructure development and challenges from emerging contaminants.



Clean Water and Drinking Water State Revolving Funds 2024 Annual Base and IIJA Funds



U.S. Virgin Islands: Coakley Bay Condominium (EPA Region 2)

Coakley Bay Condominium is a community public water system (CPWS) located on the island of St. Croix. This small CPWS provides potable water to approximately 100 condominium units and a restaurant. The condominium's water supply consists mainly of rainwater collected from a roof catchment system and groundwater treated with reverse osmosis (RO) technology.

The project replaced the system's aging and undersized RO plant with a more updated and effective containerized RO plant. Additionally, new multi-media filters for pre-treatment of the groundwater source and an ultraviolet purification system for post treatment of the RO product water were installed. The new plant can produce up to 10,000 gallons of potable water daily to meet the potable water needs of this small community. The total project cost was \$366,964, and all work was completed in September 2024.



The newly installed reverse osmosis drinking water plant at Coakley Bay Condominium

Washington, D.C.: District of Columbia Water and Sewer Authority (DC Water) Blue Plains Gravity Thickeners Upgrades Project (EPA Region 3)

This project funded upgrades to the Blue Plains gravity thickeners at the District of Columbia Water and Sewer Authority (DC Water). These gravity thickeners are a crucial component of the sludge-handling facilities at the Blue Plains Advanced Wastewater Treatment Plant, which is the world's largest advanced treatment plant with a treatment capacity of 370 million gallons per day.

The project's primary goal was to ensure a consistent sludge feedstock for the gravity thickeners and to increase their overall capacity. This enhancement is necessary to accommodate the higher solids capture and loading resulting from recent upgrades to the primary sedimentation tanks. Additionally, the upgrade will reactivate Gravity Thickener Nos. 5 and 6, which have been out of service for several years. This will restore the gravity thickener process to its full capacity, leading to improved sludge processing efficiency, better reliability, and enhanced operation of these units. Ultimately, this will improve the water quality of the Potomac River, where treated effluent is discharged.

The Blue Plains plant serves parts of Maryland and Virginia, as well as D.C., and the jurisdictions share costs. DC Water was awarded \$13 million in EPA Wastewater Infrastructure Grant funds for its portion of the project. This funding contributed to the overall project cost, which exceeded \$57 million.



Newly constructed gravity thickeners at the Blue Plains water treatment plant

Guam: Guam Waterworks Authority (GWA) Pressure Zone Realignment Project (EPA Region 9)



One of the nine newly installed PRV's

The Pressure Zone Realignment Construction Phase I project is the first of five phases planned by the Guam Waterworks Authority (GWA) to install systems that will effectively regulate the potable water distribution system across various pressure zones. This will ensure reliable water delivery across the system.

Phase I involved work at nine Pressure Reducing Valve (PRV) sites: Ysengsong PRV, two Carnation PRVs, Marbo PRV, two Kaiser PRVs, Clara PRV, Okkodo PRV, Terao PRV, and Maimai PRV. Additionally, the project included upgrades to the Supervisory Control and Data Acquisition (SCADA) systems at two existing GWA water reservoirs, Yigo and Astumbo.

The work at these PRV sites entailed the installation of new PRVs, the replacement of old PRVs, and the setup of flow meters, vaults, piping, SCADA systems, and other necessary appurtenances. The total construction contract, including all change orders, amounted to over \$7 million. The construction project was completed at the end of 2024.

American Samoa: American Samoa Power Authority (ASPA) East Side Villages Wastewater Collection Project (EPA Region 9)



Construction underway on the wastewater collection project. The villages are located along Pago Pago harbor.

In January 2024, the American Samoa Power Authority (ASPA) completed the final phase of the East Side Villages Wastewater Collection System Project in American Samoa. This \$37.8 million project, funded by several grants starting in 2011, extended the wastewater collection system, providing municipal wastewater treatment to 456 homes from the villages of Atu'u to Onesosopo to improve water quality in local aquifers and marine ecosystems. This involved improvements to the Utulei wastewater treatment plant, including installing new pumps and rehabilitating a clarigester, upgrades to existing lift stations, installing new force mains, gravity mains and lift stations, and decommissioning cesspools and septic tanks. These investments expand the wastewater collection system, provide customers with first time wastewater service, and protect public health and reduce environmental contamination.

Commonwealth of the Northern Mariana Islands (CNMI): The Commonwealth Utilities Corporation's Wastewater Treatment Plant Clarifier Project (EPA Region 9)

The Commonwealth Utilities Corporation (CUC) Wastewater Treatment Plant in Sadog Tasi faced a significant challenge in 2018 when its clarifier failed after Typhoon Yutu impacted the island. To maintain the plant's operation, the dedicated operators creatively developed a clarifier-scraping plow and pump system using PVC piping to effectively remove sludge. For over two years, they manually maneuvered the scraper along the bottom of the clarifier twice a day, using ropes to direct the sludge toward the suction pipes. Thanks to their remarkable efforts, the facility consistently met compliance standards for the removal of solids and organic pollutants, but the extreme manual effort involved was unsustainable.

In response to this urgent need, EPA funded a project costing \$1.5 million through the agency's water and wastewater infrastructure programs to replace the clarifier. This project involved installing a new clarifier rake drive, control systems, supports, a catwalk, and a pre-weir clarifier baffle on the exterior side of the dual-sided weir, all aimed at reducing permit violations related to high solids. The project was successfully completed in December 2023.

The installation of the new clarifier significantly improved the safety of the treatment plant operators, benefited the surrounding community, and enhanced the overall environmental health of CNMI.



The newly-installed clarifier at the CUC Wastewater Treatment Plant



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