

EPA Region 10 SRF **WATERS** Awards



2024
WATERS

Well-Planned
Affordable
Transferable
Efficient
Resilient
Sustainable

2024 WATERS Award Winners

Alaska

- City of Bethel
- City of Kodiak
- Village of Unalakleet

Idaho

- City of Grand View

Oregon

- City of Estacada
- Bay Hills Water Association
- Scrael Hill Water Coop
- City of Canyon City

Washington

- NE Sammamish Sewer & Water District

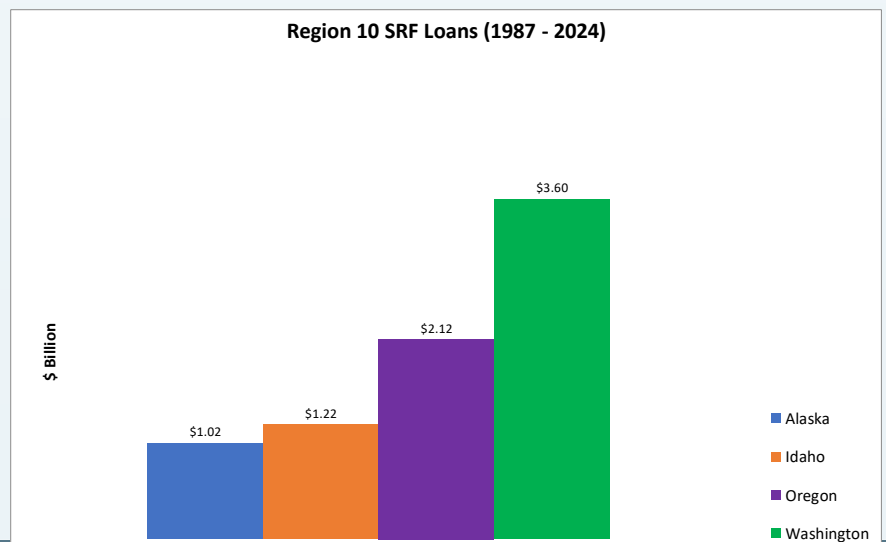
About The **WATERS** Awards

Recognizing the most innovative and effective CWSRF and DWSRF projects.

Since program inception in 1987, borrowers have tapped the State Revolving Fund (SRF) program to fund millions of dollars of projects that deliver vital environmental and public health benefits. Out of these projects, the EPA Region 10 WATERS award program seeks to recognize a few SRF projects that are exceptional. These projects are nominated by the state staff who implement the SRF program, and are projects that help communities attain goals or requirements under the Clean Water Act or Safe Drinking Water Act, as well as achieve one or more elements of the **WATERS** program. Those elements include projects that: are **Well-planned**, **Affordable**, include innovative ideas or technology that is **Transferable** to other communities, provide benefits for water or energy **Efficiency**, or help make the community more **Resilient** or **Sustainable**.

About the Region 10 SRF Program

Over the past 37 years, the Region 10 SRF program has been capitalized at a total of \$3.8 billion. To date, using those funds, along with state match, repayments and interest earnings, Region 10 states have provided more than \$8.1 billion in SRF loans for 3,276 projects.





City of Bethel, Preliminary Engineering Report to Increase Sanitation and Public Health

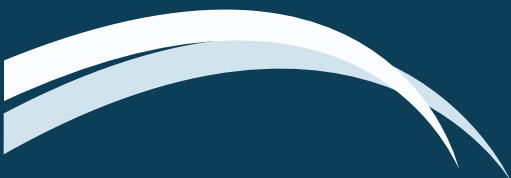
The City of Bethel, located on the Kuskokwim River and approximately 410 miles from the City of Anchorage, is the largest community in western Alaska. With a population of 6,325 people, many of whom have no access to piped water or wastewater service, the community initiated a preliminary engineering report (PER) project to develop several alternative project options to increase sanitation and public health, while reducing City maintenance costs. The report evaluated many project alternatives, including a no-build plan (maintain haul services), an upgrade scenario for current treatment plant infrastructure, new water and wastewater treatment systems, and various other combinations for different areas around the City. The project falls into the Well-Planned category under WATERS as a result of the project initiating design work to provide more reliable potable water in conformance with the SDWA, which is significant since there are a number of contaminated sites near unpiped residential areas. As for wastewater, currently the City is served by two wastewater lagoons and the PER has helped plan for possible active wastewater treatment via modular systems in order to better comply with the CWA. The project also qualified for consideration under the WATERS Affordability category due to the significant amount of subsidy being provided.

Funding for the PER was provided by the Alaska SRF under the Sustainable Infrastructure Planning Project (SIPP) loan program, with funding split evenly between the CWSRF and DWSRF. Two loans were issued for the amount of \$86,893 each with \$75,000 in principal forgiveness from the CWSRF and the DWSRF; \$173,786 in total with \$150,000 in principal forgiveness.

City of Kodiak, Contact Time Tank Improvements Project

The City of Kodiak is located on the second largest island in the United States and has a population of 5,581 people. The project involves rehabilitating and repainting two 2.2-million-gallon welded steel water storage tanks. The project also replaced baffles within the tanks as well as safety poles and gratings on the tanks. The tanks are utilized to provide the required chlorine contact time for disinfection of public drinking water to meet SDWA requirements. The SRF provided \$2,730,000 in funding for the project with \$500,000 in principal forgiveness. This project meets the Sustainable criteria for the WATERS award because instead of replacing the tanks, which would consume a large amount of material resources, the design opted to rehabilitate the existing tanks with minor repairs and a new coat of paint. **“Clean water is a basic requirement for life, not only on a personal level but on a community level. Access to clean water directly supports health, educational, economic and safety issues that are required for a robust and thriving community,”** said Sterling Lewis, Public Works Director, City of Kodiak.

Before and after photos of the CT tanks



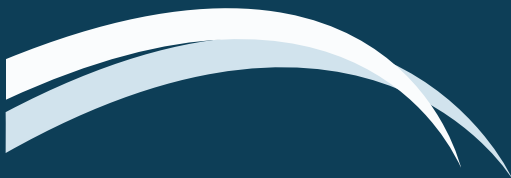


Existing Covenant Lift Station—photo credit CRW.

Village of Unalakleet, Covenant Life Station Rehabilitation and Septic Pumper Purchase

The village of Unalakleet, located approximately 400 miles northwest of Anchorage, has a population of 765 people. The Covenant lift station is over 45 years old, and is in need of replacement. In addition to the aging lift station, there are freeze ups and back ups throughout town which currently have to be fixed by hand. This loan was used for the design of a replacement lift station as well as the purchase of a pumper truck. The pumper truck is a much-needed addition to the community to allow freeze ups and backups to be fixed in a safe and efficient manner, thereby adding resiliency to the city's utility at an affordable cost.

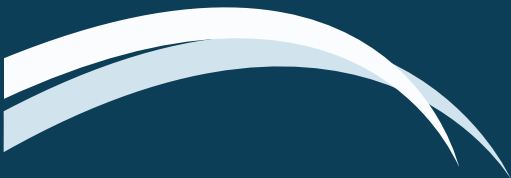
Funding for the Covenant Lift Station Rehabilitation and Septic Pumper Purchase was provided by the Alaska CWSRF under their SRF Microloan program. The SRF loaned Unalakleet \$488,620 with \$342,034 in principal forgiveness from the CWSRF, meaning that only \$146,586 (30%) will have to be repaid. The Microloan program provides highly subsidized loans meant for rural Alaskan communities that have not traditionally worked with the SRF program.



City of Grand View, Wastewater Treatment Plant Improvements Project

The City of Grand View will use a CWSRF loan in the amount of \$945,648 to construct wastewater treatment improvements, including a total containment lagoon, optimizing cell #1, relining cell #2, dike and flood resiliency improvements, and collection system and lift main improvements. The terms of the loan, 1.5% for 30 years, will save this community significant finance charges over the life of the loan, compared to private sector financing rates. This project is receiving a WATERS award due to the project increasing the plant's energy efficiency as well as making the community more resilient.

Photo shows lagoon prior to project



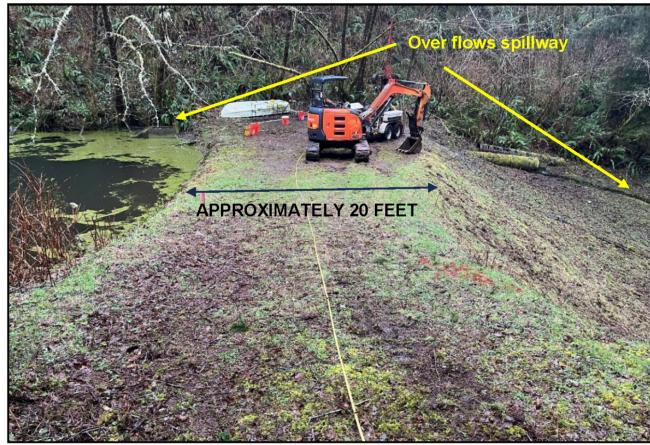


Aerial view of current wastewater treatment plant

City of Estacada, Wastewater Improvements

A \$3.55M CWSRF loan will be used to fund the design and construction of an expanded and upgraded wastewater treatment facility on a new site approximately 2 miles north of the current treatment facility and modify the collection system pumping stations to deliver waste to the new site. The loan will also be used to fund the construction of the new facility, relocate the surface water outfall, install new gravity trunk sewer and associated collection system improvements to improve effluent quality and to ensure compliance with NPDES permit requirements, and provide capacity to serve anticipated growth in the City of Estacada with the ability to expand in the future as needed beyond the projected 20-year growth. This project is receiving a WATERS award because it will deliver energy efficiency benefits by using premium efficiency motors that will operate at efficiency levels of 3-6% higher than standard motors. In addition the project will provide resilience and sustainability by using an advance MBR (Membrane Bioreactor) treatment process that will exceed all current and anticipated future water quality standards and ensure long-term environmental benefits. The terms of the loan, 30 years at 2.95% interest, with \$500,000 of principal forgiveness, make this project more affordable for ratepayers. **"The SRF funding for the City of Estacada's new wastewater treatment plant build signifies a crucial step in addressing the pressing need to replace our 1963 plant. This aging infrastructure is unable to meet our NPDES permit requirements and is under an MAO with DEQ. This funding ensures a sustainable solution for addressing immediate concerns for water quality and building a new facility able to foster economic growth,"** said Assistant City Manager, Elaina Turpin.

The existing conditions of the site



Bay Hills Water Association, SIPP Feasibility Study

Bay Hills Water Association (BHWA) is a privately owned and operated water association, with 19 connections and serves approximately 34 persons. This small residential community is located outside the City of Newport, in Lincoln County, Oregon. BHWA relies on two springs that feed an unnamed creek as its only drinking water supply source; the unnamed creek was dammed to create the raw water reservoir in 1964. The reservoir is comprised of an earthen dam which is showing visual signs of weakness; leaks are prevalent around the raw water overflow area of the dam and if the ground were to become extremely saturated, these leaks could potentially act as a lubricant of the slip plane, potentially causing the dam to fail.

The November 2020 Water System Feasibility Study stated “Earthen dams are susceptible to failure during or after earthquakes. The community should have a geotechnical engineer evaluate the dam to determine what their options are with regard to reinforcing it.” Since then, the dam has continued to leak/seep in a manner that appears to be increasing over time. Bay Hills Water Association was concerned that the dam may fail on its own or during a seismic event due to the continued seepage.

Bay Hills Water Association applied for and secured a Sustainable Infrastructure Planning Project (SIPP) award through the Oregon Safe Drinking Water Revolving Loan Fund (SDWRLF) program. SIPPs support water system planning efforts with forgivable loan funding up to \$20,000. The BHWA SIPP feasibility study completed an assessment of the dam to analyze the following:

1. Engineering evaluation of reservoir with focused structural analysis of earthen dam pertaining to the seeps in dam face and the potential for mitigating against failure during seismic activity.
2. Identification of various mitigation alternatives to remedy the earthen dam’s issues.
3. Cost estimate of alternatives, and selection of the most feasible, and seismically sustainable alternative.

Loan amount: \$20,000; **Loan terms:** 100% subsidy

The project is receiving a WATERS award because it meets the following criteria:

Well-planned: The BHWA followed the recommendation in the Water System Feasibility Study to examine the risks of the earthen dam and analyze alternatives solutions.

Affordability: The water system received a 100% forgivable loan for the feasibility study.

Resiliency: A major concern of the community is vulnerability during a seismic event and the water system took pro-active steps to determine options to mitigate this risk.



Canyon City, Water System Improvements

The Canyon City water system relies on a 1930's spring line, a 1930's storage facility, and aging concrete reservoirs. In addition, the city needed to add an infiltration system to the water system to comply with Oregon Health Authority regulations. Canyon City is in Grant County, Oregon; it has 321 connections serving a population of 705 people based on the 2020 census data. The city is considered both rural and distressed.

The project scope includes design and construction of water system improvements identified in the Water Master Plan. The Master Plan named four priorities to upgrade the City's current water delivery system:

1. Install Infiltration System for the Byram Gulch Springs, which were determined to be under the influence of surface water and per regulations must be filtered.
2. Replace Reservoirs #1 & #2, both reservoirs are leaking, and #2 leaks are severe enough it has been taken offline. With Reservoir #2 offline, the city's storage capacity is below levels needed for domestic use and fire protection.
3. Replace Existing Steel Supply Line from Byram Gulch Springs. The line has had some failures and is in an area that is difficult to access. After the 2015 Canyon Creek Wildfire, most of the hillside where the line is installed has burned and is now vulnerable to falling trees and landslides.
4. Repair and upgrade the city's well and booster station, providing back-up power, and replace aging service meters.

This project helps implement the following goals and objectives of the Safe Drinking Water Revolving Loan Fund: to provide public water systems financing for planning, design, and construction projects that protect public health, ensure compliance with federal and state requirements, respond to an emergency, or generally improve water infrastructure resiliency. Canyon City secured a loan from the Safe Drinking Water Revolving Loan Fund (SDWRLF) with the following terms:

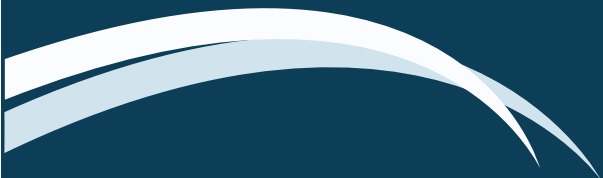
SDWRLF loan: \$2,231,750 loan, 30-year term at a 1% interest rate plus \$680,000 in forgivable loan

The project is receiving a WATERS award because it meets the following criteria:

Well-planned: Canyon City is implementing priorities outlined in its recently completed Water Master Plan.

Affordability: The water system is receiving significant subsidy from the DWSRF. .

Resiliency: In addition to bringing the city into compliance with the installation of an infiltration system, the project addresses leaks, storage capacity issues, and includes wildfire recovery measures to increase resiliency.





Scravel Hill Water Cooperative, Capital Improvements Project

Scravel Hill Water Cooperative is located outside Albany City Limits, in Linn County, Oregon and has 105 connections serving approximately 300 people. Scravel Hill Water Cooperative's water system components are 50+ years old and failing. The system faces continuous disruptions in service from lines breaking and/or leaking. The supply and distribution lines are asbestos concrete piping which is difficult to repair when broken. The Sunset Drive reservoir is 100,000 gallons, and at peak demand has storage for one day. Back-up emergency power generators are needed to ensure a continuous supply of clean water to co-op members during emergency power outages. Replacement of some sections of asbestos concrete pipe supply line with new PVC or HDPE waterline is needed, as well as some replacements of older PVC distribution waterline piping and connections to houses.

The project includes design and construction of the following improvements:

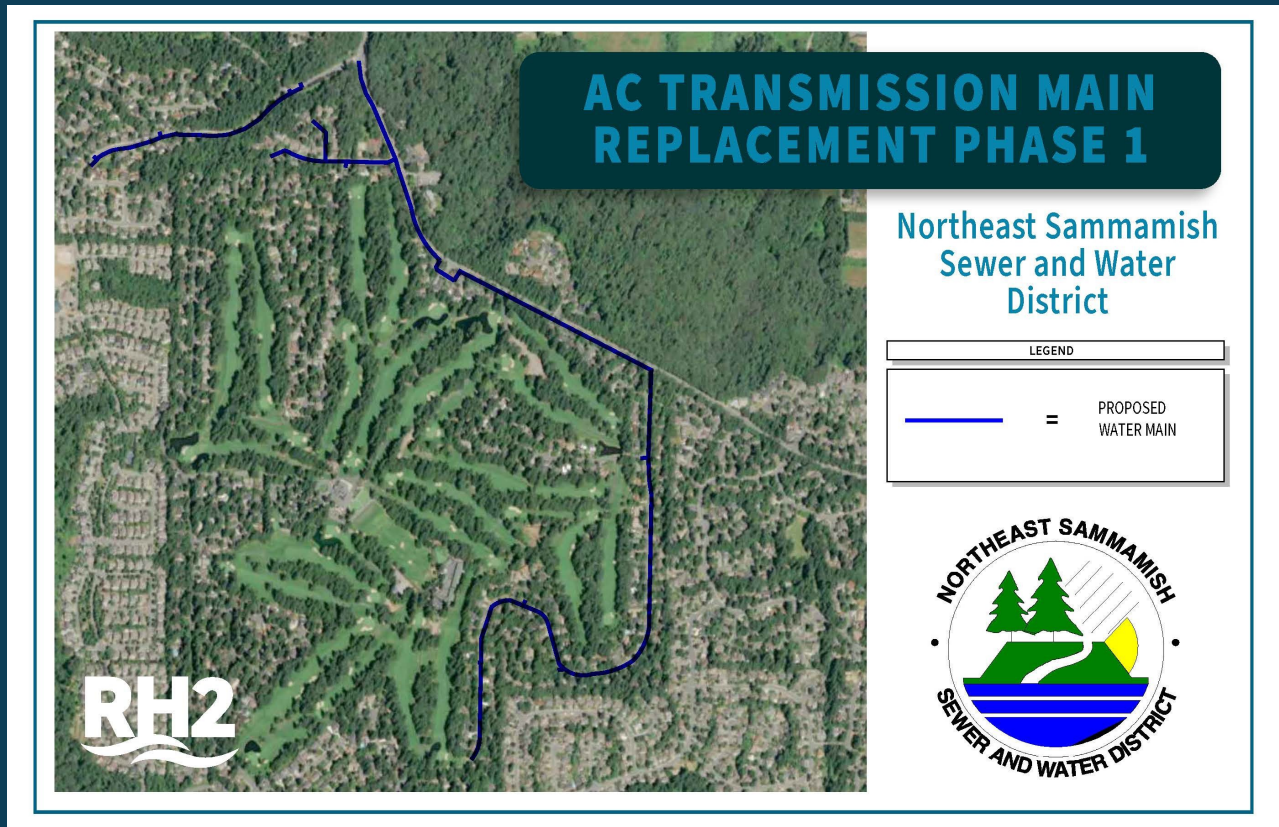
- Purchase and install 12 kilowatt, 230 volts, 3 phase, skid mounted, natural gas backup power generators, with enclosure and auto transfer switch for three pumping sites;
- Replace half of the asbestos concrete pipe supply line from the mid-level water tank to the upper-level water tank with new PVC or HDPE waterline;
- Replace half of the older PVC distribution waterline piping and connections from the mid-level water tank to the upper-level water tank with new PVC or HDPE waterlines;

The project meets the following WATERS criteria:

Affordability: The water system maximized forgivable loan available for the project.

Resiliency: The project addresses leaks, improves system structure to ease repairs, and facilitates consistent supply of water to the community.

This project helps implement the following goals and objectives of the Safe Drinking Water Revolving Loan Fund: to provide public water systems financing for planning, design, and construction projects that protect public health, ensure compliance with federal and state requirements, respond to an emergency, or generally improve water infrastructure resiliency. The loan was awarded with the interest rate of 2.68% for 30 years with Principal Forgiveness totaling \$280,000.



Northeast Sammamish Sewer & Water District, AC Transmission Main Replacement Phase 1

The utility is designing the replacement for the existing asbestos concrete (AC) transmission main which began leaching asbestos in 2018. As AC pipe weakens, it is more susceptible to earthquake damage. Eighty percent of the transmission main has been replaced since 2013. This project designs Phase 1 to replace 11,000 feet of transmission main.

The project will bring the water system into compliance with the SDWA asbestos regulations. The water system has been well managed for 55 years with capital reserves available to aid in construction of the transmission main that serves 70 percent of the water system service area. Replacing aging AC pipe with ductile iron pipe will increase the water system's resiliency against land movement due to earthquakes. The water system serves 8516 people and 3360 connections.

The Planning and Engineering Loan (P&E) awarded was \$500,000 at zero percent interest for 10 years with a 2 percent loan fee that is rolled into the loan for a total loan of \$510,000. This allowed the District to be shovel-ready and obtain a low interest construction loan of \$5,000,000. This reduces rate impacts to customers while funding a needed project.