WFX
WATER FINANCE EXCHANGE
NO COMMUNITY LEFT BEHIND

# COMMUNITY PROFILE

## Water Reuse in Northern Idaho

### Santa-Fernwood Water and Sewer District

### BY THE NUMBERS

**$7.5M**
Total project cost

**100%**
Project costs that were grant funded

**2nd**
Idaho's rank for population growth in 2022

**43%**
Projected increase in average daily sewer flow by 2041

**13.5%**
Poverty rate in the district

**$49,275**
Median income in the district

Northern Idaho is well known for its pristine natural amenities that draw millions of people to the state each year. Among those amenities, Lake Coeur d'Alene is among the most popular. Lake Coeur d'Alene is the homeland of the Coeur d'Alene tribe and an economic catalyst for the region. About fifty miles southeast of the lake's southern shore, the small, rural communities of Fernwood and Santa are taking significant and innovative steps in making sure Lake Coeur d'Alene stays healthy and blue. The Santa Fernwood Water and Sewer Districts are advancing a regional approach and collaboration between the two communities implement more sustainable infrastructure solutions.

The Santa-Fernwood Water and Sewer District is pursuing a water reuse project that would reduce the amount of nutrients flowing into Lake Coeur d'Alene while providing the community with water suitable for a silviculture (forest management) application. Water Finance Exchange (WFX) worked closely with the district, the Idaho Department of Environmental Quality, and the Environmental Protection Agency (EPA) Water Reuse Action Plan 8.5 to make it happen.

#### The Need

The Santa-Fernwood Water and Sewer District lies on the banks of the St. Maries River, which flows into Lake Coeur d'Alene after meeting with the St. Joe River. The significant role the lake plays in the tourism economy and as home to the Coeur d'Alene tribe in the state emphasizes the need to maintain the health of the lake and its watershed. This is particularly true as the state sees significant population growth. Idaho has been among the fastest growing states in the country for much of the past decade.

Lake Coeur d'Alene has significant pollution concerns already, primarily due to the history of mining in the region. Although the communities of Santa and Fernwood are small, community leaders recognized their impactful place in the watershed and wanted to take steps that would help the district avoid contributing to that pollution. However, the district is small and its customers have relatively low income levels, which made the $7.5 million reuse project unaffordable to the Santa Fernwood region.

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### The Process

The proactive leaders of the Santa-Fernwood Water and Sewer District attended a webinar on the EPA's Water Reuse Action Plan and reached out to the agency seeking assistance on the development and planning for their water reuse project. The district had a water treatment plant that was discharging into the St. Maries River, but in order for the water to be suitable for reuse for a silvicultural project, they had to further improve the quality of the water leaving the treatment plant.

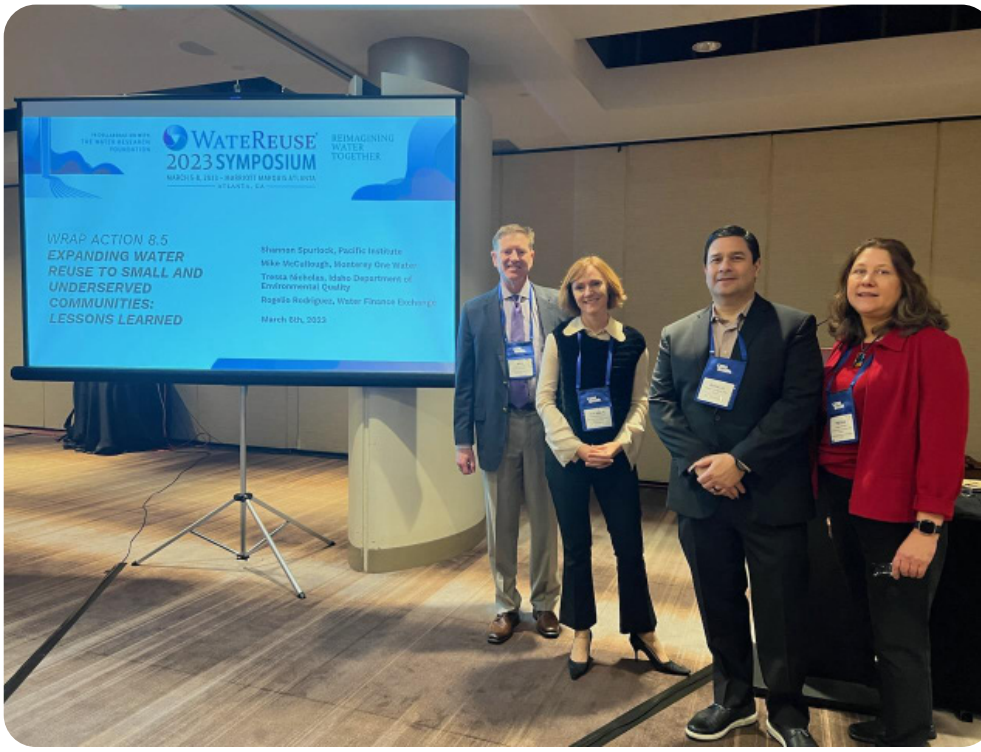
EPA reached out to WFX as it was putting together a technical assistance team to help the district submit the project for funding. After surveying the funding and financing landscape for the project, WFX completed a rate impact analysis to analyze how water and wastewater rates would change if the district funded a portion of the project. That rate analysis estimated the project would require significant rate increases, even if 50 percent of the project was funded through a grant. WFX also provided a suite of alternatives, including scaling down the project, identifying other financing partners, and seeking alternative revenue streams.

Despite challenges in finding an affordable path forward for customers, WFX and the engineering team recommended the district apply to funds through the State Revolving Fund to keep the project alive and in front of state agencies. Meanwhile, WFX maintained communication with the Idaho Department of Environmental Quality (IDEQ) and the system engineer, making the case that this project would not only benefit the communities of Santa and Fernwood, but all downstream users, including Lake Coeur d'Alene.

### The Outcome

WFX's persistence paid off. When the state legislature asked IDEQ for a list of water infrastructure projects to fund using $36 million available in the state budget, the Santa-Fernwood Water and Sewer District's water reuse project made the short list. The state allocated funding for the full $7.5 million project cost, with construction estimated to begin  to begin in late 2023.

WFX is establishing itself as a partner and technical assistance provider for communities interested in water reuse. Rogelio Rodriquez, Director of the Texas Infrastructure Fund at WFX, who assisted in the Santa-Fernwood project, was invited to speak on a panel at the WateReuse Symposium in Atlanta alongside representatives from EPA, IDEQ and Monterrey One Water to detail the lessons learned in implementing water reuse projects in smaller disadvantaged communities. A central theme in the lessons learned is water reuse projects can be decentralized and for specific use such as a golf course, parks, or baseball fields. In addition to environmental challenges such as drought and impaired water quality, many water systems are exploring reuse to deliver more water to their service area at a lower cost to their customers, and federal agencies are interested in implementing more reuse projects across the country.




*Rogelio Rodriguez joins Shannon Spurlock (Pacific Institute), Mike McCullough (Monterey One Water), and Tressa Nichols (IDEQ) to discuss the Santa-Fernwood reuse project at the WateReuse Symposium in Atlanta.*

Learn more about water reuse and how WFX can assist in implementing projects here.