Modernizing Idaho's Water Infrastructure

An Ongoing Story Series on the Idaho Water Resource Board's Aging Infrastructure Grant Program Issue No. 8

# Hayden Lake Irrigation District

***Project description:*** Hayden Lake Irrigation District received a $1.72 million Aging Infrastructure Grant from the Idaho Water Resource Board to replace its aging transmission main line in the heart of its service area.

The District serves about 10,000 residential and irrigation customers.

Most of the transmission main was 24-inch and 27-inch reinforced concrete-lined and coated steel cylinder pipe installed in the 1950s and 1960s. Some of the concrete pipe was installed by the U.S. Bureau of Reclamation to address deteriorating wooden transmission mains. The transmission mains were primarily installed along the backlot of residential property lines.

The old pipeline has reached the end of its expected service life. "They're 70 years old, and we're getting some leaks because of the old pipe," said Brandon Rose, Hayden Lake District Administrator.

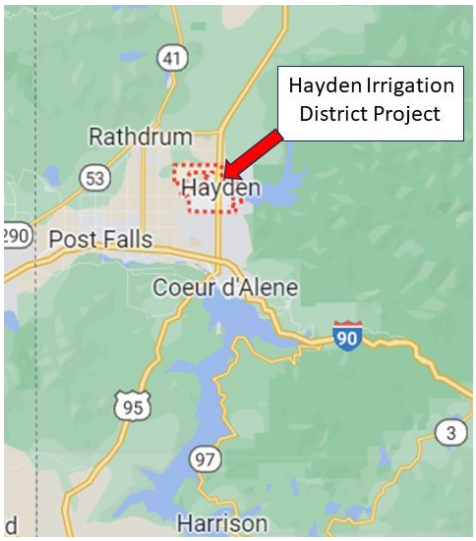
This project will relocate the existing transmission main into the public right of way. The project also will construct waterlines to improve system looping, water pressure, and reliability.

*New water main being installed in Hayden, Idaho. (Photo courtesy Hayden Lake Irrigation District)*

In total, the project includes 2.5 miles of pipeline, which has an estimated project cost of $6.18 million. This project is a primary focus for the Hayden Lake Irrigation District to reduce structure flooding risk and improve system reliability by replacing aging infrastructure.

Phase 1 is currently under way, featuring the installation of 3,300 linear feet of new

- ***Type of project:*** New water mainline
- ***Location:*** Hayden, Idaho
- ***Total project cost:*** $6.18M
- ***AIG:*** $1.72 million
- ***Local cost-share:*** TBD
- ***Other funding partners:*** Hayden Lake Irrigation District
- ***Start date:*** October 2023
- ***End date:*** 2025



# Hayden Lake Irrigation District (cont.)

water pipeline. It is projected to be completed by February 2024. Phase II and Phase III are planned for 2024 and 2025. Phases III and IV are being developed in a partnership with the City of Hayden and the Hayden Area Regional Sewer Board. The multi-agency project minimizes cost to all entities involved for all phases from design through construction.

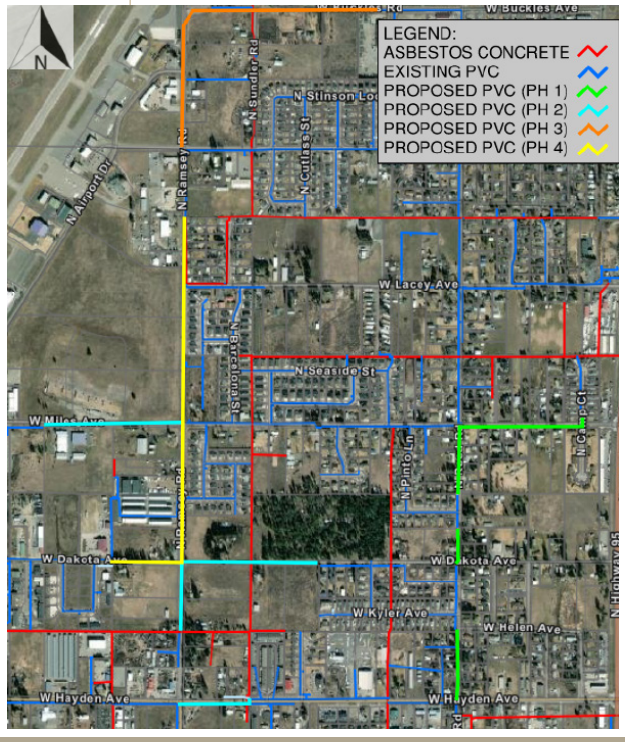
"The project approach provides the highest value to the citizens while reducing impacts during construction," Rose said.

***Project Benefits:*** All transmission pipe replacement in these projects will utilize PVC pipe material. Pipelines are sized according to the Hayden Lake Irrigation District Water System Facility Plan in 2019 as 18-inch, 12-inch and 10-inch-diameter pipe. Existing services will be reconnected to the new watermain location. The main benefits of these projects are improved water service reliability, water quality improvements, increase public safety, and improving the water supply stability.

Another major benefit of the project is relocating the main line to the public right of way. Property owners have built sheds, fences and planted trees over the top of their large diameter transmission main. The location of the old main line poses growing operation and maintenance concerns due to limited access, infrastructure approaching the service life and flood risks.

"If a break were to occur, it could cause significant damage to structures due to the current location of the large diameter and location of the main line," Rose said.

*Above, main line installation. Below, red line on map shows the location of new water main being installed in Hayden. (Courtesy Hayden Lake I.D.)*




For more information, contact the Hayden Lake Irrigation District at 208-772-2612 or go to: haydenirrigation.com.