



Modernizing Idaho's Water Infrastructure

An Ongoing Story Series on the Idaho Water Resource Board's Aging Infrastructure Grant Program ISSUE No. 10

North Side Pumping Co. pipeline project

Project description:

North Side Pumping Co. provides irrigation water to 30 producers who raise crops on 4,790 acres of agricultural lands near Hazelton, Idaho. North Side has natural flow and storage water rights provided by Bureau of Reclamation projects on the Snake River. Irrigation water is delivered for about 200 days each season for raising

primarily alfalfa, corn, grains, sugar beets and potatoes.

North Side Pumping shareholders pursued a \$4.1 million irrigation efficiency project to replace an antiquated delivery system, which dates to the early 1900's. The project will reduce water losses to improve drought resiliency, improve energy efficiency, and phase out the outdated pumps and open ditch delivery system.

North Side is financing its project with an Idaho Water Resource Board (IWRB) Aging Infrastructure Grant, Bureau of Reclamation WaterSmart grant and IWRB loan to modernize its irrigation system.

A series of strategically located smallscale pump stations and pipelines



Concrete foundations for irrigation pumps are set in place along an open canal. New irrigation pipe is staged and ready for burial. (photo by Steve Stuebner)

- Type of project:
 Irrigation efficiency conversion from open
 ditch to enclosed pipeline
- Location: Hazelton
- Total project cost: 4.1 million
- AIG: \$951,800
- BOR WaterSmart grant: \$2M
- Local cost-share: \$213,588
- **Start date:** November 2023
- End date: April 2024

throughout the distribution area will allow North Side to eliminate 14.5 miles of irrigation laterals and decommission two pumping plants.

The project will require 25-30 small-scale pump stations, ranging in size from 5-150 horsepower and 86,000 linear feet (16.3 miles) of PVC pipeline, ranging in diameter from 2 inches to 15 inches.

The small-scale pump stations will be installed off of new water delivery headgates on the portions of the open channel irrigation laterals that will remain active in the project area. These laterals are owned and operated by the North Side Canal Company, a sister company to North Side Pumping Co.

Project benefits: The North Side Pumping project will result in an annual water savings of approximately 6,286 acre-feet. The water saved will have a direct benefit to water users and other public interests as it will remain in storage, making it available for use during drought years.

When combined with both past and proposed future water efficiency projects on the Snake River, these



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North Side Pumping pipeline project (cont.)

projects will improve drought resiliency for the overall irrigation storage system in Southern and Eastern Idaho. Water supplies are showing evidence of becoming less reliable over time, making this type of project critical for the long term continued success of agriculture in Southern Idaho and the associated economic benefits.

Water savings also will benefit fish and wildlife, recreation, hydropower, and water supply stability and sustainability, officials said.

By replacing the large-scale pumping plants with small-scale variable frequency drive pumps, North Side Pumping will have an improved ability to manage their overall irrigation delivery system. Previously, the old system required water managers run excess water flows in irrigation laterals to ensure that the most downstream water user has sufficient water to meet current irrigation needs. Water managers also kept excess water in laterals to account for significant water losses from seepage.

The variable frequency drive pumps, combined with in-pipe flow meters for each landowner, will create an irrigation system that can quickly and efficiently adjust water delivery rates based on actual irrigation demand.

North Side Pumping previously completed a similar irrigation efficiency project with a BOR WaterSmart grant, leading to the abandonement of 20.5 miles of irrigation laterals. That project saved 9,150 acre-feet of water seepage



Project map shows the location of new pipelines serving 30 farm producers near Hazelton on the north and south sides of I-84. (Map courtesy North Side Pumping)



Construction contractors are busy with trenching work to install 16.3 miles of pipelines as part of the new irrigation efficiency system by April 2024.

losses in the canals.

The next phase will involve the future abandonment 13.6 miles of irrigation

laterals. For more information, contact Parley Hinton at pbh@northsidecanal.com