

Naches-Selah Irrigation District

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Final Report: SCADA/Canal Automation, Phase 2

Project: SCADA/Canal Automation, Phase 2
Grant Agreement No.: No. 1
Date: July 14, 2008
Reporting Period: January 10, 2008 to June 30, 2008
District: Naches-Selah Irrigation District
Prepared By: Justin Harter, District Manager

Project Description:

NSID received this grant toward further development of the SCADA telemetry and automation of the District main canal and laterals. Three automated gates were added to the existing SCADA system to provide control and regulation of the last 6 mile portion of the main canal and first mile of the No. 1 Lateral

Goals and Objectives Accomplished

Rubicon Systems FlumeGates were selected from the competitive bids received.

By late January, District crews began preparing the three structures where the automated gates were to be installed. Concrete structures were poured by the end of February.

The three gates were received March 24. All gates were installed by April 1 prior to priming of the canals. The Rubicon technician commissioned the gates the first days of April. The gates were operated in local control to automatically maintain canal levels at the gates.

The radios for each gate were installed by May 2. The Rubicon technician returned to bring all gates online with the SCADA system the following week. There was a delay in the delivery of the walkways for the gates. Walkways were installed in June.

The gates have been performing as expected. The District has benefited from increased control of the canals. The gates provide level and flow measurements at each site. This information along with other SCADA sensors provide real time system conditions. This information is used for operational decision support. The gates are controlled remotely for faster response without the need of traveling to multiple sites to regulate these sections of canals.

Costs

Total project came in under budget. Largest savings was on the estimated equipment costs.

Summary

Phase 2 increased the miles of canal operating under the SCADA system. The increased control and condition awareness supports better regulation of the system. The goals of Phase 2 have been achieved.





No. 2 Gate Check Structure – looking from downstream



Burton Gate (Mile 14.4) – looking from upstream



No. 1 Gate, start of the No. 1 Lateral – looking from upstream



No. 2 Gate – looking from downstream

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