FACTSHEET

Weiser River SCD
Soil Conservation District

Weiser Irrigation Automated Head Gate Project

The purpose of the project was to install several automated head gates and measuring devises along streams that directly affect the pollutant loads of both the Weiser and Snake Rivers. Ultimately, this project will reduce pollutant loads for phosphorus, sediment and nitrates identified in loads within the Brownlee Weiser Flat, Weiser River and Snake River Hells Canyon TMDL's. Automation and measurement will allow more precise computation of water quantity that will be diverted from the Weiser River. There will be more accurate accounting of consumption and an elimination of excess water in the irrigation delivery and return drain system. These practices will reduce the amount of pollutant loads going into the Weiser and Snake Rivers.

The project will include automation and measurement to conserve water and insure delivery. Current diversions from the Weiser River into the Galloway Canal are made by installing flashboard across the top of the Galloway diversion dam to increase the depth of the pool behind the dam. Automated head gates at these diversion dams will regulate the flows of the diverted water; assuring that only the amount actually needed will flow into the canal, with the unused amount allowed to stay in the river, maintaining flows in reaches that are often dewatered during summer months, and allowing more precise computation of that will be diverted. The same with Monroe Creek, Warm Springs and Jenkins Creek measuring devices will be installed near the inflows into the Weiser River that can quantify the actual use of unregulated water upstream. This will be a more accurate accounting of water consumption from the Weiser River and will nearly eliminate excess water in the irrigation delivery and return drain system, thereby reducing the amount of pollutant loads going into the Snake River Hells Canyon complex.

The automated head gates can be controlled automatically, remotely from the office, remotely from the computers in the ditch company's vehicles, and the flow levels are reported back to the office. All of this automation is powered with solar power and batteries for back up.


BEFORE installing the automated head gates


AFTER installing the screw jacks and hooking up the power pox.

TOTAL LOAD REDUCTION ESTIMATES FOR THE ENTIRE PROJECT:
TSS= 2057 tons per year
TP= 8.1 tons per year
TN= 20.5 tons per year
(calculated by Darcy Sharp of IDEQ, using Kirk Campbell's monitoring data of ISDA)

The sediment and the nutrients will be reduced because of the reduction of irrigation return flows to the Weiser River from Monroe Creek, and the Snake River from Jenkins Creek, Warm Springs Creek, and Galloway Canal. There will be an increase in the efficiency of the irrigation delivery operation with the installation of the automated head gates because there will not be excess, non-used irrigation water flowing through the irrigation system.

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