



Outlet Canal Automation Phase II Project

North Sterling Irrigation District
Substantially Complete July 1, 2021



A sensor on a lateral ditch Parshall Flume that can report the flow rate into the ditch (left) and an automated headgate that will receive data from the sensor and adjust the gate to a predetermined flow rate (right)

Project Description

The North Sterling Irrigation District was created in 1907 by the Board of County Commissioners and currently serves 122 landowners with more than 40,000 acres east of the North Sterling Reservoir. Following on the successful Phase I which installed 25 automated on-farm headgates, this project automated 42 additional headgates. Automation included solar power, a controller, an actuator to operate the headgate, a radar sensor at each Parshall flume, and telemetry for data access and remote control. This new equipment saves time, labor, and water, and may reduce the size of the regulating reservoir in the future. Installation began in the early spring and was nearly all complete by the time water was turned into the Outlet Canal in April.

| P R O J E C T D A T A | | |
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| <i>Sponsor:</i> North Sterling Irrigation District | <i>County:</i> Logan | <i>Water Source:</i> South Platte River |
| <i>Type of Project:</i> Ditch Systems Improvement | | <i>Board Approval Date:</i> January 2021 |
| <i>Loan Terms: (Original)</i> \$395,920 @ 0.90% <i>(Final)</i> \$395,920 @ 0.90% | | |
| <i>Design Engineer:</i> Hydrologic Consultants, Inc | | |
| <i>Contractor:</i> Hydrologic Consultants, Inc | | |