



Meeker-Driftwood Canal SCADA and TCC Modernization Project

Frenchman Cambridge Irrigation District has completed the automation of the Meeker-Driftwood Canal system. This project has modernized 33.7 miles of Meeker-Driftwood Canal and 5.6 miles of Meeker- Driftwood West sub-canal by installing a precision flow management system. The check structures on the canals have been fitted with FlumeGates. These structures are now managed by a central SCADA system that precisely coordinate supplied flows to match demand in the canal. Rubicon's Total Channel Control (TCC) software monitors water delivery by continually writing flow setpoints to each check structure to precisely match all water deliveries, including farm water deliveries, seepage and or groundwater recharge and wasteway spills. The Total Channel Control (TCC) solution utilizes a combination of feed-forward and feed-back control to precisely match downstream water requirements. Reservoir releases can now be made to precisely match the downstream irrigation demand.

On the Meeker-Driftwood main Canal and Driftwood West sub-canal; a total of 51 Flumegates have been installed on 39 check structures, 3 SlipMeters have been installed on two check structures and one Flowlink observation station installed. A total of 8 wasteways are now monitored and during a rain event if water needs to be evacuated from the canal that discharge can be accurately measured and reported. All sites have real-time telemetry that utilizes a 200 Mhz Radio network that constantly updates a central SCADA system.

2021 was a challenging year with Covid-19 and supply chain issues, however, Frenchman Cambridge had nearly 80% of the project completed in 2021. All of the construction and modifications to the check structures was completed in 2021. We experienced delays with some of the radio components so the TCC tuning did not occur until the 2022 irrigation Season.

With the completion of the Meeker-Driftwood Canal SCADA and TCC Modernization Project, Frenchman Cambridge Irrigation District now has two Canal systems and part of the Bartley Canal below our recently built pump station automated. In Total 83% of our 45,669 acres are now under TCC control.