Park Ditch Parshall Flumes

Final Report

The installation of the parshall flumes on the Park Ditch measure and monitor the amount of water taken out of the ditch on property owned jointly by the Pagosa Area Water & Sanitation District ("PAWSD") and San Juan Water Conservancy District ("SJWCD") as originally planned in the grant request. The first parshall allows the Park Ditch Company, PAWSD, and SJWCD to measure water as it enters the property, often referred to as the Dry Gulch area. The second parshall allows the entities to measure water as it exits PAWSD/SJWCD property, which is beneficial to all downstream ditch shareholders as it ensures they are receiving their allocated water. The parshalls also help the entities measure in real-time if the ditch is running too high (which can happen during the spring runoff and heavy rainfall periods), potentially causing catastrophic washouts.

Park Ditch shareholder, Bob Formwalt purchased two 6'x12', 14 gauge galvanized steel parshalls flumes and provide a high quality and accurate measuring device for Park Ditch Company. On March 29, 2024, the two parshalls were picked up by Bob Formwalt and Tay Barker. Shareholder Pat Bennett began the initial site prep on May 3, 2024, using a mini-excavator. Big Rock Construction was also hired by Park Ditch to cut willows out of the area on May 5, 2024 using a specialized blade attachment to a miniexcavator. The willows grow into the side of the ditch, causing narrow spots where the parshalls now set. By removing the willows, the ditch was able to be widened out to a proper width and provides easy access to read the water measurements. The parshalls were installed on May 11, 2024 by shareholder Steve Laverty, Carson Laverty, Thomas Barker and Bob Formwalt. The parshalls were not flowing water properly and water was seeping after installation so Bob Formwalt worked with a water engineer from San Juan Conservation District to determine proper elevation for the flumes. The engineer did not charge Park Ditch Company for his services and did not provide a written report. Adjustments were made by changing the grade to the ditch bed, repositioning the railroad ties using heavy equipment provided by Park Ditch shareholders and manual labor. Concrete around the edge of the flumes on the parshalls were also added by hand. Shareholder Vernon Leslie, Steve Laverty, Carson Laverty, Thomas Barker and Bob Formwalt were present for this phase of the parshall installation. The project is 100% complete and are operating properly. Pictures of the parshalls on the trailer from the day they were purchased and pictures of the fully installed parshalls are attached.

We thank you for this grant and are so relieved to have quality measuring devices on that section of Park Ditch. It is a great benefit to all shareholders of Park Ditch Company.

Submitted by Robyn Bennett on behalf of the Park Ditch Company Board of Directors,

Robyn Bennett









Parshall "13" - FAWN Gulch Road

may 16, 2024



Parshall "C" - Dry Euleh MAY 16, 2024