


Concrete water culverts before canal is in operation.



Water culverts submerged during irrigation season.



How do you measure flow of water in submerged culverts? Pulsar Doppler flow meters.

Raymond Irrigation District Finds Solution for Submerged Flow Applications

Raymond Irrigation District (RID) measures the flow rate of water delivered to over 46,000 acres of irrigated land and 300 municipal and agricultural water users in Southern Alberta, Canada.

Most of the RID's flow monitoring applications are in open channels or partially filled culverts. For help with this submerged culvert application they turned to the irrigation engineering firm Wilde Bros Engineering Ltd. of Welling Alberta for solutions. Wilde Bros selected Greyline DFM 5.0 Doppler Flow Meters for the project. The DFM 5.0 is available with a submersible QZ2L ultrasonic sensor and waterproof cable designed for continuous operation under water.

The DFM 5.0 QZ2L sensors were installed with stainless steel mounting brackets screwed to the inside wall of the 30" concrete pipes. Cables to the sensors were run in PVC conduit from solar powered electronics in nearby panels. The DFM 5.0 comes with a 2 million point data logger so RID personnel can retrieve flow reports quickly and easily by just plugging a USB memory stick into the face of the controller.

To help take care of the controller and sensors, the QZ2L sensors are removed from the application after each irrigation season to prevent potential damage from harsh winter ice.

More Information

Greyline DFM 6.1: <https://pulsarmeasurement.com/dfm-6-1.html>



INFO@PULSARMEASUREMENT.COM

*Pulsar Measurement is a trading name of Pulsar Measurement, Ltd.
Copyright © 2020 Pulsar Measurement
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX
Registered No.: 3345604 England & Wales*

Delivering the Measure of Possibility

United States
11451 Belcher Road South
Largo, FL 33773
+1 888-473-9546

Canada
16456 Sixsmith Drive
Long Sault, Ont. K0C 1P0
+1 855-300-9151

United Kingdom
Cardinal Building, Enigma
Commercial Centre
Sandy's Road, Malvern WR14 1JJ
+44 (0) 1684 891371

Rev 1.0