



DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

John W. Hickenlooper
Governor

Mike King
Executive Director

Dick Wolfe, P.E.
Director/State Engineer

Alan C. Martellaro, P.E.
Division Engineer

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Dear Roseman Ditch Shareholder:

The Roseman aka Tompkins Ditch diverts water from Main Elk Creek in Water District 39 pursuant to water rights held individually by shareholders. The water right decrees governing diversion and use of water by the Roseman Ditch require the use of measuring devices wherever water is diverted from the Roseman ditch.

As Division Engineer for the Colorado River Basin, it's my duty to administer water rights and enforce the terms of water right decrees. You are hereby notified that only those shareholders with properly installed and maintained measuring devices will be allowed to divert from the Roseman Ditch in water year 2014.

Several types of measuring devices have been approved by the Division Engineer (see attachment). To learn more about obtaining and installing an approved device, or to find out whether the measuring device you already have is approved, contact Dave Martin at 984-0548.

The Water District 39 Water Commissioner along with the Roseman Ditch Walker will be out early spring of 2014 to post notices for non-compliance with the Roseman decree. Any out of compliance diversion will be curtailed.

Sincerely,

Alan C. Martellaro, P.E.

Division Engineer

Water Division 5 • Glenwood Springs

202 Center Drive, Glenwood Springs, CO 81601 • Phone: 970-945-5665 • Fax: 970-945-8741

Attachment

Examples of Approved Measuring Devices

Device Type	Advantages	Disadvantages
Parshall Flume	1.Available in sizes from 1-inch to several feet. 2.Can be purchased and installed by user	1.Open channel only. 2. Cannot be inserted in pipeline. 3. Must have straight approach channel and free discharge. 4.Low flows difficult to measure.
60-Degree V-notch Weir	1.Accurate for small flows of 3 shares or less 2.Can be inserted in pipeline 3.Easy to measure low flows.	1.Not commercially available, must be built to plans. 2.Sediment deposits in weir. 3.Must not freeze with water inside.
90-degree V-notch Weir	1.Accurate for medium flows of 3 to 10 shares. 2.Can be inserted in pipeline. 3.Easy to measure low flows.	1.Not commercially available, must be built to plans. 2.Sediment deposits in weir. 3.Must not freeze with water inside.
Cutthroat Flume	1.Commercially available in fiberglass; can be formed in concrete. 2.Simple to build; self-draining. 3.Very small V-section versions can be accurate for low flows.	1.Same disadvantages as Parshall Flume. 2.Cannot be inserted in pipeline. 3.Not as accurate as Parshall Flume.
In-Line Flow Meter	1.Can be inserted in existing lines.	1.Subject to fouling by debris in ditch water; difficult to clean. 2.
Pipe and Pump Restrictors	1.Can be inserted in existing lines 2.Permanent; no scale to read.	1.Difficult to clean. 2.Cannot be increased if share allotment goes up.

The primary requirement for any measuring device is that a ditch walker or water commissioner be able to examine a staff gage on the device and compare it to a rating table or chart designed for that specific device to determine the amount of water being measured. The bucket-and-stopwatch method is acceptable for the purpose of calibrating a device and preparing a rating table.

The other part to having an approved measuring device is having a lockable diversion structure and a person that is in charge of distributing the water.