<u>Missouri Heights Mountain Meadows Irrigation Company Ditch</u> <u>Lining Project</u>

In an attempt to better serve its shareholders and more efficiently deliver irrigation water the MHMMIC decided to make improvements on a section of ditch between the Spring Park Dam and Upper Cattle Creek Road. From the outlet structure at the dam to the county road the ditch drops less than 12" over 3742' resulting in a seepage loss of up to 30%.



In the spring of 2013 the shareholders voted to address the seepage/water loss issue by lining the mentioned section of ditch with a corrugated HDPE product with the trade name Mega Ditch. The company and shareholders decided on the ditch liner as it was a much more cost-effective option compared with piping the water.

Construction of the lining project began in the fall of 2013. The project was engineered by the NRCS and installation of the product was done by Kursten Construction LLC out of Rifle Colorado. Despite challenging weather conditions the project stayed on schedule and the product was in place for the first call of water in the spring of 2014.

During the first call of water the MHMMIC noticed that water loss was still occurring. The company immediately notified the product manufacturer and the installer. The problem was identified as a faulty adhesion along the center seam of the ditch liner. The manufacturer and installer worked diligently during the summer of 2014 to address the issue. After all repairs were carried out a test run of water was run in the late summer an proved to have reduce water loss to less than 10%.



The product has proved to work as intended reducing seepage water loss to an acceptable level. This reduction of water loss has resulted in more available water and more irrigation days for the shareholders of the MHMMIC. Water conservation is an integral part of the future of agriculture in the Roaring Fork Valley, the MHMMIC strives to practice water conservation measures to better serve its shareholders.