

Recharging The Aquifer

January 25, 2017

CEDAR CITY, UT-Central Iron County Water Conservancy District in conjunction with Cedar City, Iron County, and local property owners recently broke ground on the construction of an aquifer recharge project near Quichapa Lake. This project will divert water that traditionally becomes contaminated and evaporates in the lake and pump it to a recharge area north of Highway 56 near Cedar City's municipal well. The project is located in an area that has seen the largest water level declines as well as known subsidence at the ground surface.

The CICWCD received a \$100,000 grant from the local Enterprise and Iron Conservation District which is under the Utah Department of Agriculture and Food to help construct the diversion structure. "Artificial aquifer recharge is the practice of sending water into the ground to refill groundwater stored in aquifers. Historically more water has been drawn from the Cedar Valley aquifer than is being replenished and this project will help in reversing that trend," said Shelby Ericksen Public Information Specialist for CICWCD

The recharge project started to gain traction at the beginning of the 2016 when the State Engineer of the Division of Water Rights held a public meeting to address the overdraft issues in the valley and began the implementation of a Groundwater Management Plan. This plan, which will be developed over time, is the process that the State uses to reduce water rights to bring the aquifer back into equilibrium. Artificial aquifer recharge will likely help reduce the cuts of water rights brought about by the Groundwater Management Plan, as well as help restore groundwater levels.

In addition to the Quichipa Recharge Project, CICWCD has also been recharging the Enoch Graben aquifer since late October 2016. The Enoch Graben Recharge project was a combined effort between the Worth Grimshaw Family and Enoch City. Enoch City Manager, Robert Dotson said, "We live in a desert. Clean ground water is always going to be the life source of the community, especially economically. Projects like this help to protect resources that we can only safeguard if we take responsible steps."

"The water only travels a few feet before it is absorbed into the ground," Ericksen said. Water began flowing through the pipe after the irrigators were finished using the water for the season and will continue through the winter months. "We hope to put as much water into the ground as we can to replenish the aquifer," Ericksen said.

Sixty years ago, the Graben area was a large free flowing spring. Today, it is absorbing water like a conduit because water levels in some areas are near 100 feet below the historic levels.

Billy Grimshaw, a fourth-generation farmer and owner of the land where recharge is taking place, said, "We could be drinking this water in 20 years. The underground reservoir is great for storage without evaporation. The ground also filters the water as it moves down. We are reversing what we have done by putting water back into the underground reservoir instead of just taking it out."

In 2015 the Division of Water Rights approved the District's application to recharge up to 20,000 acre feet of water from Coal Creek. One acre foot of water equals 325,851 gallons or about the same amount of water a family of four consumes in one year.

When asked about the importance of aquifer recharge, Dotson said, "To me, this is a symbol of future cooperative efforts. This is one step towards balancing the aquifer. It takes some desire, a good plan, and people willing to give a little up. Everyone gave a little up, but the potential return on investment is significant."

Similar to the cooperation of Enoch City and the Grimshaw family, the District is encouraged and thankful for the local support and contribution from the local land users, Jones Land and Livestock, Brad Schmutz, Tyree Bulloch, and for Iron County and Cedar City Corporation for supplying the equipment and labor for the project. Questions and more information about the project can be directed to CICWCD at 435-865-9901.