

Levee nearing completion aims to keep Iron County from drying out

Written by [or for St. George News](#)
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CEDAR CITY — The latest project to help direct Coal Creek water to an isolated section of Lake Quichapa for later use and reduce water loss to evaporation is nearing completion.



Cedar Valley officials have long lamented the loss of Coal Creek water to evaporation once it reaches Lake Quichapa.

Driving past Lake Quichapa on state Route 56, passersby may notice a large dike being built to separate the north and south ends of Lake Quichapa. With the help of heavy equipment, the new dike will enable more fresh excess water to run under the highway into a lazy river channeling system designed to absorb water for recharging the local aquifer and reduce levels of evaporation.

The project is part of a [larger effort to conserve water in Iron County](#).

Central Iron County Water Conservancy District General Manager Paul Monroe said they received \$250,000 from the Utah Department of Agriculture and Food through the Water Optimization Grant, making the project possible. The dike has been constructed with help from the county, which donated the use of equipment and employee time. County Commissioner Paul Cozzens has also donated his time to help build the dike.

The Quichapa Recharge Project is the most complex recharge system in Cedar Valley. Construction on the first phase began in 2017 in conjunction with Cedar City, Iron County, the Enterprise & Iron Conservation District, and local property owners. The lazy river on the north side of the highway is designed to allow dirt and debris in the water to settle and not be taken downstream, and a pump directs the water into a recharge basin.

This latest phase has expanded the pipe network to allow water to be pumped directly to an agricultural operation for irrigation use. The excess water in Quichapa can now be used on fields, allowing farmers to idle wells and conserve groundwater. Additionally, project funds cover new low-elevation sprinkler nozzles for the pivot that will pull from the basin, making the water use even more efficient.



New portions of the project include a conservation pond designed in partnership with the Bureau of Land Management, which will be an ideal habitat for waterfowl. The pond is designed to be the first place water will flow and a spillway holding the water, making it the last place water should be held in the Quichapa area.

Before the water reaches the conservation pond, a large steel gate separates the old creek bed and directs the flow toward the pond, but it can be opened to let flash flood water flow into the southern portion of Lake Quichapa. Monroe said flash flood water can have poor quality and contain as much as 50 percent sediment so it is not desirable for wildlife habitat or aquifer recharge.

The new gating system allows for redirecting flash flood waters away from the waterfowl habitat and into the south end of the lake.

Previously, water that flowed into Lake Quichapa quickly became unusable, picking up very high numbers of total dissolved solids (TDS) as it sat on the alkaline soil. It was unable to soak into the ground because of the many layers of silt and clay, so it just sat and evaporated. Monroe said tests have revealed that water on the north end of the lake does not have nearly as high TDS numbers as water on the south end, so it can be stored and used throughout the growing season.

Jessica Staheli, the district's public outreach and conservation specialist, said that in 2019, when 9,990 acre-feet of excess water was put into the recharge system, a lot of non-flood water was still going to Quichapa because there just wasn't room for it in the recharge projects around the valley. This project will help with that, as it has a storage component that has been missing within the Cedar Valley watershed.



The Quichapa Recharge Project is the latest in a series of recharge projects that began in 2015 and now includes six recharge facilities. Most are along Coal Creek and have been able to utilize existing gravel pits as water collection basins. Cedar City and CICWCD have worked hard to create recharge facilities within gravel stratis of Coal Creek. The only project that is not along Coal Creek's path through Cedar City to Lake Quichapa is the Enoch Graben Recharge, to the north of Enoch in an area where springs used to flow. This is a partnership project that took place with Enoch City and the Worth Grimshaw Family.

Monroe said in the past five years, the Water District has spent more than \$1 million in conservation/recharge projects. Measuring devices were added to the recharge facilities in 2018, and since then the aquifer has absorbed more than 14,000 acre-feet of water that would otherwise have gone into dry lake beds and evaporated.

These projects have been a high priority for the CICWCD board and staff, because they want to be responsible stewards and optimize every drop of water that comes into the valley, Monroe said.

People can share their thoughts and ideas about water use and conservation in Iron County by completing a [survey](#). The website www.cicwcd.org includes information about the spring Localscapes Landscape Design community education class, water conservation tips and more ways to conserve in your neighborhood.