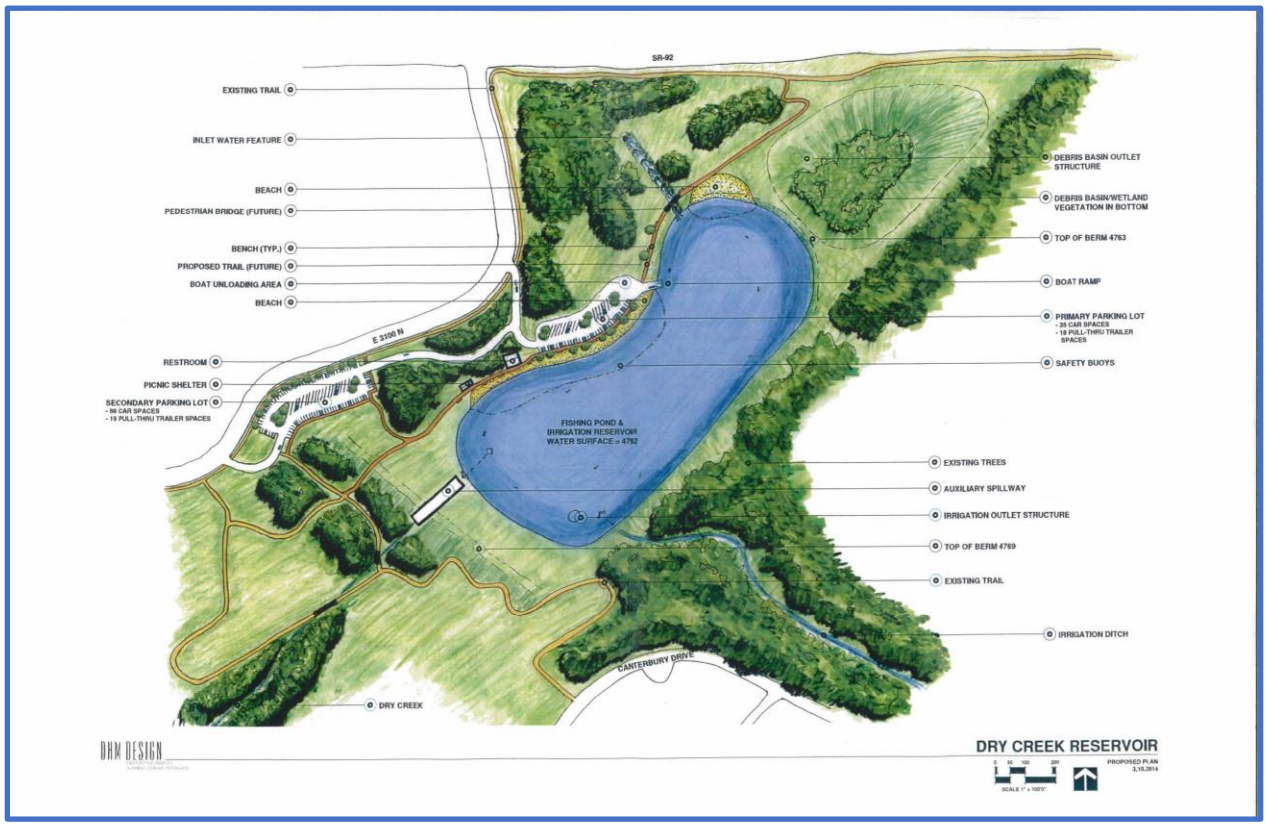
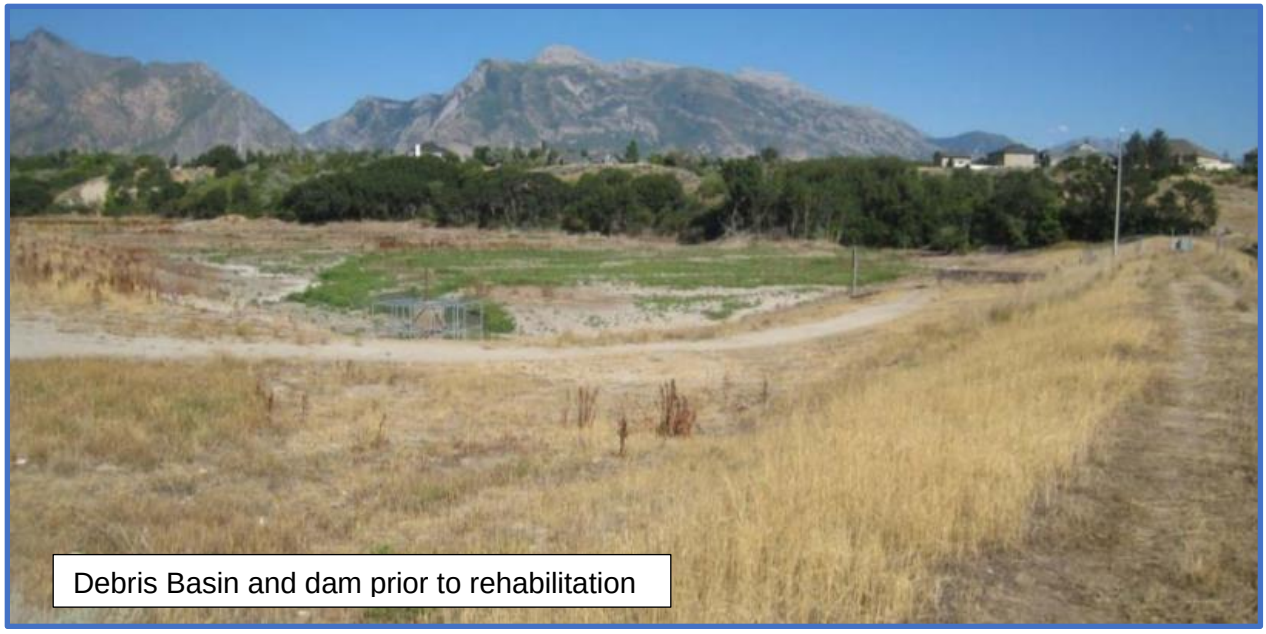
Rehabilitation of Dry Creek Debris Basin in Lehi City, Utah Will Add Additional Community Benefits



The Dry Creek Debris Basin was constructed in 1962 as a high hazard dam and in recent years was earmarked for upgrading by the North Utah County Water Conservancy District.

Originally the debris basin was constructed for flood control by the conservancy district with the assistance of the Natural Resources Conservation Service (NRCS) Watershed Program. The purpose and need for the rehabilitation project is to upgrade the Dry Creek Dam and Debris Basin to meet current USDA-NRCS and Utah State Dam Safety regulations and current engineering standards and extend the life of the structure.

Through the partnership of the conservancy district, Lehi City, City of Highland, Utah Department of Natural Resources and NRCS the rehabilitated structure will not only improve dam safety and flood control, but will also add irrigation water storage capacity for Lehi City and provide a new recreational area that will include fishing, swimming, and non-motorized boating.



Debris Basin and dam prior to rehabilitation

The conservancy district requested assistance from the NRCS in rehabilitating the debris basin dam. NRCS is providing 65 percent of the design and construction cost of the project. The Utah Department of Natural Resources (DNR) is contributing 31.5 percent towards portions related to dam safety. The remaining portion is being paid by the conservancy district and Lehi City, with Lehi City paying for the amenity costs. W.W. Clyde is doing the construction work on the project.

The project will raise the dam by four feet, raise the auxiliary spillway by five feet, replace the principal and auxiliary spillways, add downstream improvements for earthquake resistance, excavate sediment, concrete the upper portion of the sediment basin for easier sediment removal and add additional measures to maintain a constant pool of water in the basin. The project will extend the life span of the structure by 57+ years.

A large concrete spillway is being constructed during rehabilitation (Photo provided by W.W. Clyde).

Over 130,00 cubic yards of sediment is being removed from the sediment basin, hauled off site to a location where it will be stocked piled for topsoil around the rehabilitated structure.

A section of the sediment basin is being lined with concrete for easier sediment removal.

“The biggest thing we have started working on is the spillway, a lot of big tall structures, and 40 foot walls,” said Caleb Mendenhall, W.W. Clyde Project Manager. W.W. Clyde has the first stage of the project which will be completed in early 2021.”

“This is a good example of how local watershed project sponsors and their partners can rehabilitate high hazard dams to not only improve the safety and effectiveness of a dam, but often add additional community benefits such as water supply and recreational areas,” said Lisa Knauf Owen, National Watershed Coalition Chair.

Although the land is owned by the North Utah County Water Conservancy District, Lehi City will maintain the reservoir and develop shoreline improvements including a parking lot, docks, pavilions, and a sandy beach.

At a recent Lehi City Council meeting a boundary adjustment was made with Highland City at the border of the two cities south of SR-92. The new border goes right down the middle of the lake (north to south) and will allow Lehi City to develop the northwest shoreline. Highland City will be responsible for maintenance along the east side of the lake, while Lehi City will be responsible for the west side.

To watch a video produced by W.W. Clyde about the construction part of the project go to:
https://www.facebook.com/wwclyde/videos/780994299357887/?__so__=channel_tab&__rv__=all_videos_card

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