Dry Creek Debris Basin Rehabilitation

National Environmental Policy Act (NEPA) Public Scoping Project Description

The Natural Resources Conservation Service (NRCS) is analyzing alternatives to rehabilitate Dry Creek Debris Basin located within the city of Highland, Utah. NRCS performed an assessment of Dry Creek Debris Basin which concluded that the Dry Creek Debris Basin does not meet current NRCS and Utah State Dam Safety regulations and engineering standards for a Class “C” dam (potential “Loss of Life”). The purpose of this project is to rehabilitate the dam to meet current NRCS and Utah State Dam Safety regulations, current engineering standards, and stabilize the existing dam structures. The life of the dam would be extended for a minimum of 50 years and a maximum of 100 years. The project would also restore the design storage capacity in the reservoir by possibly raising the height of the dam, enlarging the spillway to pass the Probably Maximum Flood and provide slope stability for seismic events.

The NRCS is analyzing alternatives to rehabilitate the dam and conceptual alternatives that have been identified include the following:

- **No Action**: The dam would be left in its existing condition.
- **Dam Decommissioning**: Completely remove the dam and restore the site back to a natural stream channel.
- **Dam Rehabilitation**: Repair the dam infrastructure to meet current NRCS and Utah State Dam Safety regulations and engineering standards. Restore the reservoir storage capacity. (minimum of 50-yr evaluated life).
  - **Spillway Replacement**: Replace the spillway at the same elevation.
  - **Raised Spillway**: Increase the elevation of the spillway to create additional storage capacity in the reservoir.
- **Sediment Removal**: Remove the accumulated sediment in the reservoir to restore the original capacity.
- **Recreation Improvements**: Improve recreation components for public use.
- **Other Alternatives**: Other alternatives identified by the public and project team during scoping will be analyzed during the NEPA process to rehabilitate the diversion.

NEPA Analysis

This project is being partially funded by the NRCS Small Watershed Rehabilitation Amendments (PL 106-472) which authorizes funding and technical assistance to rehabilitate aging flood control dams built under the Small Watershed Program (PL83-566). NRCS, as the lead federal agency, is initiating NEPA analysis in the form of a Supplemental Watershed Plan and Environmental Assessment to analyze impacts to the natural and human environment from this project. The Environmental Assessment will comply with the Council on Environmental Quality’s regulations at 40 CFR Parts 1500-1508 which require an evaluation of potential environmental impacts associated with federal projects and actions. This project is located within the boundary of the North Utah County Water Conservancy District (NUCWCD). The NUCWCD is the sponsor for the project.
Figure 1: Dry Creek Debris Basin Vicinity Map
Figure 2: Dry Creek Debris Basin Project Map
Photos

Debris Basin Pool Area

Debris Basin Dam and Pool Area
Photos

Measuring Device & Water Intake

Area Below Debris Basin
Photos

Emergency (Auxiliary) Spillway

Principal Spillway With Trash Rack