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Cove-East Fork Virgin River Watershed Project
Kane and Washington County, Utah
Draft Plan-EIS Frequently Asked Questions (FAQs)

Unique Identification No.: EISX-005-53-049-1288324567 September 2026



Q: What is the Preferred Alternative?
A: The Preferred Alternative includes construction of a 6,000-acre-foot reservoir and dam with appurtenances, a recreation area, pipelines, and a booster pump station.

Q: What Alternatives were considered?
A: Several alternatives were considered during the planning process including alternative reservoir sites, alternative reservoir sizes, and non-structural measures (including water conservation). Three alternatives were carried forward for detailed analysis in the Watershed Plan Environmental Impact Statement: 1) A No Action Alternative (which includes existing and planned conservation measures), a 3,000-acre-foot reservoir, and a 6,000-acre-foot reservoir (the preferred alternative). Ten additional reservoir locations and/or sizes were eliminated from detailed study due to being infeasible, not meeting the project purpose and need, or being more environmentally impactful, dangerous, or costly.

Q: Where will the materials be sourced from?
A: Embankment materials for the proposed dam will be taken primarily from the reservoir basin. Three additional borrow pit sites will be used to supply riprap and gravel. Use of the borrow pit sites would result in a maximum of 5.7 acres of additional disturbance.

Q: Why is the project being proposed?
A: The project is being proposed to address annual water shortages experienced by local agricultural users served by the Glendale, Orderville, and Mt. Carmel irrigation companies. Additionally, Washington County is experiencing stressed Municipal and Industrial (M&I) water availability.

Q: Who benefits from the project?
A: The proposed project would provide the following long-term benefits:

- Increased water availability to local agricultural users in Kane and Washington Counties.
- Increased water availability to municipal users in Washington County.
- Increased water security for present and future residents in both Kane and Washington Counties.
- Added recreation opportunities for Kane County and the surrounding communities.

Q: What would the water be used for?
A: Water from the proposed reservoir would be made available to existing agricultural fields near Mt. Carmel and Hurricane, and for M&I uses in Washington County.

Q: How will the reservoir affect downstream flow?
A: The proposed reservoir would store excess water during high-flow periods and release it during low-flow periods to meet irrigation and water conservancy demands. Although the timing of flows would change, modeled flow alterations would be small compared to the natural seasonal variability of EFVR flows. Yearly monitoring would continue to be required to regulate flows on the EFVR.

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Q: When would water be diverted to the reservoir and released from the reservoir?
A: Water would be diverted from the East Fork Virgin River (EFVR) at the Orderville Diversion and delivered by pipeline to the proposed reservoir between November 1 and May 31, as required by the *Zion National Park Water Rights Settlement Agreement of 1996*. No diversions are allowed outside of this period. Releases from the reservoir would be timed to supplement low, natural flows. Water for Long Valley agricultural purposes would be released into existing and proposed irrigation pipelines during the summer months, when natural flows are lowest. Water committed to Washington County could be released any time during the year to meet demand but would most likely be during the summer months for agricultural needs and during the fall and winter months for M&I needs.

Q: How will the reservoir affect downstream habitat?
A: The EFVR riparian corridor is adapted to substantial natural variation in streamflow, including episodic flood events, spring runoff, and seasonal low flow periods. Modeled project-related changes in flow, depth, and width would remain small relative to the river's existing natural variability. As a result, the project is not expected to adversely affect existing downstream habitat.

Q: What measures will prevent non-native fish from entering the East Fork Virgin River?
A: The proposed reservoir intake would include a fish screen with a 1-inch maximum pore opening to prevent fish and debris from entering the pipeline to the Orderville Hydroelectric Power Plant. The hydroelectric facility utilizes two Turgo Impulse turbines, which focus water through small nozzles at high pressure and velocity into the turbines. The combination of the small nozzle size, high velocity, and sudden pressure drop would make it highly unlikely that any fish that might make it into the pipeline would survive. Additionally, prior to stocking the proposed reservoir with fish, a management plan will be developed to ensure that non-native fish species do not escape from the reservoir into the EFVR. The management plan would meet non-native stocking and control requirements.

Q: What is the likelihood of a dam failure and what protection would be in place for downstream properties?
A: The dam would be classified as a high-hazard structure to safeguard downstream infrastructure, and further detailed analyses would be conducted to include strategies for reducing the probability of a dam breach. However, like all dams, the risk of failure exists and would be mitigated by an Emergency Action Plan.

Q: What is the total project cost and benefits?
A: The total cost estimate for the preferred alternative is $39,730,000 with the NRCS contributing $24,889,000 and the sponsors contributing $14,841,000. The average annual benefit is projected to be $1,397,000, and the benefit-to-cost ratio is expected to be 1.03, which includes monetized and non-monetized benefits.

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