



COLORADO RIVER DISTRICT

PROTECTING WESTERN COLORADO WATER SINCE 1937

SCOPE OF WORK

AUGUST 1, 2023

Summary: The Shoshone Hydro Plant, a unique run of the river hydroelectric power plant, sits alongside the Colorado River in Glenwood Canyon, about eight miles east of Glenwood Springs. It produces 15 megawatts of electricity, enough power to serve approximately 15,000 customers. Shoshone also holds the most senior (1905), major water right on the Colorado River, returning the flows it uses to the river after a short trip through the penstocks and turbines. Shoshone’s flows provide critical habitat to four fish listed under the Endangered Species Act and drive the recreational economies supported by rafters, kayakers, and anglers from Summit to Mesa County.

Shoshone’s Command Over the River: In Colorado, the right to divert and use water is governed by a legal priority system of water rights administered by the State of Colorado. Water is scarce in the arid West. The priority system is a means of rationing water when river flows subside after spring runoff. Shoshone holds the most senior (1905), major water right on the Colorado River, measured at a total of 1,408 cubic feet per second (C.F.S.). During significant periods of the year, there is not sufficient water to satisfy all water rights decreed on the Colorado River within Colorado. When the river flows drop below the 1,408 C.F.S. the Shoshone plant puts a “call” on the river which turns off many junior rights above the power plant, causing water to flow downstream to the plant. Because it is a hydroelectric water right, the plant does not consume water, but returns 100% of the flows it uses to the river after a short trip through the hydropower plant’s penstocks and turbines. In dry years, the call is often on for 11 months out of the year; in average years the call is closer to an eight-month period. If the Shoshone flows were not in the river, river levels in the mainstem of the Colorado River would be significantly lower, especially in drought years, and the riverine ecosystem and tourist/recreational economy would suffer.

Benefits for the Western Slope and Beyond: The Colorado River downstream from Shoshone is habitat for four fish listed under the Endangered Species Act. Without the exercise of the Shoshone call, the stretch of the Colorado River, known as the 15-Mile reach, in and around Grand Junction, which provides critical habitat to the four endangered or threatened species, would have significantly less flow during large periods of the year, especially in dry years. For most of the year, the river would not come close to meeting the flow targets set by the Upper Colorado Endangered Fish Recovery Program. Based on recent modeling findings, the Shoshone call produces between 41,000 – 86,000 acre-feet in a dry year scenario annually to the 15-Mile Reach of the Colorado River. All Colorado River water users – both east and west slope users – rely upon the benefits of the Shoshone flows as a bedrock for the success of the Upper Colorado River Endangered Fish Recovery Program, which provides Endangered Species Act (ESA) compliance



for over 1,250 projects in Colorado on both sides of the divide. Further, the Shoshone senior water rights command higher flows and lower water temperatures through key segments with recreational fishing and wildlife habitat identified as Outstandingly Remarkable Values (ORVs) of the Upper Colorado River. The Upper Colorado River Wild & Scenic Stakeholder Group Management Plan lists the Shoshone water right as a long-term protection measure for the streamflow influenced ORVs.

Additionally, the river, bolstered by Shoshone flows, supports a robust recreational economy within Grand, Summit, Eagle, Garfield, and Mesa Counties. The commercial river outfitters and recreationalists using the river need these flows as temperatures increase and flows decrease in order to keep local economies afloat and recreation a central economic driver for the state. Those economic drivers rely on the recreational flows provided by Shoshone's call to support a river recreation industry that contributes \$18.8 billion in economic output and over \$10 billion annually to the state's GDP, with nearly \$4 billion coming directly from the Colorado River basin on the Western Slope¹.

Communities large and small along the Colorado River mainstem also benefit from the enhanced water quality Shoshone flows provide, diluting pollutants in the source drinking water for towns like New Castle, Rifle, Palisade, Clifton, and the greater Grand Junction area served by Ute Water Conservancy. Without the higher flows provided by the Shoshone call, higher pollutant concentrations create higher costs for municipal drinking and wastewater treatment.

Western Colorado communities benefit greatly from Shoshone's flows and are motivated to protect those benefits in perpetuity. Should the power plant cease operation without permanent protection of the water right through an instream flow, the negative economic and environmental impacts to Western Colorado and to the State of Colorado would be immediate and profound.

A Coalition to Permanently Protect Shoshone's Flows: For more than 20 years, the Colorado River District and 17 other western Colorado governments and water entities, including Summit, Grand, Eagle, Garfield and Mesa Counties and many of the municipalities therein, have been working together to find a way to permanently preserve the Shoshone flows. The 2013 Colorado River Cooperative Agreement between Denver Water and 17 West Slope governments/water user organizations expressly recognizes the importance of – and memorialized the need to provide permanent protection of – the historical flow regime created by the Shoshone Plant. In this agreement Denver Water agreed to cooperate with western Colorado's effort to protect the plant and not try to buy it itself.

The Colorado River District and the Western Slope coalition are interested in acquiring the water rights to preserve the Shoshone flows. To that end, the Colorado River District is in the process of negotiating to purchase of the Shoshone water rights, however the agreement has not been finalized. The transaction will be structured such that the Colorado River District will make those water rights available to the plant operator through a permanent lease for the continued operations

¹ 2019 Business for Water Stewardship Report (<https://businessforwater.org/co-rivers-key-to-economy>); Total economic output calculated with the multiplier effect.



of the Shoshone plant. Prior to the closing of the contract and purchase of the water rights, the Colorado River District will, in conjunction with the Colorado Water Conservation Board (CWCB), apply to state water court for the purposes of adding the alternate beneficial purpose of an instream flow to the Shoshone water rights, thereby preserving the Shoshone water rights' priority and ability to call water downstream when the rights are not being used for hydro-power generation. Upon successful conclusion of the water rights case, and obtaining any regulatory approvals required by the Colorado Public Utility Commission to close the sale, the water rights will be secured in perpetuity.

Funding Needs: Due to the benefits identified above, the water rights, even without the power plant, have significant value. The parties have not arrived at an agreement on all of the terms of the sale however, the purchase price is likely to be \$98,500,000, consistent with several recent appraisals. The current funding strategy includes a diverse partnership reliant on local, state, and federal funding sources.

- **Local contributions:** The West Slope governmental entities are expected to fund approximately 33% of the purchase price. This includes a \$20 million proposed funding contribution from the Colorado River District and \$10 million distributed across the 17 other western Colorado governments and water entities.
- **State Contributions:** Additionally, the Colorado River District and the other West Slope governments are discussing with the State of Colorado a contribution of \$20 million to support the acquisition. While severance taxes are notoriously volatile, severance tax collections over the last two years have increased substantially given the upward price pressure within the energy markets. This has created an opportunity to work closely with the Colorado Water Conservation Board (CWCB) to appropriate funding through annual legislative called the CWCB Water Projects Bill.
- **Federal Contributions:** Finally, the Colorado River District and the other West Slope governments are discussing with the Bureau of Reclamation a contribution of approximately \$49 million to support the acquisition. The Inflation Reduction Act provides \$4 billion in Drought Mitigation funding to support actions that deliver:
 - (i) compensation for temporary or multiyear voluntary reductions in diversion of water or consumptive water use;
 - (ii) voluntary system conservation projects that achieve verifiable reductions in use of or demand for water supplies or provide environmental benefits in the Lower Basin or Upper Basin of the Colorado River; and;
 - (iii) ecosystem and habitat restoration projects that address issues directly caused by drought in a river basin or inland water body.

This funding is available through September 30, 2026. The Shoshone acquisition is in strong alignment with funding category (ii) and (iii) given the measurable benefits, particularly evident in drought years, to the Colorado River ecosystem and critical habitat,



which is essential to meeting recovery requirements to maintain compliance with the Endangered Species Act.