

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM

FY 2024-25 SCOPE OF WORK

PROJECT: C-9

Project Title

Elkhead Reservoir Operations and Maintenance for Yampa River Flow Augmentation

Bureau of Reclamation Agreement Number:

Contract No. 05-WC-40-420

Reclamation Agreement Term

Permanent

Note: Recovery Program FY22-23 scopes of work are drafted in May 2021. They often are revised before final Program approval and may subsequently be revised again in response to changing Program needs. Program participants also recognize the need and allow for some flexibility in scopes of work to accommodate new information (especially in nonnative fish management projects) and changing hydrological conditions.

Lead Agency:

Colorado River Water Conservation District acting by and through its Colorado River Water Projects Enterprise

Principal Investigator:

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Category:

- Ongoing project
- Ongoing-revised project
- Requested new project
- Unsolicited proposal

Expected Funding Source:

- Annual funds
- Capital funds
- Other [explain]

Relationship to RIPRAP:

Green River Action Plan: Yampa and Little Snake Rivers. I.B.2.a.(2)(b), Deliver Water for Endangered Fish

Study Background/Rationale and Hypotheses:

Flow augmentation deemed beneficial to recovery of listed fishes in the Yampa River. See Final Programmatic Biological Opinion on the Management Plan for Endangered Fishes in the Yampa River Basin (January 2005).

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Study Goals and Objectives:

Release water requested by Recovery Program for augmentation of Yampa River flows, maintain the reservoir facilities and comply with all permit Requirements.

Study Area:

Elkhead Reservoir, Yampa River.

Study Methods/Approach:

Agreements provide for release of 5,000 af of stored water and up to 2,000 af annually of supplemental lease water for augmentation of Yampa River flows. The Recovery Program requests reservoir releases for various purposes. The River District and the City of Craig operate the reservoir to make requested releases and keep all required records.

Task Description, Deliverables and Schedule:

Winter – reservoir operations are limited. Low flow releases are made to assist with maintenance of open stream conditions for stock watering downstream of the reservoir. Diversion records from previous year are completed and submitted to the SEO.

Spring – reservoir operations to fill in spring are managed to bring the reservoir pool to full reasonably quickly to provide hydrology for wetland mitigation area development and to reduce erosion of inlet wetland development by incoming spring flows. Reservoir fill is managed to reach elevation 6371 prior to commencement of peak runoff to protect wetland mitigation features in the upstream end of the reservoir. Spillway fish barrier net installed in 2016 will allow reservoir levels to be maintained closer to full and enhance wetland mitigation development. Weed control is undertaken on reservoir lands.

Summer – reservoir is operated to bypass inflow necessary to meet Elkhead Creek demands from senior water rights holders and to make releases requested by the Recovery Program, any contracts for River District water, and releases requested by the other pool holders City of Craig, the Craig Station Power Plant, and Tri-State.

Fall – reservoir releases abate as irrigation demand downstream slows and calls for fish releases cease.

Deliverables- Deliver water on demand.

Budget Summary:

The following cost estimates are based on recent years' experience and represent best-guess costs for routine O&M costs to be borne by the Recovery Program. These estimates do not account for extraordinary O&M, major repairs, or capital investments. Capital expenditures of past years for improvements like the fish containment net, Malburg Pond erosion protection, and concrete repair efforts are not reflected in these estimates.

FY Year	<i>Estimated Routine O&M</i>	<i>Short-term water leasing*</i>
2024	\$65,280	\$50,000
2025	\$67,238	\$50,000
2026	\$69,255	\$50,000
2027	\$71,333	\$50,000

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FY Year	<i>Estimated Routine O&M</i>	<i>Short-term water leasing*</i>
2028	\$73,472.63	\$50,000
Total	\$346,578	\$250000

* From 500 to 2,000 AF of 'short-term water supply' is potentially available for leasing annually. USFWS may lease this water as appropriate based on hydrologic conditions and river needs. The current lease agreement with the River District runs through 2025, at \$50/ac-ft. The 2005 Yampa PBO and experience since its inception suggests it is reasonable to expect a lease of this water approximately 2 in 4 years. Therefore a \$50,000 placeholder for leasing 1000 af annually is included here. If funds can be carried over year to year, PDO recommends using Section 7 depletion fees instead of annual funds between 2019-2023. Note: In partnership with Colorado Water Trust, Upper Yampa Water Conservancy District, Tristate Generation and Transmission, the River District is participating in a the Yampa River Flow Pilot Project which aims to enhance water security for historic water users and recreational and environmental needs including the endangered fish species.

Reviewers:

David Graf

References: