

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM

FY 2021 ANNUAL REPORT

PROJECT: 168

Project Title

White River Management Plan

Bureau of Reclamation Agreement Number:

N/A

Project/Grant Period:

Start date: 2012

End date: 2022

Reporting period end date: 09/30/2021

Is this the final report? Yes _____ No X

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Abstract:

The White River Management Plan will characterize current and reasonably foreseeable future water use within the basin and its water depletion impacts to endangered fish, including to different life stages and habitat in the White and lower Green River basins. The Management Plan will describe the impact analyses and will help identify necessary Recovery Program activities in the White and Green River basins that will provide Endangered Species Act compliance for water depletion impacts in the basin. The Management Plan will include a Biological Assessment to provide the basis for development of a Programmatic Biological Opinion (PBO) by the U.S. Fish and Wildlife Service.

The purpose of this project is to provide the stream flows needed for protection of endangered fish in the White River by evaluating current and projected future flows under future water development scenarios against flow recommendations developed in 2019 (Anderson et al.), complemented by non-flow management actions in affected reaches. This project will continue through development of the White River PBO; it is envisioned that 'sufficient progress' checkpoints will be part of the WRMP/ PBO and imbedded annual work plans to ensure that implementation of Recovery Program activities satisfactorily offsets the impacts of current and future flow depletions on listed fish.

Study Schedule:

Initial: 2012

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Final Year: 2022

Relationship to RIPRAP:

I. Provide and protect instream flows (habitat management)

I.B.3. Develop and implement a White River Management Plan

I.B.3.a. Conduct programmatic Section 7 and NEPA compliance on recovery actions and a level of future water demand.

Table 1: Accomplishment of FY 2021 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Date	Task	Responsibility	Status
Oct. 2017	Develop current hydrology: <ul style="list-style-type: none"> • Generate daily current flows by extending StateMod to the Watson U.S. Geological Survey streamgauge in Utah. • Re-state all flow statistics and daily hydrographs for the baseline hydrology. • Consult with Utah on the extension of StateMod to the Green River to model future demands, including energy and tribal use, in Utah. 	Contractor	Complete
Jul. 2018	Develop future demand scenarios: <ul style="list-style-type: none"> • Tabulate and review future demands in Colorado and Utah including scenarios and storage developed by the Yampa/White/Green Basin Roundtable for future demands. Select high and low demand scenarios that represent a range of reasonable future demands. 	White River Planning Team*, Program Director's Office, U.S. Fish and Wildlife Service, White River Working Group**	Complete, except for Ute Indian Tribe demand scenarios
Nov. 2017	Develop flow recommendations: <ul style="list-style-type: none"> • Specify preliminary high flow targets (using current daily flows from StateMod). • State preliminary baseflow targets (using current daily flows from StateMod). Variable length baseflows will be used. • Review and resolve comments on July 2011 draft flow recommendations report. 	Program Director's Office, Flow Recommendations Technical Team, White River Planning Team*, White River Working Group**	Complete
Aug. 2018	Model future demands and identify impacts on preliminary flow targets: <ul style="list-style-type: none"> • Conduct initial modeling of the selected future demand scenarios (including storage for future demands) and identify impacts on the preliminary flow targets. 	Contractor, Program Director's Office, White River Planning Team*, White River Working Group**	Complete

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Date	Task	Responsibility	Status
<p>Aug. 2018 – Dec. 2019</p>	<p>Finalize flow recommendations report:</p> <ul style="list-style-type: none"> • Incorporate current hydrology, flow statistics, and hydrographs into flow recommendations. • Update (U.S. Fish and Wildlife Service) the draft flow recommendations report after considering the impact of future demands and new storage on the preliminary flow targets and respond to independent peer review. • Seek (U.S. Fish and Wildlife Service) approval of a final draft flow recommendations report by the Biology Committee, Water Acquisition Committee, and Management Committee. • Finalize technical report for appendix to flow recommendations report to document methods, assumptions, etc. used in StateMod development. • Finalize and approve interim flow recommendations report. 	<p>U.S. Fish and Wildlife Service, Program Director’s Office, Biology Committee, Water Acquisition Committee, Management Committee White River Planning Team*, White River Working Group**, Contractor</p>	<p>Complete</p>
<p>Spring. 2020 – Summer 2021</p>	<p>Develop and model future depletion scenarios:</p> <ul style="list-style-type: none"> • Develop possible White River Future Depletions scenarios (new depletions to be eligible for streamlined Section 7 Consultations) based on reasonably foreseeable water demands in the basin (See ‘Phased Approach’ Document briefly described below). • Model future depletion scenarios and compare with interim flow recommendations. • Review and approve depletion scenario analyses, in consideration of future water demands and interim flow recommendations. 	<p>Program Director’s Office, White River Planning Team*, White River Working Group**, Contractor</p>	<p>Complete</p>
<p>Aug. 2020 – Dec. 2021</p>	<p>Conduct modeling on the Green River:</p> <ul style="list-style-type: none"> • Develop strategy for assessing impacts of future White River Water Development on the Lower Green River in Utah for the White River Management Plan. • Conduct, review, and approve modeling for the Green River. • Complete Green River depletion analyses 	<p>Program Director’s Office, (+USFWS Water Resources) White River Planning Team*, White River Working Group**</p>	<p>Complete</p>

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Date	Task	Responsibility	Status
Spring. 2020 – Fall 2021	<p>Address and model climate change:</p> <ul style="list-style-type: none"> • Conduct a literature review and evaluate the implications of the latest climate research on relevant hydrology and habitat conditions. • Model reasonably foreseeable climate change effects on hydrology, water demands, and compare with interim flow recommendations. • Utilization of CO’s Climate modeling outputs for the White River (component of Technical Update/ CO Water Plan Process) to examine future Phase 1 and 2 depletions in the context of future climate scenarios. 	Contractor, Program Director’s Office, White River Planning Team*, White River Working Group**	Complete
Spring. 2020 – Spring 2022	<p>Develop management actions:</p> <ul style="list-style-type: none"> • Develop management actions to improve endangered fish populations in the White River and identify how such actions will offset the depletions. • Seek input from members of the Biology Committee, Water Acquisition Committee, and Management Committee on how these management actions will offset the depletion effects to the endangered fish populations. 	Contractor, Program Director’s Office, White River Planning Team*, White River Working Group**	Ongoing
Spring. 2020 – Winter 2022	<p>Develop White River Management Plan:</p> <ul style="list-style-type: none"> • Write a draft Management Plan, including a suite of recovery actions needed to offset depletion effects. • Evaluate and recommend management actions, including developing a timeframe for implementation • Continue public outreach during development/ finalization of the plan (Yampa/White/Green Basin Roundtable, Utah, and Ute Tribe, other local user groups, etc...) to communicate content of the draft Management Plan. 	Contractor, Program Director’s Office, White River Planning Team*, White River Working Group**	Ongoing
Spring. 2020 – Summer 2022	<p>Complete Environmental Compliance:</p> <ul style="list-style-type: none"> • Develop a draft cooperative agreement framework. • Complete NEPA analysis and compliance. • Complete Section 7 Consultation. 	Contractor, U.S. Fish and Wildlife Service, Program Director’s Office, White River Planning Team*, White River Working Group**	Not complete; awaiting DRAFT WRMP Doc

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Date	Task	Responsibility	Status
2022	Sign a Cooperative Agreement to implement the Management Plan.	Signatories	Not complete
2022	Complete Programmatic Biological Opinion.	U.S. Fish and Wildlife Service	Not complete

* *The White River Planning Team consists the Upper Colorado River basin water users; Program Director's Office/ USFWS; Colorado Water Conservation Board, Utah Division of Water Rights; The Nature Conservancy; Alden Vanden Brink for the Rio Blanco Water Conservancy District; and the Ute Indian Tribe.*

** *The White River Workgroup consists of the Yampa/White Basin Round Table, including Rio Blanco Water Conservancy District, Ute Indian Tribe of the Uintah/Ouray Reservation, Bureau of Land Management, Colorado River Water Conservation District, Uintah Water Conservancy District, and Utah Division of Water Resources.*

Additional noteworthy observations:

- The development of the White River Management Plan is following rigorous technical protocols and methods with the best and most-up-to date modeling and data available through the CO Water Plan, Basin Implementation Plan, and Technical Update processes administered by CWCB. Thus development of future depletion analyses, updates to depletion accounting, and any changes and updates to water supply forecasts and planning information available through CWCB modeling should continue to be utilized as the PBO is implemented.
- In 2021 the WRPT developed and finalized the ‘Phased Approach’ Document that provides the framework for two phases of depletion analyses (‘Phase 1’ and ‘Phase 2’). Phase 1 depletions are up to 6,150 AF of new non-agricultural depletions, and 3500 acres of new agricultural production within the White River basin. At the conclusion of the Phase 1 water depletion allowance, or 10 years after the PBO is finalized, the FWS will re-visit existing and future depletions under Phase 2.
- Also critical to Phase 1 depletions is that there is no offsetting flow augmentation under current conditions, and no near-term storage available for augmentation. Thus management activities for habitat, non-native fish abatement, engagement with other working groups, and science and monitoring in the White and Reach 3 of the Green River are considered offsetting components of the Management Plan and PBO.
- The White River basin is currently the focus of a *White River Integrated Water Initiative* led by the White River and Douglas Creek Conservation Districts (to “promote a healthy river that ensures a vibrant agricultural community and maintains healthy fisheries while protecting water rights, quantity, and quality with respect for the local customs, cultures, and property rights”, <https://www.whiterivercd.com/white-river-integrated-water-initiative.html>), and a *White River Partnership* coordinated by RiversEdge West (“committed to restoring healthy riparian areas along the White River in Colorado and Utah”, <https://riversedgewest.org/white-river-partnership>). Opportunities to productively collaborate with these efforts should be considered in the development of the White River Management Plan.
- Multiple staffing changes within the White River Planning Team (particularly CWCB and PDO) affected scheduling in 2021; thus timelines for development of the WRMP, BA, NEPA analyses, and a final White River PBO have all been adjusted accordingly (see Table 1).

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Recommendations:

The development of the White River Management Plan and programmatic biological opinion should proceed as planned according to the updated target dates.

Project Status:

On track and ongoing.

FY 2021 Budget Status

Funds Provided: The Colorado General Assembly approved \$250,000 of funding for the White River Management Plan through the Species Conservation Trust Fund (House Bill 13-1283). No Program funds are being provided. An additional \$46,000 was provided through the Species Conservation Trust Fund for modeling. The total funds provided for this project are \$296,000.

Funds Expended: \$89,089.80

Difference: \$206,910.20

Percent of the FY 2021 work completed, and projected costs to complete: 30%

Recovery Program funds spent for publication charges: \$0.00

Status of Data Submission

(Where applicable): Not applicable

Signed:

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