I. Project Title: FR-168 White River Management Plan

II. Bureau of Reclamation Agreement Number(s): N/A

III. Principal Investigator(s):

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IV. Abstract: Provide and protect flows for endangered fish in the White River by assessing species needs, evaluating historic flows and projected future flows under future water development scenarios, updating flow recommendations, and consulting on a river management plan that establishes satisfactory offsets to the impacts of current and future flow depletions.

V. Study Schedule: 2012 - 2019

VI. Relationship to RIPRAP:

I. PROVIDE AND PROTECT INSTREAM FLOWS (HABITAT MANAGEMENT)


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

VII. Accomplishment of FY 2017 Tasks and Deliverables, Discussion of Initial Findings:

The schedule and tasks have been updated as follows. Completed tasks are flagged in green, and tasks that are near completion in orange:

SEQUENCING AND ROLES FOR UPDATE AND FINALIZATION OF ENDANGERED FISH FLOW RECOMMENDATIONS FOR USE IN MANAGEMENT PLAN AND PROGRAMMATIC BIOLOGICAL OPINION FOR THE WHITE RIVER BASIN IN COLORADO AND UTAH (September 5, 2017)

This proposal applies the program protocol and responds to the requests for clarification of the roles of the PDO, the modeling contractor, the program committees, the White River Work Group (WRWG), and the USFWS in the update, review and approval of the flow recommendations.

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<th>Estimated dates of completion¹</th>
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| Nov-17 Concurrent activities; greater detail provided in cells to right. | Contractor | Develop Current Hydrology.  
- Generate daily current flows by extending StateMod to the Watson gage (completed)  
- Re-state all flow statistics and daily hydrographs for the baseline (completed)  
- Consult with Utah on the extension of StateMod to the Green River to model future demands, including energy and tribal use, in Utah (completed)  
October 2017 |
| PDO, USFWS, Planning Team, WRWG | PDO, USFWS, Planning Team, WRWG | Develop Future Demand Scenarios.  
- PDO will tabulate and review future demands in CO and UT, including scenarios and storage developed by the Yampa/White BRT for future demands. High and low scenarios that represent a range of reasonable future demands will be selected by the Planning Team in consultation with the WRWG and USFWS. (near completion, finishing touches on Utah’s future demand)  
October 2017 |

¹ Derived primarily from the Wilson Water proposal and Director Walsh’s letter to Representative Tipton and then updated (first date estimates are now strikethroughed)
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| Nov-17  | PDO in concert with Flow Rec authors, Planning Teams                   | • Specify Preliminary High Flow Targets (using current daily flows from StateMod) *(Agreement on high flows.)*  
• State Preliminary Baseflow Targets (using current daily flows from StateMod) *(still working on baseflows: variable versus static.)*  
• Review and resolve comments on July 2011 draft flow recommendations report, including the topics prepared by TNC for the 12-10-2012 workshop. *(ongoing)* |
| Jan-18  | Contractor, PDO, Planning Team, WRWG                                   | Model Future Demands and Identify Impacts on Preliminary Flow Targets.  
• The contractor will model the selected future demand scenarios (including storage for future demands) and identify impacts on the preliminary flow targets. *(ongoing)*  
• PDO and Planning Team will keep WRWG apprised of the impacts on the preliminary flow targets. The WRWG will coordinate any concerns / comments through their Recovery Program representative. |
• Incorporate into draft flow recommendations report the current hydrology and flow statistics and hydrographs developed by contractor. *(ongoing, finished when draft flow targets have been finalized into flow recommendations)*  
• USFWS will update the draft flow recommendations report after considering the impact of future demands and new storage on the preliminary flow targets and responding to independent peer review  
• USFWS will seek approval of a final draft flow recommendations report, first, from the BC and WAC and then the MC (from an implementation perspective) before issuing a final report.  
• PDO and Planning Team will keep WRWG apprised of any significant changes to the preliminary flow targets.  
• The WRWG will coordinate any concerns / comments through their Recovery Program representative.  
This will encompass the iterative modeling Wilson Water has identified as Task 2c. |
| Mar 18  | PDO, USFWS, Planning Team, WRWG                                        | Non-Flow Management Actions  
• PDO and USFWS will develop non-flow management actions to improve endangered fish populations in the White River and identify how such actions (in addition to the final flow recommendations) will offset the flow impacts from agreed upon amount of future water development.  
• We expect the USFWS will seek input from the BC, WAC, or MC on how these non-flow management actions will offset the depletion effects to the endangered fish populations. |
The Planning Team currently consists of Tom Pitts for all water users, Tom Chart, Don Anderson and Tom Econopouly for the PDO, Michelle Garrison and Brenna Mefford for the CWCB, James Greer for Utah Division of Water Rights, Meg White and Nancy Smith for TNC, and Alden Vanden Brink, District Manager Rio Blanco Water Conservancy District.

The White River Work Group now consists of the Yampa/White BRT, including the Rio Blanco Water Conservancy District, the Uintah/Ouray Ute Indian Tribe, the BLM, CRWCD, Uintah Water Conservancy District, Utah Division of Water Resources.

The BC, WAC, and MC refer to, respectively, the Biology Committee, Water Acquisition Committee and Management Committee for the Upper Colorado Endangered Fish Recovery Program.

The PDO refers to the Program Directors Office, which runs the Upper Colorado Endangered Fish Recovery Program and is staffed by the USFWS.

The USFWS refers to the U.S. Fish and Wildlife Service, which is responsible for authoring the preliminary flow targets, the final draft flow recommendations report, and the Programmatic Biological Opinion for the White River Basin. The PDO will coordinate USFWS representation (e.g. USFWS personnel who serve as authors of the flow recommendations and / or personnel from Ecological Services (UT and CO)) and input throughout this process. In many instances the PDO will lead these USFWS tasks.

VIII. Additional noteworthy observations:
The Yampa/White/Green Roundtable hired Wilson Water Group (WWG) to convert StateMod to a daily step model, and WWG is working closely with the Workgroup to evaluate historic hydrology, possible flow targets for native fish considering historic flows, and the likely impacts of various development scenarios.
The Planning Team is now evaluating variable time windows for applying the base flow targets depending on the type of hydrologic year (e.g., June 15 through March 1 in the 10% driest years), rather than using fixed dates for all years (e.g., August 1 through March 1). These would correspond to the variable time windows adopted in 2000 for Green River base flow recommendations.

IX. **Recommendations**: USFWS, CWCB, the State of Utah, TNC, the Rio Blanco Water Conservancy District, and the Upper Colorado River Water Users representative should work together to hire a consultant to begin drafting the White River Management Plan.

X. **Project Status**: We have characterized historic and current White River hydrology, identified future demand scenarios, developed preliminary flow targets, and modeled some initial likely impacts of future scenarios on the targeted flows. USFWS is in the process of updating the draft flow recommendations report, addressing deficiencies identified when the current draft was earlier reviewed, and incorporating more recent biologic, geomorphic, and hydrologic information. USFWS will seek approval of a final version of this report from the BC and WAC initially, and then from the MC (from an implementation perspective) before finalization.

XI. **FY 2017 Budget Status**:

A. Funds provided: 7/13/2013 The State legislature approved $250K for the White River Plan from the Species Conservation Fund. No Program funds are being provided.

B. Funds Expended: $ TBD

C. Difference: $ TBD

D. Percent of the FY 2017 work completed: N/A

E. Recovery Program funds spent for publication charges: N/A

XII. **Status of Data Submission**: N/A

XIII. Signed: 

- **Don Anderson**  Principal Investigator  11/17/2017
- **Michelle Garrison**  Principal Investigator  Reviewed Dec 2017
- **Tom Econopouly**  Principal Investigator  11/17/2017