



Upper Colorado River Endangered Fish Recovery Program

Dated: December 19, 2018

Management Committee Summary, September 11 & 12, 2018

In Attendance:

Steve Wolff	State of Wyoming
Todd Adams	State of Utah
Michelle Garrison	State of Colorado
Tom Pitts (via phone)	Water Users
Patrick McCarthy	The Nature Conservancy
Leslie James (via phone)	Colorado River Energy Distributors Assoc.
Shane Capron	Western Area Power Administration
Melissa Trammell	National Park Service
Ryan Christianson	Bureau of Reclamation
Marj Nelson	US Fish and Wildlife Service
Tom Chart (non-voting)	Program Director

Interested Parties:

Kevin McAbee	Program Coordinator
Julie Stahli	Program Coordinator
Don Anderson	Program Coordinator
Melanie Fischer	Program Coordinator
Kathy Callister	Bureau of Reclamation
Dave Speas	Bureau of Reclamation
Lain Leoniak	State of Colorado
Chris Keleher	State of Utah
Lori Martin	Colorado Parks and Wildlife
Harry Crockett	Colorado Parks and Wildlife
Tildon Jones (via phone)	US Fish and Wildlife Service

Tuesday, September 11th

Convened: 1:00 PM

1. Introductions, modify/review agenda - Capital projects update was moved up in the agenda to be discussed before individual capital projects.
2. Approve draft April 26&27, June 25, and July 10 meeting summaries
 - a. Kevin McAbee included final and draft meeting summaries via email on August 28.
 - b. The summary of the April 26 and 27 meeting includes revisions from Tom Pitts.
 - c. The summary of the June 25 meeting was approved on July 10.

- d. The summary of the July 10 meeting includes revisions to terms presented to Thayn Hydropower from USBR.
 - All meeting summaries were approved by the Committee and posted to website.
3. Update on Fiscal Year 2019 funding - Tom Pitts said the appropriations conference bill included \$21.4 million to Bureau of Reclamation for environmental programs (including the Upper Colorado and San Juan Recovery Programs) which will fully fund the programs for FY19! We thank all those who have worked on finding this solution! >Tom Pitts suggested a coordinated approach by non-federal partners to thank the federal delegation and governors' offices that advocated for this solution. The Water Resources Development Act would have changed funding from FY20-23 from Colorado River Storage Project power revenues to appropriations, but the relevant language was removed from the bill, whose passage is still pending, so funding is not currently in place for FY20-23. Partners expressed the need to speak with Office of Management and Budget to understand scoring issues. If the Congress does not authorize program funding for FY20-23 in this session, a new bill will need to be introduced in the next session. This bill to extend the program authorization, would likely require the Secretary of the Interior to submit a report to Congress by the end of FY21 describing the status of the four endangered fish, the need for further funding post-2023, and cost-sharing arrangement to provide that funding, as did the House bill that passed earlier this year (H.R. 4465). Steve Wolff said the conference package must be approved by the House and Senate, but cannot be changed. Partners await final ratification of the FY19 appropriations "minibus" bill. [*Note: The President signed the Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019 into law on September 21.*] Patrick asked why the funding is for \$21.4 instead of \$23 M. The \$21.4 meets Reclamation's request for funds. WAPA also has expenses including the cost of experiments at Glen Canyon Dam that roughly account for the difference. The passage of this bill is a direct result of partner efforts and relationships with Congress, indicating that people outside the program understand the importance of these programs to the basin. Steve Wolff expressed special thanks to both Tom Pitts and TNC as well as all those who helped get this accomplished.
4. Capital projects budget table - Ryan Christianson provided an updated budget table for Committee review. The table is ordered by likely order of action, and the table is color coded by type. The canal fish screen is pink, reservoir containment is tan, and floodplain wetlands are green. Ryan expects an award on the on the weir and screen at the Green River Canal in approximately 1 month but doesn't have updates regarding the Thayn 8-gate structure. Installation of a downstream screen at Red Fleet Reservoir is expected to occur in the next year. The Provo office is still leading that effort and currently has a design that is 95% complete. Construction is slated for FY19, probably in the spring.

Installation of a net at Ridgway Reservoir is anticipated to occur in FY20 and is the highest priority of the fish escapement projects. The value engineering study on alternatives will occur in a few weeks. Ryan has been working on an OM&R contract for that net, which should go out to relevant parties in the next few weeks. Starvation Reservoir has been pushed out to be completed in FY20+ because of the redesign of the screen. Kevin noted that Utah paid for design work on the original screen and does not want to pay for the second design, so total cost and Program share may both change. Steve asked when the Starvation design might be available; that is currently unknown. Last on the list is Catamount Reservoir, which has been on hold since a meeting was cancelled because of the government shutdown. Catamount is likely the furthest out, projected for FY2021. The type of solution has not been determined.

Dave Speas introduced the proposal available for Stirrup wetland, which has been used to support razorback sucker entrainment previously in an unmodified state, but would further support razorback sucker recruitment with modifications to the wetland. The current proposal modifies the wetland outlet to be able to manage for endangered fish and allow approximately 6 ft of water to be maintained in the wetland. Construction includes a box culvert with multiple gates. BLM owns the land and has agreed to complete the NEPA process for dredge and fill. The cost estimate of construction is \$518,000. Dave Speas said Scott Winterton confirmed that the \$518,000 estimates for the Stirrup floodplain project does include the fish kettle and all major design components of the project. The kettle would allow much easier maintenance and would not require daily visits during draining (or 24 hour attendance as occurs at Stewart Lake). Ryan noted the Rubicon gate is \$110 K, and there may be other options for gates. Dave said we have had to modify the gates at Stewart Lake multiple times to be able to move water in multiple directions; in contrast, [the Rubicon gate](https://www.rubiconwater.com/catalogue/flumegate-usa)¹ will allow a more efficient way to manage flows and water levels both upstream and downstream of the flume. Kevin McAbee asked if Stirrup would be able to be drained completely. Dave Speas confirmed that the current plan allows for complete draining of the wetland. Kevin McAbee asked how quickly construction could begin as the Stirrup is currently dry. Dave Speas noted a group will be convened after preliminary approval occurs from the MC. > Dave Speas and Tom Chart recommended having a BC call specific to this project and will report back to the MC. Scott will check on the scheduling of the USBR force account crews. [Note - *Dave Speas reported to the Biology Committee on September 17, 2018, that the force account crew will not likely be able to schedule the Stirrup project in FY 19.*] Tom Chart asked for tentative approval from the MC to move forward, barring any major changes in cost or design, with technical approval to occur by the BC. Dave said additional funds may be needed for design as well. The MC approved continued action on the Stirrup.

¹ <https://www.rubiconwater.com/catalogue/flumegate-usa>

Modifications to the Matheson and Audubon Wetlands have both been added to the project list. The Matheson Wetland, near Moab, was a Utah DWR project, and they have started Phase 1, but the design results are less than ideal as water will not make it into the wetland itself, only into the outlet channel. The Audubon Wetland project, near Grand Junction, is ideal for outreach and other participation, but is not downstream from known razorback sucker spawning locations. The group recommended maintaining both projects on the list for tracking purposes. Tom recommended getting an update on Matheson during the BC call for the Stirrup.

The last thing on the list is the Recovery Program's \$1.5M grant to the Grand Valley Power Plant, which is a critical factor in water deliveries to the 15 mile reach. No updates are available for this project. Ryan asked for any comments/input to improve the table to be emailed to him.

The budget sheet outlines when our capital funds are expected to be spent on specific projects. Each year a set amount of appropriations are available for Recovery Program projects as needed. This sheet is a planning tool for allocating those funds. For examples, the appropriation for Ridgway in FY19 could be reallocated to accomplish the Stirrup project that year, but that may push Ridgway out to FY21. The total appropriations for FY19 and FY20 are complete and are difficult to alter. The budget sheet includes both approved projects and those likely to occur in the time horizon. Kevin asked if the 8-gate structure was included in the amount for Green River Canal project in FY19, Ryan confirmed that it is. Ryan noted that the Fruitland project in the San Juan was allocated for FY19, but is unlikely to occur in that year, which may allow changes in construction timelines in the Upper Basin. Kevin will keep review of this table as a running agenda item to provide updates to the MC.

5. Tusher Diversion projects

- a. Green River Canal fish barrier contracting and construction update - The technical proposal process went out; 4 proposals were submitted which are currently being evaluated. To use FY18 funding, money needs to be awarded by next Friday, which is the goal. The plan is still for the project to be operational by spring 2019. Tildon last saw the fish passage in mid-May and thought it would be difficult for fish to swim through it.
- b. Program support of 8-gate structure repairs with Thayn Hydropower - Ryan sent two items to the Committee. On July 10, 2018, the MC agreed to a set of initial terms of negotiation for the repair of the 8-gate structure including limiting costs to \$400K and 25% of costs incurred. Ryan sent out language and received comments back from Tom Pitts. Bob Norman expressed concern about the inclusion of review of any sales agreement on the property, but recommended

keeping the requirement that any new owners would assume responsibility of the structure. Tom agreed to removing the suggested language. Ryan supported all other changes offered by Tom Pitts. Bob also recommended removing the 25% limit and relying only on the \$400K limit just to make accounting simpler. The Committee approved a change to a one-time payment of \$400K and removed the 25% limitation. Ryan also noted that he removed the requirement for all payments to be brought back to the MC and that all invoicing and payments will be handled by Reclamation exclusively. Melissa Trammell recommended adding clarification about what specific components the Recovery Program is planning to build and how that differs from Thayn Hydro's responsibilities during construction. Ryan agreed to add the contract number for specificity. Tom Pitts reminded everyone how important this project is and thanked Bob Norman for his years of service towards this goal as it could not be completed without it.

- c. Kevin McAbee reviewed the plan to tour the facility, noting that the tour will begin at the Post Office in Green River. Travel time to Green River is approximately 90 minutes. Kevin recommends starting upstream at the diversion structure and moving down to the canal.
6. GVIC Diversion Dam - Ryan sent out a proposal from the Applegate Group to investigate modifications to the GVIC diversion dam. Total cost for this feasibility study is projected to be \$28,000. The GVIC fish screen has been down more frequently than the other screens because of how it is designed. Reclamation and the Program have been exploring possible improvements with GVIC. Upgrades or replacements to the screens could be complicated and expensive. This proposal considers raising the dam, as this would increase hydraulic head, creating more efficient operation of the existing screens, and making more options possible for screen upgrades. Don noted additional head could allow for more effective fish screen operations during low flow conditions, and potentially leave the Obermeyer gate open more often (allowing for more fish passage). This could potentially reduce the need for Orchard Mesa to check water back up to GVIC. Bob Norman says the proposal could be funded through the O&M contract and NFWF funds are not needed. Capital funds would be used to fund the project. Don Anderson and Bob Norman expressed support for Applegate as a company. Melissa Trammell asked if the Program has access to the existing floodplain model already available. Bob Norman noted that the models we have are 20 years old, requiring updated versions to be obtained. Michelle Garrison said the Colorado River was not part of FEMA map modernization project and so the Colorado River model is very old and will require a lot of work to acquire and use (and therefore supports the timeframe for the screen planning process). Recent LIDAR will assist with defining the channel. Bob believes the vast majority of the project costs are surveying costs. Tom Chart asked if the surveying will take place above and below the existing structure. Bob assumes this would

be the case as surveys would be required downstream to determine what is controlling the water level during high flows. Ryan noted he has allocated \$50K to this project for this year and additional funds in out years for possible construction. The Committee approved the \$28,000 expenditure.

7. 2018 Flow Updates

- a. Don said the flows in the 15- mile reach of the Colorado River are very low this year (~270 cfs right now, of which ~220 cfs are our reservoir releases). The Program will likely have exhausted our allocated fish pools by the end of September. Victor Lee of Reclamation's Upper Colorado River Collection Project approached Don yesterday about water that may be available and protected through the 15-MR this season. One opportunity is 5,000-8,000 af that may be made available from Green Mountain Reservoir through water service contracts, if purchased in 1,000 af pieces at ~\$20/AF. Each of the 1,000 af contracts would have to occur with separate entities. Discussions are ongoing to identify the appropriate mechanisms. *[Note: Reclamation subsequently determined that this uncontracted pool at Green Mountain would not be available this year for this purpose.]* TNC and individual water users may be able to participate as different entities. Steve Wolff asked how much flow these would provide. Don said each contract would be equivalent to about 200 cfs for about 2.5 days. Don is most concerned about early October and will either need to slow down releases now or will need additional water. Tom Chart applauded the efforts that all have made to make the water last as long as possible during this hot, dry summer.
- b. Yampa River - similarly, the Yampa River has been very dry. A call has been placed on the river for the first time in its history. Flows below the Maybell gage were dropping to near zero and there were places along the river that were completely dry. Erin Light, Division Engineer, State Engineer's Office, monitored flows and acted quickly to resolve the problem and issue the call. Erin also decided to reexamine the transit losses that were assumed to be 0.5% transit loss per mile, she reduced that to 0.1% loss per mile. The remaining portion of our releases from storage will be protected as in-stream flow. The call and follow up administration has resulted in more of the Recovery Program's storage water in Elkhead Reservoir reaching the lower river where native fish species are most prevalent. Patrick asked how the Division Engineer decides what is curtailed and whether the decision was based on senior water rights or on instream flow targets. Don explained that Erin was trying to protect senior water rights using any natural flow that would be in the river and protecting the Elkhead storage releases as instream flows. Todd asked if Erin was interested in creating a rating curve for transit losses. Don noted that transit losses vary across time and space and are very difficult to calculate. CWCB shared information with Erin, who ultimately

has the authority to set a number she feels comfortable with and adjust it as necessary. Michelle explained that Erin will continue to explore that over the winter in conjunction with CWCB.

8. Program Director's update:

- a. Staffing updates - The PDO still has 3 unfilled positions, 2 science coordinators and an administrative support position. A new science coordinator has been selected, but the final offer has not been communicated from HR. A fisheries intern will join the office for FY19 and will assist on propagation projects (and others). Administrative assistance has been provided through decentralized help from the rest of FWS.
- b. Species Status Assessments & associated documents
 - i. Humpback chub SSA and 5-year review was signed in March 2018, recommending downlisting. A proposed rule to follow through on the recommendation will be submitted to HQ FWS by the end of September. The proposed change from endangered to threatened required the inclusion of a 4(d) rule because of proposed changes in the implementation of the ESA. Neither the Program nor the FWS Region has control over when the proposed rule is published, but the PDO is hoping that it is published before the next DC trip in March. Kevin reiterated the importance of continued funding to reinforce the conclusions reached in the SSA and subsequent documents. The proposed rule includes a 60-day comment period; FWS will inform partners when the comment period opens.
 - ii. In the lower basin, DOI is in the planning process for a potential High Flow Experiment from Glen Canyon Dam. Also, the NPS's Nonnative Fish EA was released for public comment today. The EA includes adding a cash incentive to harvest brown trout below Glen Canyon Dam and allowing rotenone treatment under certain conditions. The EA also supports increasing Tribal participation by adding guides to take Tribal youth fishing. Program partners who wish to submit comments should do so by October 11. Comments will not be coordinated through the Program.
 - iii. Julie Stahl has been leading the development of the razorback sucker SSA this summer, with a signed 5-year review scheduled to occur by the end of September. Julie built on the draft submitted by BioWest and convened a science team for resource condition evaluation and future scenario development. The SSA was reviewed by program stakeholders in June and updated. The SSA has been approved by the Regional Office and a 5-year review is being drafted for release by the end of the month.

- iv. Eliza Gilbert, San Juan Program biologist, has been drafting an SSA for Colorado pikeminnow over the summer. This will be reviewed internally then shared externally soon. A 5-year review is planned for FY19.
 - v. A bonytail 5-year review is slated for FY19, without an SSA.
 - c. Post 2023 Program Planning update - Lots of effort was dedicated to this process earlier in the year focusing on what recovery looks like and what actions are necessary into the future. The PDO is still planning to circle back to the RIP/RAP to characterize what Post-2023 actions look like. As staff finishes some of these larger documents (SSAs, 5-year reviews, rules), the PDO anticipates returning to this effort. Steve Wolff noted that the report to Congress requirement was in the legislation that did not pass.
 - d. 2018 Sufficient Progress update - Tom Chart is drafting a sufficient progress letter that builds on the RIPRAP review, which was finalized in April. This year's letter includes the review of Programmatic Biological Opinions in the 15-MR, Yampa, and Gunnison.
9. Interim Agreement for Drought Response Operations - Steve Wolff noted Drought Response Operations is one of three parts of the Drought Contingency Planning (DCP). A principals meeting next week will wrap up final drafts that can be brought back to the appropriate commissions in each state. A Lake Powell surface elevation of 3525' is a critical level to DCP. There could be a plan to pull water out of the CRSP units (Aspinall, Navajo, or Flaming Gorge) should that occur. The document will define the process for making that decision, including reservoir storage recovery. Any reductions in upper basin consumptive use would be compensated. This process defines a framework, not the decision itself. Lain Leoniak noted that as a second line of defense, demand management programs would be voluntarily implemented in the upper basin states. Three elements of the upper basin plan include: reoperation of the CRSP reservoirs, weather modification, and reductions in demand. The Interim Agreement includes language that all drought response operations would comply with existing Records of Decisions and Biological Opinions. The upper and lower basins documents are planned to be signed by the end of 2018, and include federal legislation. For full implementation, the Arizona legislature must pass legislation, which will likely not occur until 2019. The agreement will be signed by the Secretary of the Interior and an MOU will be created with WAPA.

Adjourned: 4:26 PM

Wednesday, September 12th

Convened: 9:00 AM

10. Review of potential lease of water to support the 15-MR - As noted yesterday, low water conditions are present across the basin and the Program is actively searching for new

water options. Don had conversations with Victor Lee (Reclamation) before the meeting this morning and understands that 5,000 acre-feet of water is now determined to be available from the in the “4 out of 5 pool” in Ruedi Reservoir (earlier this year, it was determined that water was not available). Water users in the Grand Valley are also looking for additional water for consumptive uses, but this pool cannot be used for that purpose. Reclamation determined that if ExxonMobil donates water to the general pool the ‘4 out of 5 water’ can be made available to the Recovery Program for flows in the 15-MR. This 5,000 af is expected to be made available at no cost to the program. Big thanks to Kyle Whitaker (State Engineer’s Office) and Mark Hermunstad (legal counsel for West Slope water users) for assistance in working on this. Don expects this will help carry flows through the first couple of weeks of October. Steve asked if, with this water, will Don still pursue the 1,000 af contracts that were discussed yesterday. Don said that will remain under consideration over the next few weeks based on water conditions. Don will bring proposals back to the MC as needed. *[Note: Reclamation subsequently determined that this water from Green Mountain Reservoir will not be available for this purpose this year.]* Don expects irrigation to continue through the beginning of October, but demand may decrease about mid-October. GVIC has been having to make hard discussions and will run out of HUP “direct delivery” water from Green Mountain Reservoir within days, while other Grand Valley water users are expected to run out not long after. Crops are coming in in the next few weeks and then rewatering will occur.

Patrick asked how a donation from ExxonMobil can free up water. Don explained that the ‘4 out of 5 year’ pool is specifically designated to support base flows in the 15-MR. Reclamation cannot provide the 4 out of 5 water when it threatens their ability to meet other contract agreements. With the 5,000 af donation, Reclamation can provide this water while meeting all other Ruedi Reservoir contract obligations. Don said we might consider this “donation” to be worth around \$20/AF (for a total of ~\$100K) based on the cost Reclamation estimated for contracting additional water from Green Mountain Reservoir this year. Don noted that the rate at which water can be released out of Ruedi Reservoir under the terms of CWCB’s Ute water lease is restricted (max 300 cfs); he expects to be out of CWCB’s Ute water in the next few days and then will continue using other endangered fish pools (at which point releases to the Fryingpan River are not contractually limited to 300 cfs). Ryan noted we may still need additional water in the 15-MR. Don asked for permission to purchase 1,000 af out of Green Mountain at an estimated \$20/acre-foot should it become necessary. Tom Chart noted that the funds would likely come out of the Section 7 account. Kevin said we have about \$275,000 in that account which is unobligated currently. Lain encouraged coordination with CWCB to ensure the releases are protected through the Grand Valley. The Committee approved purchase of 1,000 af if the PDO deems the purchase appropriate. Melissa asked how Don would likely release the 5,000 acre-feet now available from the 4-in-5-year pool. Don

noted we could release 250 cfs for 10 days or 125 cfs for 20 days. Don is currently releasing 240 cfs from upstream reservoirs, with approximately 220 cfs reaching the 15-MR due to transit loss. Don said that earlier in the year, 17,000 cfs was released by the Colorado River District from Wolford Reservoir for maintenance purposes, which was able to be protected through the 15-MR, all at no cost to the program. Tom Chart complimented all for the efforts that Reclamation, CWCB and water users have put in to help us make it through a very low water year. Ryan expressed support for the weekly HUP calls, which help everyone understand what the problems are. Tom Pitts said he would like a press release developed about how all the water coordination has supported flows in the 15MR and all the work of all the parties involved. >Don & Melanie will take the lead on the press release once the contracts are finalized. *[Note: Don and Melanie worked with Reclamation to produce the press release.]*

11. Review of Fish Studies and Flow Recommendations for Endangered Fishes of the White River, Colorado and Utah. Don reviewed the history of the White River. He said the White River does not have a programmatic biological opinion, but that the Recovery Program has supported multiple studies regarding flows on the White River. Flow studies were undertaken in the late 1990s, with draft peak flow analyses provided in 2002 (Schmidt and Orchard) and a final base flow analysis in 2004 (Haines et al.). In 2011-2012, a draft flow recommendation document was developed by Jana Mohrman, Tildon Jones and Matt Breen. A decision was made at that time to take a more considered approach to develop flow recommendations, a management plan and the foundation for a programmatic biological opinion. In 2016, a White River Planning Team was convened and Wilson Water Group was contracted to create a model for the White River based on Colorado's STATEMOD. The report was updated with the model of current water use and future water demand in the basin, endangered and native fish information, and new flow recommendations. The group developed flow recommendations based on current levels of development under the assumption that the current flow regime is beneficial to endangered fish. Don distributed the document to the WAC, BC and the White River Planning Team for technical review with an October 19 deadline to provide comments. The MC was cc'ed on that email. It seems a lot of misinformation is circulating about a 300 cfs baseflow target and as a result discussions about a potential fish pool in a new reservoir that would be sized to meet such a target. The suite of flow recommendations is quite different, including different flow targets for different hydrologic years. Tom Chart said it will come to the Management Committee as a flow recommendation document for approval once all of the recommendations from the technical committees are incorporated. Don thanked Tom Econopoly for all of his help in coordinating the planning team's reviews of the model and flow recommendations. The planning team has seen the recommendations and have had multiple opportunities to provide feedback. Tom Pitts said water users want the same amount of regulatory certainty for all water users on

the Western slope that are provided by programmatic biological opinions, which has encouraged development of these programmatic biological opinions and river management plans. The CWCB is currently developing an RFP and scope of work to contract for the development of the White River Management Plan. The Program has been successful in reaching out to the Uintah and Ouray Ute Tribe and has discussed this planning process with tribal representative Duane Moss, who is now participating in the planning team. Tom Pitts said there are many potential future demands for the White River basin and defining these will be one of the largest challenges in development of the plan. The Uintah and Ouray Reservation has reserve water rights and addressing that in the management plan will be an additional challenge. Federal reserve tribal rights have not been previously addressed by the Program.

- a. This draft report was emailed to technical committees and peer reviewers on September 10th.

12. Updates:

- a. Leslie James thanked Don and Melanie for their participation in the National Water Resources Association meeting in Park City. She praised the display and representation of the Program. Michelle thanked Melanie, CWCB and CPW for all of the extra outreach that occurred in conjunction with the Elkhead Reservoir Fishing Tournament. Melanie thanked CPW for bringing her out on ranger boats, which allows her to meet with anglers one-on-one, which are great opportunities to connect.

13. Schedule next meeting – Webinar on Wednesday, December 19th in the afternoon (tentative 1-4:00).

Adjourned: 10:30 AM

A group of Program participants visited the Tusher Diversion & Green River Canal in the afternoon.