



Upper Colorado River Endangered Fish Recovery Program

Dated: May 20, 2019

Management Committee Summary, April 25-26, 2019

In Attendance:

Steve Wolff, chair	State of Wyoming
Todd Adams	State of Utah
Michelle Garrison	State of Colorado
Jojo La	State of Colorado
Tom Pitts	Water Users
Patrick McCarthy	The Nature Conservancy
Leslie James (by phone on day 2)	Colorado River Energy Distributors Assoc.
Shane Capron	Western Area Power Administration
Melissa Trammell	National Park Service
Ryan Christianson	Bureau of Reclamation
Marj Nelson	Fish and Wildlife Service
Tom Chart (non-voting)	Program Director

Interested Parties:

Kevin McAbee	Acting Program Deputy Director
Julie Stahli	Database Manager, Program Office
Don Anderson	Instream Flow Coordinator, Program Office
Tildon Jones	Habitat Coordinator, Program Office
Cheyenne Owens	Natural Resource Specialist, Program Office
Kathy Callister	Bureau of Reclamation
Dave Speas	Bureau of Reclamation
Paul Badame (by phone)	State of Utah
Lain Leoniak	State of Colorado, Attorney General's (AG) Office
Chris Breidenbach	State of Colorado, AG's Office
Ed Warner	Bureau of Reclamation
Ray Tenney	Colorado River District
Chris Keheler (by phone)	State of Utah
Matt Bryner (by phone)	Provo Office, Bureau of Reclamation

Convened: 3:12 PM MT

1. Approval of meeting summary from December meeting – The Committee approved the meeting summary from December. Julie will finalize and post (*done*).
2. Program Director's Update
 - a. Federal Register document updates - Kevin briefed Fish and Wildlife Service Headquarters about the Proposed Downlisting Rule for humpback chub in February. He has addressed two sets of comments from Headquarters. New guidance about regulation changes to the ESA came out in mid-April, which may affect the process. FWS is confident that the Proposed Downlisting Rule for humpback chub will be published by

the end of the fiscal year, hopefully sooner. The razorback sucker proposed downlisting rule is scheduled to clear the FWS Regional Office by the end of FY19.

- b. 5-year status reviews - Cheyenne Owens has been developing a short form assessment for bonytail, which is in review. Tildon Jones has been developing the SSA for Colorado pikeminnow. Tildon has a draft and is currently working with a science team to ensure all relevant information is included. Conditions and habitat factors have been developed and an assessment of current condition is forthcoming. The SSA will likely be sent to the Program technical committees by the end of July. The 5-year review will likely be finalized by the end of the calendar year.
3. Report from DC Briefing Trip – *Summary inserted from the IC meeting: Steve Wolff reported that the authorizing funding legislation was wrapped into PL 116-9. Sixteen participants attended 32 meetings with elected officials offices and Department of Interior representatives. The downlisting news was well received. The funding for these programs are in the President’s budget for FY20, and were supported in the House budget. The Senate Energy and Water Appropriations Subcommittee informed the group that support from Senators from the upper and lower basin states must occur if the recovery programs were to be funded in FY20. Most of the Senators from the four upper basin states sent letters of support. The House and Senate appropriations subcommittees are working on the FY2020 budget next week and the week after. Tom Pitts said both programs still have strong support from the delegations. Members are appreciative of the parties bringing a solution to the potential ESA conflict in the Upper Colorado and San Juan basins. All members of the House and Senate delegations were asked to support funding in the Reclamation budget for the recovery programs, and the Grand Canyon Adaptive Management Program in their requests to the appropriations committees. Senator Gardner submitted a letter of support. Partners are optimistic that the Programs will be funded in FY2020. Tom Pitts noted that DC trips are essential to maintaining support and funding at the national level. Kathy Callister agreed that the in-person discussions are essential to maintaining support. Tom Chart thanked all the non-federal partners who take the time to plan and attend that trip. Steve Wolff was praised for his ability to schedule the meetings effectively. Tom Pitts recognized Paul Badame and Bill Miller for providing their scientific expertise in those meetings, which is essential for providing credible answers to questions regarding the status of the species. Steve thanked Melanie for the stuffed Briefing Books. Tom Pitts also applauded the work of Jojo La in working with the Colorado delegation to get budget requests submitted.*
4. Post 2023 results and next steps - Julie reviewed the post-2023 process to date and showed examples of some of the activities and levels of action suggested by the expert teams. Jojo asked if participants would be able to choose from multiple options in each box. Julie noted that each box should be able to stand on its own, but will go back and clarify that statements are in place to help in the selection process. Julie reviewed the timeline moving through the summer to get data to the MC to determine optimal Program size moving forward. The Committee discussed next steps, specifically whether or not to include costs in the tables as they are distributed. The PDO agreed consider including costs vs no costs in the next step and will bring options back to the MC. >Julie will send out draft guidance for selections before the tables are distributed in mid-June for MC review.

5. Update on Green River Flow and Temperature Recommendations – Tom Chart reviewed the history of the Green River Flow Recommendations. There are currently three main areas of revisions being considered: spring operations to support floodplain connections, revised base flow conditions to support Colorado pikeminnow and the potential addition of flow spikes to disadvantage smallmouth bass downstream of Flaming Gorge. The revised recommendations have been proposed as continued experimentation under the existing 2006 ROD. In March, 2019, the Program included the experimentation suggestions in the draft annual flow request for Flaming Gorge based on study plans that are currently in place for flow spikes and larval-trigger operations. Tom said study plans to assess both biological and physical effects of base flows are forthcoming. The determination of whether NEPA is needed to implement experimental flows or not lies solely with Reclamation. Shane expressed a preference for the report to suggest changes in operations and not as experiments. WAPA has seen greater impacts than anticipated in implementing some of the previous experiments. Steve Wolff requested an analysis of effects on water delivery to Lake Powell related to the operating tiers in the 2007 interim Guidelines. The Green River Evaluation and Assessment Team (GREAT) report that is being prepared will include actual flow recommendations that require Management Committee approval. The Management Committee will review the GREAT report and will decide how the recommendations are presented (e.g. more experimentation to support changes in operation in the future or operational changes now). Dave Speas said explanatory graphs are included in the GREAT report that will assist with an evaluation of effects to various resources (e.g. hydropower generation, Lake Powell lake levels).
6. Possible Letter of Interest, Wolf Creek Reservoir storage - Don informed the Committee that the Rio Blanco Water Conservancy District is interested in developing new storage in the White River basin. The District is seeking a conditional water right for a reservoir based on their characterization of proposed uses and the amount of storage needed. The District has approached the Program about identifying the recovery of endangered fish as a use for some of the storage. Don says it is too early for the Program to determine what involvement may be in a new storage facility. The Program continues to work with various partners (including Rio Blanco WCD) in the White River planning process, which is considering a number of possible future development scenarios in the basin in order to craft a basin Management Plan that could serve as the basis of a programmatic biological opinion. The Colorado Water Conservation Board and State Engineer's office are involved in discussions on various aspects of the proposed storage project, project feasibility studies, and the conditional water right request. The Program may have future involvement in a proposed reservoir as more information is obtained.

Adjourned: 5:00 PM MT

Friday, April 26, 2019

Convened: 8:02 AM MT

7. Capital updates:

- a. Reservoir screening update - Kevin McAbee reviewed the table outlining reservoir screening projects across the basin. Red Fleet Reservoir has a downstream screen planned. The design has been completed and construction is currently scheduled for spring 2020. Reclamation's Force Account Crew from the Provo Area Office is scheduled elsewhere during the fall of 2019. Projected costs are now about \$250,000 above the original estimate. Utah DWR is contributing \$150,000. Kevin, UDWR, and Reclamation suggested pulling capital funds currently scheduled for the Starvation screen project to complete the Red Fleet screen as it is nearly ready to go. Kevin recommended reconciling the effect on the capital budget in the coming months. Paul Badame agrees that Red Fleet is the top priority for screening. Leslie asked where the higher costs came from; Kevin clarified that the increase came from Reclamation and was attributed to the price of the metal screens. The State of Utah is considering taking on greater responsibility for the Starvation Res. screening project to offset some of the cost-share increase at Red Fleet Res. Kevin thanked Utah for that offer, but recommended we continue to focus on developing the best and most practical solutions to reservoir escapement. The location of Red Fleet (on Ashley Creek, 13 creek miles away from the Green River and entering the Green River between the razorback sucker spawning bar and the wetlands) makes it important to screen as soon as feasible. Yellow perch and walleye have likely escaped from Red Fleet in the past, based on their capture in wetlands managed for razorback sucker larvae downstream. The Committee supported the use of funds to move forward with Red Fleet. Starvation has a temporary screen after the stilling basin. The Program will continue to pursue a permanent solution for escapement at Starvation Reservoir.
- b. Ridgway Reservoir fish escapement project - Kevin reviewed the history around Ridgway and the illicit introduction of smallmouth bass in 2013. Tri-County has successfully prevented spilling since 2014 to prevent smallmouth bass from escaping. Fishing tournaments have been held every year since 2015. The population is now changing in response to the tournaments, bass are smaller and harder to find. Two of the alternatives the value engineering produced were brought back to the stakeholders: a net in the reservoir or a screen on the apron of the spillway. The desired solution was a screen on the spillway apron. Fish only interact with the screen during a short period of time and the screen is likely to be in the water for less than 3 months annually. The projected price is currently \$3.8 million. The screen has a life of ~40 years and will be much easier to maintain (not requiring SCUBA teams) unlike some of the other nets the Program has installed. The current screen design will pass a spill of up to 850 cfs. Based on historical hydrology and operations, a spill greater than 850 cfs is not anticipated. Matt Bryner added that a debris boom is included in this price. The debris boom is designed to keep the large debris out. He anticipates that any debris that bypasses the debris boom will be on the top of the water, so clogging would likely occur on the top side of the screen, but the remainder of the screens should remain open. Historically, Tri-County Water Control District would operate to push woody debris over the spillway and downstream. Since 2014, Tri-County has managed the reservoir to avoid spills. CPW has committed to writing a Lake Management Plan, which is currently in internal review. CWCB has committed to fund \$1 million with the remainder coming from the Program. CPW (Ridgway State Park) will be responsible for O&M of the screen, including removal of the woody debris. The Program will be responsible for large issues requiring

significant repair or replacement. The design is modular, so individual panels can be removed and replaced as needed.

- CPW was interested in exploring designs for increased flows (1500 cfs) to ensure smallmouth bass will not be spilled at higher spillway capacities. Increasing the screen flow capacity would require an increase in height by ~1 ft, change the angle of the screens and increase the price tag by ~\$600,000. Matt said the 1500 cfs number was chosen arbitrarily and represents a spill approximately 4 times larger than has ever occurred in the observed hydrologic record. According to Jojo, in 1990, the reservoir spilled 740 cfs, in 2009 630 cfs, in 2010 430 cfs. Some of those spills were planned by the dam operators specifically to flush woody debris through the spillway. The outlet works are large in relation to the incoming capacity at this reservoir, making large spills unlikely. Melissa asked if an analysis had been done to assess what the chances that a flood could exceed the 850 cfs limit. Ed Warner said that the outlet works can handle 1400 cfs, which means a rain event would have to exceed 2000 cfs to overtop the screen. Ed clarified that the dam safety analysis will ensure that the screen will not affect the underlying structure of the dam, but will not address spill likelihoods. Reclamation's Technical Services Center needs permission from the MC to proceed with modelling. The Committee recommended moving forward with the 850 cfs design based on cost concerns for the increased structure. Michelle and Jojo will go back to CPW to determine whether Colorado would like to continue discussing the 1500 cfs design, and if so, how that might be funded.
 - Patrick McCarthy asked whether this was the most expensive escapement prevention device in the Program's history. Kevin confirmed that it is, but it will likely last longer than the nets and require less maintenance.
 - c. 8-gate structure construction - proposed fall of 2019 – Ryan explained that Thayn Hydropower is still waiting for FERC approval on the 8-gate structure. The Program approved \$600,000 contingent on construction while the coffer dam was in place. Ryan will return to the Committee when more information is available.
 - d. Green River Canal screen - the screen was constructed this spring. 80 cfs is screened to 3/32" with another ~20 cfs of bypass flow returning to the river to operate the screen. Ryan showed photos and videos of the new facility. The automation is still not working, but should be addressed in the next few weeks. Cleaning is recommended daily. Current data shows no entrainment into the canal, only test tags have been detected on the canal antennas. The canal screens approximately 1/10th of the total water diverted, with the remainder going to the hydropower plant. Approximately 2600 bonytail were stocked about three miles above the diversion on April 18th. We estimate more than 300 of them showed up on antennas in the raceway just upstream of the barrier; none have been detected downstream of the barrier, showing that the screen is working. Melissa clarified that the original estimate for this project was ~\$7M. The final price tag was ~\$4 million. Melissa expressed concern about the 90 degree turn and asked that the Biology Committee to assess fish condition after going through the return.
8. Review and approve draft revised RIPRAP, RIPRAP assessment and draft FY 20-21 Program Guidance

- a. Draft RIPRAP tables and assessment - Kevin explained the RIPRAP process including that the IC delegated approval of the RIPRAP an associated documents to the MC. Kevin and Tom proceeded to review the documents with the Committee.
 - i. Tom highlighted that the Green River flow spike study plan (a recommendation in the pending GREAT report) was completed last fall. He reminded the Committee about the severity of the nonnative fish problem in the Program and that flow spikes could be a very important tool in our tool box. Committee members have raised concerns about the effects of the flow spikes and revised base flow experiments (also a recommendation in the GREAT report) on channel dynamics. The Program is developing the necessary and additional study plans to monitor the effects these flow experiments could have on channel dynamics. Shane expressed the desire to talk about the impacts of these flow experiments on hydropower. The Committee agreed to continue to discuss these issues during their review of the GREAT report.
 - ii. Kevin highlighted additions to the tables, which are colored green.
 - iii. Tom highlighted the actions on the Price River completed by UDWR and TNC. Don explained the goal is to enhance Olsen Reservoir and support instream flows in the lower portions of the Price River.
 - iv. Patrick asked if the Program was considering the lawsuit from CBD regarding the EA on Reclamation's 'Block Exchange' contracts. James Greer has committed to researching the implications of these new contracts on flows in Reach 3 of the Green River and committed to report back to the WAC during their July meeting.
 - v. Tom praised Matt Breen's effort to reduce cattail growth in Stewart Lake. A second burn is being considered for this year, which will be followed by the addition of supplemental water to suffocate the cattail roots. UDWR is also looking into mechanical control methods.
 - vi. Tom highlighted the renewed lease between FWS' Ouray National Wildlife Refuge and the Ouray & Uintah Ute Tribe, which restores Recovery Program access to another managed Green River floodplain (Old Charley Wash). Tom noted the blockage of the fish passage at Tusher Diversion and encouraged continued action to ensure passage is possible, especially for Colorado pikeminnow.
 - vii. Tom Chart recognized that the PDO has received a draft Yampa River depletion accounting report. Tom noted that during the drought of 2018, the Division of Water Resources re-evaluated and reduced transit losses assessed on Elkhead storage releases. Jojo said the final transit loss report is currently in draft form and likely to be finalized by the end of the calendar year. >Tom Pitts asked Don to determine the effects of the improvements to the Maybell Canal on flows.
 - viii. Tom praised Billy Atkinson for the heroic effort to treat Chapman Reservoir with rotenone to eliminate a recently introduced northern pike population.
 - ix. Kevin highlighted the decrease in catch rates for northern pike in the Yampa since CPW implemented netting of backwaters. A population abundance effort is underway on the Yampa, which may be able to assess the relative contribution of netting and electrofishing to determine which method is more effective.
 - x. Tom thanked all who have been working on the White River planning team. Tom Pitts said Uintah & Ouray Ute Tribal reserve rights will have to be addressed in that basinwide process, which is new for the Program.

- xi. Jojo noted the discovery of pike in Kenney Reservoir. Tildon said about two dozen have been captured near public access points in the reservoir. Most of the fish caught were adults and it is likely they were spawned elsewhere. The District already holds a fishing tournament at Kenney, CPW will likely provide education at that tournament to encourage catch of northern pike. Melissa encouraged continued removal efforts as long as possible.
 - xii. Tom and Don praised the extraordinary collaboration that kept water flowing through the 15-Mile Reach on the Colorado during summer 2018. Don said the Colorado Water Trust is considering leasing water to be available to support late-summer base flows this year. The mechanism for delivering this water to Palisade is a contract signed between Reclamation and water users in the Grand Valley that allows use of surplus capacity in the federal water delivery system. Don thanked CWCB for the ongoing assistance in leasing Ruedi Reservoir water from Ute Water when feasible. Don said there are users of the Colorado River near Rifle (Middle Colorado Watershed Council) who are interested in developing an integrated water management plan that, among other things, could support the Program's instream-flow protection interests; that group has invited the PDO to make a presentation about the Recovery Program. Tom Pitts thanked Noreen Walsh for the letter she sent to water users praising their collaborative efforts in 2018. Tom Pitts asked if the Program was tracking the water savings derived from the OMID rebuild projects. Don and Ryan said that information is currently being collected.
 - xiii. Matheson flooded bottom land has been added to the table. It is the first managed wetland on the lower Colorado River. The MC approved funding to support Matheson, which will be used to install gates and screens that will allow water control when larval razorback are observed in the Colorado River. Supplemental water may be needed to keep suitable water quality throughout the summer, which may come from Mill Creek.
 - xiv. Tom said GVIC only operated 25% of the time in 2018, as a result of low flow conditions. Discussions are underway to determine how best to increase screen operations. The first option may be to increase the elevation of the diversion dam by a foot to provide additional hydraulic head. Tom mentioned that this could also help with maintaining fish passage operation. Melissa asked if raising the dam would improve water delivery to the canal as well as improve screen operation. Ryan said raising the dam should improve both water delivery as well as increase the operational time of the screens.
 - xv. Selenium concentrations in the lower Gunnison have decreased to the state standard, as a result of a well-designed, Reclamation-led Selenium Management Program with substantial community support. Tom Pitts commended Reclamation for the success of the selenium program.
 - xvi. A record number of Colorado pikeminnow (38) used the Redlands fish ladder in 2018.
 - xvii. The Program praised CWCB for securing a decreed instream flow right on the Dolores.
- b. Draft revised RIPRAP text review
- i. The PDO made fairly substantial revisions to the document this year and suggestions have been incorporated from technical committee members.

- c. Draft FY20-21 Program Guidance word document and Work Plan excel spreadsheet were reviewed. Program guidance includes new recommendations to submit a word document along with the budgeting spreadsheet provided by Reclamation. The Coordinators will work on integrating those documents together in a consistent manner. Program guidance includes a recommended list of significant changes to scopes.
 - i. Canal salvage at GRC will be terminated because of the new construction of the fish screen and barrier.
 - ii. Operation and maintenance of permanent PIAs will be in a new scope.
 - iii. A one-year increase in funding in 29c to add a new fiberglass tank at Wahweap.
 - iv. NPS and USGS monitoring for channel and vegetation changes documented in a new scope.
 - v. Floodplain wetland operation may require additional dollars based on additional sites and maintenance needs.
 - vi. Increases in statistical analysis to support northern pike work.
- d. Kevin and Tom noted that carryover in the FWS agreements have filled the holes in the budget for the last few years. Those funds are decreasing over time and the Coordinators will work with the PIs to decrease costs as much as possible in coming years.
- e. The I&E Committee has asked certain SOW include the submission of popular articles to acknowledge that they are spending hours on those projects in addition to annual reports. Melanie said it will really help her accomplish her job by increasing storytelling and transparency.

The Committee approved the materials as distributed and edited.

Todd Adams announced that Mike Styler has announced his retirement and will no longer be able to serve on the Implementation Committee. Tom thanked Mike for all the support he has provided to the Program over its history.

- 9. The committee scheduled a webinar on June 25th from 1-4 pm and an in person meeting September 3-4 in Denver.

Adjourned: 11:50 AM MT