



# Upper Colorado River Endangered Fish Recovery Program

## Biology Committee Summary

Grand Junction Double Tree Inn – Kokopelli Room

January 31, 2024, 11:00 am – 12:00 pm (MST)

February 1, 2024, 8:30 am – 1:00 pm (MST)

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### WEDNESDAY (1/31) - CONVENE: 11:15 AM

**BC Members:** Dale Ryden, Pete Cavalli, Harry Crockett, Melissa Trammell (chair), Dave Speas, Randy Oplinger, Derek Fryer

**Participants:** Creed Clayton, Travis Francis, Kate Lutz, Ike Thibodeau, Tory Eyre, Ben Felt, Chris Smith, Donald Tuttle, Sadie Hyder, Anna Amidon, Mike Partlow, Ben Williams, Jared Smith, Katie Creighton,

**Program Director's Office:** Paul Badame, Julie Stahl, Tildon Jones, Koreen Zelasko, David Graf, Shannon Nelson, Chris Michaud

**Review 2023 NNF reporting** – Tildon reviewed the [2023 annual report recommendations](#) for NNF. The notes here will appear disjointed without also using the above link for context.

The project 151 backwater landowner continues to deny access, and some believe that incentives may be the only remaining option to gain access. Access is seen as important because high densities of pike are found at this site and reproduction likely occurs there as well. Concerns were raised about the precedent that could be set by paying for access. Dale Ryden clarified that 'access leases' are used currently by DOI partners to access private land. Travis noted that a nontraditional partner like NRCS may be able to negotiate an access lease on our behalf and remove the direct connection to the Program. The remaining questions are is access important enough to pursue an access lease or should we focus on other actions in the Yampa. As a follow up, Tory noted that the family may be willing to berm the backwater, disconnecting it from the river. Reclamation studied that previously and determined that it would be difficult and be a potential liability risk to Reclamation for any future damage. A discussion about Yampa nonnative fish priority actions narrowed in on the completion of the fish screen at Catamount. The BC agreed that installation of a screen at Catamount should remain priority 1 and that further investigation for access options for the 151 backwater is needed. >**The PDO** will investigate options for an access lease and other potential avenues to secure access to the 151 backwater. Shannon suggested exploring options that might be available through the FWS Partners for Fish and Wildlife Program and potentially approaching the matter as a restoration project.

The recommendation of adding effort to do low water removal (e-seining etc.) was started. Julie noted that this type of recommendation can be addressed and implemented by the PIs and element Coordinator, unless it rises to the level of adding to or significantly changing the workplan. Travis asked what the BC would like to hear from the nonnative coordinator in relation to any changes or adaptations that the PIs are considering. Melissa Trammell felt informed by updates that Kevin McAbee provided in the past. Melissa encouraged PIs to be open with the nonnative coordinator. Dale asked if the BC is worried about the PIs working

outside their scopes. No one expressed any concerns as long as the NNF coordinator was involved in all decisions and the BC remained informed.

Paul thanked Utah and Colorado for their flatwater reports. He noted the data in those reports was comprehensive and very helpful. Ben Felt noted that CPW is moving forward to implement screening of the smaller facilities outlined in the report. No additional action is needed from the Program.

The walleye removal report recommends additional effort. Mike Partlow said in years when they do not have pikeminnow efforts, they have available time to move to walleye hot spots rather than conducting removal in the Middle Green where catch rates are low. Ike Thibedeau noted that walleye spawn early – late Feb or early March so moving earlier in the season might be productive – especially when it may result in finding a new spawning bar. Katie Creighton said Moab sends one boat out per week starting in March for surveillance and they don't typically find much until April. Travis noted that they can try to put a boat on the water for some exploratory reaches. Travis anticipates a banner walleye year based on gizzard shad numbers and will adapt as possible to address those concerns. Mike reminded Travis that because Green and Colorado pikeminnow estimates are occur in different years, that they would likely be available to assist with any early walleye hotspot control in March or April of 2025.

Travis walked the group through some access issues due to a lack of boat ramps in certain areas like the reach between Gov Highline and Cameo. Several of these reaches are important both for smallmouth bass removal and pikeminnow estimates and a solution in the near future is needed.

### **WEDNESDAY (1/31) - ADJOURN: 12:15 PM**

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### **THURSDAY - CONVENE: 8:30 AM**

**BC Members:** Melissa Trammell (chair), Dave Speas, Dale Ryden, Derek Fryer, Pete Cavalli, Jenn Logan, AJ Keith, Randy Oplinger, Tom Pitts

**Participants:** Kate Lunz, Harry Crockett, Jenn Logan, Chris Smith, Travis Francis, Brian Scheer, Saidee Hyder, Mike Partlow, Kate Lawry, Katie Hennis, Tyler Swarr, Jared Smith, Zane Olsen, Ben Williams, Zach Ahrens, Cat Adams, Katie Creighton, Blake Hansen, Donald Tuttle, Darek Elverud, Brian Hines, Kara Scheel, Sam Brockdorff, Tory Eyre, PDO Staff

**Review/modify agenda** – Trammell reviewed the agenda and minor adjustments were made to the timing of discussions to allow for a few early departures.

### **Consent Agenda**

#### Review Committee assignments list as of December 11, 2023

- a. **Tildon Jones** will distribute a copy of the flow request letter to the MC and BC for review and encourages the BC to discuss it with their MC rep for any additional comments. *ACTIONS: Completed, Tildon will send the draft to the MC (with the BC cc'd) in the next few days for a two week approval period.*

- b. **Jenn Logan** will investigate if there is a concern leaving the fish barrier net in Highline Reservoir dry for an extended period of time and report back to the Committee. *ACTIONS: The net will not be damaged by wet-dry cycles. The copper treatment is still in place at Highline. The concentrations of copper are still too high to release. Once levels drop to 200 mg/L they will release water out of the reservoir to hopefully eliminate mussel veligers below the reservoir (which have recently been found). The concentration would prevent reproduction of the mussels. To drain the reservoir before next winter, they will need to keep the reservoir 20-30 ft below full pool throughout the summer. Fish tend to move away from high concentrations. Adult fish are not currently in Salt Creek (which is downstream of Mack Wash). Razorback sucker spawning in the area is possible, but not confirmed. The aquatic life standard is 30-50 mg/L, which will be exceeded to detrimentally affect mussels in Mack Wash. Inputs from Salt Creek and the Colorado River will dilute below the aquatic life standard.*

Approve December 11 meeting summary. Approved following a few edits were made during the meeting.

**Reports due list** – The report list was updated with new reporting timelines. A tab was added to the Excel file which depicts the current and past monitoring schedule for the four listed fishes. Paul will maintain this file along with other BC related resources on a shared drive with availability for all Committee members ([BC Folder in Box Fileshare](#)).

**Accept UDWR triploid Walleye modeling report** – Tildon explained that the paper went through an external review followed by comments from the BC; the BC's comments were addressed or spoken to, however, this report was not funded by the Program and an external publication is the primary goal of the authors. The PDO is seeking acceptance to post it on our website after finalization or publication in a journal. A parallel report was published by CPW in 2023 and is posted on our [Program website](#).

BC members raised concerns about stocking walleye with a 95% triploidy rate vs 99% that the Program has previously required. The decision to allow stocking of 95% triploid fish was made between the signatories of the Nonnative Fish Stocking Agreement after lengthy reviews of models and discussions about what rates are feasible. Harry Crockett shared the [FWS, CPW, UDWR position paper](#) from Kevin McAbee which summarizes these discussions and reasoning and sets the current stocking principles, which are to be reviewed in 2025. The BC accepted the report for posting upon publication. The BC asked for a future discussion around 95% vs 99% stocking (summer 2025).

**Propagation topics from working group** – Koreen reviewed recent actions from the Propagation Group. Wahweap is planning to stock out of all the older bonytail on station. Koreen has received plans from each of the facilities on how they would like to tweak their bonytail rearing which will be distributed once they are reviewed. Koreen noted a need to document the current techniques to allow for evaluation. The group heard a presentation from David Ward with some ideas focused on bonytail life history.

**Pikeminnow brood collections** – Tracy Diver presented results that indicate that Green River and Colorado River broodstocks are genetically separate. The goal for each brood was 1000 fish. Southwest Native ARRC has about 700 fish on station from each basin, so broodstock collections will continue if conditions allow. Discussions are ongoing about funding for ASIR to

support the collection efforts. Robust discussions were held to develop an SOP on how to run the process from start to finish to reduce handling stress and increase survival. Dave asked when Colorado pikeminnow could be produced for the Green River. Kevin Bestgen can provide newer samples from the Yampa River to see if there is genetic differentiation that we are missing. Melissa recommended focusing on collections from the middle Green River. Knowing that we will be working with two broodstocks, the next step will be talking about where broodstocks can be held and what production timing and levels might look like. Pete is very supportive of documenting past and current actions to provide a foundation for moving forward.

**PIT update and discussion** – Dave Speas provided an update on the PIT tag antennas provided through BIL funds. Dave worked with Darek Elverud, Bob Schelly, Chris Smith, Jenn Logan, Peter MacKinnon and others to identify some sites. Dave provided a color-coded map that shows where the antennas are planned, with green indicating that the antennas are moving forward, yellow indicating that permitting is running into some challenges and red indicating that permitting hasn't begun yet. The Green River sites are focused on Razorback Bar. The Colorado sites are focused in multiple areas in the 15 MR. Dave and others are researching a site in Palisade and two more on CPW lands at Beswick's Pond and further downstream. Additionally, there are two sites at the Gunnison/Colorado confluence area, one on the Colorado just below the confluence and another upstream on the Gunnison if we can find a workable location. Additional sites in the 18-MR are possible, but more information is needed about geomorphology and access to these areas. A site at Horsethief Wildlife Area was also identified but may or may not be used depending on access to other candidate sites further upstream. Finally, a site was located on Salt Creek a little less than a mile from the Colorado River, on land owned by BLM. The goal is to install a subset of these by the end of the year, which will depend on availability of low flows and labor. There are a few ideas about sites around Fish Ford, Cisco, and Moab that may be possible but need much more research and discussion. Dave indicated a need to work with ES on Section 7 compliance. Kate Lunz is happy to work with Dave on all compliance.

The Dolores antenna has been significantly impacted by a debris flow and most of the wiring has been ripped out. Utah State University's contract will close at the end of the fiscal year for repairs. CPW has a lot of interest in this antenna because the Dolores has a lot of 'three species' and sees seasonal visits by razorback sucker and Colorado pikeminnow. The Wines Diversion is currently proposed for a new fish passage, boat passage, and antenna. For much of the year the Dolores River is difficult to sample because of low flow conditions.

The White River antenna has been replaced and is collecting data, the connection to STReAMS is still pending. Chris said he is working with Amy to revamp how all the antenna data enters the database from BioLogic. Chris thinks the connection should be available within the next six months.

**Key findings from researchers' meeting and annual reports** – Julie prefaced the next agenda item with a brief update on work planning changes in the PDO including proposed changes to the Recovery Action Plan (RAP) assessment process with the goal of making the RAP text more forward looking and strategic. There was discussion about the value of reviewing the RAP tables

'box by box' during Committee meetings which everyone agreed is tedious. Pete commented he thinks it is an important exercise because it leads to a lot of discussion that otherwise would not occur. He added that at one time there was discussion within the Program about discontinuing the RAP text. Dale put forward that while it is indeed arduous to go through the RAP table 'box by box' it results in him learning a great deal about other regions which he otherwise might not. Jenn Logan said she is fairly new to the process and will continue to review the table 'box by box' but does not think this necessarily needs to occur during Committee meetings and supports a hybrid approach. Derek agreed that although it is a chore, he also learns a great deal by going through each box of the RAP tables. Dave Speas expressed he is used to this approach and does not mind continuing in the absence of an alternate plan or hybrid proposal. Melissa said she finds the usual approach difficult but useful, particularly when other Committee members raise issues that she may not otherwise become aware of. AJ expressed support for a hybrid approach similar to how things were done during the pandemic when Committee members reviewed the RAP table individually and met afterward to discuss significant points. Randy Oplinger has not previously reviewed the RAP tables but expressed interest in a hybrid format. Julie thanked everyone for sharing their thoughts and will adjust the March 2024 BC meeting accordingly.

The [Compiled Annual Report Recommendations](#) was used as a guiding reference by the PDO and Committee to discuss all of the significant annual report recommendations. The following notes should be paired with the recommendations document to provide context.

Instream flow – David mentioned that ditch operators suggested a change in format for the annual reports they submit each year. There were also recommendations to install new gages in the Yampa and lower 15MR to measure potential gains in those reaches. David also highlighted some new starts proposed for the 15MR to assist in refining the flow recommendations in that reach. David also highlighted a recommendation from USGS to continue funding sediment monitoring given the recent influx of sediment from the Little Snake R. David requested input from the BC in the management implications of continuing this work or other suggestions from the group. Dave Speas said he thought the USGS and NPS work was the closest the Program comes to linking flows to fish habitat.

AJ recommended the Program assess the attainment of flow targets in each reach with flow recommendations. He also requested an evaluation by the BC to determine the biological relevance of attaining or not attaining flow targets. >Melissa suggested this topic be added to a future BC agenda.

Habitat – Tildon recommended fixes to both Stewart and Matheson gates. He is in discussion with the PIs to figure out what the solutions are. The entire water control structure at Old Charley needs to be replaced, which has been identified as a capital project. Further coordination is needed with Ouray National Wildlife Refuge and the Ute Tribe as this is on the tribe's land which is currently being leased by the Refuge. Tildon is exploring ways to remove nonnative fish from the wetlands (particularly for the ones that don't dry out). He noted both rotenone and some of David Ward's recommendations. Tildon also said that some of our wetlands could be ideal sites for YY techniques to control small cyprinids (red shiner).

Tildon praised Redlands for all the work they did to remove sediment and keep their passage operating. Dale commented that the fish ladders are getting old and will need repairs in the future.

Saidee Hyder would like to continue to experiment with bonytail stocking in Stewart. Derek asked if a diet study on adult bonytail could determine whether they are eating larval razorback. Saidee said it would be possible, but would require adding to their current SOW. It was noted that the density of stocked bonytail was low in 2023. Zane Olsen commented that razorback sucker and bonytail are co-stocked in grow ponds at the hatchery with high razorback survival. Other participants said there are other equally probable factors that reduced razorback sucker success relative to past years.

Propagation – Koreen emphasized the importance of shifting the goals and objectives for the stocking program from ‘numbers and size’ to ‘survival and recovery’ of the listed fish species. The workgroup has a long list of priorities that they will continue to work with and bring back to the BC as needed. She noted a need for additional analysis between detections in the river and information provided by the hatcheries around who is using what techniques. Koreen noted that the Integrated Stocking Plan (2015) is getting old and revising it is on her radar.

Julie reminded the BC to focus on big-picture questions and allow the workgroups and PI’s to work out the details of implementation. It was noted by several of the hatchery managers that numerous pieces of their infrastructure are old and in need of repair or replacement. The issue of treating bonytail for Asian tapeworm was dealt with this year at Grand Valley. It was stated that we need to consider the FWS and State’s fish health regulations to determine if ongoing treatment prior to stocking is needed. Asian tapeworms occur throughout the upper basin and fish health regulations categorize them as ‘reportable’ but not ‘actionable’ parasites. If treatment is to continue, then the two FWS hatcheries will need to develop a long-term solution for conducting these treatments.

Ben Williams commented that housing is continuing to be a problem for Randlett hatchery staff. All Wahweap (UDWR) and NASRF (CPW) projects are underway or in discussion in the hatchery group. Jenn is working to hire a hatchery manager to replace Ted Smith who retired. Jenn may need help PIT tagging 10,000 bonytail at NASRF to get them off station. Jenn noted it might make sense to have a closer hatchery stock the Yampa and stock NASRF fish closer to the facility.

Monitoring – Dave Speas asked about the questions posed in Project 160 (Razorback reproduction success in lower Green); why do we not see young of year razorback in places where there aren’t smallmouth bass populations? It was mentioned that the San Juan Program looks at these types of problems through the lens of bottlenecks – should we examine our problems in the same way? Katie Creighton suggested that if we want to test specific questions like this, we need to redesign this study.

The BC supported developing comprehensive ways to analyze antenna data. Dave Speas supported expanding the metrics through which demographic recovery criteria are evaluated.

>The BC requested a future discussion on why pikeminnow are continuing to decline in the Green. Kevin Bestgen reminded the committee that it takes a long time for this species to recruit to the adult stage. He sees no indication that the adults are dying faster than normal, but that survival of larvae to the fall, and juveniles to adults is a big challenge. The lack of young-of-year fish after lots of larvae produced in some years is the primary concern. Backwater habitat is still available. Kevin suggests that smallmouth bass and other predators in the backwaters are troubling. Julie shared a graph from C. Michaud depicting YOY, juvenile, and adults sampled in Green River system, for CPM and SMB suggesting a direct (inverse) relationship between #s of adult bass and LACK of young life stages of CPM. Likewise, where young/ juvenile CPM are encountered, there are basically no bass in those reaches. Some BC members asked for a copy of this plot for (immediate) use w/ other lower-basin groups discussing bass in the lower system.

### **FY 24 No Cost SOW revisions**

15 MR Study: Addition of larval pikeminnow sampling in Grand Valley in FY24 – This project stemmed from the 15 MR study plan where it was recommended that this sampling be started as soon as possible. The GJ-FWCO believes they can add this sampling in 2024 without significant additional costs. Travis and other meeting participants discussed some of the sampling equipment needs. Mike Partlow (UDWR Vernal) offered to provide some larval drift nets and flow meters to Travis while he waits for new equipment to arrive. The CSU Larval Fish Lab will prioritize the CO/ lower Gunnison samples.

### **Program Director's Update**

Program documents – Julie said we continue to address necessary pieces for reauthorizing the Programs. Julie is working through comments on the EA. She is also working to incorporate comments to the “aqua book” (replacement for the Blue Book). There are some specific topics such as committee processes for identified tasks. She is also working on procedures for revising the aqua book. The PDO aims to have those things ready to run through Reclamation and on to DOI approval by the end of April.

Recovery Planning – The HBC recovery team planning has been working since March of 2023 to revise the SSA and recovery plan. We expect a recovery plan by 2025. The razorback final donwlisting rule is in the FWS/DOI review process. Once that is complete and published, we will initiate the revision process for the razorback recovery plan.

### **Next Meetings**

Jan. 28-29, 2025, Researchers Meeting – San Juan Program hosting – most likely Durango

Mar 26-27, BC meeting for RAP assessment – In Grand Junction (meeting room TBD) & virtual

**ADJOURN: by 1:00 p.m.**

### **Assignments List as of February 1, 2024**

Previous tasks completed are described in the opening section of the meeting summary. Only remaining and new assignments are recorded below.

1. **The PDO** will investigate options for an 'access lease' and other potential avenues such as the FWS Partners for Fish and Wildlife Program to address concerns related to accessing the 151 backwater. *ACTIONS:*
2. **The PDO** will share the graph that suggested an inverse relationship between numbers of adult smallmouth bass and YOY pikeminnow. *ACTIONS:*