



Upper Colorado River Endangered Fish Recovery Program

Dated: September 24, 2018

Management Committee Summary, April 26-27, 2018
Fairfield Inn & Suites Denver Airport; [6851 Tower Road, Denver, CO 80249](#)

Management Committee:

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

San Juan Basin Recovery Implementation Program Coordination Committee:

Brian Westfall (for Pearl Chamberlain)	Bureau of Indian Affairs
Cathy Condon	Southern Ute Tribe
Dale Ryden	US Fish and Wildlife Service
Tom Pitts	Water Users
Michelle Garrison	State of Colorado
Ryan Christianson	US Bureau of Reclamation
Rolf Schmidt-Peterson	State of New Mexico
Patrick McCarthy	Nature Conservancy

Recovery Programs' staff:

Kevin McAbee, Julie Stahli, Don Anderson, Melanie Fischer, Melissa Mata, Eliza Gilbert, Scott Durst

Interested Parties:

In person: Kathy Callister, Lee Traynham - USBR; Michele Logan - Colorado AG Office; Jojo La - CWCB; Via phone: Bill Miller - Southern Ute Tribe; Bill Stewart - USBR, Gila River Recovery Program; Sarah Rinkevich, Kevin Johnson - USFWS; Matt Zeigler - NMGF; Mike Mills - CUWCD; Paul Badame - UDWR; Paul Harms - NMISC; Mark McKinstry - USBR;

CONVENE: 1:00PM

1. Introductions, modify/review agenda: Steve Wolff thanked everyone for attending
2. Approve draft February 7, 2018, meeting summary: No comments were received on the draft summary. It was approved by the group. >Kevin McAbee finalized and emailed to both Program listservs. Julie Stahli posted to UCRP website.

Post 2023 Programs Planning Session:

Tom Chart reviewed previous discussions that have occurred within the 2023 discussion. A sub-committee was chartered to work on detailed proposals and actions, and how to best accomplish the report to Congress due in 2021. The results from the sub-committee are presented under the agenda today. Tom Chart described that while we are focusing on program(s) structure, it will be accompanied by a Service-led recovery planning effort.

3. Overview of Program(s) establishment

Tom Pitts reviewed a summary of the initial negotiations and establishment of the Upper Colorado River Endangered Fish Recovery Program. He also provided a summary of cost sharing structure that funds the Recovery Program. (These documents were emailed to the list-serv on April 25 and included as attachments 1&2).

4. Overview on the USFWS's recovery planning process

(PowerPoint from Marj Nelson and Sarah Rinkevich included as attachment 3). Marj Nelson reviewed the USFWS's current recovery planning process, which is called Recovery Planning and Implementation (RPI). The Service received much internal and external feedback about recovery plans, including the difficulty and time it takes to develop a plan, and the fact that plans were often developed and not explicitly used. RPI was designed to make the recovery planning process adaptable over time. Now, species status assessments (SSA) feed into recovery plans, which are adapted through recovery implementation strategies (RIS). SSAs provide all the science needed to inform a variety of ESA actions, including recovery plans, but are not themselves decision documents. The recovery plan maintains its three required components (objective and measurable criteria, actions, time and cost estimates). The RIS contains more site-specific information and is flexible over time, which can be revised much more easily than the recovery plan. For example, it may be appropriate to revise RISs every five years dovetailing with 5-year reviews. Shane Capron asked about the 'recovery strategies' portions of recovery plans and whether those are still included - Marj Nelson answered that recovery strategies could

still be components in these plans, but emphasized that background scientific information should be in the SSA and not repeated in other documents.

Marj Nelson reviewed the concept that recovery criteria are the strict definition of success. Delisting/downlisting decisions are made based on whether or not the species meets the definition of threatened or endangered, not necessarily based on whether or not it meets recovery criteria. Historically, the USFWS considered that species were able to be delisted when the species was viable with no future management. However, the idea that species will not need management to remain viable is not appropriate for a large number of listed species. A new concept of conservation-reliance is becoming more common, indicating that management will have to continue into the future (whether by the Service or other entities) to ensure the continued health of species populations. If there is a need for future management to preserve species' viability, the USFWS makes decisions based on the certainty in implementation and effectiveness of those actions. The amount of certainty of management actions is typically represented by the legal mechanisms that guarantee them. Science provides the basis for the certainty of biological outcomes, which demonstrates effectiveness. Certainty is typically considered within the foreseeable future analysis of a decision document. The group reiterated the importance of science-driven recovery criteria that include flexibility in recovery mechanisms. Marj Nelson reviewed examples of other species that have recently been down- or de-listed, including:

- Kirtland's warbler - [proposed rule to delist on April 11, 2018](#);
- Black-capped vireo - [final rule to delist on April 16, 2018](#);
- Greater Yellowstone Ecosystem population of Grizzly Bear - [final rule to delist published on June 22, 2017](#).

5. Summary of 'Possible Post 2023 Structure (PP2023)' sub-committee activities
 - a. The PP2023 sub-committee met multiple times over the past two months, culminating in a meeting in Berthoud, CO on April 6, 2018

Tom Chart reviewed the participants in the PP2023 sub-committee - Tom Pitts (chair), Water Users; Patrick McCarthy, Nature Conservancy; Steve Wolff, State of Wyoming; Michelle Garrison & Lain Leoniak, State of Colorado; Shane Capron, Western Area Power Administration; Marj Nelson & Sarah Rinkevich, USFWS; & Ryan Christianson, USBR. The sub-committee is supported by Recovery Programs' staff - Tom Chart, Kevin McAbee, Julie Stahl, Don Anderson, Melanie Fischer, Eliza Gilbert, Scott Durst, and Melissa Mata.

The sub-committee is using principles of structured decision making to outline the process and keep the sub-committee focused on discrete steps during this complex conversation. For example, the sub-committee created a draft problem statement and foundational objectives, which were reviewed. The Coordination Committee and Management Committee members

wished to review the language in these items. > *Kevin McAbee will send the problem statement out to this group along with Shane's comments (Attachment 4). Comments should be submitted by May 4. Kevin McAbee also is including the draft meeting summary from the April 6 meeting (Attachment 5) and the proposed timeline (Attachment 6) of this process.*

Tom Chart emphasized the sub-committee's role is to create some concepts and information and bring them back to the joint MC and CC to ensure it is the appropriate direction. When formal decisions have to be made, all parties will be included and represented. The current discussion path of the PP2023 sub-committee is to investigate Program structure under differing recovery planning strategies (noting that the recovery planning process will be a USFWS led effort). The strategies considered a spectrum of demographic criteria and management criteria between the 2002 recovery goals as written and species that are entirely conservation reliant. The PP2023 group acknowledged that an optimal program would borrow from both ideas, using appropriate demographic criteria, but recognizing that future management actions (and associated commitment) are important to recovery.

Tom Pitts clarified that the group discussed three main things: certainty for the fish (in the form of viable populations and appropriate management actions), certainty for stakeholders (in the form of project implementation, known management actions, etc.), and implementation of the recovery planning options. Implementation questions include how to regulate water development's potential impacts to fish (and their status) without section 7 authorities? One solution may be to keep the USFWS involved. It was also determined that some sort of organizing body (and staff) would be needed. The concept of certainty incorporated the need to involve the Service in both staff and funding, ensuring large water projects could be evaluated by the program, ensuring management actions continue and are effective. Michelle Garrison asked how the Service would be involved if there are various species in various states of listing. Kevin McAbee said it would depend on what kind of decisions are being made. For example, Section 7 project evaluations would be site-specific and only consider species still protected under ESA, whereas management action implementation could be basin wide. The current rangewide conservation agreement for bluehead sucker, flannelmouth sucker, and roundtail chub is a good example of USFWS involvement in a conservation plan that doesn't include listed species.

Tom Chart, Tom Pitts, and Steve Wolff also discussed the importance of keeping the recovery of endangered species as our primary programmatic goal as opposed to the goals of the Lower Colorado River Multi-Species Conservation Plan and the Glen Canyon Dam Adaptive Management Program where recovery is not a specific goal. All agreed recovery should remain our goal.

Shane suggested that geographic scope is an important consideration for planning the future program structure and described that we may want to consider adding new areas into our

discussions of program structure. Steve suggested this issue be part of the PP2023's pending discussion of institutional alternatives.

6. March 2018 D.C. trip update, including authorizing legislation

Steve Wolff described the Program partners visit to DC the week of March 19. He thanked Melanie Fischer for all the materials and support for the DC trip. This was the largest non-federal group to participate (~16 participants). The 5-year review recommendation to downlist humpback chub made the trip very positive. The proposed legislation gave high visibility to the Programs during the trip. The group communicated that management actions will need to continue past 2023. Tom Pitts thanked New Mexico and Colorado for attending this year; he also thanked Bill Miller and Paul Badame for their biological support on the trip, and thanked Utah and the Southern Ute Indian Tribe for supporting their participation.

Funding legislation has passed the House, and is awaiting a vote in the Senate. This should take place before the August Congressional recess. The bill is packaged with several other water bills in the Senate.

7. Species Status Assessments & associated documents

Kevin McAbee described that the [Humpback chub SSA](#) was finalized with lots of help from our partners and USFWS Regions 2 and 6. The [5-year review](#) was released on March 22 and recommended downlisting the species to threatened and drafting a revised recovery plan. A proposed downlisting rule for the species is a Region 6 priority to maintain the momentum on this important achievement and is expected to be drafted later this year. USFWS hopes the proposed rule can be published in the spring of 2019. Various stakeholders asked the USFWS to request expedited review on this important decision so it could be published sooner and before the next non-federal partner trip to D. C in 2019.

Julie Stahl is leading an interagency team to complete the razorback sucker SSA this summer. A draft of the SSA is expected to the Programs' BCs in June. A 5-year status review expected by September 30th.

Eliza Gilbert (San Juan Recovery Program) is detailing into the UCREFRP to complete the Colorado pikeminnow SSA this summer, with a 5-year status review expected this fall. A draft population viability analysis (PVA) report, which is a key part of the SSA, has been reviewed by the Biology Committee (along with San Juan Program BC). Shane Capron and Melissa Trammell suggested convening an SSA team for Colorado pikeminnow, much like was done for razorback sucker and humpback chub.

A bonytail 5-year review expected this summer. No SSA is planned.

ADJOURNED: 4:49 PM

FRIDAY, APRIL 27th, 2018:

Management Committee: Marj Nelson, Tom Chart, Chris Keleher, Patrick McCarthy, Ryan Christianson, Steve Wolff, Leslie James, Melissa Trammell, Shane Capron, Michelle Garrison, Tom Pitts (via phone)

Interested Parties: In-person: Jojo La, Eliza Gilbert, Don Anderson, Julie Stahli, Kevin McAbee, Kathy Callister, Melanie Fischer, Michelle Logan, Lee Traynham Via Phone: Paul Badame, Dwight Slauch (USBR)

CONVENED: 8:30 AM

9. Approve draft December 4&5, 2017, meeting summary

Draft meeting summary was emailed by Angela Kantola on December 28th, 2017. Comments were submitted by Tom Pitts and Steve Wolff with replies from Kevin McAbee. The committee approved the revised meeting summary.

> Kevin McAbee finalized and distributed on May 1. Julie Stahli posted to UCRP website.

10. RIPRAP Review

Initial draft of RIPRAP sent to all Program participants on February 12th (Resent on March 27th). The WAC reviewed on March 27th, the BC reviewed on April 2nd, and the I&E committee on April 19th. All committees' input has been addressed and an updated version was sent to the MC.

RIPRAP tables

This year, Program staff added a glossary for definitions for the status column and updated the status columns to provide consistency. Kevin McAbee reviewed that columns A to N stay consistent from year to year, any changes are documented with a green highlight. Column O is revised each year to provide annual updates. Major accomplishments are documented with !, major shortcomings are indicated by an X (in column O). Tom Chart brought the cells marked with ! and X to the attention of the committee as each section was reviewed.

Summaries of information discussed:

- The “Assessment of larval Colorado pikeminnow presence and survival in low velocity habitats in the middle Green River: 2009-2012” report (Project 158) marked as overdue in January has been received by the Program Office and will be reviewed according to existing guidance.
- The Program office reviewed Flaming Gorge release patterns in 2017 and the resultant flow conditions downstream . Wyoming, Reclamation and USGS are adding additional stream gaging stations and SNOTEL sites in the upper Green river drainage to improve Flaming Gorge inflow forecasts (~\$200,000 over the next 2-3 years). Near-record inflows in 2017 resulted in unusually early and sustained releases out of Flaming Gorge at full bypass capacity. Tom Chart described that had the spillway been available for use in 2017, it could have shortened the duration and increased the magnitude of the spring peak flows. However, in light of past spillway damage, spillway use is limited to emergency purposes at this time. Burbot larval presence should be considered before the spillway is used. The Committee acknowledged that in a year of such high snowpack, there was little Reclamation could have done differently. However, we should recognize that prolonged high flows supported nonnative fish (northern pike reproduction in Brown’s Park) and negatively affected Colorado pikeminnow (very few young pikeminnow were collected in 2017, likely a result of cold temperatures during larval drift). A group of local landowners with property along the Green River (in CO and UT) and the tailrace trout fishing business interests are voicing increased concerns regarding recent spring operations and impacts to property and their industry. A coalition of Program partners will meet with this group to better understand their concerns (*Post meeting update – meeting was held on July 20, 2018 in Vernal, Utah*).
- Kevin McAbee commended UDWR for the burn that occurred on Stewart Lake to address cattail encroachment. Matt Breen organized and conducted the burn in early April which opened up 90% of the available habitat. Water rights held by USFWS and USBR were requested to flush ash out before peak flows bring razorback sucker larvae into the wetland (*Post meeting update, this request was not met, so water quality conditions in the wetland for entrained razorback sucker may have been degraded*). Sampling of sedimentary selenium occurred post-burn.
- Kevin McAbee provided an update regarding grass carp in the upper Colorado River basin. All adult grass-carp that have been sampled in the basin have been fertile fish. Crews have captured 3 in the Green River, 2 in the Colorado River and 1 in the Duchesne (*Post meeting update – this fish was determined to be a sterile, triploid fish*). Stocking of

fertile grass carp is currently illegal in all states in the basin. USGS has applied for internal funding to complete a risk assessment of grass carp in the Colorado River basin.

- Tom Chart and Don Anderson praised the Maybell Ditch improvements along the Yampa River. Tom Pitts noted the improvements were made with funds provided from the Program as well as through the Basin Roundtable with funds provided by CWCB. Total project costs were ~\$197,000. Tom Pitts noted this effort avoided a lawsuit, provided in-stream flow benefit for endangered fish, and improved operations for the ditch owners.
- Patrick McCarthy asked about timing for a Program flow protection workgroup. Don Anderson said the workgroup has not been assembled as of yet, as efforts in 2017 focused more specifically on White River and Green River flow recommendations and protections. Don anticipated that the workgroup may convene in the coming months. He imagines an intersection between Post-2023 planning with a technical work-group around flow needs. Tom Chart said the Yampa-White-Green Basin roundtable is interested in updated flow recommendations for the Yampa as well and is very active through the state-based basin implementation planning process. Patrick committed to talking to Jeff Blakeslee about opportunities that may be available in the basin. Michelle Garrison provided an update regarding the depletion accounting reports for the Colorado and the Yampa, noting drafts have been created and are currently under review in her office. The Program is likely to receive those drafts soon.
- Shane Capron requested reconvening discussions about humpback chub translocation into the Yampa River and completing the paper describing this topic. He recommends narrowing the scope of the report to focus on the specific actions for the Yampa River. Tom Chart said this is a management tool that has been used very successfully in the lower basin and he supported the effort. Melissa Trammell said that one of the big questions was whether or not the fish that spawned at Horsethief would be appropriate. They were determined not to be because few fish were brought in from the hatchery and even fewer spawned, creating a potentially limited genetic pool. The remaining question is where to get source fish for translocation to the Yampa. *>Shane Capron and Melissa Trammell agreed to focus on the next draft.*
- George Weekley (USFWS-Utah) and Don Anderson have been contacted by a representative of the Northern Ute Tribe who is interested specifically in White River management planning effort, but also in the Program in general. The Program Office is discussing potential future Tribal involvement in the Program with Mr. Duane Moss, Director, Tribal Department of Water Rights.

- Kevin McAbee discussed the expansion of smallmouth bass in the White River, which have been very resistant to mechanical removal. Don Anderson has been in contact with the operators of Taylor Draw Dam. The operators would like to provide a pulse out of the dam this year to address high algal presence. Don Anderson is working to see if we can time those pulse/spike flows to disadvantage smallmouth bass spawning as well and is also coordinating with field crews to possibly sample both before and after the event. The spike flow will be small, as Taylor Draw Dam does not have large release capacities (the dam is a 'run-of-the-river' facility), but that even a small flow could have a large effect as the White River is likely to have minimal flows this year (~200 cfs). The potential magnitude of the spike would be around 1000 cfs, but only for a few hours. Tom Chart clarified the sediment is more likely moved during spring flows, so a sediment pulse is not likely to be combined with the flow spike.
- Don Anderson described the CROS operations (Coordinated Reservoir Operations) supporting spring peak flows in the 15-Mile Reach and praised all the participants that help in that effort and Michelle Garrison's work in organizing the effort. Patrick McCarthy praised this voluntary effort. Michelle Garrison noted that a change in operational mindset has occurred, where reservoir operators are assuming CROS efforts will occur instead of waiting until they are sure volume is present to get it started. The peaks and flows have become more reliable over time as reservoir operators become more comfortable with the efforts. Unfortunately, there is not sufficient snowpack in 2018 and CROS is not slated to occur this year. *>Melissa Trammell asked for additional text in column N about providing flows (especially post-delisting when PBOs no longer apply). >Done.*
- Tom Chart and Don Anderson also recognized CWCB's and Ute Water Conservancy District's (UWCD) mutual efforts to lease UWCD water from Ruedi Reservoir to support 15-Mile Reach base flows. Michelle Garrison said additional water may be available in Ruedi from other entities, but not necessarily at the times of year we typically use the UWCD water. The additional water may be available to fill the 'April hole' or provide winter flows important to local residents and CPW. Conversations are on-going around whether UWCD water will be available this year and whether or not UWCD is amenable to continuing the contract. Don Anderson also noted that carryover 2017 water from the HUP Surplus account at Green Mountain Reservoir was used for the first time this year to help fill the April hole in the 15-Mile Reach (a couple of hundred cfs).
- Don Anderson commended USBR for their 2017 releases out of the Aspinall Unit. He noted that USBR timed their releases very effectively to correspond with peak flows out of the North Fork of the Gunnison and met and exceeded all flow recommendations.

- Michelle Garrison described the Ridgway Smallmouth Bass Fishing Tournament and explained that in 2017 the tournament was schedule was changed to after smallmouth bass spawning, and that catch rates and numbers of participants increased substantially. If catch rates decline, CPW will investigate stocking other species to fill the ecological niche and the angling opportunity. Melanie Fischer noted the next distribution of the nonnative fish information will go out to Tri-County Water users with a focus on Ridgway Reservoir and the Gunnison River.
- CPW coordinated with USBR in 2017 to deliver a spike flow out of McPhee Reservoir into the Dolores River to disadvantage smallmouth bass. CPW will present information about this spike flow to the Biology Committee this summer. CWCB got a decreed instream flow water right in the Dolores River just in the last few months, which was a major effort.

RIPRAP text

An initial draft including Program Director's office edits marked as changes was sent on February 12th. Revised text including BC review sent with this agenda.

> *The Committee will submit comments by May 11.*

11. Capital projects update - Christianson (30 min)

Ryan Christianson provided tables documenting key capital project efforts (Attachment 7) and Recovery Program Capital Expenditures (Attachment 8). He plans to use this tool in the future to provide updates. The table was distributed by Kevin McAbee with meeting materials. Planned projects are at the top, existing projects are next, followed by projects that exist but were not developed with Program funding. The capital projects are colored based on project type.

Green River Canal Company dam screen / fish passage Operation and Maintenance contract has been signed by all parties. Ryan anticipates the project will be completed during the non-irrigation season this winter. Kevin McAbee reiterated that according to the Colorado Pikeminnow PVA, screening this canal could have a meaningful positive impact to populations of endangered fish in the Green River.

Ridgway Reservoir smallmouth bass escapement is going to be addressed with a design-build contract for a net, that will be completed in 2020. The estimated cost of the project is still very preliminary, but \$2.3 M has been estimated. Michelle Garrison said CWCB has committed at least \$1 M; the MC thanked CWCB. CPW will operate and maintain the net; USBR will own it.

Planning for a Catamount Reservoir nonnative fish escapement plan is delayed pending the hiring of a non-native fish coordinator. Kevin McAbee will try to find time to get a meeting

scheduled this summer. Ryan anticipates that this will be the last escapement prevention device and will be completed in 2021.

USBR has been using the \$20K (capital funds) the Management Committee approved in December 2017 on preliminary designs for the Stirrup Wetland restoration project. Ryan Christianson anticipates the project will include a water control gate and fish kettle similar to Stewart Lake, the design of which may be completed this winter. Tom Chart said we will work with the BC to provide comments on the design, but in general, supports USBR's current design and construction this winter. >MC approval of funding for Stirrup will be requested during the September meeting, if not before.

Grand Valley Power Plant received funding from the Program, from USBR's WaterSmart Program, funds from the Species Conservation Trust Fund, and a loan from the CWCB to rehabilitate the power plant. This will preserve a key non-consumptive water right that provides instream flows to the 15-Mile Reach.

Problems are ongoing operating the GVIC screen, especially during low flow conditions, resulting in around 30% downtimes. The Grand Junction USBR staff and Don Anderson met with GVIC on March 2 to discuss possible improvements that would enhance operations. Ryan Christianson and others at Reclamation are exploring options for a retrofit on that facility (e.g., increasing hydraulic head at the diversion dam) and will bring information back to the MC as needed.

Leslie James praised the tables and asked >Ryan to add *State (and/or River Basin) to each project to provide context*. Ryan anticipates we have about \$10.2M remaining for capital projects and noted we have over \$9 M in projects scheduled at this point. The \$9M includes approximately \$1M for future floodplain work.

a. Reservoir screening update

Kevin McAbee and Brent Uilenberg worked together to develop a plan to build essentially one project a year to finish all capital construction by 2021. Kevin provided a summary of those efforts in the Reservoir Escapement Summary (Attachment 9).

i. Starvation and Red Fleet projects (Badame, Slaugh, and Christianson)

Kevin McAbee noted that a stilling basin screen was originally scheduled for installation at Starvation Reservoir in 2017, and then in 2018, but has now been delayed until an unknown time. New project specifics, such as timing and funding need to be defined to complete this project before 2021. It was previously estimated that the Program would contribute \$250,000 to

this project. Paul Badame explained that Starvation Reservoir was the first reservoir considered for screening because an alternatives analysis had already been completed. UDWR assessed options 5 years ago and went through a process to select a preferred option with representatives from CUWCD, FWS, USBR-Provo, and other state groups. The group completed design two years ago and the contracting process was started. UDWR believed that all of the designs had been approved. Recently, Provo-USBR has determined that they will not permit a project inside the Primary Jurisdiction Zone of the dam, so the project must be moved and re-evaluated. Provo-USBR's Wes James will be charged with managing the project moving forward (as well as Red Fleet). Currently, no one is aware how this realignment and re-design process will affect time and cost estimates. Provo-USBR wants to consider moving the screen downstream to screen both the outlet works and the bypass channel, which was not the original preferred option. By moving the screen, the screen will need to operate in higher flows for the entire year. The original thinking (based on field investigations) was that the reservoir outlet drew from a depth that precluded significant fish escapement. Paul Badame said the current design could be fixed by moving the screen about 50 meters downstream and would only require a re-survey. >Ryan Christianson will coordinate with the MC and Wes James in the Provo office to move this project forward and will report back to the committee.

Red Fleet Reservoir is planned to be screened in 2019, which is a partnership project being completed by UDWR and USBR, using Program and UDWR funds. It is estimated that the Program will commit \$250,000 to this project. Dwight Slaugh, Bureau of Reclamation, Provo Area Office, said his counterpart, Wes James, created a project schedule for Red Fleet, which is on hold until the design firm (Forsgren Associates) receives funding from UDWR (expected on July 1, 2018). The current design by Forsgren is at 80% completion. USBR-Provo has also completed a large portion of the NEPA process already. The next steps moving forward will be for Forsgren to take the design to 100% and get the For Construction Set issued. In addition to this, Forsgren will need to complete a Proposed Action description that supports the NEPA analysis. Dwight said Wes has been working on an MOU to authorize work, which is in internal review until May 5th. Ute Ladies-Tresses have been discovered in the area, which are a protected species, but the Program anticipates resolution in the NEPA and section-7 processes. Paul Badame anticipates the project cost may increase to ~\$430-\$450K. All design work is being charged to the Program's capital project account. USBR is unsure how NEPA costs will be covered.

b. Floodplain Improvement Projects

Tom Chart described that two sites on the upper Colorado River are being considered for razorback sucker habitat enhancement - Matheson (TNC property near Moab) and Audubon (near Grand Junction) wetland sites. The Program needs to be apply some of our lessons learned on the Green River to floodplain habitat enhancement on the Colorado River, such as excluding

large-bodied nonnative fish during entrainment, timing entrainment to presence of larval razorback sucker, and providing supplemental water during the summer. However, the location of razorback sucker spawning is a critically important information gap in the upper Colorado River. UDWR has gathered enough biological information (larval razorback sucker) to indicate the Matheson Preserve is a good location. TNC is funding the Matheson wetland work, as is the Utah Endangered Species Mitigation Fund. Initial excavation work has been scheduled, but will not occur prior to 2018 spring runoff as originally anticipated. ACOE permitting is ongoing and has delayed project construction.

12. Schedule next meeting

The committee scheduled their next meeting on September 11th (1-5pm) & 12th (8am-noon) in Grand Junction at USBR's Western Colorado Area Office conference room. Melissa has offered to host an associated social the evening of the 11th.

ADJOURN: 12:01PM