



Upper Colorado River Endangered Fish Recovery Program

Dated: July 10, 2018

Management Committee Summary, June 25, 2018

In Attendance:

Absent

Todd Adams

Michelle Garrison

Tom Pitts

Edalin Koziol for Patrick McCarthy

Leslie James

Shane Capron

Melissa Trammell

Ryan Christianson

Absent

Tom Chart (non-voting)

State of Wyoming

State of Utah

State of Colorado

Water Users

The Nature Conservancy

Colorado River Energy Distributors Assoc.

Western Area Power Administration

National Park Service

Bureau of Reclamation

US Fish and Wildlife Service

Program Director

Interested Parties:

Kevin McAbee

Julie Stahli

Don Anderson

Bob Norman

Dave Speas

Jojo La

Paul Badame

Acting Program Deputy Director

Program Coordinator

Program Coordinator

Bureau of Reclamation

Bureau of Reclamation

State of Colorado

State of Utah

CONVENE: 9:00AM MT

1. Introductions were made. Tom Chart requested to discuss the OMB passback issue.
2. OMB Passback of Fiscal Year 19 funds - OMB examiner will be visiting the Colorado River Basin tomorrow. Program participants will be in attendance. WAPA indicated that nothing had changed on the status of fiscal year 19 funds from their perspective.
3. Discussion of capital funding request from Thayne Hydropower (see Attachment 1)
 - a. Thayne Hydropower has requested financial assistance to modify the "8-gate structure" in the raceway of the Green River Canal during the Recovery Program's construction of a fish screen and weir wall project (hereafter "fish exclusion project") on the Green River Canal this fall/winter. The 8 gates regulate how much water goes into the canal and can accumulate a lot of trash (Attachment 3) which prevents flow from entering

the canal or the fish screen. The Recovery Program does not have a water right to operate the fish screen and depends on flow going into the raceway to make it work effectively. The MC previously made a decision to deny funding for \$2M to alter the 8-gate structure. The proposal has been modified and Thayn hydropower is currently asking for \$400K-\$600K (see Attachment 1). Tom Pitts sent an email the morning of 6/25/18 outlining the history of the Recovery Program's involvement in the construction of local facilities (see Attachment 2). Tom Pitts noted that the Recovery Program has received a variety of benefits that have been paid for by other state, federal or private sources and believes that funding this project is consistent with work funded in the Grand Valley. Melissa Trammell asked if we are still planning on upgrading the siphon and whether or not the motors would interfere with the PIT tag antennas. Bob Norman said the motors are not variable speeds and should not interfere with the antennas. We will be replacing the siphon structure, which provides us with head needed to operate the new fish entrainment barrier facility. Ryan Christianson noted rehabilitating the 8-gate structure was once considered part of the project that we agreed to and noted there is a benefit to our facilities as well. If funded, Thayn hydropower would like to complete repairs to the 8-gate structure while the coffer dam for the Program's fish entrainment barrier is in place this winter.

- b. Ryan Christianson reviewed the Recovery Program's capital construction funding cap. If the requested funds are approved here, it may impact future projects such as floodplain restoration or escapement prevention at Red Fleet or Starvation Reservoirs. We have committed to multiple other capital projects over the next couple of years and this project could impact the funding availability to those projects. Ryan currently shows \$1.2 million remaining after estimated planned expenses were incorporated in the budget, but is concerned about the realized final costs for a number of projects for which costs are simply estimated.
- c. Ryan Christianson suggested we could offer Thayn Hydropower funds up to a cap. Tom Pitts proposed that the Program commit up to \$600,000, contingent upon the final contract costs and costs of concrete. Leslie proposes requesting more detail in the cost estimates and project specifics before committing to funding. She suggested we let Thayn Hydropower know that we are interested in cooperating and offering some funding for the project, but that we would like more specificity in the costs, requests, and schedule before committing to an amount. Bob Norman thinks that would provide Thayn Hydropower with the certainty to move forward to investigate specific designs and costs. Ryan Christianson and Bob Norman believe funds can be transferred (if approved) from USBR to Thayn Hydropower quickly enough for the winter construction schedule. However, their winter construction schedule is aggressive and a decision is needed soon. Thayn Hydropower will need to provide us with a construction easement before we can start our fish entrainment barrier project. >Ryan will call Rick Kaster to let him know the Program is interested in cooperating on the 8-gate project, but wants more details on the cost of the project and would like Rick to participate in a follow-up call.

- d. The Committee requested to see the capital project cost planning spreadsheet in the most updated form. > Ryan will update and share at the September meeting in Grand Junction, or at the next conference call. Shane suggested setting aside a contingency amount (such as 5%) to ensure that the scheduled projects are ensured to be completed.
- e. The Committee scheduled a follow-up call at 8:30 am MT on July 10. Rick Kaster will be invited to participate.

ADJOURN: 10:15 AM MT

Attachment 1

Thayn Hydro/Thayn Ranch Eight Gate Raceway Structure Remodel - Cost Share Proposal

Thayn Hydro and Thayn Ranch believe that the planned dewatering of the raceway this coming winter, in order to facilitate construction of the Recovery Program fish screen, presents the raceway water users a rare opportunity to perform much needed upgrades to the eight gate structure.

We believe that modifying the structure to accommodate two large mechanized gates and a heavy equipment bridge would accomplish the following:

1. Provide light and heavy equipment access to the west end of the new dam for routine and emergency maintenance and repairs.
2. Also provide light and heavy equipment access to the raceway east canal bank for routine and emergency maintenance and repairs.
3. Greatly reduce the amount of trash buildup, which presently collect on the eight gate guides.
4. Allow personnel, with the push of a button, the capability to raise and lower the two large gates to whatever gate position desired, for either routine maintenance or a downstream emergency.
5. At some point in the future, the gates could be enclosed inside a narrow, tall insulated sheet metal enclosure for protection from the elements, including ice.

Thayn Hydro and Thayn Ranch offer the following to help facilitate the construction of the project:

1. We would pay for the engineered, stamped construction drawings, which would be distributed to the interested parties for comment and approval. We have received a quote of \$12,000 from an engineering firm that has extensive experience in designing bridge structures. This quote does not include geotechnical work. I am hoping that we could use a combination of the geology work that was performed on the adjacent dam, in addition to digging a test hole next to the eight gate structure.
2. We would provide six large bridge beams that we own for support of the equipment bridge.
3. We would build the two new large slide gates, complete with rollers, entirely at our cost and free to the project.
4. We would build in our shops the new heavy gate guides needed for the new gates, to be imbedded in the concrete walls, for the exact cost of material and labor, without markup, to the project.
5. We would provide a track hoe and dozer to help facilitate the excavation and removal of the portion of the old structure to be removed, rough grading necessary for concrete placement, and back filling of the new structure, free to the project.
6. We have access to some very heavy, used, threaded stem gate lifters and we own two new gear motors that would handle the weight of the new gates. If these actuators were acceptable to all the parties involved we would donate the gear motors and acquire, rebuild, and deliver the threaded stem actuators to the site at cost.
7. We would pledge that in addition to the above services offered we would not seek to profit on any aspect of the project.

We believe that in addition to the contributions listed above it would take as little as an additional \$400,000 to \$600,000 to complete the project, depending on the cost of any required studies, how elaborate everyone wants to get with the design, and finding a contractor that would place the concrete for \$400 to \$600 per yard.

Attachment 2

8:12 am MT 6/25/18 email

To: Management Committee, Upper Colorado River Endangered Fish Recovery Program

From: Tom Pitts

Subject: Info re: 9:00 AM, Monday, June 25 Tusher Wash Discussion

The purpose of this call is to discuss Recovery Program partial funding for rehabilitation of an gate on the Tusher Wash diversion. I am providing the following information based on discussions with Reclamation Grand Junction staff. I am responsible for the interpretation of the information provided below.

1. Diversions at Tusher Wash, including the west side Thayn Hydro diversion, the west side Green River Canal irrigation diversion, and the east side diversion are classified as is classified as an historic diversion with respect to the Recovery Program. Therefore protecting endangered fish from their pumping and hydropower operations would be the responsibility of the Program to prevent fish from getting into their pumping and hydropower units. However, Thayn Hydro upgraded their trash racks to avoid fish entrainment and installed a cleaner at its cost, with no reimbursement by the Recovery Program. The Program is not paying for O&M of the hydropower trash racks.
2. The diversion dam upgrade improved fish passage and allow improved operations of the Tusher Wash hydropower and 80 cfs irrigation diversion (Green River Canal) on the west side of the Green River and the historic diversion on the east side of the river. The Program provided \$75,000 to assist in the construction of the fish passage on the dam rehab project. This was probably 20% of the actual cost.
3. The west side Green River Canal fish screen benefits from the additional head created by the dam rehab. The screen could have been built without it, but the additional head will greatly improve the ability to deliver water to the fish screen.
4. The dam rehab project also included an east side fish screen and downstream fish passage notches, all funded by others, rather than the Recovery Program. Reclamation estimates that the east side fish screens might have cost \$400,000 to \$500,000.
5. The fish facilities included in the dam rehab (screens and passage) increased the rehab cost by \$750,000 to \$1,000,000. About 90% of the rehab was paid by either a federal or state grants. So the actual cost to the water users is estimated by Reclamation to be about \$100,000 for the fish facilities. Given the historic status of the diversion (pre-1988 existing depletion), this could have been a Recovery Program cost
6. The existing 8-gate structure barely works and accumulates a lot of trash which is passed through to the Tusher diversion canal on the west side of the river. This makes it harder to manage trash that could enter the canal and consequently, require more operational expense at the fish screen. Trash definitely accumulates on the Thayn Hydro fish screen, causing

operational problems and increased maintenance expense. The rehab will substantially reduce the trash load.

7. The proposal is to provide \$400,000 to \$600,000 which will cover the partial cost of a rehabilitated 8 gate structure.

Conclusion: The Recovery Program has received substantial benefits from rehabilitation of the diversion structure that included improved fish passage and screens at little cost to the Program. Provision of these funds is consistent with the Program providing funds to upgrade the Highline Canal and Orchard Mesa Irrigation District systems in the Grand Valley and funding improvement on the Maybell Irrigation District canal on the Yampa River. The rehabilitated 8 gate structure will improve operations of the Green River Canal fish screen and the Thayn trash rack which reduces adult mortality.

Attachment 3



Debris (foreground) removed from 8-gate structure (background) in June 2018.