



Approved Summary
San Juan River Basin Recovery Implementation Program
Biology Committee Conference Call
8 July 2015

Attendees:

Biology Committee Members:

Bill Miller, Chair – Southern Ute Indian Tribe
Jicarilla Apache Nation – absent
Brian Westfall – Bureau of Indian Affairs
Jason Davis – U.S. Fish and Wildlife Service, Region 2
Mark McKinstry – U.S. Bureau of Reclamation
Benjamin Schleicher – U.S. Fish and Wildlife Service, Region 6
Vincent Lamarra – Navajo Nation
Harry Crockett – State of Colorado
Mike Ruhl – State of New Mexico
U.S. Bureau of Land Management – absent
Tom Wesche – Water Development Interests
Dave Gori – Conservation Interests

Program Office – U.S. Fish and Wildlife Service, Region 2:

David Campbell
Scott Durst

Interested Parties:

Brian Hines – Utah Division of Wildlife Resources
Nate Franssen – University of New Mexico
Dale Ryden – U.S. Fish and Wildlife Service, Region 6
Susan Behery – U.S. Bureau of Reclamation
Dale Lyons – The Nature Conservancy
Howard Brandenburg – American Southwest Ichthyological Researchers
Michael Farrington – American Southwest Ichthyological Researchers
Mark Miller – U.S. Bureau of Reclamation
Carrie Lile – Southwestern Water Conservation District
Ryan Christianson – U.S. Bureau of Reclamation
Chris Cheek – Navajo Nation Department of Fish and Wildlife

Approve 12 May 2015 draft meeting summary and review Action Item list:

- Durst received comments and sent revised summary. Wesche motioned to approve the revised summary, Crockett seconded, and summary was approved unanimously.

Discuss draft FY2016 Annual Work Plan and revised Scopes of Work – Program Office:

- Whitmore distributed a second draft of the 2016 AWP and had it posted to the SJRIP website. This draft of the AWP included new and revised SOWs as requested during the May BC meeting:
 - Lower Non-native Fish Control and Monitoring – describing middle reach work.

- Waterfall Monitoring and Endangered Fish Translocation.
 - PIT tag O&M – including PIT tag data evaluation.
 - Natal Origin SOW – including work in Lake Powell and the San Juan River.
 - Population Model.
 - Program Office – including environmental flow workshop and Information and Education funds to Upper Colorado River Endangered Fish Recovery Program.
 - Growth Curve specific to the San Juan River.
- This version of the AWP had a deficit of \$108,889.
 - The group discussed the natal origin SOW. Determining natal origin in the San Juan River and Lake Powell were both viewed as important but some considered determining natal origin in Lake Powell to be a bigger priority. There have been many untagged razorback sucker detected during recent work in Lake Powell and it will be important to determine if these fish are wild recruits even if they cannot be assigned as wild fish with 100% certainty. Natal origin work in Lake Powell could proceed in tandem with UDWR's proposed sampling below the waterfall.
 - Campbell detailed additional funding that should be available to the SJRIP in January as part of the Reasonable and Prudent Measures from the Four Corners Power Plant Biological Opinion. These funds can be used to off-set costs that could free up funding for other activities. These funds will go through NFWF and can be carried-over in years when it is not spent.
 - Davis asked if SOWs like the Growth Curve can wait until this funding becomes available. ASIR is collecting this data and can conduct analysis whenever funding becomes available.
 - The UNM data integration SOW will continue with different personnel as Franssen takes a position in the Program Office. In addition to completing outstanding tasks, this SOW can take on addressing questions related to razorback sucker interactions with the waterfall. Translocated fish can be tracked via telemetry or sonic tags. Questions remain over the need to translocate razorback sucker upstream of the waterfall. Campbell suggested a study needs to be conducted to address issues related to the waterfall. Franssen and Durst are currently working with Duran, Hines, and Schleicher to analyze channel catfish movement based on recapture of floy-tagged fish. Hopefully they can provide an update in time for the next BC call.
 - Campbell indicated that since non-native fish are identified as a threat in the Recovery Goals and Long Range Plan, the SJRIP cannot abandon non-native removal efforts. At this point non-native removal is required for ESA compliance. McKinstry clarified that the threat posed by non-native fish and the SJRIP's ability to remove non-native fish are two separate issues. Non-native fish may be the biggest threat but it might not be possible to effectively remove them.
 - To date it has been difficult to evaluate the impact of non-native removal on native and non-native species. The revised non-native fish removal proposal is an effort to address some of the uncertainty related to non-native removal.
 - Wesche suggested suspending non-native removal for a year and combining those funds with funding for large-bodied fish monitoring to plan and obtain river-wide population estimates for Colorado Pikeminnow and Razorback Sucker. More precise population estimates could be used to assess progress toward recovery demographic criteria and inform adaptive management to attain recovery. Miller agreed that better abundance estimates are needed for endangered fish. McKinstry noted the importance of tagging Colorado pikeminnow during non-native fish removal efforts. Davis suggested that obtaining abundance estimates as part of the non-native removal would be a possibility. Removal efficiency might improve by postponing some effort as late as November when sampling conditions are typically good. Miller brought up the risk multi-pass electrofishing may pose to Colorado Pikeminnow and Razorback Sucker. Franssen asked how non-native removal would be evaluated if removal occurs after Adult Monitoring (since that effort has been used to date to evaluate the effect of removal on natives and non-natives).

- Franssen acknowledged that population estimates would be useful but asked how that would benefit recovery. Given there is limited recruitment for both endangered fish, it might be better to focus on questions that directly benefit recovery. It is unlikely that a precise abundance estimate will result in increasing recruitment. Questions like the amount of larval habitat necessary for recruitment might be more appropriate.
- Lamarra cautioned against cutting any monitoring effort since it limits the Program's ability to make informed management decisions. Riverwide habitat monitoring is needed to evaluate the effect of flow and other management activities. When habitat monitoring was previously suspended, capturing the response to high flows like 2008 was lost. The habitat monitoring protocols need to be revised to allow for flexibility in the future.
- McKinstry discussed the entrainment contract procurement and award. The awarding of the entrainment contract took longer than anticipated due to several factors. The RFP was not released until later than expected because Reclamation's Acquisitions Group had a large workload and this procurement was not a priority. The paperwork to start the contracting process was submitted by August of 2014. The original plan was to have it awarded in March, but it was not awarded until late June. Competition on this contract was limited to small business and GSA contractors only. An email from the Contracting Officer (CO) Melanie Russel explaining that decision was distributed to the SJRIP CC members a few weeks ago. Several proposals were submitted in response to the RFP and all of them were evaluated during the TPEC review (Technical Proposal Evaluation Committee). The TPEC was composed of government personnel from both Reclamation and Fish and Wildlife Service. Because of major discrepancies in proposed effort and pricing of the work, negotiations were held with all proposers to clarify the amount of work required and the specific deliverables so that all contractors could propose on equal footing. These negotiations delayed the awarding by several weeks to allow for the negotiations and resubmittal of proposals. Once the proposals were resubmitted they were much more in-line with what the SJRIP needed to meet our objectives and were closer together in pricing. Another TPEC was conducted to re-evaluate the proposals and a recommendation was submitted to the CO. An award to ASIR and TNC was subsequently made on 2 July 2015. As per a previous email that McKinstry sent to the SJRIP BC he would like to have some initial discussions on this call with the contractor and BC on important factors that should be included in the evaluation process. A follow-up meeting can be scheduled with interested parties that would like to serve in a more-detailed role in the evaluation process. At this point the contract is scheduled to be completed by June 2016, with a draft report due in February 2016 along with all of the other SJRIP reports. However, due to the delays on the part of the government, and the potential that some of the field work may not be completed this year, there is the possibility that the contract will need to be extended by a certain period. A potential delay can be dealt with if and when it is determined that a delay will occur. Total cost for the entrainment project is \$98,360.87. A team composed of the Program Office, Schleicher, NMFWCO, Ruhl, Wesche, and Crockett will work with TNC and ASIR to determine specific metrics to include in the entrainment evaluation. ASIR and TNC will send the SOW for the entrainment project so it can be included in the 2016 AWP.
- The Program Office will use the priorities laid out during the December BC meeting to develop an AWP within budget that will be distributed to the BC before being submitted to the CC for approval. A revised AWP will be distributed by the end of July and discussed during the 26 August BC conference call. Priorities identified during December BC meeting:
 1. ESA compliance activities (O&M of existing facilities, SJRB Hydrology Model, peer review)
 2. Augmentation, including production, stocking, and evaluation

3. Initiate process for reviewing and revising, if needed, Program flow recommendations including:
 - A. Planning and conducting workshops
 - B. Data integration in association with upcoming revision to flow recommendation
 - C. Integration of general biological data
 - D. Monitoring and evaluation
4. Connectivity and range expansion
5. Efforts to document recruitment
6. Non-native monitoring and control
7. Fish monitoring (in order of priority: larval, small-bodied, and adult)
8. Habitat monitoring

Discuss comments received on 2015 LRP – Program Office:

- Whitmore received comments from Uilenberg and Pitts and she is working them into the latest draft of the LRP. Uilenberg is concerned about the number of potential fish passages and fish screens that are identified in the LRP. He is particularly concerned with including range expansion on the Animas River and the Lake Powell waterfall in the LRP before determining the need for range expansion to achieve recovery. He is also concerned about the ability to down- and de-list Colorado Pikeminnow and Razorback Sucker based on the existing capital project cost ceiling authorizations for the San Juan and Upper Colorado Recovery Programs. Pitts' commented that the LRP, in its current form, cannot be used to determine progress toward achieving down- and de-listing of the species, or the specific tasks, subtasks, or SOWs needed to achieve down- and de-listing. He commented the LRP needs to be rectified so that it can be used to identify high priority SOWs on annual basis to include in the AWP to ensure items critical to recovery and down- and de-listing are implemented on an annual basis.”
- Gori and Lyons proposed including tasks in the LRP under Element 2 that reduce overall agricultural, municipal, and industrial river diversions of the San Juan River through efficiency improvement and the development of water markets. Gori and Lyons described funding available outside the Program that could be used to promote the collaboration needed to accomplish these tasks.
- The Program Office will continue to revise the LRP for review by the CC.

Discuss comments received on proposed alternatives to non-native fish removal – Davis:

- Davis did not receive written comments on the proposed changes to the non-native fish removal program but he will update the SOW based on discussions during the call.
- The Program Office responded to the Peer Reviewers' comments on the non-native removal program. A final version of these comments will be distributed to the group once the Peer Reviewers incorporate Program Office concerns.
- The group discussed how the Peer Reviewers' comments were presented to the CC during the May meeting and that those comments should have come through the Program Office.

Update on request to increase summer flows downstream of Mexican Hat so scheduled work can be completed – Behery and Program Office:

- Whitmore submitted a letter to Reclamation requesting increased flows but because of recent precipitation there will likely be no need to increase releases from Navajo Dam to ensure there is sufficient flow in the downstream reaches of the San Juan River. Reclamation will continue releasing 350 cfs from Navajo Dam and maintain flows > 500 cfs downstream of Bluff.

- Behery distributed a revised available water calculation showing there is water available to the Program. Although the period for a spring peak is past, this water in excess of the 6,063 target reservoir elevation can be used to increase target baseflows in the San Juan River or manage “spike” flows. Behery asked for timelines to decide when and how to use available water during the summer and fall.
- Miller suggested increasing baseflows up to 1,000 cfs because higher baseflows result in more backwater habitat.
- Releases from Navajo Dam can occur later in the year after monsoons but there is a risk of needing spike releases if there is too much inflow to Navajo Reservoir. Reclamation will coordinate with the Program Office if there is a risk of having too high of a reservoir elevation. If there is a need for a spike release in September it should be balanced with field activities occurring in that month.

Update on installation of trash rack cleaners at PNM – Cheek:

- Screen cleaners have been installed and operating since mid-June. There appears to be consistent flow through the passage but it is too early to evaluate the effectiveness of the screen cleaners at this point. Cheek observed more catfish being collected in the passage than previously.
- There have been infrequent mortalities associated with fish being caught in the screen cleaners. Fish have been caught in the screen brushes and they end up with the other debris. Cheek is exploring options to minimize these mortalities and return fish to the river. Navajo Nation is operating the screen cleaners to reduce mortalities but a permanent fix may not occur until the winter.

Update on waterfall sampling – McKinstry:

- Temporary antennas were placed at various locations downstream of the waterfall. Since March there have been 521 unique tags detected, including 495 Razorback Sucker, 15 Colorado Pikeminnow, 1 Bonytail, and 14 unknowns. McKinstry will prepare a summary report of these results.
- Most detections occurred in March and April so sampling effort in June did not capture many fish. However, 5 tagged Razorback Suckers were captured out of a total of 8 that were detected on antennas. Also 7 untagged Razorback Suckers were collected. These 12 fish were translocated back to the San Juan River upstream of the waterfall.
- Part of the difficulty of sampling below the waterfall is the poor quality of the access road. Uilenberg indicated it might be possible to improve this road.
- The group discussed what should be done with endangered fish stacking up below the waterfall. McKinstry suggested that at least some should be moved upstream of the waterfall to see what they do, they appear to move upstream when given the opportunity.
- There are many Razorback Suckers present below the waterfall at least seasonally and many of these fish are untagged. This issue will be further discussed at the December meeting.

Update on Hogback Weir testing – McKinstry:

- There has been no SJRIP funding for this evaluation.
- Previous tests on fish large enough to be PIT tagged indicated entrainment rates of 3.2%. In June the latest release of buoyant beads and larvae was conducted to estimate larval entrainment. Any larvae entrained in the Hogback Canal would be unlikely to return to the San Juan River.
- ASIR assisted with this evaluation and has included releases of larval Razorback Sucker, larval Colorado Pikeminnow, and buoyant beads. Released larval fish were marked to distinguish them

from wild larvae. These samples are still being processed and results will be presented during a future meeting.

- The VFD (variable frequency drive) on the pumps in Hogback Canal continues to cause interference problems with the PIT tag antennas. McKinstry is working to get a contract in place to resolve this and also plans to continue larval tests next year.
- Cheek has also released tagged fish captured at the PNM Fish Passage into Hogback to test the efficiency of antennas at Hogback.

Revisit plans to stock further upstream in the Animas River – McKinstry:

- Previously the group discussed stocking endangered fish further upstream in the Animas River. Cheek developed a proposal. Entrainment issues in the Animas River derailed efforts to stock in the Animas River and the group decided to wait for the results of the entrainment study before proceeding with any stocking in the Animas.
- The Animas River provides substantial linear habitat to expand range of endangered fish populations. Also the Animas River has a relatively natural hydrology and temperature regime and a largely native fish community. Although there are entrainment risks in the Animas River, there are also entrainment risks in areas of the San Juan and lower Animas River where stocking currently occurs. Both endangered fish could be stocked into the Animas River. SUIT conducts regular monitoring in the Animas River so the SJRIP will be able to assess the results of any stocking in the Animas River.
- Miller suggested a formal proposal be developed detailing these plans. Wesche asked that the proposal describe the need for range expansion. Davis, Durst, McKinstry, Cheek, and Crockett will develop this proposal. It will be largely based on what Cheek developed previously. This proposal will be completed 1 week prior to the next BC conference call.

Next meetings:

- 2015 Annual Hydrology Meeting Webinar: 30 July 2015 from 1-3pm. Additional details will be distributed prior to the call.
- BC conference call: 26 August 2015 from 9am-12pm.

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 26 August 2015)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
1	Provide RBS/CPM stocking/capture/recapture data		P.I.'s to the Program Office	Annually before Jan. 1		
2	Provide Preliminary Draft Report Presentations		Project Leads (authors)	Annually at Feb. meeting		
3	Review LRP		BC	Annually at fall meeting		
4	Review Peer Review Comments from the February and May meetings		BC	Annually at fall meeting		
5	Provide Draft Reports		Project Leads (authors) to Program Office	Annually by end of March		
6	Scopes of Work		Project Leads to Program Office	Annually by end of March		
7	Provide Final Reports		Project Leads (authors) to Program Office	Annually by end of June		
8	Annual Data Delivery		PIs to Program Office	Annually by June 30		
9	T&E Species Data		BC to Program Office	Annually by Dec. 31		

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 26 August 2015)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
10	Annually compile T&E data and Program progress into summary to address overall Program recovery goals/objectives for presentation at annual meeting		Program Office/BC	By Annual Meeting in May		
11	Distribute Consolidated Data and list of annual data collected and available in the Program's database		Program Office to BC	Annually by Jan. 31		
12	Recapture analysis on PIT tagged fish		Durst	Annually by March		
13	Coordinate CPM stocking closely with Reclamation to avoid negative impact due to high flows/releases		Project Leads	Annually		
14	Revise RBS Augmentation Goals (based on the outcome of experimental stocking and analysis by Franssen and Durst). What is the appropriate numbers of fish to stock?	5/10/10	FWS Fisheries/Program Office	5/2011 – provide update and extend as needed	12/1/15	
15	Pursue Non-native fish stocking procedures	11/5/09	Crockett and Ruhl	12/1/09	12/1/15	
16	Pursue effects study on Hg/pikeminnow with other groups/programs	1/14/10	Program Office lead	ongoing		
17	Schedule maintenance work at PNM	8/5/14	BR, NN, PO	12/31/14	7/8/15	7/8/15
18	Include benchmarks for recovery in LRP	12/5/14	Whitmore	1/5/15	12/1/15	

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 26 August 2015)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
19	SOW to conduct population estimates for Colorado pikeminnow and razorback sucker	2/20/15	PO	5/12/15	12/1/15	
20	Position paper summarizing the effects of the non-native fish removal program	2/20/15	PO	5/12/15	12/1/15	
21	Finalize environmental flow workshop notes and summary	3/25/15	Whitmore	5/12/15	9/30/15	
22	Plan workshop to evaluate and revise flow recommendations	5/12/15	PO	9/30/15		
23	Revise SOWs	5/12/15	PIs	6/15/15		7/8/15
24	Comments on proposed alternative to non-native fish removal	5/12/15	BC	6/15/15		7/8/15
25	Investigate costs of converting San Juan electrofishing fleet to ETS units	5/12/15	Davis	9/30/15		
26	Letter to BR requesting increased summer flows downstream of Mexican Hat so scheduled work can be completed	5/12/15	PO	7/8/15		7/8/15
27	Distribute entrainment SOW	7/8/15	TNC/ASIR	7/31/15		
28	Develop revised AWP within budget that includes prioritized projects	7/8/15	PO	7/31/15		

BIOLOGY COMMITTEE ACTION ITEM LOG						
(Updated 26 August 2015)						
Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
29	Proposal to stock further upstream in the Animas	7/8/15	Cheek, Crockett, Davis, Durst, McKinstry	8/19/15		

* Items were re-numbered after changes were made

Yellow highlight indicates annual action items

Green highlight indicates new action items

Red highlight indicates completed action items that will be removed from the next iteration of the Action Item Log

Date	Annual Tasks	PO	CC	BC	P.I.
Oct.	Reclamation administers contracts	X			
Nov.	BC Meeting (peer reviews typically do not attend this meeting) <ul style="list-style-type: none"> Review data integration results from previous year Identify questions for annual data integration Discuss Program priorities LRP review and provide recommendations (with pros and cons) to PO Appoint new BC Chair (every two years) 	X		X	
Dec. 31	RBS/CPM stocking/capture/recapture data to Program Office				X
January	Notification/update of Program rosters/mailling lists	X			
January	Executive meeting (Program Office; Reclamation Fund Manager; CC and BC Chairs) to do preliminary planning for upcoming year	X	X	X	
January	Updated LRP to BC and CC for review	X	X		
January	Reclamation provides a determination of perturbation for BC Review.	X			
Jan. 31	Distribute consolidated PIT tag data and post other data	X			
February	BC Meeting (peer reviewers are expected to attend this meeting) <ul style="list-style-type: none"> Prepare for Annual Meeting Provide preliminary results; draft report presentations Final review of updated LRP Review annual data integration priorities 	X		X	X
Feb/Mar	Final updated LRP to CC (with explanation of input included/not included)	X			
March	CC approval of LRP				
March	Annual guidance/solicitation for SOWs based on LRP/list of prioritized projects	X			
March 31	Draft final reports and SOWs due to Program Office			X	X
April	Preliminary draft Annual Workplan and Budget	X			
May	Annual Meeting <ul style="list-style-type: none"> Program overview P.I. presentations Review preliminary draft AWP Committee reports 	X	X	X	X
May	Annual hydrology meeting to review and solicit information regarding the San Juan River Basin Hydrology Model	X			
June/July	Draft Annual Workplan and Budget	X			
June 30	Provide final reports and data sets to Program Office				X
July	Final reports posted on website	X			
August	Tech review of draft AWP; recommendations with pros and cons to Program Office			X	
August	Revise AWP based on input and transmit final draft to CC with documentation of all input	X			
Sept.	Review and approve final AWP		X		
Sept.	Post final AWP to website	X			