



Approved Summary
San Juan River Basin Recovery Implementation Program
Biology Committee Conference Call
25 March 2015

Attendees:

Biology Committee Members:

Bill Miller, Chair – Southern Ute Indian Tribe
Jacob Mazzone – Jicarilla Apache Nation
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
Navajo Nation – absent
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
Sharon Whitmore
Scott Durst

Interested Parties:

Chris Cheek – Navajo Nation Department of Fish and Wildlife
Brian Hines – Utah Division of Wildlife Resources, Moab
Nate Franssen – University of New Mexico
Carrie Lile – Southwestern Water Conservation District
Michael Farrington – American Southwest Ichthyological Researchers
Manual Ulibarri – U.S. Fish and Wildlife Service, Region 2 (SNARRC)

Approve 19-20 February 2015 draft meeting summary and review Action Item list:

- Review Action Item list at the end of the call and include agenda items for (1) available water forecast, (2) entrainment RFP, and (3) review of workshop report.
- Durst incorporated previous edits from Wesche and Whitmore. Wesche motioned to accept the meeting summary as approved, Mazzone seconded, and the summary was approved unanimously.

Status update on NAPI Pond management – Cheek:

Leave Avocet West fallow in 2015 for re-grading.

Discuss delivery of SNARCC fish, stock fewer fish to maintain pond density, or increase pond density with normal delivery?

Need for additional pond capacity? Rehabilitate 6-pack ponds or build new pond?

- The Biology Committee concurred with following Avocet West for 2015 so re-grading and pond management could occur. This work should happen by the end of June.
- Only two NAPI ponds will be active in 2015 and they will be stocked at past density (3,500 fish per pond). Because stocking density is currently so low there is no indication that decreasing it would result in more growth. Avocet East and Hidden Pond will be operated normally in 2015. Ulibarri indicated that the additional 3,500 fish that would have been stocked into Avocet West will remain at SNARRC until 2016.
- Any discussion on increasing pond capacity at NAPI should wait until Furr completes a draft of a revised razorback sucker stocking plan to determine if there is a need for additional capacity. Furr will work with Franssen and Durst using the available data on razorback sucker abundance, first-year survival, and subsequent survival to determine how many fish need to be stocked to reach Recovery Goals and replace losses to mortality. The 6-Pack Ponds would require substantial effort to make them usable again.
- This discussion of the Program's future stocking plans and goals should continue at the May meeting, especially how the Program's augmentation efforts are related to species' Recovery Plans.

Discussion of timing non-native removal trips during possible Colorado pikeminnow spawning (electrofishing concern) – Miller:

Discussion of ETS electrofishing settings to avoid impact to Colorado pikeminnow while continuing to sample channel catfish – Hines:

- Miller is concerned that the timing on non-native fish removal activity may harm spawning Colorado pikeminnow in the San Juan River.
- A mix of ETS and Smith-Root electrofishing units are currently used on the San Juan River. Hines indicated that ETS units produce different peaks and still effectively shock catfish at lower maximum voltage settings, perhaps with less risk to Colorado pikeminnow. Smith-Root units operate on an average voltage setting.
- The effect of electricity on the reproductive success of Colorado pikeminnow is unknown. Since the 2015 non-native removal trips have already been scheduled, this discussion should continue as part of the 2016 work plan development and the discussion of the future of non-native fish removal.
- The group discussed the benefit of shifting to a standardized ETS electrofishing fleet for the San Juan. ETS units are cheaper and can use off-the-shelf generators. There are three Smith-Root units that would need to be upgraded.
- Miller asked for a memo from those crews currently using ETS units. Schleicher will look into paired comparisons of ETS and Smith-Root units during Adult Monitoring and will distribute a CSU – Larval Fish Lab report on comparing the two units. Davis will investigate ETS costs to upgrade San Juan fleet.

BIA selenium analysis – Westfall:

- Westfall reported that selenium and mercury can be analyzed separately for \$75 and \$70, respectively, but both analyses can be run at a discount, \$135. The same muscle plug can be used for both analyses.
- BIA has a \$10,000 budget for selenium analysis. Reclamation is interested in mercury analysis for Colorado pikeminnow and McKinstry indicated he could fund this.
- All necessary permits appear to be in place to conduct this work.
- Selenium is a concern for razorback sucker and mercury is a concern for Colorado pikeminnow. The group needs to decide which fish to collect samples from.

- There was a lack of understanding on the field preservation of the muscle plug samples. Westfall will follow up with the lab and Campbell will confirm the Services' past protocols.

Discuss future monitoring effort in San Juan River upstream of Animas River or in the Animas River proper – Schleicher:

Should sampling effort in upstream reaches of San Juan River continue or shift this effort to the Animas River?

- Flows in the Animas River typically limit fall sampling but it can be sampled in the spring.
- Schleicher is planning to sample the Animas River in early April with raft-mounted electrofishing (per Adult Monitoring protocols) and Ruhl will have New Mexico Game and Fish crews conduct concurrent small-bodied monitoring in the Animas River.
- In 2015, the Fall Monitoring that has occurred upstream of the Animas River in the San Juan River for the last several years will continue but a discussion and decision needs to be made how these upstream sampling efforts will occur in the future.

Clarify ESA and environmental compliance issues related to stocking razorback sucker in upstream portions of the Animas River – Campbell:

- Campbell followed up on the discussion from the previous meeting. There are no ESA issues with stocking outside of critical habitat. There was concern that if stocked fish are entrained in diversions, then canal owners would be obligated to fix those diversions. Entrainment and passage issues need to be addressed throughout the San Juan River Basin, the same concern exists for these structures in Animas River as for those that are not screened in the San Juan River. The Program needs to know where entrainment may occur so outstanding issues can be addressed to achieve recovery. The entrainment RFP will be a step to identify problematic locations.
- The group discussed if this entrainment study should be completed before any stocking occurs in upstream reaches of the Animas River. This RFP will address both passage and entrainment issues. Although the announcement for the RFP has been delayed it should be out in the next few days.
- BC members should review the Francis (Reclamation) report on passage issues in the Animas River.

Follow up on opportunistic razorback sucker stocking in the Animas River – Cheek:

- Experimental opportunistic stockings will be on hold until the results of the entrainment study are available (these results will be presented during the February 2016 meeting).

Colorado pikeminnow recovery team update – Campbell:

- There is a webinar on 7 April to discuss the status of the Colorado pikeminnow recovery plan. Whitmore will get additional information from Tom Chart and distribute to the group.

Status of memo to CC regarding feasibility study of passage in the Animas River and any outstanding discussion of passage issues in the San Juan River and Animas River per review of Stamp and Francis reports – Campbell:

- This memo was discussed at the CC meeting in May 2014. Brent Uilenberg needs additional guidance on sites to address passage issues. APS and Fruitland are budgeted for 2017. Sites in the Animas River could be budgeted for 2018 but Uilenberg would need to start that process by this summer. At a minimum the barriers identified in the Francis passage report should be addressed.

- There was some confusion on the naming of various diversions. Whitmore will develop a list of possible diversions starting with the Francis report.

2015 LRP update – Whitmore:

- Whitmore sent out an updated LRP along with a list of outstanding questions to the BC.
- The various integration efforts should be combined for simplicity and to reduce redundancy.
- Additional discussion is needed on the pilot mark-recapture abundance estimates to determine where these efforts stand.
- Gori asked about the need for additional modelling at the habitat restorations sites. It could be important to understand the flows needed to move sediment in these restored channels. Gori will provide some information on modelling that has been conducted in the Gila River.
- The BC will review the updated LRP by 15 April.

2015 budget update – McKinstry:

- Most FY 2015 obligations have occurred apart from the entrainment RFP.
- There should be no surprises for the 2016 work plan and McKinstry indicated any CPI is not expected to be large.

Update on installation and testing of remote PIT tag readers – McKinstry:

- Testing of the Hogback Fish Weir is on-going. There are plans to test the effectiveness of the weir with larval fish through outside funding. Also an additional PIT tag reader will be installed at the Hogback inflow gate.
- Tagged fish are being detected at the Phase 2 habitat restoration site, the PNM Weir, and the PNM fish passage.
- In April McKinstry will use the floating PIT tag reader below the waterfall.
- Cheek and Cathcart collected four untagged razorback suckers with cast net sampling below the waterfall and also installed anchored PIT tag readers below the waterfall.
- McKinstry will provide an update in May.

Update on maintenance work to maintain flow at PNM – Cheek:

- The new screens will be delivered by 13 April and they should be installed shortly thereafter.

Review options and cost-benefit of stocking larger razorback sucker from NAPI – Cheek:

- It appears that density dependent growth may already be maximized at the NAPI ponds given the current stocking density.
- Cheek is working with Franssen and Durst to consider other efforts to increase post-stocking survival. Plans to experimentally acclimate passively harvested razorback suckers to flow are being worked out. There has also been some discussion of exposing razorback sucker to predators (channel catfish) but this will not be immediately pursued because predation does not appear to be a substantial cause of razorback sucker mortality given the size that they are stocked.

Update on non-native fish stocking procedures – Crockett and Ruhl:

- There has been no change in the status of the non-native fish stocking procedures. Getting this processed has been made more difficult by the departure of Gilbert. New Mexico needs to finish the draft so it can move up their chain-of-command.

Implementing recommendations from non-native fish workshop – Davis:

- Davis previously distributed these recommendations. Comments from Ross and Gori have been incorporated. As the future of non-native removal is resolved, there will be continued discussion of non-native fish management plans.

Finalizing T&E fish augmentation plans – Davis:

- Furr is currently updating the razorback sucker augmentation plan. Furr will work with Franssen and Durst to use survival and abundance estimates to revise stocking goal targets.
- The Colorado pikeminnow augmentation plan has been revised and the Program is currently using this draft as the basis for augmentation effort. The BC should review and finalize this draft.

Status of narrative report and data associated with TNC Threats Assessment report – Gori:

- Lara Miller presented the results of this effort at earlier meetings. The map books are useful but there is no associated summary or narrative.
- Lara Miller has taken another position and Gori is working with Steve Bassett to take the lead on wrapping up this project. This should be completed by May.

Discuss BC review of SNARRC genetics integrity management plan and UNM genetics assessment – Ross:

- Ross was concerned if there were any genetics issues related to the stocking of endangered fish but he was unavailable for the call. SNARRC has a current SOW to address this and there do not appear to be any indications that there are genetics problems in stocked fish in the San Juan River. SNARRC is making efforts to ensure that their fish have a genetic make-up reflective of wild fish.

Discuss rotating meetings between Durango and Farmington to accommodate BC participants – Miller:

- It would be good to alternate meetings between Farmington and Durango but meeting facilities and accommodations are limited in Farmington.
- When meetings are scheduled on short notice New Mexico representatives have trouble getting out-of-state travel approval because those requests are approved quarterly.
- Miller will try to schedule meetings well in advance of any agency approval deadlines. BC meeting are currently scheduled through December 2015

2015 available water forecast:

- Behery has sent regular updates to the Program Office and BC. There has been little change from past reports and there are no plans for a spring peak release based on available water calculation and the current forecast.

Notes from environmental flows workshop:

- Whitmore distributed notes compiled from the workshop.
- There was general consensus that an executive summary would be useful. Westfall thought there were inaccuracies in the notes. Those points should be discussed and corrected.
- Whitmore will take the lead on drafting an executive summary and incorporating comments to finalize the notes.
- Plans for a follow up workshop are on-going.

Recap decision points and review assigned action items:

- Review the attached Action Item List for a summary of completed and assigned actions items.
- The call scheduled for 20 April from 9am-12pm should be used to free up time during the May meeting. Discuss latest flow forecast and other BC “house-keeping” items would be useful.
- Schleicher will present a comparison of ETS and Smith-Root electrofishing units.
- Whitmore will finalize the environmental flows summary.
- Westfall and Campbell will get more details on field preservation and analytic needs for muscle plug samples.
- Durst will follow up with Cathcart on study proposal for work in tributaries and below the waterfall.
- BC comments on LRP are due 15 April.
- BIA will provide details of water quality sampling for the LRP update.

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 1 April 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 1 April 2015)

Item No. *	Action Item	Meeting/O rigin 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	Waterfall Inundation Whitepaper – review past meeting summaries, determine what is needed, and provide report at the next meeting.	05/18/07	Program Office	12/07/07	Not a current priority	
15	Revise RBS Augmentation Goals (based on the outcome of experimental stocking and analysis by Franssen and Durst)	5/10/10	FWS Fisheries/Program Office	5/2011 – provide update and extend as needed	5/12/15	
16	Develop a detailed outline for San Juan River Recovery Program case history manuscript	11-5-08	Propst/Miller			On hold
17	Pursue Non-native fish stocking procedures	11/5/09	Crockett and Gilbert	12/1/09	5/12/15	

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(Updated 1 April 2015)

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18	Pursue effects study on Hg/pikeminnow with other groups/programs	1/14/10	Program Office lead	ongoing		
19	Discussion of what is the appropriate number of fish to stock	3/23/10	BC	ongoing		
20	Schedule maintenance work at PNM	8/5/14	BR, NN, PO	12/31/14	5/12/15	
21	Plan workshops to determine an end of season reservoir elevation for revised available water calculation and develop a protocol to implement replacement for "decision tree" to make releases from Navajo Dam	9/15/14	Program Office	ongoing		
22	Follow up with CC regarding memo on feasibility study to remove barriers in the lower Animas River	12/5/14	PO	2/20/15	5/12/15	
23	Include benchmarks for recovery in LRP	12/5/14	Whitmore	1/5/15	12/1/2015	
24	Review SNARCC genetic integrity management plan	12/5/14	BC	2/20/15		2/20/2015
25	Review University of New Mexico genetics assessment	12/5/14	BC	2/20/15		2/20/15
26	Provide status updates to LRP tasks	12/5/14	Pls to Whitmore	12/31/14		12/31/14
27	Review and comment on LRP	12/5/14	BC	1/15/15	4/15/15	

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 1 April 2015)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
28	Prepare memo on stocking larger RBS from NAPI	12/5/14	Cheek et al. to BC	2/11/15		3/25/15
29	Review and comment on Population Model report	12/5/14	BC to Miller and Lamarra	1/15/15		1/15/15
30	SOW to conduct population estimates for Colorado pikeminnow and razorback sucker	2/20/15	PO	5/12/15		
31	Position paper summarizing the effects of the non-native fish removal program	2/20/15	PO	5/12/15		
32	Possible alternatives to current non-native removal program	2/20/15	PIs	5/12/15		
33	Clarify ESA and environmental compliance issues related to stocking razorback sucker in the Animas River	2/20/15	Campbell	3/25/15		3/25/15
34	Written proposal to BC for feedback on McElmo Creek spawning study, fish sampling below waterfall, and remote PIT tag antennas	2/20/15	Cathcart	3/25/15	5/12/15	
35	Distribute non-native fish trip dates to BC to discuss avoiding electrofishing during endangered fish spawning	2/20/15	Duran and Hines	3/25/15		3/25/15
36	Clarification on field preservation and analytic needs for muscle plug samples	3/25/15	Westfall and Campbell	4/20/15		
37	Finalize environmental flow workshop notes and summary	3/25/15	Whitmore	5/12/15		

BIOLOGY COMMITTEE ACTION ITEM LOG						
(Updated 1 April 2015)						
Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
38	Comparison of ETS and Smith-Root electrofishing units	3/25/15	Schleicher	5/12/15		

* 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			