



**Final Summary**  
**BIOLOGY COMMITTEE MEETING**  
**22 May 2018**  
**Fort Lewis College**  
**Vallecito Room, Student Union Hall**  
**Durango, CO**

**Attendees**

**Biology Committee Members**

Bill Miller – Southern Ute Indian Tribe  
Jacob Mazzone – Jicarilla Apache Nation  
Brian Westfall – Bureau of Indian Affairs (BIA)  
Jason Davis – U.S. Fish and Wildlife Service (Region 2), Chair  
Mark McKinstry – U.S. Bureau of Reclamation  
Benjamin Schleicher – U.S. Fish and Wildlife Service (Region 6)  
Mike Ruhl – State of New Mexico  
Harry Crockett – State of Colorado  
Tom Wesche – Water Development Interests

**Coordination Committee Members**

Tom Sinclair – U.S. Fish and Wildlife Service Region 2  
Dale Ryden – U.S. Fish and Wildlife Service Region 6  
Ryan Christianson – U.S. Bureau of Reclamation  
Rolf Schmidt-Petersen – State of New Mexico (NM)

**Program Management**

Scott Durst, U.S. Fish and Wildlife Service (Region 2)  
Melissa Mata, U.S. Fish and Wildlife Service (Region 2)  
Nate Franssen, U.S. Fish and Wildlife Service (Region 2)  
Eliza Gilbert, U.S. Fish and Wildlife Service (Region 2)

**Other Interested Parties**

Matthew Zeigler – State of New Mexico  
Roland Becenti – Bureau of Indian Affairs  
Dan Lamarra – Ecosystem Research Institute  
Steve Platania – American Southwest Ichthyological Researchers, L.L.C. (ASIR)  
Henry Day – Arizona Public Service (APS)  
Brian Hines – Utah Department of Wildlife Resources  
Matt Owens – PNM Resources  
Alex Birchfield – Office of Surface Mining Reclamation and Enforcement (OSMRE)  
Susan Behery – U.S. Bureau of Reclamation  
Tracy Diver – U.S. Fish and Wildlife Service Region 2  
Jerrod Bowman – Navajo Nation Department of Fish and Wildlife  
Scott Clark – University of New Mexico  
Ron Bliesner – Keller Bliesner Engineering LLC  
Mike Greene – PNM Resources  
Melissa Trammel – National Park Service (NPS)  
Ken Hyde – National Park Service (NPS)

**Introductions and changes to agenda**

- Durst announced that there are new habitat maps and will be made available to everyone.

**Approve draft summaries from 20-22 February 2018 BC meeting and 15 March 2018 BC call; review Action Item list**

Wesche asked to correct a typo on page six of the 20-22 February 2018 notes to state the correct number of fish. This error was identified and the notes now reflect the correct number. Ruhl motioned to approve both 20-22 February 2018 and 15 March 2018 summaries; Wesche second. These notes will be finalized and emailed out to the BC and posted on the Program website.

**Review of Action Items as identified in 20-22 February 2018 Summary**

Action item 21 – Completed. Program Office (PO) has received permission from BIA and this will be emailed out to the Biology Committee (BC). Westfall added that 96 fish spawned from the selenium study

Action Item 23 – Completed. Gilbert said this has been added as an agenda items for today's BC Meeting

Action Item 24 – Ongoing. Franssen has coordinated aerial flights with base flow imaging for Fiscal Year (FY) 18, this will continue to be an ongoing effort.

Action Item 25 – Ongoing. Ruhl stated that each cooperating agency has been given the opportunity to review and comment the non-native fish stocking procedures, which are due back to New Mexico Department of Game and Fish (NMDGF) by June 30, 2018.

Action Item 26 – Completed. Population Viability Analysis (PVA) for Razorback Sucker went out for review and comment to the BC on March 7 and comments were due back on April 3, 2018.

Action Item 27 – Ongoing. Franssen stated that the PO started a study to test PIT tagging on various lengths of fish at PNM. PO will provide an update during the July BC Meeting

Action Item 28 – Ongoing and has been added as an agenda item for today's BC Meeting.

Action Item 29 – Ongoing. To be changed for FY2019 Annual Work Plan (AWP).

Action Item 30 – Completed.

Action Item 31 – Completed. Scope of Work (SOW) is identified as New 6 in the draft AWP, to be discussed in further detail during the discussion of the draft AWP for FY2019.

Action Item 32 – Completed. Ramp-up of water for the riparian restoration project will begin June 6.

Action Item 33 – To be added for discussion at the Coordination Committee Meeting next week.

Action Item 34 – Completed. This was completed on March 5, 2018.

Action Item 35 – Ongoing-it was requested that this agenda item be move up.

Action Item 36 – This action item will be maintained, until the next annual meeting.

**Discuss draft recommended FY 2019 Annual Work Plan – Program Office**

- Durst provided a summary of this year's process in reviewing SOW. The AWP for FY19 was sent out for technical review on March 22, 2018 to BC members. Following discussion at recent BC meetings, the PO requested BC and Peer Reviewers review and comments on only new or substantially changed SOWs. In addition, the PO included SOWs submitted after the Nonnative Fish Workshop and approved this past winter in the 2018 AWP and resubmitted for consideration in the 2019 AWP as "new" SOWs. However, BC members and Peer Reviewers review was not limited to these SOWs. The Draft AWP based on comments received and PO priorities was emailed on May 15, 2018.

***Element 1 SOW***

- There were no comments with regards to Element 1 SOWs

***Element 2 SOW***

- Durst provided clarification that the PO mixed up the numbers in the AWP. The SOW labeled as New-6 in the draft AWP that was emailed on May 15, 2018 is the SOW that the BC requested on maintenance needs for Phase I and II. The New-6 SOW that was out for technical review in March was for Restoration of Secondary Channel and Backwater Habitat in the San Juan River, which was not included in the AWP and may be considered in the future as a capital project. For the purpose of the notes, the SOW for Restoration of Secondary Channel and Backwater Habitat in the San Juan River will be called Old-6.

- Bliesner stated that Phase II would need regular maintenance because of the sediment bar. The proposed maintenance is very temporary it may last a season or maybe two months.
- Wesche stated that no comments on the New 6 were provided. What is the goal of Phase I and II for the out years? Previously the BC indicated these secondary channels should remain open through the use of maintenance. However, maintaining these sites may no longer be a priority given change on-the-ground. The control bar at Phase II has been removed and there is an ephemeral wash upstream on river right that is likely pushing sediment into the Phase II site.
- There were general discussions whether maintenance of Phase I and II would be worthwhile given the amount of investment it took to establish Phase I and II.

#### ***Element 3 SOW***

- There were no comments with regards to Element 3 SOWs

#### ***Element 4 SOW***

- Durst stated that there was an overall pattern in the review and comments that discussed frequency and spatial extent of monitoring projects. It would be worth taking a look at our entire monitoring project and discuss the frequency and spatial extent of each effort in relation to how it helps recovery of these species. The PO recommends having those discussion at the November meeting, where new ideas are requested and SOW are due shortly thereafter.
- For example: The PO recommended SOW-19, adult monitoring, not sampling the lower reach in 2019. There were concerns whether Zachary Ahrens research would be impacted by not sampling the lower reaches in 2019. Hines provided an overview of Ahrens research, which is to sample below the waterfall to get an idea of the fish community to think about fish passage options in the future. Ahrens is looking at the fish population above and below. What does the upstream waterfall provide to the study? This would help with Utah initiative of determining whether the waterfall is an impediment to migration.
- SOW-20 NMDGF provided an updated SOW for small-bodied fish monitoring to include a flexible sampling schematic based on the number and location of Age-0 captures. PO has recommended the SOW as is. Davis asked if the PO or NMDGF have put any thought into the reviewer's comments about using other sampling techniques. Eliza and ASIR tried sampling with a Missouri Trawl, but there were too many problems executing this sampling technique in the San Juan River. It was recommended that PO or NMDGF coordinate with another agency who has experience with Missouri Trawl.
- Durst explained that we are currently over budget for the current AWP and we will need to make cuts in order to proceed with all of the projects. Therefore, the PO worked with a few Principal Investigators (PIs) and made a recommendation to reduce cost. The PO recommended scaling back the spatial extent of SOW 21a (larval monitoring from the Animas confluence to Shiprock). In addition, the PO is looking for a BC recommendation on cutting the April pass from SOW 21 (the long-term monitoring effort) or removing New-4 (larval monitoring below the waterfall) from the 2019 AWP.
- Miller suggested that these proposed changes to SOWs be sent to the BC for consideration and discussed at the July BC Meeting. In out years, these potential changes should be presented to the BC in advance for discussion at the BC meeting. Then the BC could provide a technical review with the disadvantage and advantage of the SOW changes.
- SOW New-1 Backwater productivity assessment, McKinstry expressed concerns about whether this project could get funded. This is largely due to the fact that this PI is not part of an existing agreement or partner to the Program or a Cooperative Ecosystem Studies Units (CESU).
- SOW New-2 N<sub>b</sub> and genetic diversity project was recommend based on the fact that it will be analyzing larval samples below the waterfall in 2018/2019 and conducting analysis on other native suckers to put the N<sub>b</sub> into context with the self-sustaining native sucker population.

- All other SOWs not reviewed or mentioned here have been recommended because they are ongoing necessities or continuing research projects from previous years.
- Finally the PO made recommendation that PIs should ensure that their budgets are mathematically correct. The PO office will consider developing a budget template.

*Discussion of potential projects FY19 in lieu of not funding the Whitney project.*

- McKinstry mentioned a spin-off of the Carthart project; Stocking tributaries with early life stages of razorback sucker may be an alternative to stocking adults *and* offer insight into recruitment of the species, including the feasibility of constructing the off-channel wetland. The habitat conditions in McElmo Creek meet requirements for spawning, egg hatching, growth, and recruitment of razorback suckers. Additionally, McElmo Creek had few nonnative fish present, relative to the main channel San Juan River. Using McElmo Creek as a test for growing out larvae and providing a source of larger juvenile may be a tactic that could be used to introduce conditioned fish to the mainstem San Juan River. This project would require a relatively small budget since it would be a seasonal research question that could be administered and monitored over limited time periods annually. This would essentially be a rearing project. The goal is to test stocking larvae Razorback Sucker in McElmo Creek and can some of those individuals be picked up in small bodied monitoring in McElmo to identify imprinting or nursery. No plan for evaluating of fish when getting out of there. There is a considerable amount of Flannelmouth Sucker in McElmo and there were concerns of competition. We need a student dedicated to do it.
- Larval work below the waterfall. To quantify loss over the waterfall, maybe a drift study is needed.
- Testing elevated baseflows is one option to assess for increasing Colorado Pikeminnow survival. This is also being done in the upper basin. However, the response to be measured remains an outstanding question.
- Another alternative for the SOW New-1 Backwater productivity assessment is to conduct a feasibility study to help refine their work, especially if we cannot get this project funded in FY2019 (i.e. pilot study)
- The BC had some discussion that at times it is unreasonable to review and be asked to rank SOW's blind to cost. Evaluating any work plan without an idea of the level of effort makes it difficult to make informed decisions. If the PO wants the BC to participate in the Program and make informed decisions it is impractical to do that with a major decision factor missing which is cost. The BC does not need to see the entire budget but the overall cost for any scope of work that the BC are expected to evaluate is important, especially if evaluating the priorities of one project to another when we are over budget in the AWP.

**Discussion of post-2018 Colorado Pikeminnow stocking – NMDGF**

- Zeigler provided a presentation outlining an adaptive management strategy for stocking Colorado Pikeminnow post-2018. The impetus of this adaptive management approach was due to having two consecutive years where wild young-of-year fish have been collected during annual fall monitoring. Two important questions were raised:
  - How do we identify a fish as hatchery-origin or wild-origin
  - Could the interactions between hatchery-origin and wild fish have any deleterious population level effects on wild fish
- This led to several discussions between a smaller group consisting of the PO, NMFWCO, and NMDGF, developing an adaptive management framework for augmentation.
- Based on the current knowledge of the Colorado Pikeminnow population in the San Juan River and the 2002 recovery goals, a hierarchal set of desired conditions for the population was developed using an adaptive management (AM) framework.

- Zeigler handed out a Table describing desired conditions, conservation actions, quantitative responses, and performance metrics for Colorado Pikeminnow in the San Juan River above Paiute Farms Waterfall.
- The conservation action will need yearly augmentation to build up the population to quaternary and tertiary desired conditions; however, to continue building the population to secondary and primary desired conditions we need to continue increasing the wild population and maintaining the population. Therefore, this is where we can use an adaptive management approach.
- Keep in mind this is not exhaustive, but five alternatives have been developed for discussion:
  - No action
  - Production determined by April 1<sup>st</sup> projected hydrograph
  - Stocking determined by young-of-year captures
  - Production determined by April 1<sup>st</sup> projected hydrograph and stocking determined by young-of-year captures
  - Cease augmentation
- Each alternative has uncertainties, assumptions and risk associated with them. This also includes fish disposition (what to do with fish we do not stock). For example, this could include the following scenarios:
  - Stock fish below the waterfall in SJ Arm of Lake Powell
  - Holdover fish in an actively managed pond
  - Holdover fish in a passively managed pond
  - Give fish to another recovery program
  - Destroy fish
- The next step is to determine the path forward for augmentation to address uncertainties and balance/mitigate risks associated.

#### *BC discussion*

- Miller mentioned that there have been recent discussions about review and revision of the Colorado Pikeminnow recovery goal and criteria. The question was posed if we changed recovery goals and criteria in the future would the desired condition change. Zeigler/Ruhl stated that was not taken into consideration, but we should keep in mind that the desired condition could be changed. However, the end result (primary designed condition) is to shoot for a self-sustaining population. The framework is set up to be adaptive.
- Hyde suggested that a fish disposition option could be the use of a net pen operation in Lake Powell, allowing fish to grow out.
- It was suggested to have the smaller subgroup develop a plan for the BC November meeting and develop more options for down the road. In addition, the subgroup should start running these options and find out what is feasible.

#### **Discussion of Peer Review report – Westfall**

- Westfall wanted to talk about the Peer Review Report and suggest the PO address the Peer Reviewer comments. This report was entitled Peer Reviewer comments for spring, 2018, submitted by the Peer Reviewers on March 30, 2018. The PO did not see a need to respond to the peer review comment and if a response is needed this should be coming from the BC or Program as a whole, because the PO does not constitute the Program.
- Westfall provided an example, where the Peer Reviewers state that strategies for recovery of the two species cannot be spatially bounded between the waterfall at the lower end of the San Juan River and the upstream extent of the two species in the river. The Program recognizes that recovery for these species cannot be spatially bounded, but the San Juan Program is taking steps to incorporate information from below the waterfall.
- Westfall added if we have a viable population below the waterfall how does that impact recovery. How does that contribute to the 5800 adults needed for Razorback Sucker downlist/delist criteria? As

of right now, both Colorado Pikeminnow and Razorback Sucker are in the process of developing a Species Status Assessment, which is the science-based document to inform future products, such as the 5-year review and a revised recovery plan. Coordination for revised recovery plan will begin in FY19.

- Westfall highlighted on page 2, sub-bullet two: “While results of analyses and syntheses are being presented for unique data sets, it is unclear to peer reviewers as to how these syntheses are being integrated into the overall Program and how the knowledge is being incorporated into an adaptive management framework.” The PO disagrees, and highlighted recent changes to handling juvenile Colorado Pikeminnow and efforts to open the PNM fish passage as examples how these analyses are being used to modify our management strategies.
- The PO indicated there may be a disconnect between the Program and the Peer Reviewers because the Peer Reviewers have been less engaged due to budgetary constraints. The Peer Reviewers expressed this to the PO during the February meeting. The peer reviewers expressed a need more involvement to be better engaged, but this comes with a necessary budget increase. There were also discussions on the peer reviewers changing their roles as science advisor focusing on big picture ideas. The peer reviewers were receptive to that idea of being science advisors. The PO wants the peer reviewers to bring in new ideas to the Program.
- The BC will highlight topics from peer review report for discussion at the November BC meeting. Highlighted topics could be used as a starting point to talk about potential new projects.
- The BC requested that the peer reviewers role as science advisors be discussed at the next CC meeting.

#### **Update on opening PNM fish passage from March-May – Franssen**

- The PO placed wagon wheels PIT tag antenna at APS and multiple antennas are in place at PNM to evaluate fish movement between these potential fish barrier.
- At Hogback antennas detected 29 Colorado Pikeminnow and two of those individuals were detected at APS, and as well as 6 individuals detected further upstream at PNM.
- At Hogback antennas detected 446 Razorback Sucker and one of those individuals were detected at APS, and as well as 14 individuals detected further upstream at PNM. At APS 253 Razorback Sucker were detected and 86 of those individuals were later detected at PNM. There were at least 6 individuals that had detection moving down stream.
- Additionally PNM was opened as a non-selective passage. Fish are initiating movements upstream as discharge increases and there is a positive correlation with fish detections and San Juan River flow.
- We have passed 164 Razorback this year in a 6 week period, compared to a total of 183 during spring over the previous 7 years. However, we are still having problems with passage. For example, we detected 296 unique Razorback Suckers at the most downstream antenna in the fish passage, but fewer detections further upstream, where passage rate gradually fell from 90% to 32% fish moving successfully through the passage. This will be an ongoing evaluation.

#### **Overview of input received from fish passage experts – McKinstry**

- McKinstry provided an update on input received from fish passage experts on the Waterfall, Hogback, PNM and APS. A report of their revisit will be shared to the BC, once received.

#### *Waterfall*

- Option 1: Collection of fish for sorting and transfer upstream of the San Juan Waterfall through the use of a fish wheel that could be operated downstream from the barrier in areas where fish are known to congregate.
- Option 2: A natural bypass channel would also function as an effective passive fish passage option. Optimal channel designs are approximately 1 m wide and approximately 167 m long with a slope of 3% with a trap at the top end. NPS expressed concerns of the maintenance that would be required for any constructed bypass channel around the waterfall and removing the waterfall with explosives would not be ideal.

APS

- Based on Franssen's earlier presentation we believe fish are moving through the sluiceway during low flow conditions.
- Option 1: Fish passage under low and variable flow conditions can be restored using concave inclined wedge ramp, embedded into the existing weir while maintaining head necessary for water withdrawal.
- Option 2: Construction of a natural bypass on the opposite side of the river from the pumphouse, entrance should be located as close to the weir face as possible in a downstream orientation. This side of the bank is on private land.

**Colorado Pikeminnow calcein sampling – Zeigler**

- Sampled down to Clay Hills and sampled 55 sites and we captured 9 Colorado Pikeminnow. One fish was determined to have a calcein mark. All fish will be sent to Dexter for evaluation. Zeigler will need to look through the data to determine whether there need to change small-bodied monitoring in the fall.

**Lower canyon sampling – Hines**

- The lower canyon sampling has resulted in 82 Colorado Pikeminnow and 160 Razorback Sucker
- A couple of inter-basin migrations of Razorback Suckers have been identified this year. One was stocked in the Green River at the State Park in 2005 and was recaptured this year upstream of Slickhorn Wash on the San Juan (likely translocated this year by Pennock). That is approximately a 345 mile migration. Another Razorback Sucker was captured by Ahrens at the waterfall on the San Juan and was stocked at Green River State Park in 2010. That is approximately a 300 mile migration.
- UDWR will also evaluate Channel Catfish CPUE, size structure, and population estimates. Mean total length was ~320mm for Channel Catfish. The size structure has increased in the last three years.
- Population estimates are for Channel Catfish of >200mm, population estimates are consistent from previous years.

**Lake Powell – Schleicher**

- Schleicher reported out that they just finished trip 5. Twenty-four individual Razorback Suckers have been captured. Cold temperatures observed to date may have limited fish captures and the lack of spawning. There are three more trips planned. Spawning may be coming very soon. Water clarity has been high.
- Wagon wheel PIT tag antennas have been placed on the Colorado side and only detected 2 Razorback Sucker in three weeks. Spawning is not being observed right now. Hopefully, this will pick up in the coming weeks.
- The river is migrating downstream and is affecting the big bend area, which is now shallower and makes it hard to predict where the fish will be.

**Lake Powell-San Juan River interface – McKinstry**

- Casey Pennock translocated a total of 412 Razorback Sucker in the last three years. Twenty-one Razorback Suckers were tagged and only one has been detected below Mexican Hat. It is presumed that all translocated fish moved back downstream of the waterfall. Pennock captured 15 young of year Razorback Sucker ranging from 26-63 mm in the riverine portion of the Lake Powell inflow in July 2017.
- Only 15 Colorado Pikeminnow have been translocated upstream of Piute Farms Waterfall. However, it should be noted that the antennae are not running when we would expect to see Colorado Pikeminnow, only 38 Colorado Pikeminnow have been detected in the last four years. This year the antennae will be operated when we would expect to see Colorado Pikeminnow. Over 200 juvenile Colorado Pikeminnow collected in a single backwater below the waterfall in March 2017.

- In future work, Pennock will focus on estimating population size of Razorback Sucker in the inflow area (Piute Canyon-Waterfall), evaluate movement dynamics and evaluate the efficacy of translocation of endangered fishes.

**Prioritization of passage and habitat projects using capital funds – Program Office**

- The PO office wants to prioritize implementing fish passage and habitat projects through the use of capital funds. We need to have the foresight in planning out these capital projects because of how funding for capital projects are allocated. The BC needs to support and recommend capital project prioritization. Miller mentioned that the BC has already written a memo regarding several fish passage issues. It would be worthwhile to look at that memo and remind the CC that these are recommendations from the BC.
- The BC asked the PO to come up with a capital project prioritization list that can be discussed at the next July BC meeting.

**Summary of Roundtail Chub stocking in the San Juan River Basin – Gilbert**

- The Southern Ute Tribe has been stocking 37-8,100 Roundtail Chub in the Animas River and La Plata River semi-annually since 2010. These fish come from Colorado Parks and Wildlife (CPW) who are also stocking in San Juan River tributaries. These include the Florida, La Plata, Mancos, Los Pinos, and McElmo. CPM stocks an average of 39,000 fish each year. These are all 50-150 mm fish. Stocking for Southern Ute Tribe and CPW did not occur in 2016 and 2017 but is expected to occur in 2018. NMDGF stocked Roundtail Chub in the San Juan River at the Animas River confluence in 2009 per their 2006 Roundtail Chub Recovery Plan. Adult monitoring in the San Juan River has detected some Roundtail Chub. Other collections in tributaries can be found in reports by Bill Miller.

**Update on status of Remote Biologist – Davis**

- Davis announced that the Remote Biologist position for the NMFWCO had to be re-advertised and is currently posted as of today (BC meeting). Once human resource's processes the applications, we will get a list of potential qualified applicants and begin the selection and hiring process later this summer.

**Update on 2018 and 2019 funding and budgets – McKinstry**

- Reclamation is and has been in the process this year of renewing many agreements with our PIs in the San Juan Program and getting a new agreement in place for PIT tag equipment needs for the upcoming FY.

**Recap decision points and review assigned action items**

- See following pages for action items.

**Next Meeting**

- July 10, 2018 BC Meeting Webinar/Conference Call

**BIOLOGY COMMITTEE ACTION ITEM LOG**  
(Updated June 11, 2018)

Item No.*	Action Item	Meeting/Ori gination Date	Responsible Party(s)	Due Date	Revised Due Date	Date Completed
1	Provide RBS/CPM stocking/capture/recapture data		PIs to PO	Annually before Jan. 1		
2	Provide Preliminary Draft Report Presentations		PI	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		PIs to PO	Annually by end of March		
6	Scopes of Work		PIs to PO	Annually by end of March		
7	Provide Final Reports		PIs to PO	Annually by end of June		
8	Annual Data Delivery		PIs to PO	Annually by June 30		
9	T&E Species Data		BC to PO	Annually by Dec. 31		
10	Annually compile T&E data and Program progress into summary to address overall Program recovery goals/objectives for presentation at annual meeting		PO/BC	By Annual Meeting in May		
11	Distribute Consolidated Data and list of annual data collected and available in the Program's database		PO to BC	Annually by Jan. 31		
12	Recapture analysis on PIT tagged fish		Durst	Annually by March		

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13	Coordinate CPM stocking closely with Reclamation to avoid negative impact due to high flows/releases		PIs	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	NMFWCO/PO	05/2011 – provide update and extend as needed		
15	Pursue effects study on Hg/Colorado Pikeminnow with other groups/programs	1/14/10	Program Office lead	ongoing		
16	Include benchmarks for recovery in LRP (amended to also included in Pathways document and monitoring protocols)	12/5/14	Mata	01/5/2015	ongoing	
17	Status updates for the LRP	12/2/15	PIs to Mata	02/23/2016	ongoing	
18	Make Program peer-reviewed publications available to Program participants	11/29/16	PO (Mata)	02/21/2017	ongoing	
19	Determine disposition of Razorback <300 mm TL	02/21/17	NMFWCO	05/16/2017	ongoing	11/28/2017 but TBD FY 2019
20	Draft a plan for Colorado Pikeminnow stockings	02/21/17	PO, NMFWCO, and NMDGF	02/21/2017	ongoing	
21	Develop structure for Monitoring Plan and Protocols 2012 to be incorporated into other SJRIP documents will be added to LRP	7/13/17	PO	11/28/2017	ongoing	
22	Coordinate aerial flights for base flow imaging	11/28/17	BC (Lamarra)/PO (Franssen)	02/20/2018	Ongoing	
23	Non-native fish stocking procedures to be sent to signatories	02/20/2018	Crockett and Ruhl	03/30/2018	06/31/2018	

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Item No.*	Action Item	Meeting/Ori gination Date	Responsible Party(s)	Due Date	Revised Due Date	Date Completed
24	PO provide recommend on fish length for PIT tagging	02/20/2018	PO	5/22/2018	07/10/2018	
25	PO summarize Colorado Pikeminnow Stocking Option for 2018 and out years	02/20/2018	PO	03/15/2018	07/10/2018	
26	Revise Navajo Nation SOW for PNM Fish Passage	02/20/2018	PO	03/19/2018	07/10/2018	
27	Prioritization of capital projects agenda item in May Meeting.	02/20/2018	PO/BC	05/22/2018	07/10/2018	
28	APS present on Morgan Lake to Coordination Committee after one year of operation.	02/20/2018	APS	05/30/2018		
29	Send out Selenium Study Plan to BC	05/22/2018	PO	07/10/2018		
30	Upload new habitat maps	05/22/2018	PO	07/10/2018		
31	PO Recommendation will send SOW modifications recommendation for technical trade-off review	05/22/2018	PO	07/10/2018		
32	Make Comments to New-6 (Original) available to BC	05/22/2018	PO	07/10/2018		

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33	Send SOW for Phase I and II maintenance to BC	05/22/2018	Bleisner	07/10/2018		
34	Highlight peer reviewer topics from spring report for discussion in November	05/22/2018	PO/BC	11/01/2018		
35	Add Science Advisor discussion at next CC meeting	05/22/2018	PO	05/31/2018		
36	BC call/webinar meeting	05/22/2018	PO	07/10/2018		
37	Determine if BIA selenium study can be shared with BC and share if permission granted	5/16/17	BIA and PO	07/13/2017		05/20/2018
38	Contact Southern Ute Tribe with regards to the Roundtail Chub stocking efforts	11/28/17	PO	02/20/2018		05/20/2018
39	PO send out Colorado Pikeminnow PVA for review	02/20/2018	PO (Durst)	03/30/2018		04/03/2018
40	PO provide a synthesis presentation at annual meeting	02/20/2018	PO	05/23/2018		05/23/2018
41	SOW for open and maintain Phase II Project	02/20/2018	PO	03/19/2018		05/22/2018
42	March 15 Conference Call add agenda item 1200 acre feet for riparian restoration project	02/20/2018	PO	03/15/2018		03/15/2018

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Item No.*	Action Item	Meeting/Ori gination Date	Responsible Party(s)	Due Date	Revised Due Date	Date Completed
43	Discuss with CC about having future Annual Meetings in Farmington, NM	02/20/2018	PO	05/31/2018		05/31/2018
44	Send out RFP and guidance to BC in March	02/20/2018	PO	03/01/2018		03/05/2018

\*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