



**Approved Summary
San Juan River Basin Recovery Implementation Program
Biology Committee Meeting
San Juan Public Lands Center
Durango, CO
20-21 February 2013**

Attendees:

Biology Committee Members:

Bill Miller, Chair – Southern Ute Indian Tribe
Kyle Tator – 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 (via conference call)
Dale Ryden – U.S. Fish and Wildlife Service, Region 6
Vincent Lamarra – Navajo Nation
Harry Crockett – State of Colorado
Eliza Gilbert – State of New Mexico
U.S. Bureau of Land Management – absent
Tom Wesche – Water Development Interests
David Gori – Conservation Interests

Peer Reviewers:

Steve Ross – University of New Mexico
Mel Warren – USDA Forest Service

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

David Campbell
Sharon Whitmore
Scott Durst

Interested Parties:

Carrie Lile – Southwestern Water Conservation District
Steven Platania – American Southwest Ichthyological Researchers
Nathan Franssen – University of New Mexico
Bruce Jaquez – Bureau of Indian Affairs NIIP
Glenn Selby – Navajo Nation Fish and Wildlife
Chris Cheek – Navajo Nation Fish and Wildlife

Stephen Saletta – PNM Resources
Dan Lamarra – Ecosystem Research Institute
Jen Hester – American Southwest Ichthyological Researchers
Judith Barkstedt – American Southwest Ichthyological Researchers
W. Howard Brandenburg – American Southwest Ichthyological Researchers
Michael Farrington – American Southwest Ichthyological Researchers
Bobby Duran – U.S. Fish and Wildlife Service
Ernest Teller – U.S. Fish and Wildlife Service
Ben Schleicher – U.S. Fish and Wildlife Service
Travis Francis – U.S. Fish and Wildlife Service
Brandon Gerig – Utah Division of Wildlife Resources
Katie Creighton – Utah Division of Wildlife Resources
Jim Brooks – U.S. Fish and Wildlife Service
D. Weston Furr – U.S. Fish and Wildlife Service
Mike Greene – PNM
Bruce Jaquez – Bureau of Indian Affairs, NIIP

Wednesday 20 February 2013

Changes to agenda:

- Durst will give an update on installation of remote PIT tag readers.
- Davis will discuss production of razorback suckers at Uvalde during the stocking presentation.
- Westfall will provide an update on the current condition of RERI restoration sites.
- Miller suggested pushing commenting on the LRP until a later date.

Approve draft meeting summary for 7-8 November 2012 meeting; review Action Item list:

- Durst incorporated earlier edits. The group will review Action Item list at the end of the meeting. Wesche motioned to approve the November summary and Ryden and Gilbert seconded. Unanimous approval. Durst will distribute approved summary to group.

Nomination of Kyle Tator as Jicarilla Apache BC representative:

- Tator provided background on his resume that was previously distributed. He has been the lead biologist for the Jicarilla Apache Game and Fish Department Biology Division since September 2012 and has been part of the Navajo River restoration work.
- Once the Jicarilla Apache Nation hires a new fish biologist, that person will likely serve as the Jicarilla Apache Nation BC representative.
- Lamarra motioned to approve the nomination of Tator to the BC, Wesche seconded, unanimously approved.

2012 Rare fish stocked summary – Furr:

- A total of 395,640 age-0 Colorado pikeminnow were stocked in 2012 at Boyd Park in the Animas River (1 RM upstream of the Animas-San Juan confluence) and at Verde Del Rio Park on the San Juan River (RM 196.1).
- A total of 15,753 razorback sucker were stocked in 2012 that included 10,670 from Uvalde, 4,268 from NAPI, and 815 from Dexter (SNARRC).
- Ross and Warren suggested looking into other Colorado pikeminnow stocking locations in order to increase survivorship.

- Furr detailed the high mortality observed in the razorback sucker stockings from Uvalde on 17 October and 14 November 2012. Widespread mortality was observed following overnight tempering in an enclosed area. There was no cause identified for these mortalities.
- In 2013 some razorback suckers can be stocked in the middle San Juan River to expand their range and alleviate high densities in the upper San Juan River.

Update razorback sucker stockings from Uvalde – Davis:

- FWS R2 made decision to discontinue using Uvalde as a source of razorback sucker stocking in the San Juan River. However, they will stock remainder of the fish on station through 2013.
- In the interim, the commitment to stock 11,400 razorback suckers will come from Horsethief Canyon Pond, NAPI, and Dexter to cover any possible short-fall from Uvalde.
- The Upper Basin Program is experimenting with stocking fewer, larger razorback sucker to promote survival. This method may serve as a guide for stocking in the San Juan River.
- Although Uvalde enacted new protocols to transport and stock razorback suckers, it appears few of these fish are being recaptured despite the hatchery's efforts.
- Miller recommended that in the future unhealthy fish should not be stocked into the San Juan River. The BC needs to establish a protocol for this.
- The group discussed that equipment purchased for Uvalde will be delivered to other facilities to assist with rearing and grow-out operations.
- McKinstry reported that on-going restoration being carried out by the owner of Recapture Lodge in Bluff, UT may provide the opportunity to have grow-out ponds as part of this activity.

NAPI grow-out ponds and PNM fish passage – Selby:

- Selby reported on operations at the NAPI Ponds. PNM Fish Passage did not operate for most of 2012.
- A total of 4,268 fish were harvested from NAPI out of a total of 6,000 that were stocked into the ponds in April 2012. The total harvest included 259 juvenile razorback sucker that were spawned in the NAPI ponds. These fish were also implanted with a PIT tag and stocked into the San Juan River.
- Passive harvest continues to be an important part of NAPI ponds operation to reduce the number of fish that need to be stocked during active harvest.
- Maintenance work will need to occur at PNM prior to passage operation in 2013 to clear sediment that accumulated last year.
- Agreements with Reclamation are in place for PNM but not NAPI. McKinstry is working to complete these agreements.
- NMFWCO will continue to assist Navajo Nation on the management of NAPI Ponds.

Larval fish monitoring – Farrington:

- Razorback sucker spawning has been documented for 15 consecutive years and 1,778 were collected in 2012. Over this period of time, razorback sucker catch rates have been highest during May and in Reach 1. However, since 2010 there has been no difference in larval razorback sucker catch rate by Reach indicating a widespread distribution of razorback sucker larvae. Additionally, the upstream distribution of razorback sucker larvae continues to increase, suggesting that spawning continues to expand upstream. Spawning has occurred over a 4-9 week period since 1999 and covered 69 days in 2012.
- Age-0 Colorado pikeminnow remain rare in the San Juan River, although 114 age-1+ fish were captured in 2012.
- The RERI restoration sites maintained upstream connections and contained suitable nursery habitat between April and August in 2012.
- Roundtail chub larvae were documented for the second consecutive year.

Small-bodied monitoring – Gilbert:

- No razorback sucker were captured in 2012 but 26 Colorado pikeminnow were collected that were likely the result of age-0 Colorado pikeminnow stocking. In general there was a lower density of Colorado pikeminnow in downstream reaches.
- A discriminate function analysis revealed that different fish communities used primary and secondary channels and correctly assigned 55% of fish to the appropriate habitat.
- It appears that the CPUE of YOY channel catfish set a limit on the number of channel catfish that can recruit into juvenile channel catfish size classes. Additional work is underway to quantify this pattern.
- Small-bodied monitoring at RERI sites documented use by native fish and Colorado pikeminnow.
- Continued paired testing between sampling with a 2.2 m seine and 9.1 m seine revealed no differences in catch rates between the two methods.
- Previous discussions of annual versus biennial small-bodied sampling were evaluated with a power analysis and biennial surveys would have a 80% probability of detecting a 20% change in the population of only 4 of 5 species.

Adult monitoring – Schleicher:

- Colorado pikeminnow and razorback sucker have become common in Adult Monitoring collections, T&E fish were found in 92% of samples.
- 2012 marked the 3rd consecutive year that sub-adult and adult Colorado pikeminnow were detected.
- Although recruitment has not been documented, numbers of Colorado pikeminnow and razorback sucker captured during Adult Monitoring are approaching predicted targets detailed in the recovery goals.
- The population of native suckers has remained stable with the stocking of large numbers of Colorado pikeminnow and razorback suckers through time. Also intensive river-wide electrofishing has not led to a crash in the population of these wide-spread native suckers.
- The group discussed the faster growth rates of razorback sucker and Colorado pikeminnow in the San Juan River compared to what is detailed in the recovery goals, i.e. fish in the San Juan River are reaching size classes detailed in the recovery goals at younger ages. What are the implications of this?
- It will be important to determine if larger pikeminnow or razorbacks reproduce at younger ages in the San Juan River.

2012 Razorback sucker survey of Lake Powell – Francis:

- Electrofishing and trammel netting are effective in capturing razorback sucker in Lake Powell.
- The origin of the of razorback suckers captured without PIT tags (37% of total captures) remains to be determined.
- Successful spawning of razorback sucker has occurred in Lake Powell as evidenced by the capture of larvae.
- Future efforts should include surveys in the Colorado and Escalante arms of Lake Powell. The stable isotope analysis should continue to determine the natal origin of untagged razorback suckers and document recruitment in Lake Powell.
- The group discussed the potential impact of equalization between Lake Powell and Lake Mead on razorback sucker in Lake Powell.

Non-native species monitoring and control, upper river – Duran:

- A total of 1,124 Colorado pikeminnow were captured during upper river non-native species removal in 2012 including 314 pikeminnow too small to PIT tag and 36 pikeminnow > 400 mm TL. A possible spawning aggregation was documented at RM 119 on 23 June 2012.
- A total of 2,029 razorback sucker were captured during upper river non-native species removal in 2012. Included 1,237 razorback suckers > 400 mm TL.
- There was an increase in adult channel catfish abundance in the upper section. Catch rates in the middle section of the San Juan River was again driven by juvenile channel catfish catch rates.
- Population estimates for channel catfish indicate a 24% and 52% exploitation rate for juvenile and adult channel catfish, respectively.
- Common carp remain uncommon.
- Efforts in 2013 will continue mark-recapture to determine channel catfish population estimates and exploitation rates. Experimental sampling to remove more channel catfish including hoop nets, minnow traps, and baiting will be explored. Non-native removal efforts will focus on spawning times and locations.

Non-native species monitoring and control, lower river – Gerig:

- Non-native removal in the lower San Juan River has shifted the size structure of channel catfish toward smaller individuals with no apparent change in channel catfish abundance. Additionally exploitation rates for YOY and juvenile channel catfish continue to be low. Are the management objectives for channel catfish in the lower river being reached? Should effort shift to the middle San Juan River?
- Seining effort could be added to existing field approaches to enhance endangered fish monitoring. Additional models could also be implemented to assess survival and movement including Cormack-Jolly-Seber open population models and robust designs.

PIT tag summary – Durst:

- Fewer Colorado pikeminnow individuals were detected in 2012 but this can largely be accounted for by not operating PNM Fish Passage in 2012. Few Colorado pikeminnow stocked as age-1+ were recaptured in 2012; this is due to ending stocking age-1+ pikeminnow in 2011. Stocking continues to be important to maintain the Colorado pikeminnow population in the San Juan River. Colorado pikeminnow exhibited variable within and between year movements that require additional investigation.
- The number of recaptured razorback sucker individuals continues to increase and there are many individuals from older stocking classes. Razorback suckers typically remain stationary after post-stocking dispersal. Most recaptured razorback suckers originate from NAPI but the number recaptured from Uvalde increased in 2012, however, there are still few recaptured from Uvalde compared to NAPI. Captures of razorback sucker without PIT tags is likely a result of tag loss, capture and movement of untagged fish from Lake Powell, stocking of untagged razorback sucker from NAPI in 2006 and 2007, and limited natural recruitment.

Water temperature and habitat monitoring update – Lamarra & Miller:

- Current high definition videography is consistent with previous field-based mapping of the wetted area of the San Juan River. Since 2007 there has been a decline in total wetted area although island count increased. Over the same time period backwater area also increased.
- Releases from Navajo Dam depress water temperature in the San Juan River as far downstream as Mexican Hat. Sudden and persistent cold water releases could impact native fish reproduction and growth in the San Juan River. The relationship between water temperature and larval fish

production should be investigated. The need for thermal modification of Navajo Dam should be reevaluated.

- In the future temperature monitoring should be incorporated into the USGS gage stations at Archuleta, Farmington, Animas, and Four Corners.

Thursday 21 February 2013

Update on catostomid opercular deformity study – Platania:

- The rate of opercle deformity for non-listed native suckers is lower than razorback suckers. Occurrence of opercular deformities in razorback suckers ranged from 13% to 40% in 2002 and 2010, respectively. Since 2010, the occurrence of these deformities has exceeded 30% in larval razorback suckers.
- As fish age and mortality occurs, occurrence of these deformities (especially severe ones) is likely underestimated.
- The group discussed the suggestion that these deformities could be due to temperature rather than contaminants.

Update on study using elemental analysis of scales to determine razorback sucker natal origin – Platania:

- Samples are available from the San Juan River, Lake Powell, Uvalde, and Dexter. Preparation and analysis of samples will continue through the winter and spring and an update will be provided during the May meeting.

Update on Lake Nighthorse fish entrainment bass-o-matic study – Ulienburg:

- Some sleeve valve tests indicate passage without 100% mortality.
- The Animas-La Plata BO indicates that Reclamation will take measure to prevent escapement from Lake Nighthorse. Reclamation is seeking BC review of the submitted report and recommendations to the FWS via the Program Office.
- The group discussed screening or chemical treatment at the drop structure in Basin Creek to eliminate escapement.
- How much effort should be expended at Lake Nighthorse to limit escapement considering there are other sources within the San Juan Basin?
- The group will schedule a March conference call to discuss recommendations after everyone has review the distributed report.

Presentation on assessment of mercury exposure to Colorado pikeminnow – Osmundson & Campbell:

- Large Colorado pikeminnow in the San Juan River Basin have mercury levels above EPA human consumption guidelines. The effect of mercury exposure on Colorado pikeminnow has not been studied but there are likely reproductive impairment effects. Plans are not currently in place to conduct additional studies examining the effects of contaminants on endangered fish.

Budget issues – McKinstry:

- The effects of the impending sequestration is not known.
- Reclamation is operating under the current continuing resolution.
- Because of new processes, finalizing new agreements takes longer. The PNM maintenance agreement expired in September and the NAPI agreement is not yet finalized. BR is working on these issues.
- Reclamation funds are being obligated to FWS-Grand Junction in FY 2013 for additional work in Lake Powell to be completed in FY 2014.

- The Hogback Fish Barrier should be operating in time for the start of the irrigation season. The total cost of this project was \$3.5 million. Fish passage at the APS Weir is being explored as part of the Navajo Gallup project.

Update on remote PIT tag reader installation – McKinstry:

- Remote PIT tag reader installation has been delayed. Equipment has been built to install at PNM but weather delayed the planned installation. Conducting this work in March or April is problematic because of impending sequestration issues and higher flows later in spring.
- Because of these delays, the installation of remote PIT tag readers at PNM and Mexican hat will be scheduled for October or November 2013.

Finalizing NAPI Ponds operation manual – McKinstry & Durst:

- McKinstry reported that Navajo Nation requested an operation manual for NAPI ponds to assist new staff in managing this facility.
- ERI produced an operation manual in 2006 when 6 Pack Ponds were being utilized and Davis and Furr produced an operations document in 2009 that was never finalized. These documents were intended as overviews rather than day-to-day operation manuals. Report and presentations produced by James Morel could serve as a guideline.
- NMFWCO will coordinate with Navajo Nation to ensure appropriate operation of NAPI Ponds.

Protocol for tagging fish in spawning condition captured on spawning bars – Gerig & Durst:

- Gerig provided background on uncertainty in the UDWR-Moab office concerning sampling protocol when endangered fish in spawning condition are encountered on spawning bars.
- The BC previously decided not to electrofish during spawning periods. There is no clear negative effect of electrofishing on fish in the San Juan River.
- Information could be gained by sampling these fish but the majority of the group favored not shocking these fish. Nets could possibly be used to sample these fish while avoiding electrofishing.
- McKinstry has ordered floating PIT tag readers that could help alleviate these concerns.
- Miller suggested including a section in reports to address these concerns and to set the framework for a more detailed discussion in the future that would include a cost-benefit analysis of sampling versus not sampling these fish.

Recommendation and measures for improving effectiveness of non-native species removal – Davis:

- Davis sent out an update on the status of recommendations detailed in Appendix B from the Non-native Fish Workshop. Davis asked for the BC to review and comment on the document in order to proceed with a variety of input received during the workshop. Guidance on the targets and milestones detailed in the document would be particularly useful. Miller indicated that the Population Model would be able to inform appropriate exploitation rates where non-native fish decline and native fish show a positive response. As the quality of parameter estimates that inform the Population Model improve we can be more confident in using the model to evaluate management actions.
- Population estimates for native and non-native species are useful tools to evaluate the effect of management actions and understand what is happening with these populations.
- Davis asked for input from the group on methods to remove juvenile channel catfish. Ross indicated that there are few non-native removal success stories in the published literature.
- Based on work occurring outside of the SJRIP, there does not appear to be a shift in channel catfish spawning at earlier life stages in the San Juan River Basin. Electrofishing is effectively removing these sexually mature reproductive individuals at 300 mm TL once they are 3-4 years old.

- Gilbert reported on studies of channel catfish as prey that found no mortality as a result of consuming channel catfish and no difference in consumption of channel catfish with spines or those with experimentally removed spines.
- Franssen reported on a pilot study where Colorado pikeminnow struck channel catfish but would not eat them.
- Campbell discussed the possibility of shifting peak flow to disrupt channel catfish spawning.
- The group discussed the difficulty of teasing apart the effects of competition and predation and the difficulty of evaluating an effect of non-native fish removal in the absence of a control reach.
- Davis asked for comments by the end of March and suggested developing a plan to move forward utilizing results of the Population Model.

General discussion of 2012 project reports, results, and data; overall assessment of what was accomplished; progress toward recovery; questions to be addressed for annual meeting; additional data integration priorities, review and discuss updated 2013 Long Range Plan; peer reviewer comments/input; and recommended priority projects for 2014 program of work:

- Whitmore added a “status” field to the LRP and reformatted the documents so it is more informative and less cumbersome. Whitmore will send a request to PIs so the status field can be updated from each task.
- BC members should review the LRP prior to the next BC conference call. This conference call will be from 9am – 12pm on Tuesday 26 March 2013 to discuss LRP, Ridges Basin report, and priorities for 2014 SOWs.
- Peer Reviewers provided positive feedback on continued monitoring at the RERI sites, captures of larval razorback suckers, documentation of razorback sucker spawning aggregations, captures of Colorado pikeminnow during small-bodied monitoring, efforts to summarize work from Lake Powell, documenting multiple Colorado pikeminnow age classes, efforts to understand the opercle deformities observed in larval native suckers, attempts to determine natal origin with scale analysis, maintenance and summary of PIT tag database, and use of high resolution habitat data to address habitat monitoring questions. Concerns brought up by the Peer Reviewers were temperature depression from Navajo Reservoir and the possible link to opercle deformities, issue of mercury related to larval fish production, efforts to measure non-native fish impacts with population estimates and the Population Model. The Peer Reviewers commended the quality of the presentations but suggested that the presentations in May have a clear purpose, objective, and relation to recovery goals. Slides should be clean and simple and summarize progress toward recovery. The results should focus on how adaptive management can be informed by the particular study. The Peer Reviewers offered to give an overview presentation during the annual meeting. Also note that presentations are limited to 15 minutes during the annual meeting.

Population Model update – Miller:

- Efforts to move the model to Stella 10 are being scaled back to Stella 9. It should be ready to do test runs in time for the May meeting. There will be an online version where parameters can be adjusted in order to investigate particular scenarios. The model can be used to address questions that come up during BC meetings and to evaluate different management strategies.

Habitat restoration phase 2 – Gori:

- Gori and Westfall provided recent photos of the RERI sites. Some sites are not currently flowing.
- The next round of habitat restoration will occur at 7 sites that do not have to be on Navajo Nation lands. TNC is working with Brian Bledsoe on site selection that includes a sediment budget. Subsequent steps will include design, permitting, and restoration.

29 March 2013

- There is also a habitat restoration component related to salinity remediation work with Dine Water Users that will provide funding for 4-5 additional sites. These sites need to be on Navajo Nation lands.
- Bledsoe will produce a report in May and Gori will convene a smaller group to move forward with site selection and design.

Annual Meeting:

- A mandatory NMGF in-service meeting will prevent Gilbert from coming to the Annual Meeting. It is possible for Durst or Franssen to give the small-bodied monitoring presentation.
- Bledsoe will likely be at the meeting as long as his contract can be processed in time.
- Brooks encouraged PIs to stay for the CC meeting after the Annual Meeting to answer any potential questions.
- Peer Reviewers should also attend the meeting.

Comprehensive PIT tag database:

- As more fish are PIT tagged throughout the San Juan River Basin it will be important to maintain a comprehensive database in order to do simple queries.
- This should be developed before remote PIT tag readers are installed.
- Consider one person devoted to maintain the database for both recovery programs.

Future meetings:

- BC conference call scheduled for 9-12 on 26 March 2013.
- BC meeting on 7 May 2013 in Durango.
- Annual Meeting 8 May 2013 in Durango.

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 4 March 2013)

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		

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 4 March 2013)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
8	Annual Data Delivery		Pls to Program Office	Annually by June 30		
9	T&E Species Data		BC to Program Office	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		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	

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 4 March 2013)

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15	Revise RBS Augmentation Goals (based on the outcome of experimental stocking)	5/10/10	FWS Fisheries/Program Office	5/2011 – provide update and extend as needed	ongoing	
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	5/14/13	
18	Pursue effects study on Hg/pikeminnow with other groups/programs	1/14/10	Program Office lead	ongoing		
19	Blank database structure for data integration	1/13/10	Durst	3/23/10	2/24/11	2/24/11
20	Discussion of what is the appropriate number of fish to stock	3/23/10	BC	ongoing		
21	Southern Ute funding of Population Model	5/10/10	Miller	11/2010	ongoing	
22	Work with I&E Coordinator to determine feasibility of brochures and signs	11/10/10	PO	2/24/11	Ongoing	

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 4 March 2013)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
23	Revised positive population response criteria	11/15/11	PO and FWS to BC	2/13/12	5/7/13	
24	Prepare memo to CC conveying BC recommendation to conduct a feasibility study on removing fish barriers in the lower Animas River	7/9/12	PO	8/20/12	5/7/13	
25	Prepare Lake Powell summary analysis SOW	7/9/12	PO	7/20/12		11/7/13
26	Revise Lake Powell 2013 SOW	8/13/12	FWS-GJ	8/31/12	3/26/13	
27	Update LRP	11/8/12	Whitmore	1/31/13		2/20/13
28	Non-native fish removal summary plan	11/8/12	Davis	12/13/12		1/30/13
29	Contaminants summary presentation	11/8/12	Campbell and Lusk	2/20/13		2/20/13
30	Post monitoring workshop documents and summaries to website	11/8/12	Durst – this was posted on 5/11/12 at http://www.fws.gov/southwest/sjrip/DR_PGDCfm	12/31/12		11/29/12

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 4 March 2013)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
31	Incorporate recommendations from habitat monitoring workshop in monitoring protocol and plan document	11/8/12	Durst – there were no “recommendations” in the summary from the habitat workshop but the workshop summary was not posted to the website	12/31/12		11/29/12
32	Work with USGS to incorporate temperature monitoring into select existing stream gages	11/8/2012	PO	2/20/13		2/20/13
33	Provide historic perspective on historic San Juan data	11/8/2012	PIs	2/20/13	5/7/13	
34	Post San Juan literature to website	11/8/2012	Durst	2/20/13		2/20/13
35	Send PO summary of habitat type by RM and Reach	11/8/2012	Lamarra	12/31/12		12/31/12
36	Work with PNM to investigate potential for entrained fish at PNM lake	11/8/2012	Campbell	2/20/13		2/20/13
37	Letter to BR regarding modifying flows for installation of PIT tag readers	11/8/2012	Campbell	12/31/2012		2/1/13
38	Comments on LRP to Whitmore	2/21/13	BC	3/18/13		

BIOLOGY COMMITTEE ACTION ITEM LOG

(Updated 4 March 2013)

Item No. *	Action Item	Meeting/O rigination Date	Responsible Party(s)	Due Date	Revised Date	Date Completed
39	Review and comments on Lake Nighthorse report to PO	2/21/13	BC	3/18/13		
40	NNF workshop recommendations to Davis	2/21/13	BC	3/18/13		

* 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

Annual SJRRIP Cycle (Oct. 1 –Sept. 30)

January 2011 version

Date	Annual Tasks	PO	CC	BC	P.I.
Oct.	Reclamation administers contracts	X			
Nov.	BC Meeting <ul style="list-style-type: none"> • Identify questions for annual data integration • Review data integration results from previous year • Discuss Program priorities • LRP review and provide recommendations (pros and cons) to Program Office 	X		X	
Dec. 31	RBS/CPM stocking/capture/recapture data to Program Office				X
January	Notification/update of Program rosters/ mailing 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		
Jan. 31	Distribute consolidated PIT tag data and post other data	X			
February	BC Meeting <ul style="list-style-type: none"> • Prepare for Annual Meeting • Provide preliminary results; draft report presentations • Review updated LRP • Review annual data integration priorities 	X		X	X
February	Final updated LRP to CC (with explanation of input included/not included)	X			
Feb/Mar	Approval of yearly LRP		X		
March	Annual guidance/solicitation for SOWs based on LRP/list of prioritized projects	X			
March 31	Draft reports due/SOWs 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
June/July	Draft Annual Workplan and Budget	X			
June 30	Provide final reports and data sets				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			