



**SJRRIP COORDINATION COMMITTEE
December 12, 2016**

Final Meeting Summary

Coordination Committee Members:

Tom Sinclair, Chair
Catherine Condon
Leland Begay
Dale Ryden
Tom Pitts
Michelle Garrison
Brent Uilenberg
Kristin Green
Patrick McCarthy
Natasha Cuylear
Absent
Absent
Absent

Representing:

U.S. Fish and Wildlife Service (Service), Reg. 2
Southern Ute Indian Tribe (SUIT)
Ute Mountain Ute Tribe (UMUT)
U.S. Fish and Wildlife Service, Reg. 6
Water Development Interests
State of Colorado
Bureau of Reclamation
State of New Mexico
Conservation Interests
Jicarilla Apache Nation
Navajo Nation
Bureau of Indian Affairs
Bureau of Land Management

Program Management:

Sharon Whitmore, Program Coordinator	U.S. Fish and Wildlife Service, Reg. 2
Melissa Mata, Assistant Program Coordinator	U.S. Fish and Wildlife Service, Reg. 2
Scott Durst, Program Science Coordinator	U.S. Fish and Wildlife Service, Reg. 2
Nathan Franssen, Program Biologist	U.S. Fish and Wildlife Service, Reg. 2

Other Interested Parties:

Benjamin Tuggle, Southwest Regional Director	U.S. Fish and Wildlife Service, Reg. 2
Carlee Brown, CC Alternate	State of Colorado
Jason Davis – BC Member	U.S. Fish and Wildlife Service, Reg. 2
Bill Miller – BC Chair	SUIT
Mark McKinstry – BC Member	U.S. Bureau of Reclamation
Paul Montoya	City of Farmington
Leslie James	CREDA
Alex Birchfield	OSMRE

Introductions/Changes to Agenda – Sinclair welcomed the group. Condon requested that a discussion on the CC email server list be added to the agenda. Whitmore said she will send the CC and BC list to the CC and mentioned that the Program Office cannot deny individuals requesting to be on the BC or CC email server list because the Program is managed by federal agencies and funded with public dollars. **Action Item: Program Office will provide the CC the email server lists.**

Approval of Aug 15, 2016 Conference Call Summary – Sinclair asked if there were any additional changes besides those submitted by Pitts shortly before the meeting. He asked if there was a motion to approve the summary notes with the additional changes identified by Pitts. Condon moved to approve the summary with Pitts' changes and Ryden seconded the motion. The CC approved the summary with

the changes. **Action Item: Program Office will finalize the Aug. 15, 2016 Conference Call Summary with Pitts' changes and post to the website.**

RD Briefing – Sinclair provided a brief introduction of the Nov. 7, 2016 briefing with Regional Director Tuggle. Three main topics were discussed including Nonnative Removal, Population Estimates, and Animas River Stocking. Whitmore provided more detail concerning the three topics of discussion. She stated that the outcome of the discussion on nonnative fish removal is that the recovery activity needs to continue until it can be shown that nonnative fish are not negatively affecting the recovery of endangered fish or until someone can suggest another management activity that would solve the recruitment puzzle. One year of data under the new study design for the nonnative fish removal is not enough. Pitts asked for clarification on whether there was a regulatory decision on nonnative fish removal. Tuggle clarified that this was not a regulatory decision, but based on the available information he has seen, nonnative fish removal needs to continue until the data informs another decision. Tuggle said he can be flexible regarding the need to continue nonnative fish removal but the data will need to be able to inform the Program on how to move forward adaptively in a different direction. Pitts indicated he was satisfied with the explanation provided by Tuggle and that it was in line with how the CC wants to evaluate nonnative fish removal.

Whitmore reported that the outcome of the discussion on conducting population estimates is that the Service is not in support of conducting population estimates until we have recruitment otherwise you are just basing your estimates on stocked fish. Tuggle advised that the Program not consider a full effort toward population estimates for either Colorado Pikeminnow or Razorback Sucker until there is solid documentation of recruitment and self-sustaining populations. Pitts said Colorado Pikeminnow young-of-year (YOY) were found this year in the river and the only place Razorback Sucker have recruited is Lake Powell and none known in the San Juan River. Durst said there has been no documented recruitment of Razorback Sucker in Lake Powell. Pitts asked Miller if we started having YOY of both species show up in the river, how long would it take to see recruitment. Miller said YOY Colorado Pikeminnow were captured for the first time in the river this year and only one to two wild recruited YOY Razorback Sucker have been captured. We could start seeing recruitment as early as 7-8 year from now if those YOY's survive. Miller reiterated we are at least 7-8 years out from getting recruitment and a long way off from self-sustaining populations. Pitts stated that if we might optimistically have recruitment in 7-8 years, we are still a long way from meeting our recovery goals. Ryden reminded the group that all adult fish, including stocked fish, count toward recovery when recruitment is documented. Tuggle asked how much information we have on recruitment. Durst replied we have no evidence of recruitment just documentation of reproduction and a small number of YOY's, which is not considered recruitment. Tuggle recommended that we keep an eye on sustainability and develop a protocol on how we might achieve sustainable populations. Durst replied that we have a working document currently under review by the BC called the "Pathways Document" that describes a protocol for documenting when an adequate amount of recruitment is occurring to consider populations self-sustaining.

Pitts asked if survival estimates from one life stage to the next can be calculated and if they can be used for determining expectations. Durst said the Program Office is working on for Colorado Pikeminnow with the post-doc student at UNM. Pitts said it would be good know how many recruiting adults are needed. Durst said he could not recall the exact number but thinks 900 recruiting adults of each would be needed but we do not know the survivability for the younger age classes. Pitts then asked if any hypothetical scenarios could be done; Durst said that would be possible.

Whitmore reported on the discussion with Tuggle regarding stocking in the Animas River to restore range for the species. She said Tuggle recognized the potential recovery benefit the additional river habitat would provide for the species but said the Program needs to take a step back and come up with a game plan to show how moving into the Animas would fit into the overall recovery strategy for the species. Tuggle then stated to be cautious because stocking endangered species worry many area residents and we also need to worry about potential entrainment. We have to make the case on how it would benefit recovery of the species. Pitts agreed with Tuggle's approach, especially since he believes the San Juan has more favorable condition than the Animas. In addition, the cost of constructing entrainment structures on diversions could easily exceed the amount of money the Program has available.

Tuggle thanked the San Juan Program for breaking down the issues for him and said he wanted everyone to know that he is tuned in and keenly interested in the San Juan Program.

Nonnative Fish Workshop Summary – The BC and Peer Reviewers met on 1 December 2016 to review and discuss the results of the nonnative fish removal experimental design implemented in 2016. During the discussions, the BC and Peer Reviewers developed six options for nonnative removal in 2017 and a method for ranking the options. The Program Office distributed the summarized options to BC members and Peer Reviewers on 5 December 2016. BC members and Peer Reviewers ranked the options (see Tables 1 and 2 in the attached summary) and provided comments to the Program Office by 7 December 2016.

Condon asked for clarification about the top ranked nonnative removal option, which included population estimates. She was under the impression we are not ready to conduct population estimates. Durst responded that we are proposing river-wide population estimates, but at a much smaller scale and is in concert with the nonnative removal effort. This would be population estimates for channel catfish, Colorado Pikeminnow and Razorback Sucker.

BC recommendation on nonnative fish removal options - The preferred nonnative removal option for 2017 identified by the rankings and comments is #3, concentrate removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), with control reaches. In short, this is a recommendation to continue the nonnative removal experimental design implemented in 2016 into 2017 with two key alterations detailed below:

1. In 2017, as much nonnative removal effort as possible will be concentrated prior to spring runoff. In 2016, NMFWCO conducted 12 of 20 removal passes prior to spring runoff and UDWR conducted 2 of 8 removal passes prior to spring runoff.
2. In 2017, a post-removal population estimate will be conducted for Channel Catfish, Colorado Pikeminnow, and Razorback Sucker. A marking pass will replace a removal pass prior to the annual adult monitoring sampling effort to generate post-removal population estimates. These post-removal population estimates will be compared to pre-removal estimates (for all three species) to evaluate the effect of the removal effort. It is important to note that conducting these post-removal population estimates reduces removal effort by a single pass. In 2016, only pre-removal population estimates were generated for Channel Catfish.

The study reach for 2017 would continue from Shiprock, NM to Mexican Hat, UT and include treatment (where removal occurs) and control reaches (where no electrofishing occurs) delineated among geo-reaches 5 to 2 and between the NMFWCO and UDWR, sampling reaches. Both control

and treatment reaches would be sampled during marking passes used to generate population estimates (the first pass of the year and last pass prior to adult monitoring) and during the Adult Monitoring pass. The recommended option to concentrate removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), with control reaches, is budget neutral with the nonnative fish SOW submitted for the 2017 AWP.

Sinclair asked if there were any comments. Pitts said it appears the BC efforts to recommend an option, was rushed. Sinclair agreed that it was a little rushed but that the few CC members in attendance at the Nonnative Workshop, including himself, asked that the BC develop a specific recommendation for the CC prior to this conference call. They developed the options during the workshop and conducted an email vote shortly after to insure the CC got a recommendation in time. Condon, who attended, voiced concern about the decision being rushed.

Pollack who attended the workshop, said he did not think it was rushed and feels like there was consensus on the scenarios for nonnative fish removal. Durst said he and others provided feedback that having the weekend to think about the scenarios was good idea rather than taking a final vote during the workshop. Ryden, who also attended, indicated he would have been concerned if any different scenarios were included that were not discussed during the meeting. He thinks the summary reflects what was discussed during the workshop and is comfortable with the process. Pitts questioned focusing the nonnative fish removal effort in the spring and asked if that is when channel catfish are caught in high numbers. Durst responded that catfish numbers are higher before spring runoff. Pitts asked about the purpose of the population estimates. Durst stated that the population estimates would help measure the effects of the nonnative removal efforts. Pitts asked if the evaluation of effectiveness would be confounded by movement of fish. Durst said we do not know because we had high flows and that could have contributed to increased fish movement. Additional years of data when we do not have high flows would help answer that question.

Pitts asked if the CC is going to receive a new 2017 SOW that describes the changes. Durst said the hypotheses have not changed from what is in the 2017 AWP SOW. Sinclair said they could include the rationale for the tweaks in a revised 2017 SOW. Pitts recommended a SOW be developed for a nonnative fish workshop in 2017 and thinks it may need to be 1.5 days long. Pollack still has concerns about what he is hearing on continuing nonnative fish removal because the link between the effects of channel catfish removal effort on the listed fish species still needs to be made. McCarthy suggested that when writing up hypotheses, thresholds of expectations to make decisions could be included. Pollack also voiced concern about the timing of the workshop and process to approve nonnative fish removal is problematic for approval of AWP's. Whitmore said the timing issue has been recognized and discussed by both the CC and BC. The Program Office is addressing the issue by revising the Program's annual cycle schedule to push certain activities up to allow more time, and some action items to be completed sooner. The revised annual cycle schedule is currently being reviewed by the BC.

CC vote on continuing nonnative fish removal activities – Sinclair reiterated that the BC provided a recommendation on nonnative species removal for 2017. Pitts again stated that a revised SOW and changes to nonnative removal efforts based on the BC recommendations should be developed. Sinclair asked if there was a motion to continue nonnative fish removal activities. Ryden motioned to approve the continuation of nonnative fish removal activities for FY17; McCarthy seconded the motion; and the CC approved. No one opposed the recommendation.

The SOW will be revised by the New Mexico Fish and Wildlife Conservation Office to include:

- Concentration of nonnative removal efforts before spring runoff
- Pre- and post-removal population estimates for Channel Catfish, Razorback Sucker, and Colorado Pikeminnow
- Maintenance of control reaches as in FY 2016
- Additional sampling detail, hypothesis testing, and rationale for SOW modifications

A Nonnative Fish Removal Workshop will be held in late November/early December 2017 to review FY 2017 results.

BC recommendation on Data Integration SOW – Miller reported the Data Integration SOW was modified based on comments to include more detail about the project. The BC recommends the SOW for funding. Sinclair asked if anyone would move to fund the SOW. Pitts moved to fund it and Ryden seconded the motion. There was no opposition and the Data Integration SOW is approved for funding.

Use of blind technical reviews (CC clarification needed) – Miller stated the Program Office conducted an anonymous review of the 2017 Annual Work Plan (AWP) SOW's by the BC and Peer Reviewers. They did receive some of the best comments on SOW's; however, he cannot conclude it was due to the blind review process because the BC did not know it was going to be blind prior to the review. The CC indicated that SOW's will not be blind reviewed because only the CC can approve processes and the blind review is a process that was not approved by the CC. Miller said the BC would like some guidance or clarification from the CC on the use of blind reviews for other documents. Stanley said a clear process is needed. Pitts thought that the CC agreed that this would only apply to AWP SOW's. Miller asked about blind comments on other technical documents other than the AWP. Pitts said other documents like annual reports, sampling protocols, and workshop products could be reviewed any way the BC wants to review them. If changes in procedures need to be approved by the CC, Sinclair suggested the BC develop a list of other documents that could be blind reviewed for CC approval. Whitmore said it would not be a change in procedures because no procedures for conducting technical reviews are currently defined in the Program Document. The CC gave the Program Office and BC the following guidance:

- The BC should review the Draft BC Review Protocols previously proposed by the Program Office and provide that office with suggested changes, comments, etc.
- The Program Office should take the lead on developing proposed changes in procedural protocols based on BC discussions. A specific task under this topic will be for the Program Office to develop a document that summarizes the BC's recommendations to the CC as to the work areas that should or should not be subject to blind review. This document should also describe the pros and cons of blind reviews as they pertain to each work area being reviewed.
- All proposed changes to procedural protocols should be submitted by the Program Office to the CC for evaluation and approval prior to implementation.

Technical reviewers/financial gain (CC clarification needed) – Miller stated the BC needs clarification on who can provide technical reviews when there may be financial gains. As written in the Program Document, most BC members who submit SOW's for review have some form of financial gain, which would then lead to very few individuals reviewing SOW's. The Program Document says, "The intent is to ensure that individuals serving on a technical committee of the Program who may also directly or indirectly benefit financially by the awarding of funding, contracts, and/or agreements are not involved in any vote or approval regarding the LRP, project prioritization, scopes of work (SOWs),

AWPs, and budgets.” (Ch. 6; page 29). McKinstry said there is a solicitor’s opinion that says the Program can sole source to Program partners but reiterated Miller’s concern about the financial gain issue in regards to Reclamation’s RFP process and coordination with the BC. Pitts wanted to table this discussion until the Program Office writes up a proposal to resolve the issue. Miller reiterated that the guidance the BC is seeking is which technical reviewers would be limited from reviewing their own SOW or any SOW because they may directly or indirectly benefit financially. Condon stated the way she reads the Program Document is that any person that may have financial gain cannot review any of the SOW’s. McCarthy said this is why we need to clarify the language and it should not be overly restrictive or only a few individuals will be able to review SOW’s. Whitmore said that the majority of SOW’s include the scientific methodology for the projects and should be reviewed by the entire BC. The methods should probably be initially reviewed by the BC before they are inserted into the SOW that also includes budgets. Condon suggested that a small group of the CC get together to develop better verbiage about what it means for financial gain and the review process. Condon, Sinclair, McCarthy and Uilenberg agreed to form a small workgroup to review and clarify the financial gain language in the Program Document.

BC Chair (CC clarification needed) – Miller stated that the BC needed some guidance on procedures for how to deal with the BC chair. He said the Program Document states that the BC will elect its chair from the committee’s membership but provides no guidance on a protocol for doing that. In the past, the BC had informally put a two-year term on the chair but no policy is in place to implement a term. McKinstry added there is value in rotating the chair position but thinks a non-fed should fill the position. Condon pointed out that the current BC chair, Miller, has the ability to go to DC to speak on behalf of the San Juan Recovery Program whereas federal members cannot go to DC. Whitmore said that any technical representative can go to DC to represent the Program and it does not have to be the BC chair. Pitts agreed. Condon stated that the workgroup could also work on this issue. The workgroup of Condon, Sinclair, McCarthy and Uilenberg will put together some guidance on BC chair roles and responsibilities for the Program Document.

Construction of a new two bay boat shed on Navajo Nation – Another storage shed is needed to house all of the Program-related equipment currently being used by Navajo Nation to operate and maintain the PNM fish passage and NAPI grow-out ponds (12-06-16 Sinclair Memo). The BC discussed this at their last meeting and recommends the CC approve funding for the storage structure. Uilenberg asked how this shed would be built. McKinstry said the easiest way would be to fund it with NFWF funding. Uilenberg said we need to be careful about how we spend the NFWF State cost-share funds. There has been discussion about using those funds to construct the Fruitland Diversion fish weir, which would amount to about \$972,000. Whitmore said she has concerns about exhausting the NFWF State cost-share fund on one project because the Program relies heavily on the use of this money for smaller projects because it is easy to access and provides a nimble source of funding. Reclamation’s capital funds are typically used for larger projects like Fruitland and there is still a sizable amount of money for SJR projects (~\$13 million). Uilenberg commented that NM has not contributed their entire obligation yet and may not want to until current funds are spent. Pitts said he thought only the NM share would be used for Fruitland. Whitmore recommended that if NFWF funds are used for Fruitland that it be a 50-50 cost share with Reclamation capital funds.

Funding Updates – Uilenberg said they are under a continuing resolution that extends to April 28th and he is still not sure how much money they will get in 2017. Fruitland is budgeted for 2017 and, if we get the full amount requested, we will be in good shape. McKinstry reported the CPI for 2017 was 1.5 %. The PI’s will be asked to update their SOW’s to account for the increase next year.

2017 Washington Briefing – Pitts reported the Washington briefing is scheduled for March 21-24, 2017. The hydropower funding reauthorization legislation may be delayed a year because of the administration change. The signing of the Report to Congress by the Secretary of Interior was delayed until some OMB concerns were addressed. James asked what the OMB concerns were. OMB said that if the Secretary's recommendation would affect the budget, the verbiage needed to be softened, or they would have to wait until the next administration to get the Report to Congress signed. Pitts emphasized that it is essential that a reputable biologist go on the Washington trip to provide a technical update on status of the listed species and the Programs' recovery activities.

Next Schedule Meetings

- BC Meeting – Feb. 21-23, 2017
- BC Meeting – May 16, 2017
- SJRRIP Annual Meeting – May 17, 2017
- CC Meeting – May 18, 2017

Summary of BC Recommended NNF Option for 2017

Dec. 8, 2016

The San Juan River Basin Recovery Implementation Program's Biology Committee (BC) and Peer Reviewers met on 1 December 2016 to review and discuss the results of the nonnative fish experimental removal design implemented in 2016. During the discussions, the BC and Peer Reviewers developed six options for nonnative removal in 2017 and a method for ranking the options. The Program Office distributed the summarized options to BC members and Peer Reviewers on 5 December 2016 (see below). BC members and Peer Reviewers ranked the options (see Tables 1 and 2) and provided comments (see attached compiled comments) by 7 December 2016.

Nonnative removal in 2016 and options for 2017

2016 summary

An experimental approach was implemented in 2016 in response to questions about the effects of nonnative removal on Channel Catfish and endangered Colorado Pikeminnow and Razorback Sucker. In 2016, the nonnative removal experimental design extended from Shiprock, NM to Mexican Hat, UT. Each geomorphic reach included control and treatment reaches and Geo-reach 3 contained control and treatment reaches for each agency (NMFWCO and UDWR) conducting removal efforts. Population estimates for Channel Catfish were generated pre-removal based on a marking pass and the first removal pass. For NMFWCO, 12 removal passes occurred prior to spring runoff and eight occurred after spring runoff. For UDWR, two removal passes occurred prior to spring runoff and six occurred after spring runoff peak.

Potential alteration for 2017

Based on discussions during the 1 December 2016 meeting, the BC developed options for nonnative removal in 2017 including: not continuing nonnative removal, repeating another year of the 2016 design as previously detailed, or continuing another year of the experimental design implemented in 2016 with tweaks (i.e., efforts moved temporally, conducting pre- and post-removal population estimates, and eliminating control reaches). All tweaked scenarios are budget neutral.

Scenarios with removal effort concentrated before spring runoff would have as many passes conducted prior to spring runoff as possible. In the scenarios that do not concentrate removal effort prior to spring runoff, the number of passes before and after spring runoff would be similar to what occurred in 2016.

All modified nonnative removal scenarios for 2017 would include population estimates pre- and post-removal for Channel Catfish, Colorado Pikeminnow, and Razorback Sucker.

For scenarios with control reaches in 2017, control and treatment reaches would be distributed through geomorphic reaches as in 2016. For scenarios without control reaches, removal would occur in all reaches from Shiprock, NM to Mexican Hat, UT.

Specifically, the six options identified during the 1 December 2016 meeting and provided to the BC members and Peer Reviewers for their ranking and comments were:

1. Cease nonnative fish removal altogether.
2. Continue another year with same experimental design as 2016.
3. **Concentrate** removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), **with** control reaches.

4. **Concentrate** removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), **without** control reaches.
5. **Do not concentrate** removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), **with** control reaches.
6. **Do not concentrate** removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), **without** control reaches.

Recommended option for nonnative removal in 2017

BC members and Peer Reviewers ranked and provided comments on the six options detailed above. A rank of 1 indicated the preferred option for 2017 while 6 indicated the least preferred option. Tables 1 and 2 provide the BC members and Peer Reviewers rankings along with the mean ranking of each option received. In the mean score of BC members, the rankings of the two FWS representatives are weighted by half (FWS Region 2 and Region 6 split a vote on the BC). The overall mean represents the mean of all 11 BC members (Table 1) and 3 Peer Reviewers (Table 2). The attached Word document compiles the verbatim comments provided by BC members and Peer Reviewers.

The preferred nonnative removal option for 2017 identified by the rankings and comments is #3 from the list above, **concentrate** removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), **with** control reaches.

In short, this is a recommendation to continue the nonnative removal experimental design implemented in 2016 into 2017 with two key alterations detailed below:

1. In 2017, as much nonnative removal effort as possible will be concentrated prior to spring runoff. In 2016, NMFWCO conducted 12 of 20 removal passes prior to spring runoff and UDWR conducted 2 of 8 removal passes prior to spring runoff.
2. In 2017, a post-removal population estimate will be conducted for Channel Catfish, Colorado Pikeminnow, and Razorback Sucker. A marking pass will replace a removal pass prior to the annual Adult Monitoring sampling effort to generate post-removal population estimates. These post-removal population estimates will be compared to pre-removal estimates (for all three species) to evaluate the effect of the removal effort. It is important to note that conducting these post-removal population estimates reduces removal effort by a single pass. In 2016, only pre-removal population estimates were generated for Channel Catfish.

The study reach for 2017 would continue from Shiprock, NM to Mexican Hat, UT and include treatment (where removal occurs) and control reaches (where no electrofishing occurs) delineated among geo-reaches 5 to 2 and between the NMFWCO and UDWR, sampling reaches. Both control and treatment reaches would be sampled during marking passes used to generate population estimates (the first pass of the year and last pass prior to Adult Monitoring) and during the Adult Monitoring pass. The recommended option to **concentrate** removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), **with** control reaches is budget neutral with the nonnative fish SOWs submitted for the 2017 AWP.

Table 1. San Juan River Basin Recovery Implementation Program Biology Committee (BC) rankings and mean score of nonnative fish options for 2017. Ranks of 1 indicate the preferred option. The rankings of the two FWS representatives are weighted by half (FWS Region 2 and Region 6 split a vote on the BC).

Nonnative fish options for 2017	BC members											BC mean score (n=10)
	McKinstry	Miller	Schleicher	Mazzone	Ruhl	Crockett	Westfall	Gori	Lamarra	Wesche	Davis	
1. Cease nonnative fish removal altogether.	6	6	6	6	3	6	6	6	6	6	6	5.7
2. Continue another year with same experimental design as 2016.	3	5	3	3	4	5	5	3	5	5	3	4.1
3. <i>Concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>with</i> control reaches.	1	2	1	2	2	1	3	1	1	2	1	1.6
4. <i>Concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>without</i> control reaches.	4	1	4	5	6	2	1	4	2	1	4	3
5. <i>Do not concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>with</i> control reaches.	2	4	2	1	1	3	4	2	3	4	2	2.6
6. <i>Do not concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>without</i> control reaches.	5	3	5	4	5	4	2	5	4	3	5	4

Table 2. San Juan River Basin Recovery Implementation Program Peer Reviewers and overall rankings and mean score of nonnative fish options for 2017. Ranks of 1 indicate the preferred option. Peer Reviewer mean only includes scores from the three Peer Reviewers. Overall mean includes all 11 BC members and 3 Peer Reviewers weighted equally.

Nonnative fish options for 2017	Peer Reviewers			Peer Reviewer mean score (n=3)	Overall mean (n=14)
	Hubert	Ross	Warren		
1. Cease nonnative fish removal altogether.	4	4	4	4	5.4
2. Continue another year with same experimental design as 2016.	3	3	3	3	3.8
3. <i>Concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>with</i> control reaches.	1	1	1	1	1.4
4. <i>Concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>without</i> control reaches.	5	5	5	5	3.5
5. <i>Do not concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>with</i> control reaches.	2	2	2	2	2.4
6. <i>Do not concentrate</i> removal efforts before spring runoff, conduct population estimates pre- and post-removal (3 species), <i>without</i> control reaches.	6	6	6	6	4.5