

October 17, 2002

**San Juan River Basin
Recovery Implementation Program
Biology Committee
May 21, 2002
Meeting Summary**



Members Present:

Jim Brooks
Ron Bliesner
Tom Chart
Paul Holden
Vince LaMarra
Chuck McAda
Bill Miller, Chairman
Tom Nesler
Dave Propst
Tom Wesche

Others Present:

Rob Ashman
Mike Buntjer
Jason Davis
Steve Harris
Randy Kirkpatrick
Pat Page
Steve Platania
Dale Ryden
Ernie Teller
Jason Thron
Marilyn Greenberg, Program Assistant

Representing:

U.S. Fish & Wildlife Service
U.S. Bureau of Indian Affairs
U.S. Bureau of Reclamation
Jicarilla Apache Nation
Navajo Nation
U.S. Fish & Wildlife Service
Southern Ute Indian Tribe
State of Colorado
State of New Mexico
Water Development Interests

Public Service Company of NM
U.S. Fish & Wildlife Service
U.S. Fish & Wildlife Service
Water Development Interests
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U.S. Bureau of Reclamation
University of New Mexico
U.S. Fish & Wildlife Service
U.S. Bureau of Indian Affairs
Utah Division of Wildlife Resources
U.S. Fish & Wildlife Service

Welcome and Review of Agenda

Bill Miller, Chair, welcomed the attendees, who then introduced themselves, and the agenda was approved.

FY2003 Scopes of Work

MONITORING

Adult Monitoring

The budget includes a three percent increase from 2001. The size of Colorado pikeminnow to implant is not well specified in the monitoring plan. The need to implant the occasional individual fish versus waiting until the stocked fish elevate numbers and provide more individuals was discussed. The methods for monitoring implanted fish needs to be expanded. The general opinion of the Committee was to not implant individual Colorado pikeminnow. The relatively large budget for a single sampling trip was discussed. The equipment costs are the same for all three SOW's by Grand Junction and need to be revised to accurately reflect differences in equipment costs.

YOY/Small Bodied Monitoring

The budget for this year is slightly smaller. The due date on the report needs to be changed to 2004 instead of 2003. The description of the methods can be made more concise to reduce the redundancy.

Larval Colorado Pikeminnow Survey

This provides for a continuation of razorback sucker sampling that starts earlier since razorback sucker spawn before Colorado pikeminnow. There is some overlap in timing that needs to be corrected.

Larval Razorback Sucker Survey

The study area has been extended upstream to Cudei and can continue to move up as needed (based on locations of razorback sucker collections). The methods and data analysis techniques need to be expanded. Objectives 2 and 3 are the same. Separate out the razorback sucker from "other" catostomids and add an objective for annual monitoring updates.

Specimen Curation and Larval Fish Identification

Objective 4 does not mean that unsorted collections will be processed. It was discussed whether or not curation should be identified in all scopes of work or kept separate. The Committee thought it should be kept separate, but remove curation of Colorado pikeminnow and razorback sucker larval work from the other two scopes of work.

Long Term Monitoring - Channel Morphology

The water temperature analysis proposal approved for FY 2002 has not been funded yet. This scope of work is essentially the same as before, plus five percent for inflation. There was a suggestion that the actual cost of living be used in the scopes, instead of just applying a certain percentage.

GIS Based Integrated Database Maintenance (2 scopes submitted)

Ron Bliesner and Steve Platania presented separate scopes of work for GIS based database management. It was also identified that Shirley Mondy has proposed a GIS position to assume database maintenance responsibilities by next year.

Steve Platania's proposal is an interactive web-based database. Powerpoint handouts (pictures of the webpage) were distributed to the Committee and will be attached to the web proposal. The database is interactive so that the Committee can have access to this information. The web page is now in the prototype stage and a similar web page is available for San Juan razorback sucker data and queries: http://msb-fish.unm.edu/Website/SJR_TEST/index.html. Queries to/from the database can generate maps and spreadsheets with the raw data. It could be immediately useful for annual reports. Full development could take 2 - 3 years. It is an arc view page. Non-geomorphology data may take a couple of years to develop fully (proposed is to nearest 0.1 RM while current database is georeferenced to middle of RM). Steve Platania would work with the geomorphology data first to get the system working. Ron Bliesner stated that all historical data has a geomorphology reference in his database, so Bliesner can transfer the original model to Platania from Bliesner. The Committee needs to consider how it feels about having this accessible interactive database for integration versus using the CD. The database would have a secure interface for authorized users only. Some feel that the database will be a lot easier and that the CD is not as user friendly. Ron Bliesner suggested that someone who is more aggressive about getting the data from the researchers is needed, or the researchers need to be more responsible about getting the information to the data entry person. The significantly greater cost of the web based proposal represents a significantly greater benefit - it could be immediately useful for annual reports. The transition process from Bliesner's system to Platania's system could include using Bliesner's time and data over the next year. Bliesner may need funds over the next year, in addition to Platania's start up time and expenses, to get rest of the data into the database and ready transition to Platania's system.

Some felt it would not help in common species, but it would help with rare species. The question for the Committee is, "What do we actually want to see down the road?" Data analysis for this year will probably be done with Ron Bliesner's data files. Some Committee members could see a long term, big picture benefit, but felt that the short term needs can be met by Bliesner's database. Steve Platania reminded the Committee that if there are long term benefits, it will not get less expensive if we wait - why not do it now? The ease of access (compared to a CD) would make it more likely for people to use it. Could the Committee prepare this web-based system to use for the integration in five years? **The Committee is strongly encouraged to get on the website and play with the prototype to see if it is useful to you.** Sarah Gottlieb, database manager at UNM, could come to one of the Biology Committee meetings to demonstrate what the database is able to do.

Do we want to have it available for each other to use the data? If we are not going to use it, we should not spend the money. The web-based database could also make it easier to show people what we are doing. Steve Platania said that the web database could be accessed tomorrow, and complete in two years (FY03 and FY04). After that, it would require maintenance. The Committee members need to clarify whether they would use it, at this time. Only three - four people (in this group) admitted to using the current CD. The researcher's data are less available now and a website might make it more difficult to protect data from being released via FOIA. Ron Bliesner receives about six FOIA requests per year, at this time, from people outside of this Committee. The web page could be password protected and unauthorized use of the data would be ensured.

The Committee decided to table Platania's proposal temporarily. Committee members agreed to access and evaluate the prototype to see if it is useful to them. ***Email your support, or not, on the listserve after reviewing Platania's website - within two weeks (by June 4, 2002).*** Once we get a reading back from the Committee, the budget can be modified accordingly at that time. ***The Committee also suggested that Platania review and revise his proposal to indicate that it will be 90 percent complete within the first year, by increasing staff days or whatever else is needed.***

Peer Review for 2003

Tom Wesche suggested that the peer review coordination and budget may be a burden on Paul Holden and Bio West. He suggestion that it be moved to a function of the Program Coordinator, since the Program has a good Coordinator now and that could be handled without a committee member being responsible for it. Based on the Klamath decisions, is the Committee putting Holden in a position that he does not want to be in?

Paul Holden stated that he can pay reviewer the day they send in their invoice; the Program Coordinator cannot. Holden can also easily respond to technical and other questions from the peer reviewers. It does not require a lot of administration. Holden provides a technical background and experience, and a single point of contact. He can also provide a non-agency perspective. Is there a compelling reason to make this change? Is there a liability issue? Perhaps; peer review panels are receiving a great deal of scrutiny these days. The Committee agreed that this situation should be watched closely, and that it is not a good time to make a transition right now.

The Committee agreed that Paul Holden would continue to be the peer review coordinator for now. The Committee will explore what it would take to pass the fiscal responsibility to someone who is not at a voting member in FY04.

There were also questions about how the role of the peer reviewers in a year when a report is not due. Some suggested that the reviewers should be at this meeting so they can be involved in the discussion of the scopes of work.

PAH Study

This project is funded outside of the SJRIP. This is a Biological Opinion requirement on BLM oil and gas.

RESEARCH

Characterization of Razorback Spawning Bar

This scope is delayed one year due to delays in funding this year and there has been no activity. It looks like everything will be delayed a year, so it was suggested that we slide the 2002 work into 2003, and request the 2003 funding for 2004. The money has been lost in the Reclamation to BIA transfer. They are working on modifications to Ron Bliesner's contracts.

We need to see when and where the razorback are spawning. Once it has been determined whether the bars have changed, the search can be expanded to locate similar locations. Spawning may have occurred in an entirely different area (8 - 10 fish were found at Slickhorn) this year - where fish have never been seen before. Steve Platania's data will tell us what the

production was and Ron Bliesner can characterize the areas where we think the razorback are spawning. ***Ron Bliesner will modify the existing 2003 Scope of Work to address the one year delay and to cover additional site characterization.***

Method #4 states that no field work will occur without approval of Biology Committee to address potential disturbance of fish on the spawning bar. This step is not necessary.

Tom Wesche rates this as a low priority due to the potential for disturbing spawning fish in the system. He does not support putting even more money into it.

San Juan River Population Model Maintenance

Additional model runs are included in this scope of work because of Tom Wesche's suggestion to apply the San Juan Population Model to different class stockings and their effects on the fish communities. Bill Miller will complete a paper report by March 31, 2004 - the completion of the 2003 work. Tom Wesche asked if Bill Miller could have this completed earlier to move the integration process along. Miller agreed, pending funding.

Maintaining a model includes new releases of the software and updates of new information and fish parameters. It is a decision-making tool to determine how to proceed on recovery. When Vince LaMarra and Ron Bliesner get their funding (within 1-2 months), and integrate it into Miller's model, the Committee can have the model workshop. ***The Committee approved this scope of work pending the outcome of the workshop - hopefully before submitting the budget.***

Navajo and San Juan Temperature Model

The progress report is due soon and identifies the items that had been attempted in 2002 - mostly focusing on reservoir data. Work is on track with the reservoir and the 1995 - 2000 date range that the model is based upon (calibration period). Some questioned whether a verification period had been established before the model is broadly used. ***Tom Chart will send this progress report out as soon as he gets back to his office.*** Input from the Biology Committee is needed regarding temperature targets to incorporate into the 2003 model runs. ***The model needs to be edited to take out last year and just show 2003.*** The model itself sounds more like a Hydrology Committee model and ***consultation with the Hydrology Committee*** may be necessary.

Assessment of Fish Movement Through the Non-Selective Fish Ladder at Hogback Diversion

This scope is in response to what had been seen last year upstream with non-native fish removal. Post run off and completion of the fish ladder may have resulted in an increase in the number of catfish collected at the end of summer and early autumn, after a continual declining catch rate before run off. A basic question is how are the fish are reacting to the non-selective structure. The proposal is to tag common carp, flannelmouth and bluehead suckers, and channel catfish to assess movement through that fish ladder. All other non-native fish captured would be removed and not used in movement study. It is proposed to be a minimum two year study. Two tagging trips are proposed before spring run off and would be incorporated with non-native removal efforts. There is no data to substantiate whether the non-selective fish ladder is working.

The Committee suggested that this scope of work be rewritten to clarify the objectives, to tie it into evaluating native and non-native fish movement, and to create information regarding non-selective fish ladders in the future relative to what is already known (Redlands). It was also suggested that it be tied in better to non-native mechanical fish removal efforts. Was the diversion structure responsible for the increase in catfish? Or was it increased sampling efficiency due low, clear flow conditions? Tom Wesche thinks this should be a low priority.

Trophic Relationships Among Colorado Pikeminnow and its Prey

This scope is an assessment of Colorado pikeminnow as the top predator, prey preference, and evaluation of food habits of the Colorado pikeminnow versus channel catfish. Carbon / nitrogen signatures in the system - in algae, mud, fish - can be tracked through the system. They will also put prey organisms in a nitrogen bath to look at uptake to see if the signature is transferred from one trophic level to another. The nitrogen bath gives a ratio signature that can be tracked through the system. Each step is dependent upon the last step. Each reach will receive 100 enriched prey species to find out if these enriched prey are going to be more attractive to the pikeminnow. ***There were suggestions to explain how changes in mortality rates will be quantified and what size prey are going to be stocked in this study, to modify the "seining and back-to-back electrofishing to collect all sample fishes" statement, and to evaluate the behavioral impacts of putting pikeminnow where they do not normally exist? Dave Propst will also clarify the step basis of this proposal to determine moving forward and the use of funds.***

Vince LaMarra shared that he has found that with stable isotopes, the nitrogen signatures are not consistent up and down the river. It is a great idea, and it may need to be modified to clarify some assumptions and techniques. LaMarra felt that knowing where the pikeminnow sit and the nitrogen signature would be helpful to all of the researchers. Cages and ponds versus natural habitat may create a more stable environment for getting the desired data.

Committee members are requested to get written comments to Dave Propst within 2 weeks, and he will resubmit to the Biology Committee.

As a result of this discussion and submission of other new proposals: The Committee needs to determine how it will handle unsolicited proposals. Should there be a notice on the website? In February there should have been a discussion and then requests posted to the website, but the website/internet was down at the time. ***It was suggested that Propst tie this proposal into the long range plan and make sure that it fits into that framework.***

Razorback Sucker Augmentation Ponds Limnological Study

This is a proposal to optimize the growth rates of razorback sucker in the grow out ponds. The product will be a proposed grow out pond management plan. This proposal may want to avoid the Avocet Pond and other currently very productive ponds, and focus on the newer ponds that were stocked in the spring of 2002. Someone needs to monitor these newer ponds daily to detail the density of fish and to quantify the growth and survival success rates. Details about the timing and frequency of adding fertilizer will be needed. Include information in the proposal about when the reports will be complete and develop the need in the background portion of the proposal.

RECOVERY EFFORTS

Non-native Species Control and Monitoring

This is the same as last year. It was suggested that out year budget information needs to be included.

Non-Native Species Removal in the Lower San Juan River

Jason Thron is sitting in for Julie Jackson from UDWR - Lower San Juan. This proposal is also the same as last year.

Colorado Pikeminnow Augmentation

This scope of work covers the radio tracking of 8 fish that are already out there. Pond harvest, transport and stocking will be removed from this Scope and left in fingerling production scope (Dexter). Some discussion and suggestions were offered to Dale regarding specifics to be included in his proposal.

Razorback Sucker Augmentation (and Monitoring)

Dale Ryden

The augmentation plans will not be done by June 1st at this point. At least nine additional acres (total 27) of ponds is needed. The newer ponds will be stocked with bigger fish and hopefully stimulate better returns, and then the nine additional acres will be enough. ***Jim Brooks is working with Manuel Ulibarri to address operations of the additional pond acreage. An additional scope of work is needed for this.***

Dale Ryden will revise the tasks that are listed as objectives.

Colorado Pikeminnow Fingerling Production

At the March 19-21 meeting, the Committee decided to go with 200,000 smaller fish and explore options for larger fish in the future. More definitions of the methods are needed. Clarification is needed regarding the distribution methods. The Committee suggested that Jim Brooks follow up with Roger Hamman. The facilities plan to be produced by Jim Brooks and Manual Ulibarri could/should be appended to Dale Ryden's plan. Fish produced at Dexter will be grown out until October/November 2002 and then stocked into the river. These fish should average 50-55 mm at 120 days old.

Maintenance of Interim Holding Facility for Larval Razorback Sucker

This is the same basic proposal as last year.

CAPITOL PROJECTS AND MANAGEMENT

Capitol Improvement Program Management

This scope of work was submitted as part of the overall budget. Take your comments to your Coordination Committee member. In general, concern was expressed regarding the large budget included since the work was already being accomplished.

Construction of PNM Fish Passage

Last year only \$42,000 was budgeted for operations/management. BIA has not been reimbursed yet this year. See your Coordination Committee member regarding this.

Fish Screens at Hogback Diversion

At the head of the Hogback canal the one-inch screen was not functioning. It had to be pulled. ***Screen criteria need to be developed. This will be added to the agenda for the next Biology Committee meeting.***

Long Range Plan Status

Jim Brooks stated that four sets of comments have been incorporated into the Long Range Plan so far. More still need to be incorporated. ***Brooks will incorporate the rest of the comments by the end of May, and then distribute the updated Long Range Plan to the Biology and Hydrology Committees.***

Temperature Control

Brent Uilenberg comments regarding temperature control - the feasibility study budget does not cover installation of a temperature control device. Uilenberg also suggested rewording the screening of "all" life stages to "smaller sizes...".

Discussion Regarding Clarification of Base Flow for Flow Recommendations

Reclamation uses an average weekly flow of the gages, an average of any two of the four gages should be above 500cfs. How reliable are those four gages, and how can that be determined? The Farmington gage is upstream, and the others are below diversions. Shiprock is the lowest of the three lower gages and is more reliable, like Bluff. Bluff is the most reliable of the four. Can two of the four be found that are giving accurate readings? Using Farmington as a buffer, as the higher gage, was not the original intent of the flow recommendations. The intent was to get the best representation of 500 or more cfs in the habitat range. Reclamation would like some clarification of what they are chasing. The intent is to maintain a minimum of 500cfs on a 7 day mean. The mean range would be to average Shiprock and Four Corners to represent the middle range of the habitat where most of the fish have been.

It was suggested that Reclamation look at what gages appear to be giving reasonable numbers, and if one number has to be thrown out that is obviously not correct, then do so and document what was done. The intent was to stay between 500 - 1000 cfs, 500 was supposed to be the minimum. During base flow, it should be as close to 500 cfs as possible to save water for spring release. For habitat, it is not clear whether 500 or 1000 (or 1500) cfs was better.

Some Committee members felt that Farmington should not be used if at all possible; just look at the three lower gages. Throw out one if it is obviously wrong. Ron Bliesner will write a paragraph describing the habitat intent; and then write a paragraph from the hydrology perspective to discuss at the Hydrology/Biology Committee. Then together we can give Reclamation some guidance.

Scheduling for Subgroup Meetings

At March meeting, it was decided that the subgroup meetings should begin 60 days after the last person gets funding authorized. Today Bill Miller suggested that those meetings begin in late August or early September. At the February Biology Committee meeting, two to three meetings were suggested before meeting as a large group.

The first meeting(s) should focus on the basic findings for the three years, some preliminary

data analysis, what is the trend, is it working, is it not? Anyone is welcome to attend these subgroup meetings. The Biology Group could meet in Albuquerque or Grand Junction on September 4th & 5th. The Physical Group could meet in Logan, Utah on September 10th & 11th. The Peer Review Panel needs to be consulted to make sure that they are available so that they can make it. Paul Holden will send an email to the peer reviewers tonight to check their availability.

Fall monitoring takes 3 full weeks. That may interfere with anything being accomplished by November, after having September meetings.

The combined Physical and Biology Integration Meeting could be held in Durango or Farmington on November 5th & 6th, December 3rd & 4th, December 10th & 11th, or December 12th & 13th.

There was discussion of a joint Hydrology/Biology Committee Meeting. Most Committee members felt that it would be good to meet jointly with the Hydrology Committee at least once a year to discuss what we are each doing. The February meeting is when the Biology Committee usually discusses results; perhaps that would be a good time to meet every year.

Pat Page and Bill Miller invited anyone from the Biology Committee who can make it to the Hydrology Committee meeting on June 25th in Durango, Colorado. They agreed to provide conference call access for those who could not attend in person. The combined Hydrology/Biology meeting will be from 8:30am - 10am.

The Biology Committee needs to meet this summer to finalize the scopes of work. Most needed revisions were just editorial revisions. A final decision is needed on unsolicited scopes of work. The final drafts need to be complete by June 25, with a conference call scheduled to review them before sending the scopes to the Coordination Committee.

FY2002 Funding Status

Everyone except Ron Bliesner has been authorized for funding.

Review and Approval of February 19 - 21, 2002 Draft Meeting Summary

The Biology Committee agreed to submit their edits to Marilyn Greenberg within two weeks (June 4, 2002). The Committee suggested that less detail was needed in the meeting summaries, just capture the action items and the essence of the discussion. "After much discussion...", capture the votes. The Committee and Marilyn Greenberg agreed to try composing and editing the meeting summary as we go at the next meeting. What was said can be clarified at the end of each agenda topic.