

# San Juan River Basin Recovery Implementation Program

## Biology Committee

### March 8-9, 1999 Meeting Summary

March 12, 1999 Draft

May 24, 1999 Final

A meeting of the San Juan River Basin Recovery Implementation Program Biology Committee was held on March 8-9, 1999 in Grand Junction, Colorado. The following Biology Committee members were present:

Larry Crist

Bill Miller

Paul Holden

Ron Bliesner

Jim Brooks

Tom Wesche

David Propst

Frank Pfeifer

Mike Japhet (for Tom Nesler)

Keith Lawrence (for Vince Lamarra)

Absent: Vince Lamarra, Paul Sawyer, Tom Nesler, Joe Dowhan (Program Coordinator). A list of all attendees is attached.

#### **BLM Biology Committee Nominee:**

The nomination of Paul Sawyer as the BLM Biology Committee member was discussed. While Paul does not have direct experience with the species of concern, he does have experience in the San Juan Basin and is responsible for BLM's T&E activities. It is important that those who serve on the committee have knowledge of the issues and will actively participate in the process. It was felt that Paul met those conditions. No motion was made to reject the nomination, therefore, his nomination is unanimously confirmed.

#### **1999 Work Plan:**

The BLM work plan was recently e-mailed to committee members for review. It was noted that the work plan is a requirement of their Section 7 consultation in the basin and is funded separately by BLM, similar to some of the work completed by BIA. The work plan will be incorporated in the overall study as presented.

Per decision at the last Biology Committee meeting, Ron sent a letter to Renne Lohofener requesting assistance in getting the revised statement of work for program coordination and confirmation of USFWS funding contribution for 1999. In a telephone call to Joe Dowhan, he noted that the work plan had not yet been completed and that \$40,000 had been removed from FWS funding. This reduction in funding was very troublesome since the Coordination Committee had approved the work plan, with exception of the Program Coordination work, at their last meeting, including the commitment to the funding levels presented. On that basis, USBR has committed the funds to the various contractors. If a reduction of FWS funding occurs, it will impact only the program coordination budget, as that is the only budget element that was not approved. In a telephone conversation between FWS representatives and Joe Dowhan during the day of March 8, 1999, a verbal commitment to restoration of the funding was made along with a commitment to develop the statement of work by the end of this week.

When the statement of work is received, it will be incorporated into the work plan and the final plan sent to the Coordination Committee for full approval.

### **Razorback Sucker Stocking:**

Frank reported that approximately 34,000 - 35,000 larval razorback suckers were recently stocked by BIA in Ojo and Avocet ponds. The fish are the progeny of 15 female and 11 male fish held at Willow Beach fish hatchery. They were made available by the lower basin program in exchange for labor provided in capturing wild larvae. The transfer was earlier than expected due to limited space and a successful spawn this year. To date, about 62,000 wild larvae have been captured, with a projection of about 100,000 when completed this year. Both BIA and FWS crews have been assisting the work. The cooperation between agencies and programs has been very successful.

The fish transported well, with the exception of one bag. The first batch (1/8 of total) that were oxygenated before transport did not survive for unknown reasons. The others did fine, resulting in about 14,000 larvae being stocked in each pond. We still have one remaining cell available at avocet pond. The plan is to hold these fish until the fall of 2000 to allow adequate growth for successful stocking in the river. The other cell at avocet will be used for next year's fish.

### **1999 Water Supply and Expected Release:**

The April - July forecast runoff for the San Juan River is about 69% of normal, meaning there is adequate space in the reservoir to store the runoff without spill. Reclamation is using the decision tree in the flow recommendation report to determine releases. Storm events last summer and fall perturbed the backwaters, requiring a release as long as

storage water is available. Under the most probable runoff scenario, the flow recommendation rules would call for a minimum release of about 114,000 af - one week ramp up, one week at 5,000 cfs and one week ramp down. This would be the release under the least probable and most probable runoff condition. Under maximum probable, the release would likely be between 200,00 and 300,000 af.

### **Long Term Monitoring Plan:**

The discussion of long term monitoring was resumed at the point of termination at the last meeting. The goals developed at the last meeting were reviewed and some minor edits made to the goals, which appear in the summary of the last meeting. The written comments from Ellen Wohl and David Galat, previously distributed by Paul Holden, were used in the discussion.

Since larval monitoring was discussed heavily at the last meeting and adult monitoring seems non-controversial, most of the discussion centered on yoy and small-bodied monitoring and physical parameter monitoring. Repeatability was a key issue. It was decided that, to the extent possible, the same habitats in each mile would be sampled each year. During the 1999 monitoring trip, the sampling locations will be marked on aerial photography. Subsequent sampling trips will attempt to use the same sites. If the habitats do not exist in these locations due to changes in channel morphology or flow, then a new site would be selected. If there are no occurrences of a particular habitat within a sampling mile, it will be skipped for that mile.

Sampling will be restricted to seining, requiring shoreline habitats in the main channel. The number of seine hauls per habitat needs to be standardized and degree of difficulty should be noted. Tom Chart will send to Dave the protocol used by Utah.

Comments by Galat and Wohl re-affirmed their statements at the last meeting concerning a need for understanding the statistics of the data and setting the criteria for indicating statistical significance in data trends up front. This was discussed at length and the general concept supported. However, until final reports and synthesis are completed, we do not have the basis for this determination. It was decided that each section in the next draft should deal with statistical analysis, but that this issue would be finalized this fall, after data analyses are completed and we have been through one monitoring season, allowing us to better refine and define methods.

Four general areas of improvement in most sections are required: (1) statement of basic statistics, (2) analytical methods to be employed, (3) minimum reporting requirements and (4) data format. Each drafter is to review their section and provide revisions to Dave by April 8, 1999.

More detail is required in several method descriptions in the physical monitoring sections. Ron is to review each method and add sufficient detail to allow others who are familiar with the general techniques to be able to reproduce the results. Two items mentioned were cross-section reference points and survey grid density for cobble bar surveys

Habitat mapping was discussed at some length. It was decided that the categories should be simplified. Vince, Keith and Dave are to work out more general categories to facilitate sampling. More detail will likely exist in the mapping than for sampling, but the categories will be simplified from the set now used. Issues of map scale, etc. raised by Ellen Wohl will also be addressed.

It was noted that the methods for yoy sampling presented by Utah in December, including an earlier sampling trip to monitor yoy suckers, were discussed at the last meeting as a potential research issue. It was decided that the methods proposed in the work plan and monitoring plan for this year would be followed and evaluated before any decision is made to fund a research activity that tracks suckers during an earlier sampling trip.

### **Program Evaluation Report Discussion:**

There have been various names assigned to the report that is to be prepared as we move from a heavier research agenda toward more recovery. After some discussion, Program Evaluation Report was selected as the title.

Paul distributed another copy of the outline he prepared last year as a discussion format. The outline is based around the milestones as listed in the long range plan. It was decided that each final report was to include a section summarizing the findings in relation to the milestones. This information would then be used in the formulation of the Program Evaluation Report.

The outline presented by Paul was edited to provide functional grouping, rather than following the milestone outline. The last chapter, Summary and Suggested Changes to the Long Range Plan, will summarize the findings in relation to the milestones. Some of the chapters identified require integration of the results of several studies. Each section was assigned to a member of the committee as primary drafter. Any integration and input from other studies will be the responsibility of the assigned member. Following is a rough outline of the report with assignments shown. Paul will provide a cleaned up version for our review.

Assigned Member	Chapter	Description
Paul Holden	1	Introduction & background
Paul Holden	2	Description of studies performed (goals, objectives, modifications with time, etc.)
Bill Miller	3A	Limiting factors for Colorado pikeminnow (originally 3D)
Dale Ryden	3B	Limiting factors for razorback sucker (originally 3E)
Dave Propst	3C	Limiting factors for other native fish (originally 3F)
Ron Bliesner & Vince Lamarra	3D	Address limiting habitats and need for non-flow related habitat modification (originally 3A and 3B)

Larry Crist & Frank Pfeifer	4	Propagation and Augmentation (originally 3G-J)
Jim Brooks	5	Non-native fish issues (originally 3K)
Ron Bliesner	6	Water quality and contaminant issues (originally 3L-O)
Pending final report results	7	Other results of 7-year research (originally 4.)
	8	Adaptive Management (originally 3P-S)
Paul Holden	9	Summary and suggestions for changes to the long range plan

Paul also distributed a draft of the protocols for the report. In addition we need standards for ½ and full page graphics (margins, headings, etc). Graphics are to be supplied in a Word or WordPerfect compatible form so they may be directly embedded in the document.

Dave will provide copies of the Southwest Naturalist guidelines to authors to provide a basis for style consistency.

### **Fish Passage:**

#### Field Trip

On Tuesday, Frank Pfeifer led a field trip to inspect the selective fish passage at the Redlands diversion on the Gunnison River and the natural step-pool passage at the Grand Valley Irrigation Diversion. Both structures were sponsored by the Upper Basin Recovery Implementation Program. FWS operates the Redlands fish passage to prevent upstream migration of non-natives. The passage has been effective in passing Colorado pikeminnow and is passable by razorback sucker, although no native razorbacks have used the ladder. Frank presented data on the performance of the ladder since 1996 that indicated passage of over 28,000 fish, including 42 Colorado Pikeminnow. Of the 28,000 total, over 26,000 were native and only 275 were channel catfish.

It appears that the structure is working well and that the information learned from the operation of this facility could be utilized directly in the design of selective passage in the San Juan River, if it is deemed necessary.

#### Hogback.

Ron presented the present design concepts for the proposed Hogback diversion dam and fish passage. Some discussion followed concerning the desire for selective passage at this site. Paul Holden presented the position that selective passage at this location may allow us to remove catfish for the reach between Hogback diversion and the San Juan Generating Station (SJGS) weir by eliminating upstream migration. Others thought that it would not be possible to effectively eliminate catfish from this reach and that the extra cost to the program for selective passage was not warranted. Therefore, the general plan for the dam and fish passage as presented was acceptable. Ron presented two

fish passage configurations and performance data on each. Of the two designs, committee members recommended the step-pool design to allow more resting opportunities.

Fish screening was discussed. The canal inlet will incorporate screening sufficient for adult fish. Bill Miller is going to forward to Ron information on adult passage from an upper-basin study. Larval fish entrainment in the canal is a future issue that may need to be dealt with. It is not practical to screen at the intake for larval fish. If needed in the future, it would best be addressed in the upper reaches of the canal using a long crested weir or other passive device. Therefore, it does not impact the diversion design.

If everything stays on schedule, construction could start this fall and the structure would be in place for summer of 2000.

#### San Juan Generating Station Weir.

Dale Ryden presented information on fish passage upstream and downstream over this structure. While there was some upstream movement by flannelmouth sucker, no bluehead sucker were documented moving upstream. The general conclusion of the committee after reviewing the results is that this structure is an impediment to free movement of native fish and would likely affect the ability of Colorado pikeminnow and razorback sucker to access the upper portions of the river, some of which is designated critical habitat. Therefore, passage is recommended.

Adult monitoring data show very low numbers of channel catfish above the weir and very high numbers of adult channel catfish below the weir. In fact, the reach of river between the SJGS weir and Hogback has the highest catch rate for channel catfish of any reach. With this situation, selective passage was considered for this location. After a lengthy discussion it was the unanimous decision of those committee members present (Brooks and Propst had indicated uncontrolled passage was their recommendation, but left before the discussion was completed) to recommend selective passage at this site. The decision was based on the present disparity between catfish abundance above and below the weir, the desire to keep catfish below the weir to the extent possible and the potential availability of funds for construction as a result of the capital funding legislation that is expected to be introduced this year.

Ron Bliesner was assigned to convey this recommendation to Renne Lohofener to meet the request of the Coordination Committee for our evaluation.

#### **Schedule:**

Final reports are behind schedule for most researchers for a variety of reasons. After carefully reviewing the work load and progress, it was agreed that the due date be extended to May 1, 1999. However, this must be the last extension. Each researcher is to send copies to peer reviewers and all Biology Committee members.

With that schedule the next Biology Committee meeting was set for June 7-8, 1999. This will be a meeting to review

the final reports and initiate the integration process for completion of the Program Evaluation Report. The peer review will be invited.

### Biology Committee Meeting

March 8-9, 1999

Name	Organization	Phone
* Larry Crist	US Bureau of Reclamation	(801) 524-3639
* Jim Brooks	FWS	(505) 346-2538
* Paul Holden	Bio/West	(435) 752-4202
* David Propst	NM Game & Fish	(505) 827-9906
* Tom Wesche	HabiTech	(307) 742-4902
* Bill Miller	Miller Ecological Consultants	(970) 224-4505
* Ron Bliesner	Keller-Bliesner Engineering (BIA)	(435) 753-5651
* Frank Pfeifer	US FWS	(970) 245-9319
Ernie Teller	BIA-NIIP	(505) 325-1864
Tom Chart	Utah Division of Wildlife	(435) 259-3781
Rob Ashman	SJGS - PNM	(505) 598-7533
Yvette Converse	Bio-West	(801) 575-8857
Dale Ryden	USFWS - Grand Junction	(970) 245-9319
Lewis Boobar	GLCA - NPS	(520) 608-6266
Keith Lawrence	Ecosystems Research Institute	(435) 752-2580
Mike Japhet	CDOW - Durango	(435) 247-0853
Matt Lavery	PNM	(435) 241-4732

\* indicates member of Biology Committee