



**HYDROLOGY COMMITTEE CONFERENCE CALL  
SAN JUAN RIVER BASIN RECOVERY IMPLEMENTATION PROGRAM  
APRIL 28, 2005**

**Member/Alternates Present**

Pat Page, Chairman  
Steve Cullinan  
*Julie Linn* for Chuck Lawler  
Aaron Chavez (Alternate)  
Ray Alvarado  
Steve Harris  
John Whipple  
Rick Cox  
Bernadette Tsosie  
Pat Turney (Alternate)  
John Simons  
Bill Miller  
  
Dave Frick  
Mike Hamman  
Ron Bliesner

**Representing**

U.S. Bureau of Reclamation  
U.S. Fish and Wildlife Service  
Southern Ute Indian Tribe  
Water Development Interest  
Colorado Water Conservation Board  
Water Development Interest  
State of New Mexico  
Water Development Interest  
Navajo Nation Dept. of Water Resources  
State of New Mexico  
U.S. Bureau of Reclamation  
Miller Ecological Consultants, Inc. (Southern Ute Indian Tribe)  
Jicarilla Apache Nation  
Jicarilla Apache Nation  
Keller-Bliesner Engineering (Bureau of Indian Affairs)

**Other Interested Parties**

Dave King  
Mike Buntjer  
David Campbell  
Joann Perea-Richmann  
Molly Magnuson  
  
U.S. Bureau of Reclamation  
U.S. Fish and Wildlife Service, NM Ecological Services  
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New Mexico ISC

## **INTRODUCTIONS, REVIEW AND APPROVAL OF AGENDA**

Agenda was approved.

## **REVIEW AND APPROVAL OF DRAFT SUMMARIES FOR SEPT 15 AND NOV 16, 2004; AND SUMMARY FOR FEB 17, 2005 WITH CORRECTIONS**

The Hydrology Committee (HC) approved minutes.

## **REVIEW OF ACTION ITEM LOG (ATTACHED)**

All are still ongoing or extended. The committee requested that two files be established for the action item log, one for current and one for completed projects. Joann Perea-Richmann will act on this item.

## **UPDATES ON BUDGET AND STATUS REPORT (DAVE KING)**

- ❖ The climate data entry procedures have been updated with additional utilities.
- ❖ The NIIP project data sets through 2003 are still being updated and expected to be complete in June.
- ❖ Dave King has requested an extension to replace the NW assessment data for non-irrigation with Consumptive Use and Loss (CU&L) data for NM.
- ❖ The Hydrology Committee (HC) is looking and comparing differences in the Animas data set in Generation 2 Model Runs (Gen2)
- ❖ Dave King supplied a budget sheet and requested an extra \$2500.00. (attached)

## **UPDATE ON PROPOSED REVISIONS TO FLOW RECOMMENDATIONS**

We are waiting for the Integration Report from the biology Committee. Once that report is finalized, we can get started whole-heartedly on the testing/revising the new flow recommendations. With the delay in initiating this work, it may not be completed in FY05.

## **DRAFT MEMO ON RECOMMENDATION FOR HANDLING SMALL PROJECT DEPLETIONS (ATTACHED)**

The memo addresses the HC recommendations for Handling Small Project Depletions. The memo will be updated to change the wording in the recommendation to read “regardless of the quantity of the depletion, the depletion of all projects shall be accounted for either in the minor depletions account or in the model itself” and the last paragraph to add at the end “when the current account has been used up” It was also determined to leave in the statement that “the Service has the discretion to determine what to do with project’s which are greater than 100 acre-feet”. Pat Page will edit and forward to the HC.

## **FY2006 STATEMENT OF WORK (SOWS)**

The FY2006 SOW’s will consist of Model O&M (\$74,250) and USGS streamflow gaging (\$6,100). The SOW’s will be sent out to Hydrology committee for review and approval. After approved by the HC they will be sent to Joann Perea-Richmann to incorporate with the packet for the Coordination Committee. Pat Page will update and send draft SOW’s to HC.

## **HYDROLOGIC CONDITIONS DISCUSSION (JOHN SIMONS)**

John Simons reported that Navajo Reservoir end-Of-April content was 1,182,300 acre feet (af) at a water surface elevation of 6046.27 feet. This is 92% of the 1971-2000 30-year average. October 2004-March 2005 inflow was 386,000 af or 149% of average. This was the 7<sup>th</sup> wettest winter of the past 40 years. The CBRFC April 1<sup>st</sup> forecast for April-July inflow is holding steady at just over 1,000,000 acre-feet. This is about 160% of the 30-year average. The SJRIP Decision Tree calls for the maximum hydrograph release. This consists of a 4-week ramp up starting on April 27<sup>th</sup>, reaching 5,000 cfs on May 25<sup>th</sup> and maintaining the release for three weeks. The two-week ramp down will begin June 15<sup>th</sup> and end June 29<sup>th</sup>. Summertime flows will remain at 500 cfs through CH reach. End of September content is anticipated to be about 1,540,000 af, a WS elevation of 5074.0 feet.

### **NAVAJO DAM UPDATES**

Pat Page reported that Reclamation was preparing an Environmental Assessment for Navajo Operations this summer (in lieu of the delayed EIS). The preferred alternative in the EA would allow a minimum release of 350 cfs. Reclamation would have some flexibility to release higher amounts than the minimum if hydrological conditions allow. The minimum allowable release is currently at a 250 cfs until April 1, 2005.

### **WATER SHARING AGREEMENT**

Pat Page stated that the Recommendations for San Juan River Administration and Operation for 2005 are still being worked out. The water users are meeting to address outstanding issues with the agreement. It was indicated that 8 of the 10 entities have approved the recommendations at this time.

### **NEW PROJECTS**

Steve Harris stated that the Lightner Creek project is still a possibility. This would involve diverting water from Lightner Creek (an Animas River tributary) over to Lake Durango.

### **2005 MEETING/CONFERENCE CALL SCHEDULE**

The following meeting/conference call dates were selected (note: all meetings will be in Farmington)

- ❖ June 15<sup>th</sup> – Conference Call, 9 am - Noon
- ❖ August 30<sup>th</sup> – Conference Call, 9 am - Noon
- ❖ November 15<sup>th</sup> – Meeting in Farmington @ Farmington Civic Center

### **ACTION ITEMS**

- ❖ Dave King and Pat Page will work on updating the O & M cost sheet.
- ❖ David Campbell will check with Chuck on the Revised Flow Recommendation letter.
- ❖ Joann Perea-Richmann will update approved minutes for Sept 15, 2004, Nov 16, 2004 and Feb 17, 2005, post on web.
- ❖ David Campbell will send out the updated Minor depletions log.
- ❖ Pat Page will revise wording on the memo for Small Depletions Draft Letter.
- ❖ Pat page will send out draft FY06 SOW's.

**MEETING ADJOURNED AT 10:30 AM**



**HYDROLOGY COMMITTEE ACTION ITEM LOG**  
**(Updated April 28, 2005)**

	<i>Action Item</i>	<i>Meeting/ Origination Date</i>	<i>Responsible Party</i>	<i>Due Date</i>	<i>Revised Date</i>	<i>Date Completed</i>
4	Add model runs and other information to the permanent hydrology website: <a href="http://uc.usbr.gov">http://uc.usbr.gov</a>	7/25/01	Erik Knight	Ongoing		
5	Model modification briefings.	7/25/01	Reclamation and Keller-Bliesner	Ongoing		
12	Any new data or methods incorporated into RiverWare or State Mod will be shared with the Hydrology Committee.	7/25/01	Keller-Bliesner and Reclamation	Ongoing		
34	Gage error analysis discussion: the Hydrology Committee still needs to determine whether big losses are due to daily desegregation. The Committee has the option to re-evaluate losses once the 3 <sup>rd</sup> Generation model is complete.	11/27/01	Hydrology Committee		Postponed until StateMod analysis is completed	
58	John Whipple will provide a written statement of New Mexico's concerns re: State Mod. Based on that, Ray Alvarado will provide a written description of StateMod. New Mexico's comments have not yet been received. [10/29/02] Still on New Mexico's back burner.	5/7/02	John Whipple Ray Alvarado	6/17/02	Extended check with John Whipple	
104	Bernadette Tsosie will work with USGS to determine a good site for the Shiprock cableway.	8/5/03	Bernadette Tsosie	Ongoing	Ongoing	
105	USGS agreed to give a presentation annually to the Hydrology Committee regarding the effectiveness of the gage readings.	8/5/03	USGS	Ongoing	Annually	

	<i>Action Item</i>	<i>Meeting/ Originatio n Date</i>	<i>Responsible Party</i>	<i>Due Date</i>	<i>Revised Date</i>	<i>Date Completed</i>
115	New Mexico will present issues associated with forbearance.	10/14/03	John Whipple	Extended	6-15-05	
124	USBR will conduct a comparison of Riverware versions whenever a new version is available, analyze the results, and recommend to the HC whether and when to incorporate the new version.	1/21/04	Pat Page	Ongoing		
136	Coordinate documentation for depletion differences for Gen 2 & Gen 3 specifically on NM non-Indian.	5-18-04	Ron Bliesner & Dave King	Ongoing	6-15-05	
139	Committee will report any new projects which will be coming up.	5-18-04	Hydrology Committee	Ongoing		
140	Follow-up on (USGS) gage at Archuleta right-of-way <b>AGENDA ITEM</b>	5-18-04	Pat Page	7-13-04	Ongoing	

SJBHM FY2005 Operation and Maintenance Budget Date of Report 4/25/2005 Date of Data 4/15/2005

Item	Total	TSC	WCAO	Consultants
FY05 Cost	\$181,118	\$48,944	\$58,474	\$73,700
FY05 Expended	\$32,779	\$19,107	\$13,672	\$0
FY05 Balance	\$148,339	\$29,837	\$44,802	\$73,700

Fiscal Year 2005 Budget					
Task	Total Staff Days	Equipment and Supplies Total			
		Total	Travel		Total
A	119	\$84,980			\$84,980
B	37	\$22,200			\$22,200
C	13	\$9,288			\$9,288
D	17	\$12,184			\$12,184
E	20	\$12,000			\$12,000
F	15	\$11,480			\$11,480
G	10	\$7,240			\$7,240
Total Labor	231	\$159,372	3500	18246	\$181,118
				Contingency	\$18,088
				Total	\$199,206

Worksheet does not include \$14,300 of carryover to consultant.

Task	Description
A	Develop, test, and implement new flow recommendations.
B	Maintain data.
C	Maintain model.
D	Maintain software associated with model and data.
E	Model operations for Hydrology Committee and new projects.
F	Program management and coordination.
G	Technical transfer.

**SJBHM Operation and Maintenance Expenditures FY2005 Date of Report 04/25/05**

Data 04/15/05 Task	Item	Total	TSC Total	TSC Level 1	TSC Level 2	TSC Level 3	WCAO	Consultants	Percent Completed	Percent Expended	Description
1	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Data Maintenance
2	B	\$1,598	\$848	\$0	\$0	\$848	\$750	\$0	85.00%	53.27%	Update USGS and Reclamation data
3	B	\$6,380	\$3,392	\$0	\$0	\$3,392	\$2,988	\$0	90.00%	70.89%	Update New Mexico non-irrigation data
4	B	\$5,392	\$3,392	\$0	\$0	\$3,392	\$2,000	\$0	90.00%	179.73%	Update New Mexico irrigation data
5	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Update Arizona and Utah depletions
6	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Update Colorado depletions
7	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Update natural flows
8	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Update web data
9	D	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Software Maintenance
10	D	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Upgrade StateMod to RiverWare DMI's
11	D	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Implement improved disaggregation procedures
12	D	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Implement improved depletion reporting procedures
13	D	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Implement improved procedures for testing new projects
14	D	\$2,544	\$2,544	\$0	\$0	\$2,544	\$0	\$0	100.00%	0.00%	Develop data utilities
15	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Model Maintenance
16	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Update RiverWare models with revised natural flows and depletions
17	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Test models with revised data
18	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Investigate use of daily StateMod to replace 1 or more RiverWare models
19	C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Reconfiguration and DMI adjustments
20	E	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Model Operation
21	E	\$1,080	\$0	\$0	\$0	\$0	\$1,080	\$0	20.00%	18.00%	Test new projects
22	E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Hydrology Committee requested runs
23	A	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Revised Flow Recommendations Implementation and Testing
24	A	\$5,088	\$5,088	\$0	\$0	\$5,088	\$0	\$0	???	0.00%	Data and model comparisons and analyzes
25	A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Analyze and implement flow recommendation changes
26	A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Report to Biology Committee
27	A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Model Runs
28	A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Technical Review
29	A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	0.00%	Program Coordination related to revised flow recommendations
30	G	\$1,518	\$1,518	\$0	\$0	\$1,518	\$0	\$0	20.00%	20.97%	Technical Transfer
31	F	\$2,196	\$1,696	\$0	\$0	\$1,696	\$500	\$0	40.00%	19.13%	Meetings, Budget Tracking, Program Coordination, etc.
32	C	\$424	\$424	\$0	\$0	\$424	\$0	\$0	5.00%	16.67%	Documentation
Labor Total		\$26,220	\$18,902	\$0	\$0	\$18,902	\$7,318	\$0		16.45%	Total Staff Days
Expenses		\$6,559	\$205				\$6,353	\$0		30.16%	Travel, computer charges, software, RiverWare support
Total		\$32,779	\$19,107	\$0	\$0	\$18,902	\$13,672	\$0		18.10%	Total

Items 14, 19, and 24 are unanticipated work that was not programmed in FY2005 cost estimate. TSC was not programmed to do O&M but has been involved in these tasks.



Draft 04/28/2005

MEMORANDUM

**TO: San Juan River Basin Recovery Implementation Program (SJRIP)  
Coordination Committee**

**FROM: SJRIP Hydrology Committee**

**SUBJECT: Recommendation for Handling Small Project Depletions**

**Background**

At the initiation of the San Juan River Basin Recovery Implementation Program (SJRIP) a minor depletions account was included to cover depletions associated with projects that were too small to justify modeling. Until 1999, this account operated under Fish and Wildlife Service (Service) discretion concerning the project depletion limit for inclusion. In 1999, the SJRIP determined that it would be best to set a limit of 100 acre-feet for projects to be considered minor depletions. For projects that exceed the 100 acre-foot-limit, the Service has discretion as to whether or not to include these projects in the minor depletions account pursuant to Section 6 of the document entitled "PRINCIPLES FOR CONDUCTING ENDANGERED SPECIES ACT SECTION 7 CONSULTATIONS ON WATER DEVELOPMENT AND WATER MANAGEMENT ACTIVITIES AFFECTING ENDANGERED FISH SPECIES IN THE SAN JUAN RIVER BASIN". Recently the Service has completed consultations on projects larger than 100 acre-feet for which no modeling was performed. However, they have suggested that the depletions must be included in the baseline for future consultations. This has created a situation where the burden of meeting flow recommendations shifts away from the project in consultation to all future projects. Further, it does not provide the pattern of impact to the hydrology necessary for later inclusion. Without some means of accounting for this water, the cumulative effect of multiple projects not being included becomes problematic.

**Recommendation**

The Hydrology Committee recommends that the limit for inclusion in the minor depletions account be raised to include all projects with average annual depletions less than 500 acre-feet. For all projects with 500 or more acre-feet of depletion, it is recommended that the Service require the project proponent to submit the pattern of monthly demands for the period of record of the model. The Service would then provide this information to the Bureau of Reclamation and request them to include the provided hydrology in the model and determine the hydrologic impacts of the project for consideration in the Section 7 consultation for the project. Regardless of the quantity of the depletion, the depletion of all projects shall be accounted for either in the minor depletions account or in the model itself. Implementing these procedures will assure that

all new depletions in the basin are properly accounted. It is further recommended that the Service continue tracking the current minor depletions account and consider either expanding the current account or identifying a new block of minor depletions to cover future minor depletions when the current account has been used up.