

**Technical Work Group
January 9, 2001
Phoenix, Arizona**

Presiding: Rick Johnson, Chairperson

FINAL

Committee Members Present:

Cliff Barrett, UAMPS
Kerry Christensen, Hualapai Tribe
Dave Cohen, Trout Unlimited
Wayne Cook, UCRC
Jonathan Damp, Pueblo of Zuni
William Davis, CREDA
Kurt Dongoske, The Hopi Tribe
Brenda Drye, So. Paiute Consortium
Norm Henderson, NPS/GLCA
Amy Heuslein, BIA

Pamela Hyde, Southwest Rivers
Robert King, UDWR
Don Metz, USFWS
S. Clayton Palmer, WAPA
Bill Persons, AGFD
Randall Peterson, USBR
Nikolai Ramsey, GCT
D. Randolph Seaholm, CWCB
Robert Winfree, NPS/GRCA

Committee Members Absent:

Robert Begay, Navajo Nation
Perri Benemelis, ADWR
Christopher Harris, CRBC
Nancy Hornewer, USGS

Matt Kaplinski, GCRG
Phillip S. Lehr, Colo. River Comm./NV
John Shields, WY State Engr. Office

Alternates Present:

Wayne Cook

For:

John Shields, WY State Engineer's Office

Other Interested Persons Present:

Mary Barger, WAPA
Nancy Coulam, USBR
Barry Gold, GCMRC
Linda James, Office of Bob Lynch for IEDA

Dennis Kubly, USBR
Lisa Leap, GRCA
Mike Liszewski, GCMRC
Mary Orton, Mary Orton Company

Recorder: Linda Whetton, USBR

Meeting Opening and Administrative Items

Convened: 8:10 a.m.

WELCOME AND ADMINISTRATIVE:

The Chairperson welcomed the TWG members, alternates, and guests. All introduced themselves. The Chairperson determined there was a quorum established. Attendance Sheets were distributed (Attachment 1).

Action Items from Last Meeting

1. WAPA Rate Brochure - Done. Clayton said they didn't prepare a brochure but rather a presentation which he e-mailed to the TWG. He will provide additional copies as requested.
2. Power Economics Presentation (Rewrite). Done. Refer to Nov. 8-9, 2000, Draft Minutes.
3. Amendment to Biological Opinion - Done. This was e-mailed as well as posted to the Bureau of Reclamation's web site (www.uc.usbr.gov)
3. SWCA Report - Done. The report has been posted on the GCMRC web site.
4. TWG Vision Narrative Ad hoc Group - Cliff will provide an update later today.
5. Budget Process Ad Hoc Committee Update - Clayton said the purpose of this committee was to make a joint TWG recommendation on the FY 2002 GCMRC work plan. He hasn't been able to convene the committee and since the plan was due Nov. 30, he doesn't feel there is a need for the committee to meet. He proposed disbanding the committee.

MOTION: Move to disband the Budget Process Ad Hoc Committee.
Motion seconded and carried.

6. Budget Ad hoc Committee Update. Cliff Barrett reported that nothing has happened since the last meeting, however, he has received more comments. He proposed that since Dennis Kubly is developing a communication process diagram, the committee wait for a few weeks until those charts are completed to see if they provide better understanding of the budget process.

Another assignment the committee had was to look at ways for the AMWG to get more support for the AMP budget in the Congress. They considered: 1) forming a group to discuss, 2) have the TWG make

a recommendation to AMWG to form a small ad hoc group to address, 3) have TWG members discuss with their AMWG representatives, and 4) have an AMWG member make a recommendation. Cliff cautioned that the Federal agencies may not want to be part of the discussions as they are prohibited from talking about their proposed upcoming fiscal year budgets until they've been announced by the President. It was agreed that an AMWG member should present this issue for further discussion/action.

7. Experimental Flows Ad Hoc Group Update- Randy Peterson will give a full report at tomorrow's meeting.

8. LSSF Study Conference - Clayton reported that WAPA is still in the planning stages for the conference. They will also ask modeling experts to provide peer review and then will take their comments and incorporate them into the final report. Clayton said he had a draft copy of the LSSF report if anyone wanted to read but advised that it was pretty rough. Randy and Barry requested a copy.

ACTION: Clayton will send a copy of the LSSF Draft Report to Barry Gold and Randy Peterson.

Use of List Server for AMWG/TWG Documents - Mike Liszewski (GCMRC) talked about the possibility of using a list server to post AMWG/TWG documents. He proposed three options: 1) a format that only TWG and perhaps AMWG could access, 2) a format whereby the public can look but not participate in the discussion nor make comments, and 3) be completely open and let everyone participate. Some concerns were expressed about posting information and limiting exchange of information in light of being a FACA committee.

ACTION: Randy will check into FACA regulations.

After some discussion on who should have access to the list server, the members said it should be limited to AMWG and TWG members. Mike said that since the discussion forum is a web-based format and dialog takes place by posting messages on a web site, he asked if the members wanted a discussion format vs. a list server? If you're distributing documents, then a list server may be a better option. There was some concern about responding on a list server because some people send their replies to everyone. It was also mentioned that documents could continue to be posted to GCMRC and USBR web sites. With Serena (GCMRC) and Linda (USBR) posting documents, there is more control in posting "official" documents.

ACTION: Mike is going to try setting up a discussion forum whereby only AMWG and TWG members could access barring any FACA restrictions.

Review of November 8-9, Meeting Minutes. Edits were noted. Linda will make the changes.

MOTION: Recommend approval of Nov. 8-9, 2000, meeting minute pending changes.
Motion seconded and carried.

Review of December 7-8, Meeting Minutes. Edits were noted. Linda will make the changes and include a revised draft with the materials for the next TWG meeting.

MOTION: Postpone approval of Dec. 7-8, 2000, meeting minutes until next meeting.
Motion seconded and carried.

Strategic Plan: Mary Orton said the discussion will focus on the Goals, Principles, and Qualitative Targets so TWG members will be able to brief their AMWG representatives in preparation for the AMWG meeting on Thursday. Time permitting, Mary said the group may also review the proposed changes the ad hoc committee made to goals 1-7. The documents to be used:

1. TWG Comments on Strategic Plan Document received at Dec. 7-8, 2000, TWG meeting with responses from AHC (Attachment 2). As of today, the Ad Hoc Committee has reviewed and responded only to comments 1-57, which correspond to goals 1-7.
2. Report to AMWG, January 2001, Strategic Plan Update (Attachment 3). This 37-page document has many of the changes that the Ad Hoc Committee has reviewed through today for goals 1-7.
3. The Report to AMWG, January 2001, Addendum Document (Attachment 4). The Ad Hoc Committee went back to the Strategic Planning document that the AMWG received at its last meeting and updated it with all the changes that the AHC is recommending today. The chart looks different because the current levels, target levels, and comments columns were deleted and replaced with the qualitative targets. They want the AMWG to focus on the qualitative targets for the MOs and to tell them if they are on the right track so they can move forward with refining the MOs and developing the INs. The redline-strikeout changes are from the last time the AMWG saw the document.
4. A new copy of the schedule (Attachment 5). Mary advised the group they would be looking at goals 1-7 today, goals 8-12 at the February meeting, approving the MOs in the March meeting, and approving INs at the May meeting.

Don Metz expressed some frustration with the number of changes to the documents and felt that the AHC should just forward to the AMWG. Bob replied that the AHC has received a lot of comments and worked to incorporate those into the documents. Randy said there were cuts made on riparian

vegetation and native fish vs. non-native fish. The AHC wants the TWG to hear it first so they are prepared to discuss with their AMWG representatives .

The members reviewed the Addendum document and comments were captured on flip charts. (Attachment 6)

Clayton questioned why the razorback sucker has a different target than the HBC. Randy responded that the razorback sucker issue is a little different from the HBC in that we are expected to help establish a second population of the HBC and take other measures such as the TCD and flow regimes to help that. Under the sucker issue, it's a question of habitat. We were directed in the Opinion to conduct a workshop and from the conclusions of that, the Service would make some additional comments and come to some conclusions on the basis of the workshop regarding populations of razorback in the canyon. In some ways it is still an open-ended question regarding what has to be done to remove jeopardy of razorback sucker in the canyon.

There was a lengthy discussion on preserving the OHWZ. Bill Davis said he didn't want to sacrifice the NHWZ and the marshes and sand beach areas to conserve part of the OHWZ. It's a matter of philosophy. There are some who would say sacrifice all of those to return to the natural, native pre-dam OHWZ community. He doesn't agree and thinks the wording is such that it says our priority is to preserve the OHWZ over the other three zones. He also took exception to using 1984 as the reference base for the NHWZ vegetation because it gives a much lower level of NHWZ vegetation as the target than what we have today. He felt the whole section reads as though we want to get rid of the NHWZ and marshes.

Bob Winfree said the ad hoc group and the small group were in agreement that the goal is to try and restore a dynamic ecosystem where some scouring does take place, where some of the communities increase temporarily at the expense of other communities, and that they try to maintain some level of all four communities.

Randy explained how the ad hoc group viewed the goal. The second qualitative target that refers to 1984 described an intermittent large flood regime that presumably would have some positive impact on the OHWZ. It did not result in the elimination of all marshes in the canyon nor did it result in the elimination of the NHWZ. Those both re-established. That process was something that was valued in the canyon. They envisioned a series of periodic BHBFs according to the ROD, perhaps and most likely at a higher magnitude than we've seen so far (45,000), that would accomplish that cyclic effect on each of these four communities so the sand beaches would come and go, the NHWZ would be slightly affected and then re-established, the marshes would be hammered initially but come right back, and perhaps by taking this type of process approach, the OHWZ might be preserved. It's not going to mean a static preservation of the current distribution of marshes and NHWZ.

Clayton said would like to see Randy's comments incorporated into the document as well have Randy provide the same explanation to the AMWG. Mary said the document would not be modified again before the AMWG sees it on Thursday and suggested that Clayton and the other TWG members inform their AMWG members of today's discussion.

Rick said that the ad hoc group met during the break and they would like to have the TWG review/comment on the remaining qualitative targets. Mary led the group in reviewing the remainder of the document.

Vision Narrative Presentation - Cliff referred the members to the TWG meeting held on Dec. 7-8, 2000. He said certain issues kept coming up that had to do with natural system vs. naturalized system, OHWZ vs. all the other water zones, trout vs. native fish. At the end of the first day Barry Gold came up with the idea that perhaps the small group doing the quantitative targets were not bridging the gap between the broad vision statement written by the AMWG on the river trip and the reality of the management objectives and goals. They had difficulty filling out the tables and interpreting the very broad vision statement by AMWG, which was broken down by goals by the AMWG, and then trying to get them to this group to write specific and very difficult qualitative and quantitative targets. Barry thought that perhaps some type of bridging document would make it easier to develop management objectives and revise the goals, while at the same time try to impress some of the important and underlying issues. The narrative paper (Attachment 7) is designed to try and bridge that gap. They formed an ad hoc group (Randy Peterson, Barry Gold, Norm Henderson, Rick Johnson, Andre Potochnik, Dennis Kubly, Nancy Coulam, and Cliff Barrett). Barry volunteered to be the scribe and everyone was invited to write up their desired narrative papers. Barry would then consolidate them in one document that would help us get from the Vision and Mission Goals Statement to something that can be used as guidance to the small groups in writing up targets.

Management Objectives: Mary directed the members to use the "Report to AMWG January 2001" document as they would be reviewing the comments beginning on page 3. There was some discussion as to whether the members needed to go through the entire document. Randy said he wanted to highlight some critical issues the TWG needs to be aware in terms of the AHC's decision on the comments. If they missed these, it would be make the AMWG discussions more difficult:

- MO#18, conclusion on the quantitative target for trout of 250,000 in terms of an upper limit. The AHC is not comfortable with this and suggested that in the past since 100,000 was used that we stay there until it is shown that the greater number won't cause viability issues with native fish.

- MO#19, the AHC didn't see this as conflicting with #18. You could have 100% natural recruitment at a lower target level.

- MO#25, target level issue and stage level at Vaseys, there was a disconnect between having a stage level “at some place” area vs. some 10-year running average as being part of the target level. Also affected were the potential areas outside Vaseys where KAS might exist, those three translocated populations. And while those translocated populations would not be figured into the calculation, they would still be in need of being monitored. The cut on the stage level was pretty confusing and the AHC felt that a more straightforward approach might simply be a certain percentage of habitat occupied in 1996.

- #MO28 and 30, The discussion centered around “at some place.” The comment was calling attention to the reach of river below Separation to Lake Mead. The AHC changed it to the CRE. The scope of the AMP was part of that discussion as well as the outcome of recent litigation on the absence of discretion the Secretary has in operating Lake Mead to preserve SWWF habitat.

- #Comment 41 (Bill D.) Flows of 123,000 cfs are within the operation and flexibility of the dam as defined in the glossary. Make sure we understand what operational flexibility refers to.

ACTION: Bill Davis will provide a definition of operational flexibility

Bill said he wanted to raise the issue in regard to planning for the use of spillways to create flows. Since the dam is operated under a controlled environment, you don't purposely raise the level of the reservoir up so you can operate the spillway to create a higher flow. That is done only as a stopgap measure and the spillways are used only as a last resort. He is hearing that there is an attempt to try to design or plan for that as a feature for water releases to be incorporated in the plans here so that we can create certain conditions downstream. He wants to know what Reclamation is going to do on this. Randy replied that Reclamation can take no action to artificially raise the reservoir up to be able to use the spillways because the annual releases that would affect this situation are controlled by statute, compact, and criteria. If the water were on the gate, within 50 feet of being full, then the spillway gates could be raised just as outlet tubes could be opened to make releases through those. There is no difference in the use of those two facilities. One might perceive that the outlet tubes would be more robust and be able to be used over a longer period of time but Reclamation is confident that with the addition of the air slots, the spillways can be used safely without fear of the cavitation which occurred in 1983.

Mary reviewed the AMP Schedule and referred to page 3. She pointed out that under the column labeled “MOs” for February 13-14, the review and comment on MOs will be for Goals 7-12. She said the AHC would like to take the Draft Detailed Outline of AMP Strategic Plan (Attachment 8) and get some volunteers to write portions of the Strategic Plan. During the TWG River Trip (March 24-31) the plan is to review/revise the drafts.

Amy questioned if there were any sections from the GCMRC's Strategic Plan which could be used in

writing the AMP SP. Barry said that you could look at Chapters 1-3, except that chapters 1-3 have led to the big discussion about there needing to be an adaptive management plan because people didn't like how they were written. Bob said his recollection was that the AMWG started the Strategic Planning Committee at that time and were to take chapters 1-3 and revise them for a Strategic Plan. Mary asked if there was anyone who wanted to look at those and start a review. Cliff suggested that the question be asked tomorrow so they had a chance to think

about it and review their schedules before responding. The deadline for getting the materials distributed would be March 9, 2001.

ACTION: TWG members will review the document this evening and be prepared to discuss at tomorrow's meeting.

Adjourned: 4:45 p.m.

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D. Randolph Seaholm, CWCB
John Shields, WY State Engr. Office
Robert Winfree, NPS/GRCA

Committee Members Absent:

Robert Begay, Navajo Nation
Perri Benemelis, ADWR
Christopher Harris, CRBC

Nancy Hornewer, USGS
Matt Kaplinski, GCRG

Alternates Present:

Tim Begay

For:

Robert Begay, Navajo Nation

Other Interested Persons Present:

Jan Balsom, NPS
Mary Barger, WAPA
Gary Burton, WAPA
Nancy Coulam, USBR
Barry Gold, GCMRC
Linda James, Office of Bob Lynch for IEDA

Dennis Kubly, USBR
Ruth Lambert, GCMRC
Mary Orton, Mary Orton Company
Barbara Ralston, GCMRC

Recorder: Linda Whetton, USBR

Meeting Opening and Administrative Items

Convened: Start time: 8:05 a.m.

Review of Agenda - Rick said the meeting would begin with a report from the Strategic Planning Ad Hoc Group that met last night.

Narrative Description. Mary Orton asked the members for comments on the draft narrative description prepared by Barry and Randy. Comments were recorded on flip charts (Attachment 9).

There was some discussion on the length of the document. Bob stated it's great to have a shared vision but if it is too long, it will be hard to see. His suggestion was one page, front-to-back. Others felt that one page was too limiting and not enough information could be provided.

Mary asked what the process should be for completing the narrative. Does it end up as part of the Strategic Plan Document? How should it move through the process of approval? Wayne suggested the TWG complete and refer to the AMWG. Barry commented that there is some cross fertilization between AMWG and TWG and that the process needs to move forward. He also said there is only one person in the cultural area but none of the tribes were involved and suggested Kurt be involved in drafting the cultural portion but also include spiritual values.

Barry listed the sections that would need to be written: Introduction, aquatic, riparian, cultural, recreational, and water and power. It was decided that someone other than Barry should be the coordinator on the writing assignments. Gary Burton will be the new coordinator.

Report from Strategic Planning AHC Meeting. Rick reported on the meeting the AHC held last night and passed out a list of the proposed changes they received from the TWG (Attachment 10). The AHC reviewed and if they concurred with the suggestion, then they will advise the AMWG of their concurrence. Randy mentioned goal 6.2 and stated that the qualitative targets for goal 6 were changed by the AHC and asked the members to review. Rick said the intent is for the TWG members to go to their AMWG representatives and make them aware of the changes.

MOTION: The TWG concurs with changes 1-7 on TWG comments to Strategic Plan Addendum Document.

Motion seconded.

Motion passed unanimously.

Narrative Writing Assignments - Mary said the AHC offered the opportunity to TWG members to assist in drafting parts of the Strategic Plan. Those parts are in the Detailed Outline. The drafts will be

reviewed and then brought on the TWG River Trip for more review and revision. The deadline is March 9. (Refer to Attachment 9 for additional suggestions.)

Barry stated that some roles and responsibilities don't track with the EIS and he would like to see Randy or someone else review the EIS, make it current, and then bring it back to the TWG. Bob cautioned that you can reference the EIS and other things but also need to note if the current direction of the AMP is something different. Under a section, you could write "go to the following document in the appendix" which would still keep the document short. Bill also added that there are constraints, certain things that are going to control this program that this program has no control over.

Rick said the outline will be given to the AMWG on an "FYI" basis. Mary will make the changes and new copies will be given to the AMWG tomorrow. The AHC will also meet briefly after today's meeting and make a decision on what to bring to the AMWG tomorrow.

MOTION: Recommend to AMWG to approve the Detailed Outline as amended in today's meeting. Motion seconded.

Discussion of motion.

Voting Results: Yes = 14 No = 3 Abstentions: 0

Comments:

Dave Cohen: Didn't vote. We are blind-siding AMWG. If there were a process, send to TWG ad hoc and have them send to AMWG ad hoc. We refuse to deal with issues in a concise manner. That won't resolve conflicts. How are we going to address priorities?

Randy Seaholm: Don't feel it is necessary to revisit the issues as they have been discussed at some length.

Motion passed.

Communication Process - Dennis Kubly referred the members to page 8 of the December 7-8, 2000, meeting minutes and also displayed a new diagram (Attachment 11). He asked if all the entities were represented in the boxes in terms of how information is communicated through the AMP. Does all information flow in both directions? Does a diagram like this have a place in the Strategic Plan? He would like to take one of the segments and identify an example or two where we've experienced information flow. Are there bottlenecks? Are there ways to make it better?

Questions/Suggestions:

- Science Advisory Board be broadened.
- Is there a filter between the Secretary DOI and the Secretary's Designee?
- Can you do a decision diagram?
- What are the "official" lines of communication?

- Box of education: 1) compliance 2) cultural and compliance issues
- Internal budget process group
- How does the Sec. Lands & Minerals affect the process?
- Needs to be a series of diagrams - science, budget, management actions, etc. Try to show all arrows and boxes. Diagrams should be specific to decision.
- Series of overlays would be helpful.
- Potential for weakness is the Secretary's Designee position- he's the aorta. Nothing goes up and down if pinched.
- Amendment to Charter is a problem. Outreach ad hoc group never met. How do we satisfy ourselves that communication works both ways?
- What do we need with all these things? It's great to understand but what do we do with it?

Action: Dennis Kubly will incorporate suggestions and bring another iteration to the TWG in February.

Hydrology Update - Randy Peterson reported that the basin conditions for the last month have been very dry with a very high pressure zone over the basin. As a result, the snowpack integrated average has deteriorated from 92% of normal last month at the beginning of the month to 82% right now. If you compared last month's snow map to this month's (Attachment 12), you would see that most of the basin has dried out. Much of the basin is in the 70's and 60's percent of normal, a few areas of 80. The way that corresponds into runoff, the National Weather Service uses the current snowpack conditions from today and assumes average precipitation and temperature for the remainder of the runoff season through the end of July. They run that through their models which produces a percent of normal runoff. The forecast is usually some type of middle ground between average for the rest of the year and the current snowpack. So if future precipitation is average, current snowpack is 82%, then the runoff is somewhere between the two. The inflow estimated for the entire water year right now is about 89% of normal. There is about 70% of the snow accumulation season remaining through July so there is still a lot of time for this to change.

A second handout (Attachment 13) depicted the estimated releases for the remainder of the year. The probability of a low 8.23 maf release year occurring is somewhere in the 25-30% range. The pattern of this being a 8.23 maf release year is very typical when one would see it coming. Last year if we were forced to release a 8.23 maf, since we saw higher releases in the fall, we would have seen much lower releases all the rest of the year. The message is that there are a lot of different ways for an 8.23 maf year to be released. The average release year is in the order of a 10.5-11 maf. You can see the releases up through May are going to be following an 8.23 release schedule. We have a little bit of room in order to accommodate any future increases in the forecasted runoffs. That's why the BHBF likelihood is rather low.

Experimental Flows Update - Randy passed out copies of the Experimental Flow Ad Hoc Group Draft Meeting Minutes dated Dec. 11, 2000 (Attachment 14). They had four charges:

1. Prepare recommendations for B.O. Flows, BHBFs, and a HMF in 2001
2. Prepare program of experimental flows for BHBFs
3. Prepare program of experimental flows to comply with the Biological Opinion
4. Determine criteria for when 8.23 maf release years exist

The ad hoc has completed the first task.

MOTION #1: Recommend that if a BHBF is triggered in 2001, that a 45,000 cfs BHBF be released.
Motion seconded.

Discussion.

Voting: Yes = 16 No = 0 Abstained: 1

Robert King: Don't think it is necessary. We're already there.

AMENDED MOTION #1: Recommend that if a BHBF is triggered in 2001, **and the resource criteria are met**, that a 45,000 cfs BHBF be released.

Voting: Yes= 16 No = 0 Abstained = 2

Wayne Cook: The record is clear. We shouldn't waste an opportunity to test BHBFs greater than 45,000 cfs.

Robert King: Same comment.

MOTION #2: Recommend that if sufficient tributary inputs occur this summer, a HMF be released.
Motion seconded.

Discussion.

AMENDED MOTION #2: Recommend that if sufficient tributary inputs occur this summer **or fall and if a HMF can be scientifically evaluated**, a HMF will be released in 2001.

Voting: Yes = 15 No = 0 Abstained = 4

Bob Winfree: Don't think the additional wording is needed.

Wayne Cook: The program is to modify and control habitat, not fund science.

Robert King: Same comment

Norm Henderson: Same thing

AMENDED MOTION #2: Recommend that if sufficient tributary inputs occur this summer or fall (**before Sept. 16**) and the HMF can be scientifically evaluated, a HMF will be released in 2001.

Voting: Yes = 15 No = 0 Abstained = 4

Comments: Additional wording isn't needed.

AMENDED MOTION #2: Recommend that if sufficient tributary inputs occur this summer or fall, ~~(before Sept. 16)~~ a HMF be released in 2001.

Yes: 21

No: 0

Abstained: 0

FULL MOTION: Recommend that if sufficient tributary inputs occur this summer or fall and if HMF can be scientifically evaluated, a HMF will be released in 2001.

Voting: Yes = 17 No = 0 Abstained = 3

Comments: We made our point. You can always evaluate it.

Motion carried.

Randy said his third motion is a little different from the ad hoc group recommendation. It's based on an inability to measure the impacts this summer. He asked the GCMRC what the potential was for being able to conduct a repeat of the type of research that went into last year's test and the answer was they "cannot." It is primarily a funding issue and he's not sure how to come up with an extra \$1M +/- to carry that out. Absent those types of assurances, he thinks it would be unwise to conduct it without being able to monitor it.

MOTION # 3: If this year is a 8.23 release year, that we release according to ROD constraints.

Motion seconded.

Discussion.

AMENDED MOTION # 3: If Water year 2001 is an 8.23 maf release year, then [we release according to ROD constraints.]

Discussion.

AMENDED MOTION # 3: If Water year 2001 is an 8.23 maf release year, then we release according to the ROD and we do not conduct an LSSF experiment.

AMENDED MOTION # 3: Recommend that if water year 2001 is an 8.23 maf release year, then releases be according to the ROD and an LSSF experiment will not be conducted.

Voting: Yes = 18 No = 0 Abstained = 1

Nikolai Ramsey: I don't understand the issue well enough to vote.

Motion passed.

Power Presentation - Cliff Barrett

Cliff referred to the rewrite starting on page 5 of the Nov. 8-9, 2000, meeting minutes.

Cliff said that WAPA and CREDA are at odds over whether CREDA is being given the proper credit for repayment of the Adaptive Management Program power revenue funds. He referred to the "Basin Fund Cash Flow" chart (Attachment 15). The O&M funding includes all the reimbursable O&M costs plus WAPA is considering the AMP as an O&M expense. The AMP is considered an additional outflow. Over time and everything being equal, the basin fund goes down. CREDA had this issue with WAPA long before the 2000 dry year and the LSSF. Clayton added that expenditures of the AMP in a year like this helped create a liquidity problem. Cliff said that WAPA does not include AMP funding as an O&M cost in their rate setting process, that makes it rate neutral temporarily. Because CREDA does not agree with WAPA on how they are treating the crediting process, they still have that argument. CREDA reads the law that if you spend \$7M in year 2000 on the AMP, power users repayment obligation for capital features should be reduced \$7M in year 2000 as if that payment had been made. In the last meeting CREDA had with WAPA, they said they were doing that but CREDA asked to see the books. That was a month ago. He said that when they start the next rate process in spring, it will be a major issue for discussion. The basin fund issue is a cash flow problem. You will always have less money coming in than you have going out.

Cliff said he has received a lot of questions that relate to how the power system operates. He suggested the TWG visit WAPA's Desert Southwest Office Control Center located in Phoenix. WAPA could have people available to answer questions and CREDA would also try to have an operator on hand to answer questions from a customer viewpoint. Cliff thought it could be done in an hour and a half. Rick advised Cliff to bring this up later when future agenda items are discussed.

GCMRC Bibliography - Barry said the GCMRC prepared a bibliography of all the reports received since the GCMRC was formed (Attachment 16). Barry asked the members to review the list and let him know via e-mail/phone which ones the GCMRC should make presentations on. Barry said the Lake Powell PEP will be presented at the TWG meeting in February so another presentation could be scheduled for the April TWG meeting. Barry also asked the members to let him know of any documents that weren't on the list but which they felt should be included.

Bob Winfree provided copies of a handout (Attachment 17) regarding the Grand Canyon National Park Research Offices web page. They have three on-line bibliographies that can be searched plus all the papers that the National Park Service is aware of. The most comprehensive bibliography was done for the Grand Canyon Natural History Association and the NAU Cline Library has put that on line. It has a lot of unpublished data plus remote newspaper articles, etc. It's called NRBib and actually provides a search for all published and unpublished reports that are in National Park Service libraries with the exception of a few sensitive ones. The third one that will be online in a week is the Investigator's Annual Report.

LEGISLATIVE UPDATES:

1. Randy reported that the AMWG Charter was signed and filed today.
2. With respect to responses to letters regarding HR4733 (Authorization Bill which capped the power funding for the AMP), he talked to Assistant Secretary's office on Monday and the letters still had not yet been signed. On behalf of the Dept., he apologized for the delay but stated that the Dept. of the Interior was well aware of the letters when it responded to H.R. 4733.
3. Randy said the AMWG re-nomination letters were prepared and up until last week were in the same routing package with the Charter. However, due to the urgency in getting the Charter signed, the package was divided. He is hopeful they will be signed within the next two weeks. The new members who will be attending the AMWG meeting tomorrow will be participating as alternates.

WRAP UP

Future Agenda Items

- how PRS/rate setting works
- PEP (Lake Powell) in Feb. (IWQP)
- WAPA - Desert Southwest Office Field Trip
- Sediment Ad Hoc Paper (Ted Melis)
- Remote sensing update
- Conceptual modeling workshop and science symposium (week of April 23)
- Having A TWG response to PEP to Expert Panel report
- response to KAS Expert Panel Review
- stock assessment workshop report
- TCD Expert Panel Report
- Calendar

Upcoming TWG Meetings

February 13-14, 2001.

March 14-15 (consensus on MOs)

March 24-31 - river trip

May 30-31

April 23 (week of) -> conceptual modeling

AMWG Meeting - April 10-11 (final concurrence on MOs)

TWG Meeting - April (day before/after depending on when AMWG schedules their meeting).

- TCD Update

Meeting Review:

positive

negative

civil nature of discussion on
difficult issues

side conversations

ADJOURNED: 4:45 p.m.

General Key to Adaptive Management Program Acronyms

ADWR - Arizona Department of Water Resources	IN - Information Need (stakeholder)
AF - Acre Feet	IT - Information Technology (GCMRC program)
AGFD - Arizona Game & Fish Department	KAS - Kanab ambersnail (endangered native snail)
AGU - American Geophysical Union	KAWG - Kanab Ambersnail Work Group
AMP - Adaptive Management Program	LCR - Little Colorado River
AMWG - Adaptive Management Work Group	LCRMCP: Lower Colorado River Multi-Species Conservation Program
AOP - Annual Operating Plan	MAF - Million Acre Feet
BA - Biological Assessment	MA - Management Action
BE - Biological Evaluation	MO - Management Objective
BHBF - Beach/Habitat-Building Flow	NAAO - Native American Affairs Office
BHMF - Beach/Habitat Maintenance Flow	NAU - Northern Arizona University (Flagstaff, AZ)
BHTF - Beach/Habitat Test Flow	NEPA - National Environmental Policy Act
BIA - Bureau of Indian Affairs	NGS - National Geodetic Survey
BO - Biological Opinion	NHPA - National Historical Preservation Act
BOR - Bureau of Reclamation	NPS - National Park Service
CAPA - Central Arizona Project Assn.	NRC - National Research Council
cfs - cubic feet per second	NWS - National Weather Service
CRBC - Colorado River Board of California	O&M - Operations & Maintenance (USBR funding)
CRCN - Colorado River Commission of Nevada	PA - Programmatic Agreement
CREDA - Colorado River Energy Distributors Assn.	PEP - Protocol Evaluation Panel
CRSP - Colorado River Storage Project	Powerplant Capacity - 31,000 cfs
CWCB - Colorado Water Conservation Board	Reclamation - United States Bureau of Reclamation
DBMS - Data Base Management System	RFP - Request For Proposals
DOI - Department of the Interior	RPA - Reasonable and Prudent Alternative
EA - Environmental Assessment	SAB - Science Advisory Board
EIS - Final Environmental Impact Statement	Secretary(≅) - Secretary of the Interior
ESA - Endangered Species Act	SWCA - Steven W. Carothers Associates
FACA - Federal Advisory Committee Act	TCD - Temperature Control Device (for Glen Canyon Dam water releases)
FEIS - Final Environmental Impact Statement	TCP - Traditional Cultural Property
FRN - Federal Register Notice	TES - Threatened and Endangered Species
FWS - United States Fish & Wildlife Service	TWG - Glen Canyon Technical Work Group (a subcommittee of the AMWG)
GCD - Glen Canyon Dam	UCR - Upper Colorado Region (of the USBR)
GCMRC - Grand Canyon Monitoring and Research Center	UCRC - Upper Colorado River Commission
GCNP - Grand Canyon National Park	UDWR - Utah Division of Water Resources
GCNRA - Glen Canyon National Recreation Area	USBR - United States Bureau of Reclamation
GCPA - Grand Canyon Protection Act	USFWS - United States Fish & Wildlife Service
HBC - Humpback Chub (endangered native fish)	USGS - United States Geological Survey
HMF - Habitat Maintenance Flow	WAPA - Western Area Power Administration
HPP - Historic Preservation Plan	WY - Water Year (a calendar year)
IEDA - Irrigation and Electrical Districts Association of Arizona	