

Glen Canyon Dam Adaptive Management Work Group
Conference Call - September 6, 2006

Conducting: Mark A. Limbaugh, Secretary's Designee
Facilitator: Mary Orton

Date: Sept. 6, 2006
Convened: 2 p.m. (EDT)

Committee Members:

Joe Alston, NPS
Darryl Beckmann, USBR
Steven Begay, Navajo Nation
Brenda Drye, Southern Paiute Consortium
Jay Groseclose, NM Interstate Stream Comm.
Amy Heuslein, BIA
Loretta Jackson Kelly, Hualapai Tribe
Leslie James, CREDA
Rod Kuharich, State of Colorado
Phillip S. Lehr, Colorado River Comm./NV
André Potochnik, GCRG

Ted Rampton, UAMPS
Nikolai Ramsey, Grand Canyon Trust
John Shields, WY State Engineers Office
Sam Spiller, USFWS
Mark Steffen, Federation of Fly Fishers
Dennis Strong, UDWR
Bruce Taubert, AGFD
Brad Warren, WAPA
Bill Werner, ADWR
Gerald Zimmerman, Colo. River Board of California

Committee Members Absent:

Carleton Albert, Jr., Pueblo of Zuni
Max Oelschlaeger, Grand Canyon Wildlands Council
Leigh Kuwanwisiwma, The Hopi Tribe

Interested Persons:

Andrea Alpine, USGS
Matthew Andersen, USGS/GCMRC
Mary Barger, WAPA
Christine Beard, USGS/GCMRC
*Charlie Bullets, So. Paiute Consortium
Gary Burton, WAPA
George Carr, Colorado River Comm./NV
Tara Conrad, Office of the AS-WS DOI
Wayne Cook, WAPA
Kurt Dongoske, TWG Chair
Helen Fairley, USGS/GCMRC
Dave Garrett, M³ Research
Rick Gold, USBR
John Hamill, USGS/GCMRC
Norm Henderson, NPS
Holly Johnson, So. Nevada Water Authority
*Rick Johnson, Grand Canyon Trust
*Robert King, UDWR
J.D. Kite, USGS/GCMRC
*Glen Knowles, USFWS
Dennis Kubly, USBR
Deborah Lawler, USBR

Mark Limbaugh, AS-WS/DOI
Bob Lynch, Attorney at Law (IEDA)
Ted Melis, USGS/GCMRC
Anthony Miller, Colorado River Comm./NV
*John O'Brien, Grand Canyon River Guides
*Don Ostler, UCRC
*Clayton Palmer, WAPA
*Bill Persons, AGFD
Randall Peterson, USBR
Ken Rice, USBR/Glen Canyon Dam
Larry Riley, AGFD
William Rinne, USBR
Tom Ryan, USBR
*D. Randolph Seaholm, CWCB
LeAnn Skrzynski, So. Paiute Consortium
Bob Snow, DOI
*Larry Stevens, Grand Canyons Wildlands Council
Dave Wegner, Member of the Public
John Weisheit, Living Rivers

* Proposed AMWG alternates

Recorder: Linda Whetton, USBR

Introductions and Administrative Items. Mr. Limbaugh welcomed the newest members of the AMWG: Jay Groseclose (New Mexico), Dennis Strong (Utah), and Brad Warren (WAPA). He thanked the members for joining the conference call and suggested that future conference call meetings could be used to address issues that arise in between regularly scheduled face-to-face meetings.

He addressed two administrative items: (1) Frustration with the new requirement to have Secretarial approval of FACA alternates. He explained that this is a Government-wide requirement and said he hopes the appointments process will be prompt. (2) The settlement of the lawsuit filed by the Center for Biological Diversity against the Department regarding operation of Glen Canyon Dam has been approved by the court. The settlement contemplates additional NEPA and ESA work pursuant to the ongoing adaptive management program, but does not affect in any way the role and function of the AMWG. He anticipates the agreement will be posted in the next few days on the AMP website.

He said the Technical Work Group and Science Planning Group have been hard at work to assist in the development of long-term planning. He is looking forward to working with the broad spectrum of stakeholders AMWG members to find consensus on the complex issues they face, as they advise the Department on the operation of Glen Canyon Dam.

Meeting Management. Mary Orton stated the meeting had been noticed in the Federal Register and is considered an official AMWG meeting. She reviewed the ground rules and cautioned the members that time limits would be imposed in order to accomplish the purpose of the meeting within the two-hour timeframe. She referenced the Preparation Document (**Attachment 1**) e-mailed on August 29, 2006, that listed AMWG members' comments on and proposed changes to the TWG-recommended FY 2007 hydrograph (**Attachment 2**), budget (**Attachment 3**) and workplan (**Attachment 4**). She noted that the meeting would begin with brief presentations on these three documents.

FY07 Hydrograph. Based on guidance received from Mr. Limbaugh earlier in the year stating that water year 2007 should be a transitional year, John Hamill said GCMRC and the Science Planning Group have been working to reach agreement on a long-term experimental plan. In discussion with the SPG and the TWG, three different options were considered for WY07: (1) ROD flows or MLFF, (2) a modification of the first option to include ROD flows with late summer/fall steady flows, and (3) a proposal from Grand Canyon Trust for steady flows in August and September, otherwise ROD flows for October 2006 through July 2007 and steady flows in August and September, with equal monthly volumes of flows. He said the three options are aligned fairly close to the long-term experimental options that have been under discussion by the SPG and TWG. He said the TWG's recommendation for WY07 was for ROD flows.

He noted that while SPG and TWG discussed beach habitat/building flows (BHBFs), the TWG did not recommend a BHBF. Since that time, he has received new information that he provided in a memo sent to the AMWG on Sept. 1, 2006 (**Attachment 5**). The memo included information from a Sediment Protocol Evaluation Panel (PEP) meeting in which nine independent scientists reviewed the GCMRC sediment program for the last several years. It was their unanimous recommendation to implement a BHBF at the earliest opportunity available. GCMRC sediment staff determined that the current levels of sediment in the system are relatively high. The levels are closer to the BHBF trigger than they were for the last BHBF in August 2004. Based on the fall storm patterns, there is a reasonable chance that the trigger could be reached later this fall. John said it might be worthwhile to refer the idea of a BHBF to the SPG or TWG for further consideration before a final decision is made by AMWG. He believes GCMRC could develop a credible workplan for evaluating a BHBF based on the funds available in the experimental fund, as well as the ongoing monitoring programs that are funded through the Annual Work Plan.

FY07 Reclamation Budget. Dennis Kubly said Reclamation's budget simply added the Consumer Price Index (CPI) to last year's costs with several exceptions.

- Project C1, Compliance Documents – This line shows a substantial increase from \$22,000 to \$263,000 to cover environmental compliance anticipated in FY07 once the Secretary makes the choice on the experimental options.
- Project C4, Experimental Carryover Funds - GCMRC proposed \$500,000 be set aside under the assumption that the cost of an experiment is approximately \$1.5 million and at \$500,000 per year, there would be sufficient funds to fully conduct an experiment in three years.
- Project C5, Integrated Tribal Resources Monitoring – These funds will be allocated when the tribes have completed their contracts with Reclamation. The tribes will identify the monitoring they will do, and their plans will be presented to TWG. The remainder of the funding is a CPI adjustment.

FY07 GCMRC Budget. John Hamill said the FY07 GCMRC budget was developed in cooperation with the SPG and TWG. It is a transitional plan designed to fund the program for one year while consideration is given to the development and finalization of a long-term experimental plan. While it is transitional, and despite the fact that it does not include the long-term experimental plan, it is also the first year of the five-year monitoring and research plan that has been under development by the SPG and is scheduled for review by the TWG later this summer. The focus of the monitoring and research is on the five highest priorities/questions that the AMWG approved in August 2004; namely,

1. why HBC populations are not thriving and what can be done,
2. the effects of dam operations on cultural resources,
3. determination of the best flow regime,
4. sediment loss, and
5. a better understanding what would happen when a temperature control device was implemented and what kind of safeguards should be in place.

The areas of emphasis are: (1) continued monitoring of status and trends for sediment resources, (2) New monitoring programs that are in the research and development stage for cultural resources, archeological sites, traditional cultural properties, and non-native fishes, and (3) new information to assist in the design and operation and evaluation of a TCD. The FY07 workplan does not include any new experimental projects, as they are being deferred until agreement is reached on the long-term experimental plan.

TWG Chair Report. Kurt Dongoske referred to the report he distributed before the meeting (**Attachment 6**). He said the TWG voted to continue ROD flows in FY07 with no BHBF, as John had said. The TWG also recommended reprogramming \$48,000 from a submerged aquatic vegetation project to the continuation of rainbow trout redds research work being done by Josh Korman. The TWG then approved and recommended to the AMWG the Draft FY07 AMP hydrograph, budget, and workplan, as modified by their recommendations and subject to GCMRC providing the TWG and AMWG a final FY07 workplan and budget in time for the fall AMWG meeting (today's conference call). The TWG also asked that Kurt provide an analysis of the budget review process used in FY07 with suggested changes for improvement, which were included in his written report. The TWG also agreed to incorporate the discussion and agreements from the August 3, 2006 TWG meeting, which he believed John has done.

Since Dennis had to leave the conference call early, Mary asked if there were any clarifying questions for him on Reclamation's portion of the FY07 budget. Hearing none, she asked for questions on GCMRC's portion of the budget.

Bruce Taubert was concerned that LCR sampling had not been fully funded. John said Glen Knowles raised the issue at the TWG meeting, but it was not funded. However, John said his staff was able to find an additional \$14,000 to re-direct to FWS for the LCR work. Sam Spiller concurred that the amount of funding would be sufficient.

Brenda Drye asked about the tribal funding for FY07. John said he could not speak for all the different funding for the tribes, but said there was a decision and recommendation from both the SPG and the

TWG that an additional \$125,000 plus overhead be set aside to support tribal monitoring. The \$25,000 per tribe is subject to the tribes providing a report to Reclamation and the TWG in FY07 that identifies resources important to the tribes, how those resources might be impacted by dam operations, and monitoring protocols for tracking the status and trends of those resources. This information will come from previous funding that was allocated to the tribes. and the FY07 money now set aside in the budget to support continued tribal resources monitoring when the reports are completed. There's also the \$95K contributed from each DOI agency for tribal participation.

André Potochnik asked for Kurt's perspective on the TWG's discussion with regard to the BHBF possibility and whether there was a technical discussion. Kurt said there was a technical discussion on doing a BHBF and also whether March or September were the more appropriate months to hold a BHBF. It was the sense of the TWG that GCMRC was able to pretty much just implement monitoring of a BHBF and not put any specific research programs in operation during a BHBF which was one of the bigger contributors to the TWG voting against having a BHBF in 07. Nikolai said he heard there wasn't a technical discussion of the three options and that GCMRC wasn't prepared to discuss the implications of the different options that in a sense they were voted on by reputation rather than by a clear understanding of the technical implications. Kurt said GCMRC provided the TWG with the best information they had on the resource impacts by the different flows. John said they provide a resource assessment of the impacts or likely effects of the three different options. However, they didn't present a full-blown analysis because at the time of the meeting, there were only two options open for consideration, one was MLFF and the second was MLFF with steady flows in September and October. Those were closely aligned with two options that had been under active discussion with the SPG and the TWG over the course of the entire year and GCMRC had provided a fairly complete analysis including a written analysis of those options that had been discussed thoroughly with both the SPG and TWG.

Brad Warren asked John how GCMRC could now develop a science plan for the BHBF if they said that they could not at the TWG meeting because they lacked the funds. John responded that an independent review panel was unanimous in recommending that a BHBF should be implemented at the earliest available opportunity. In addition, an updated report suggested that the trigger for a BHBF might be met this year. He said the proposal made for a BHBF at the SPG meeting and subsequently at the TWG meeting was one of a management action with limited experimental research associated with it. GCMRC did not support that proposal and thought that adequate experimental research that could be done with the money in the experimental fund. The last experimental test cost around \$1.2 million. John thought they would still need \$900,000 - \$1 million if they were to do another experiment. GCMRC staff have learned a lot and feel they can put together a plan in the next three months that would provide some good answers about the effects of the BHBF, both on sediment as well as resources that are associated with building sandbars.

Rod Kuharich voiced concern over the beach habitat building flows and the long-term effects of flushing the sediment out of the system or creating camping areas. He does not think there is equilibrium to be reached in the system with regard to sediment and the fluctuating flows.

Motion: The AMWG recommends to the Secretary of the Interior the adoption of the Fiscal Year 2007 hydrograph, budget, and workplan, as recommended by the TWG to the AMWG.
Motion seconded. (Rod Kuharich)

Mark Limbaugh said that four proposed amendments to hydrograph, budget, and workplan had been sent in before the conference call. He asked Mary to guide the members in addressing each of those in preparation for an overall final vote on the above motion. Mary said the Secretary's Designee has requested that the AMWG hear twice from the people who support each proposed change and twice from those who oppose it, if any. The proposer will first have up to three minutes to explain his or her proposal and then someone who wishes to speak in opposition to the change will also have up to three minutes. The proposer or another supporter will have up to another two minutes to defend the proposal,

and then someone in opposition will also have up to two minutes. After all four proposed changes have been presented, there may be time to hear additional changes that were not previously provided to the AMWG. After each proposal is discussed, it will be put to a vote. If there is not consensus, those that gain at least two-thirds of the vote will be presumed to amend the motion to accept the TWG-recommended hydrograph, budget, and workplan. When all the proposed changes have been addressed, a final vote will be taken on the full hydrograph, budget, and workplan.

First Amendment. Brad Warren said his amendment was to add a note to the one-page chart/table showing the WY07 hydrograph. The text would read: "**Monthly volumes are subject to change in accordance with the final Annual Operating Plan for Colorado River Reservoirs 2007.**" Western believes that the AOP is the proper venue for determining the operating plan. It was their understanding the recommendation made by the TWG was not to conduct an experiment and for that reason Western supports the proposal for MLFF during 07. Western doesn't want the table to be viewed as the exact volumes that must be released in each month and that the AOP allows flexibility for water to be moved around based on changing hydrologic conditions or other relevant factors.

Nikolai Ramsey said he concurred with Brad that flexibility needs to be recognized for a number of purposes but one of them is park values as stipulated under the Grand Canyon Protection Act. It's been recognized by Secretary Norton as being a project purpose for which Glen Canyon Dam is operated and the Grand Canyon Trust would like the flexibility available not only for power generation but also for environmental resources.

Mark asked if there were any opposition to the amendment. None being voiced, he noted that the amendment was approved by consensus.

**Modify the hydrograph chart/table by adding, "Note: Monthly volumes are subject to change in accordance with the final Annual Operating Plan for Colorado River Reservoirs 2007."
AMENDMENT PASSED BY CONSENSUS.**

Second Amendment. Nikolai Ramsey said that since FY07 is the first year of their proposed multi-year experimental flow regime, Grand Canyon Trust wants to begin experimenting with steady flows. Based on recent data from GCMRC suggesting that the 2000 summer steady flow had something to do with the bump-up in the population HBC to 5,000, they want to further test that beyond just one time. They are proposing for October 2006 through July 2007 equalized monthly volumes around 700,000 af per month. It would still permit normal daily ROD fluctuations but they believe the equalized monthly volumes are likely to be better at preserving sediment in the system. The months of August through September 2007 are key months for when young of year humpback chub get flushed out of the LCR. They're very vulnerable both to temperatures and bigger flows and so they would like to see low steady flows around 10,000 cfs for monthly volumes around 620,000 af for those two months. Their proposal has just two months of steady flows in it. They believe it's important to conserve the sediment and also benefit the humpback chub and their proposed flows do that better than any of the other flows.

In Opposition. Brad Warren said he wanted to speak in opposition to Nikolai's amendment because it would have significant impacts to power production. It would force WAPA to have low production in the summer when it's really needed and in the winter and bring it up in the spring which doesn't match the contractual obligations they have. Since the options were fully vetted through the TWG process and got zero votes, he doesn't feel it should be further considered.

In Support. André Potochnik said that the Grand Canyon River Guides united with GCT because of the TWG vote to not continue on with fall steady flows. The steady flows have been done for three years in a row and they didn't feel right in moving away from doing a very valuable experiment and have three years of supporting data. He asked how keeping the flows at low volume in September and October affect the recruitment of HBC to adulthood over a multi-year time span knowing that the HBC have to

mature to adulthood in roughly 4-5 years. If they've already gotten three years of study, he thinks it should be continued in an effort to see whether there could be a beneficial effect within a year or two.

In Opposition. Mark Steffen said there is a concept of equilibrium that comes from fluctuating flows, and the idea of having fluctuating flows 10 months of the year and steady flows two months of the year doesn't make sense to him. Evidence presented to the TWG indicated there was less food available for fish during the steady flows, and more studies need to be done.

In Opposition. Bob Lynch (Public) said an August 25, 2006 memorandum from GCT suggests different monthly volumes from those typically designed and are in this year's proposed annual operating plan. The AOP dictates those flows, not the AMWG. He feels it would be a substantial departure from the way this river is usually run. It would also be a major federal action not covered by the 2004 EA or the Biological Opinion for the experiment.

Adopt the following hydrograph in place of the TWG recommendation of MLFF: 1. October 2006 to July 2007. Equalized monthly volumes (about 700,000 af) and normal daily ROD fluctuations (i.e., 7,500 to 13,500 cfs). BHBF may occur under enriched sediment conditions (i.e., under the new sediment trigger developed by the sediment scientists). 2. August 2007 to September 2007 monthly volumes of about 620,000 af and steady daily flows of about 10,000 cfs.

AMENDMENT FAILS.

Representative	Agency Name	Vote
Albert, Carleton	Pueblo of Zuni	absent
Alston, Joe	National Park Service	N
Beckmann, Darryl	Bureau of Reclamation	N
Begay, Steven	Navajo Nation	N
Drye, Brenda	Southern Paiute Consortium	N
Groseclose, Jay	New Mexico	N
Heuslein, Amy	Bureau of Indian Affairs	N
Jackson-Kelly, Loretta	Hualapai Tribe	N
James, Leslie	Colorado River Energy Distributors Association	N
Kuharich, Rod	Colorado	N
Kuwanwisiwma, Leigh	Hopi Tribe	absent
Lehr, Phil	Nevada	N
Oelschlaeger, Max	Grand Canyon Wildlands Council	absent
Potochnik, André	Grand Canyon River Guides	Y
Rampton, Ted	Utah Associated Municipal Power Systems	N
Ramsey, Nikolai	Grand Canyon Trust	Y
Shields, John	Wyoming	N
Spiller, Sam	U.S. Fish and Wildlife Service	Y
Steffen, Mark	Federation of Fly Fishers	N
Strong, Dennis	Utah	N
Taubert, Bruce	Arizona Game and Fish Department	N
Warren, Brad	Western Area Power Administration (DOE)	N
Werner, Bill	Arizona	N
Zimmerman, Jerry	California	N
	San Juan Southern Paiute Tribe	absent

RESULTS	
Total Yes	3
Total No	18
Total Abstain	0
Total Voting	21
2/3 =	14
Amendment fails.	

Third Amendment. André Potochnik said a BHBF is part of the ROD and that good scientific protocol calls for replication of the first test to verify results. The sediment in the system presently is at a very high level, with sediment-enriched conditions, and a sediment trigger could very easily occur this fall. If not, then an opportunity will have been wasted with more sediment going down to Lake Mead when it could've been used it in Grand Canyon. In Lake Mead it does nothing but decrease reservoir storage so for those reasons, he is recommending a BHBF in 2007 provided the sediment trigger is met.

In Opposition. Darryl Beckmann said he opposed this because 1) the TWG thoroughly vetted this option and chose not to recommend a BHBF this year, 2) he isn't convinced the budget is in line to cover an

experiment, and 3) from an dam operations standpoint, there needs to be better advance planning around the maintenance schedules.

In Response. André said he was not convinced the TWG ever questioned or looked at the data that were presented by GCMRC with regard to sediment-charged conditions. Because John Hamill said the experiment could be conducted and the funds were there, this option should be considered. He also does not believe the AMWG should be operating the whole program in accordance with the preferred maintenance schedule of the dam. While he feels maintenance is important, it should not eliminate the possibility for doing positive things for the river ecosystem.

In Opposition. Jerry Zimmerman said that if it would take another two to three months to develop a science plan, the TWG would still need to review that plan. He believes it would be foolhardy to guess or suggest that the money may be there to support the plan. A BHBF does not happen every year and when it does, then the program needs to be prepared to conduct it. For now, more information needs to be obtained.

Public Comment. Bob Lynch said it is too late to change anything this year based on the limited information. John O'Brien said as a member of the TWG, the TWG likes to provide input to the AMWG as a consensus but that has not been the case recently. The TWG vote was 14 to 8, demonstrating that there were some differences of opinion on this subject. John feels it is imperative to do a BHBF when it can be done. He appreciates the hardships on the Bureau and also difficulties with the basin states having to move water around from month to month, but he thinks it is much cheaper than building a pipeline to bring sediment to the Grand Canyon.

Add a BHBF in 2007, providing the sediment trigger is met. Cost \$900K - \$1M. Move this amount from the Experimental Fund.

AMENDMENT FAILS.

Representative	Agency Name	Vote
Albert, Carleton	Pueblo of Zuni	absent
Alston, Joe	National Park Service	Y
Beckmann, Darryl	Bureau of Reclamation	N
Begay, Steven	Navajo Nation	N
Drye, Brenda	Southern Paiute Consortium	N
Groseclose, Jay	New Mexico	N
Heuslein, Amy	Bureau of Indian Affairs	N
Jackson-Kelly, Loretta	Hualapai Tribe	Y
James, Leslie	Colorado River Energy Distributors Association	N
Kuharich, Rod	Colorado	N
Kuwanwisiwma, Leigh	Hopi Tribe	absent
Lehr, Phil	Nevada	N
Oelschlaeger, Max	Grand Canyon Wildlands Council	absent
Potochnik, André	Grand Canyon River Guides	Y
Rampton, Ted	Utah Associated Municipal Power Systems	N
Ramsey, Nikolai	Grand Canyon Trust	Y
Shields, John	Wyoming	N
Spiller, Sam	U.S. Fish and Wildlife Service	N
Steffen, Mark	Federation of Fly Fishers	N
Strong, Dennis	Utah	N
Taubert, Bruce	Arizona Game and Fish Department	N
Warren, Brad	Western Area Power Administration (DOE)	N
Werner, Bill	Arizona	N
Zimmerman, Jerry	California	N
	San Juan Southern Paiute Tribe	absent

RESULTS	
Total Yes	4
Total No	17
Total Abstain	0
Total Voting	21
2/3 =	14
Amendment fails.	

Fourth Amendment. André Potochnik presented a proposal for funding the Adopt-a-Beach Program. The program has been in existence as long as the AMWG and has provided annual reports on the conditions of beaches as monitored by the people who work down in the canyon. He feels the repeat

photography is a valuable source of long-term monitoring information that is efficient both for costs and efforts. The program should be under the long-term monitoring and core monitoring effort of GCMRC. Unlike most monitoring programs, it extends throughout the entire Colorado River ecosystem from Glen Canyon below the Dam all the way to Lake Mead, unlike most of the monitoring programs that just finish at the Grand Canyon Gage. For those reasons, he thinks the program should be supported. At \$15K a year, he thinks it's a pretty cheap program and would fit well with Management Objectives 9.3 and 9.5. In addition, he said the budget calls for establishing a GIS atlas of camping beaches in the Grand Canyon and he feels the ABA would be an excellent addition to that datasource since it has been a long, continuous source of information for 10 years.

Leslie James asked why the proposal did not come up through the normal budget process of being vetted through the Budget AHG or TWG. André said it was passed to the side and was not sufficiently advocated for. He does not believe that all things need to be first passed by the TWG or agreed upon by the TWG. The AMWG is capable of choosing projects to fund. The TWG is a valuable source for identifying and conveying the sense of the stakeholder groups at the technical level, but in this case, something important fell through the cracks. Leslie asked how the program would be funded. André said he thought GCMRC's Socio-Economic program would fund it, as they have for the past several years. It costs \$15,000 per year, and \$6,000 was secured from the Public Outreach Program. Another \$9,000 is being requested from the GCMRC budget to make up the shortfall.

John Hamill said he spoke with Helen Fairley on his staff and they feel that \$7,500 can be provided from the recreation program budget.

In Opposition. Darryl said he is opposed because it is not appropriate for proposals to go outside the process that the AMWG and TWG have agreed upon. If it is a true science project, then it needs to be vetted through the Budget AHG and prioritized like all other science plans.

In Support. Rick Johnson said it's unfortunate the proposal didn't go through the proper channels and get fully vetted but feels the AMWG should think of it as a great product. It is great for public outreach and he does not feel the opportunity to maintain ongoing data collections should be overlooked.

Public Comment. Bob Lynch suggested contacting the river running companies for the \$15K. There also might be other funds that could be secured and made available to the Bureau under the Contributive Funds Act, and we could have our process that we've worked so hard to get through the last few months and they could have their monitoring.

Fund the Adopt-a-Beach (AAB) program as part of core monitoring. Cost: \$15,000. Move this amount from: recreation budget.

AMENDMENT FAILS.

Representative	Agency Name	Vote
Albert, Carleton	Pueblo of Zuni	absent
Alston, Joe	National Park Service	Y
Beckmann, Darryl	Bureau of Reclamation	N
Begay, Steven	Navajo Nation	N
Drye, Brenda	Southern Paiute Consortium	Y
Groseclose, Jay	New Mexico	N
Heuslein, Amy	Bureau of Indian Affairs	Y
Jackson-Kelly, Loretta	Hualapai Tribe	N
James, Leslie	Colorado River Energy Distributors Association	N
Kuharich, Rod	Colorado	Y
Kuwanwisiwma, Leigh	Hopi Tribe	absent
Lehr, Phil	Nevada	N
Oelschlaeger, Max	Grand Canyon Wildlands Council	absent
Potochnik, André	Grand Canyon River Guides	Y
Rampton, Ted	Utah Associated Municipal Power Systems	N
Ramsey, Nikolai	Grand Canyon Trust	Y

RESULTS	
Total Yes	9
Total No	12
Total Abstain	0
Total Voting	21
2/3 =	14
Amendment fails.	

Shields, John	Wyoming	N
Spiller, Sam	U.S. Fish and Wildlife Service	N
Steffen, Mark	Federation of Fly Fishers	Y
Strong, Dennis	Utah	N
Taubert, Bruce	Arizona Game and Fish Department	Y
Warren, Brad	Western Area Power Administration (DOE)	N
Werner, Bill	Arizona	Y
Zimmerman, Jerry	California	N
	San Juan Southern Paiute Tribe	absent

Final Motion on the FY07 hydrograph, budget, and workplan:

The AMWG recommends to the Secretary of the Interior the Fiscal Year 2007 hydrograph, budget, and workplan as recommended by the TWG with the following change: the hydrograph chart/table is modified by adding: "Note: Monthly volumes are subject to change in accordance with the final Annual Operating Plan for Colorado River Reservoirs 2007."
MOTION PASSES.

Representative	Agency Name	Vote
Albert, Carleton	Pueblo of Zuni	absent
Alston, Joe	National Park Service	Y
Beckmann, Darryl	Bureau of Reclamation	Y
Begay, Steven	Navajo Nation	Y
Drye, Brenda	Southern Paiute Consortium	Y
Groseclose, Jay	New Mexico	Y
Heuslein, Amy	Bureau of Indian Affairs	Y
Jackson-Kelly, Loretta	Hualapai Tribe	Y
James, Leslie	Colorado River Energy Distributors Association	Y
Kuharich, Rod	Colorado	Y
Kuwanwisiwma, Leigh	Hopi Tribe	absent
Lehr, Phil	Nevada	Y
Oelschlaeger, Max	Grand Canyon Wildlands Council	absent
Potochnik, André	Grand Canyon River Guides	A
Rampton, Ted	Utah Associated Municipal Power Systems	Y
Ramsey, Nikolai	Grand Canyon Trust	N
Shields, John	Wyoming	Y
Spiller, Sam	U.S. Fish and Wildlife Service	Y
Steffen, Mark	Federation of Fly Fishers	Y
Strong, Dennis	Utah	Y
Taubert, Bruce	Arizona Game and Fish Department	Y
Warren, Brad	Western Area Power Administration (DOE)	Y
Werner, Bill	Arizona	Y
Zimmerman, Jerry	California	Y
	San Juan Southern Paiute Tribe	absent

RESULTS	
Total Yes	19
Total No	1
Total Abstain	1
Total Voting	20
2/3 =	14
Motion passes.	

Public Comments: None

Brad asked Mr. Limbaugh what his expectations would be at the next in-person meeting. Mark said he is hopeful that the SPG and TWG will have thoroughly vetted some options for the AMWG to consider recommending to the Secretary for a science plan that extends to at least a 10-year period. It's his understanding there are three options that are being considered and run the gamut of different approaches to dealing with the resources in the canyon. He looks forward to having a lively discussion. He also mentioned that one of the things he wants to commit to is taking AMWG recommendations to the Secretary and then being able to explain to the AMWG what the Secretary does with those and how they play into the decision-making process. He understands there have been some scheduling problems for the next meeting, but he looks forward to polling the members shortly and scheduling something by the November or December.

Dave Garrett asked what Mark's expectations were in terms of science planning in the longer term. Mark said it would be helpful to have a plan that provides direction and some indication of where they are headed in terms of a recovery implementation program, where a TCD might fit in, and BHBF opportunities. It would also be helpful to give guidance to the GCMRC regarding an experimental plan that addresses the relevant issues of the day, but allows them to continue to advise the AMWG on how to protect all the resources and all the users in the canyon to the best extent possible.

Additional Meeting Attachments:

Attachment 7 Settlement Agreement between the Center for Biological Diversity, et al., and the Department of the Interior

Attachment 8 Memorandum from Mark Limbaugh to DOI Secretary dated Dec. 3, 2006, forwarding approval of the Final FY07 Hydrograph, Budget, and Work Plan

Attachment 9 Final FY07 Hydrograph

Attachment 10 Final FY07 GCDAMP Budget (spreadsheet)

Attachment 11 Final FY07 GCDAMP Workplan

ADJOURNED: 2:12 PM

Respectfully submitted,

Linda Whetton
U.S. Bureau of Reclamation

General Key to Adaptive Management Program Acronyms

ADWR – Arizona Dept. of Water Resources
AF – Acre Feet
AGFD – Arizona Game and Fish Department
AGU – American Geophysical Union
AMP – Adaptive Management Program
AMWG – Adaptive Management Work Group
AOP – Annual Operating Plan
BA – Biological Assessment
BAHG – Budget Ad Hoc Group
BE – Biological Evaluation
BHBF – Beach/Habitat-Building Flow
BHMF – Beach/Habitat Maintenance Flow
BHTF – Beach/Habitat Test Flow
BIA – Bureau of Indian Affairs
BO – Biological Opinion
BOR – Bureau of Reclamation
CAPA – Central Arizona Project Assn.
CESU – Cooperative Ecosystems Studies Unit
cfs – cubic feet per second
CRBC – Colorado River Board of California
CRAHG - Cultural Resources Ad Hoc Group
CMAHG – Core Monitoring Ad Hoc Group
CRCN – Colorado River Commission of Nevada
CREDA – Colorado River Energy Distributors Assn.
CRSP – Colorado River Storage Project
CWCB – Colorado Water Conservation Board
DBMS – Data Base Management System
DOI – Department of the Interior
EA – Environmental Assessment
EIS – Environmental Impact Statement
ESA – Endangered Species Act
FACA – Federal Advisory Committee Act
FEIS – Final Environmental Impact Statement
FRN – Federal Register Notice
FWS – United States Fish & Wildlife Service
FY – Fiscal Year (October 1 – September 30)
GCD – Glen Canyon Dam
GCMRC – Grand Canyon Monitoring & Research Ctr.
GCNP – Grand Canyon National Park
GCNRA – Glen Canyon National Recreation Area
GCPA – Grand Canyon Protection Act
GLCA – Glen Canyon National Recreation Area
GRCA - Grand Canyon National Park
GUI – Graphical User Interface
HBC – Humpback Chub (endangered native fish)
HMF – Habitat Maintenance Flow
HPP – Historic Preservation Plan
IEDA- Irrigation & Electrical Districts Assoc. of Arizona
IN – Information Need
IT – Information Technology
KAS – Kanab ambersnail (endangered native snail)
LCR – Little Colorado River
LRRMCP – Lower Colorado River Multi-Species
Conservation Program
LTEP – Long Term Experimental Plan
MAF – Million Acre Feet
MA – Management Action
MO – Management Objective
NAAO – Native American Affairs Office
NAU – Northern Arizona University (Flagstaff, AZ)
NEPA – National Environmental Policy Act
NGS – National Geodetic Survey
NHPA – National Historic Preservation Act

NPS - National Park Service
NRC - National Research Council
NWS - National Weather Service
O&M - Operations & Maintenance (USBR funding)
PA - Programmatic Agreement
PEP - Protocol Evaluation Panel
POAHG - Public Outreach Ad Hoc Group
Powerplant Capacity - 31,000 cfs
Reclamation - United States Bureau of Reclamation
RBT – Rainbow Trout
RFP - Request For Proposals
RPA - Reasonable and Prudent Alternative
SA - Science Advisors
Secretary - Secretary of the Interior
SCORE = **S**tate of the **C**olorado **R**iver **E**cosystem
SHPO – State Historic Preservation Office(r)
SPAHG – Strategic Plan Ad Hoc Group
SPG - Science Planning Group
SWCA - Steven W. Carothers Associates
TCD - Temperature Control Device
TCP - Traditional Cultural Property
TES - Threatened and Endangered Species
TWG - Technical Work Group
UCR - Upper Colorado Region (of the USBR)
UCRC - Upper Colorado River Commission
UDWR - Utah Division of Water Resources
USBR - United States Bureau of Reclamation
USFWS - United States Fish & Wildlife Service
USGS - United States Geological Survey
WAPA - Western Area Power Administration
WY – Water Year (a calendar year)

Q/A/C/R = Question/Answer/Comment/ Response