

**Minutes of Technical Work Group Meeting
June 8-9, 1999**

Presiding: Bill Persons, AGFD

Committee Members Present:

Clifford Barrett, CREDA
Andres Cheama, Pueblo of Zuni
Kerry Christensen, Hualapai Nation
Dave Cohen, Trout Unlimited
Wayne Cook, UCRC
William E. Davis, CREDA
Kurt Dongoske, The Hopi Tribe
Brenda Drye, So. Paiute Consortium
Christopher Harris, ADWR
Norm Henderson, GCRA
Amy Heuslein, BIA

Rick Johnson, Grand Canyon Trust
Mindy Schlimgen-Wilson, American Rivers
Phillip Lehr, Co. River Comm/Nevada
Don Metz, USFWS
Clayton Palmer, WAPA
Bill Persons, AGFD
Randy Peterson, BOR
Andre Potochnik, GC River Guides
Randy Seaholm, CWCB

Committee Members Absent:

Mark Anderson, USGS
Alan Downer, Navajo Nation
Robert King, UDWR

John Shields, Wyo. State Engineer's Office
Robert Winfree, NPS/GCRA
Fred Worthley, CRBC

Alternates Present:

Nancy Hornewer, USGS
Timothy Begay, Navajo Nation
Jan Balsom, NPS

Alternate For:

Mark Anderson, USGS
Ala Downer, Navajo Nation
Robert Winfree, NPS

Other Interested Persons Present:

Mary Barger, WAPA
Gary Burton, WAPA
Barry Gold, GCMRC
Carol Heathington, SHPO
Susan Hueftle, GCMRC
Pamela Hyde, Glen Canyon Trust
Loretta Jackson, Hualapai Cultural Res.
Christine Karas, USBR
Ruth Lambert, GCMRC

Lisa Leap, GCNP
Mike Liszewski, GCMRC
Robert S. Lynch, CAP/CREDA/IEDA
Bruce Moore, BOR
Mary Orton, American Rivers
Tom Ryan, USBR
Barbara Ralston, GCMRC
Bill Vernieu, GCMRC

Recorder: Serena Mankiller, GCMRC Secretary

Convened: 6/8: 10:11 a.m. 6/9: 8:10 a.m.

Adjourned: 6/8: 6:30 p.m. 6/9: 3:22 p.m.

MEETING OPENING AND ADMINISTRATIVE ITEMS

Welcome and Introductions: The Chairperson welcomed the TWG members, member alternates, and guests.

Attendance: Attendance sheets were distributed.

Review of Agenda: The agenda was reviewed, revised (one item moved to an earlier time) and approved by the group.

Review of Minutes: Minutes of April 20-21, 1999, March 16-17, 1999 and February 23-24, 1999, meetings were available for review (Attachments 1-3).

Recommendation: Submit any revisions to minutes to the GCMRC Secretary by June 25, 1999.

Other Administrative Business

TWG Chair-elect: The TWG is seeking a Chair-elect for TWG meetings for the year 2000 (post January 2000 AMWG meeting). Bill Persons has discussed the position with some members.

Motions: The TWG would like a more formal process for bringing forth motions at meetings.

Recommendation: The member bringing forth the motion: (1) is responsible for getting the item added to the agenda in advance, (2) should give enough advance time for review by the other members, (3) may submit the motion in writing or in person.

TWG Operating Procedures (Attachment 4): There were two action items from the AMWG meeting regarding TWG roles and process efficiency: (1) did our rules allow it, (2) to allow a voting alternate for the Chairperson. A suggestion was previously made to amend the procedures accordingly. Bruce Moore reviewed the document and distributed a draft amendment. Suggested revisions: (a) the procedures now specify that the chair has to be a TWG member; (b) an alternate may represent the Chairperson's agency, but that shareholder is entitled to only one vote. Bruce Moore will add the language if approved by the TWG, and also include separate roles for the Chairperson and Vice Chairperson. A motion was made "to approve these operating procedures as they are." The motion was not seconded.

Recommendation: The TWG shall submit comments today to Bill Persons or Randy Peterson and Bruce Moore will finalize the document next week. Mr. Peterson and Mr. Persons will review and reach agreement on the roles and responsibilities. The TWG did not desire to review the revised document before it is included in the 30-day AMWG mailing. The procedures will be amended according to this meeting's approved revisions and forwarded to the AMWG.

Discussions and clarifications included:

Meeting Facilitator: According to the operating procedures, an outside facilitator is not defined as a Chairperson, but may assist with conducting a meeting. An outside facilitator may not be a Chairperson, but the TWG may decide to be more flexible on that issue.

Chair and Vice-chair Duties: More duties will be assumed in-between meetings by the Vice-chairperson to better assist the Chairperson.

Chairperson Compensation: Language regarding TWG Chairperson compensation is not currently included (and is not required to be) in the operating procedures, although it was approved and initially intended for the 1999 Chairperson. Some agencies/organizations may not require compensation to chair the TWG. Bruce Moore clarified the motion carried at the March 16-17, 1999, TWG meeting that the TWG shall: "select a chairperson and make payment not to exceed \$20,000, if needed, and the funds will be included a line item in the AMP budget under USBR administrative costs." This motion as carried at the March TWG meeting was not amended, but the intent (after 1999) is to disregard the \$20,000 figure and the TWG will decide on compensation if it is needed by the agency/organization (to cover costs due to the employee fulfilling his/her duties as TWG Chairperson) on a case-by-case basis.

Recommendation: Amend the TWG Operating Procedures to indicate that Chairperson compensation, if needed, is to be decided on by the TWG on a case-by-case basis.

GCMRC Duties: The first two GCMRC duties listed define scientific roles. Bruce Moore suggested that these items be deleted since it is an operating document, but the rest of the duties remain as is. A question arose if it is appropriate for GCMRC to continue recording meeting minutes because they are the science, rather than the administrative, branch for the AMP. FACA regulations require that meeting minutes be recorded. The USBR is willing to assume this responsibility.

Recommendation: The USBR Adaptive Management and Environmental Resources Division staff will provide future administrative support for the ANT FACA meetings. GCMRC will continue to provide AMWG/TWG web page support.

Basin Hydrology/BHBF: Tom Ryan (USBR, Water Resources Group) has replaced Randy Peterson and will present future hydrology reports (Attachment 5). April was wet and cool. If June and July are the same, the reservoir will fill. A question arose about the decision process between now and the end of July regarding a BHBF trigger. The TWG would like to benefit the resources if possible. Hydrographs are reviewed on a daily basis. A BHBF does not seem likely at this point. Water Year 1999 will not be an 8.23 MAF minimum release year. It is unlikely that Water Year 2000 will be an 8.23 MAF year as well. June was raised to a 1 MAF release (up from the 950,000 AF release projected last month). The NWS forecast decreased by 300,000 cfs. Inflow is 108% of average. The tribes who don't have email requested forecasts to be faxed to them. The TWG needs to recommend a proposed action for compliance for Water Year 2000.

BHBF: There was the possibility of a BHBF trigger last week, and Ruth Lambert began calling the tribal nations to alert them. At least one tribe was not called, and expressed concern that they heard about the alert through another organization. Ms. Lambert stated that the alert was called off after approximately 30 minutes and she felt it was unnecessary to continue making the calls. The tribal nations requested better communications about future BHBF alerts because the change in flows may adversely affect tribal resources in the canyon. GCMRC will continue to telephone the tribal representatives about possible BHBFS. The river guides feel that BHBF flows will not adversely affect their scheduled recreational river trips. Advance notice would be useful to recreational interests. A process should be in place for future flows notification to recreational and tribal interests. The GCMRC stressed that it is more beneficial to plan BHBFS months in advance rather than a few weeks.

The tribes desire to hold meetings with GCMRC about resource, monitoring and research aspects and concerns regarding the program. The Hopi Tribe sent a letter in January 1999 to GCMRC regarding this issue. GCMRC requested clarification on its role because it is involved in this open process, and the TWG would be excluded from these meetings. Amy Heuslein clarified that it is appropriate for GCMRC to participate in this forum with the tribes as part of the fulfillment of its federal trust responsibilities, and the TWG should understand this. If there were a recommendation for a change in the program, that type of issue would come back to the TWG.

Recommendation: Mr. Ryan said that the possibility of a BHBF would require discussion after receiving the mid-month forecast, and dam safety would be the priority. Tom Ryan will obtain the tribal nations' fax numbers and set up an automatic fax for future forecasts. The notification process will be placed on future agenda items.

MONITORING AND RESEARCH CENTER REPORT

Status of Integrated Water Quality Plan: Barry Gold stated that the TWG has received the May 1, 1999, draft of the monitoring plan for the program. It was also distributed to a group of independent, external peer reviewers. Three sets of comments have been received to date. The plan will be revised and is scheduled to be mailed out to the AMWG by June 18, 1999. Comments received and a budget will be incorporated in the final plan. Some TWG members thought the revised plan would include a table of responses to comments that were not incorporated and an explanation about why they were not included.

Recommendation: Additional comments from the TWG will be accepted through June 11, 1999. Bill Vernieu will include an attachment of responses to comments received.

Status of FY2000 RFPs: Barbara Ralston stated that the RFP package is in the UC USBR Contracting Office for review. The contracting office is reorganizing and has a 30-60 day contract backlog. Modifications to existing contracts are planned to be completed by early July to enable a smooth transition in October when the contracts end. The new RFPs are expected to be released in mid-July. The review process will be delayed to October 1999. Awards are

expected to be announced in November 1999. Contracts will probably start at the beginning of January 2000. The delay is not expected to affect the field work or literature review analysis projects.

Native Fish Project Update: Owen Gorman, the PI for the native fish project, has accepted a new position at the Great Lakes Science Center in Michigan and will be leaving the Flagstaff USFWS office. The Co-PI is also leaving. Since there will be no PI to assume the award for the remainder of the project, GCMRC is planning to include that RFP on the extended contract (for FY2000) in this package. It is expected that the USFWS will ask to continue working on the contract, but GCMRC's position is that it contracted with individuals and not the organization. Owen Gorman is required to complete his contract through FY99. His contract ends in October 1999 and he is required to submit the data work by December 1999. However, due to the PEP process, GCMRC has already planned to extend the contract through FY2000 (and this has been previously discussed with the TWG). The HBC hatchery (establishment of a second population) work needs to be continued until enough information has been learned about raising and rearing the fish in the future. There also is the requirement to address BBC overwintering mortality. The contract needs to be in place in time for the December/January research team. If the contract is not yet in place, GCMRC proposes that a team from the Center collect the chub data samples in December/January to ensure no data gaps occur regarding overwintering mortality due to contract delays. Barbara Ralston reminded the group that the new RFP can be canceled if the matter gets resolved. Discussions with USFWS will continue.

Status of PIT Tag Data Files: Barbara Ralston stated that a cooperative aquatic group meeting held earlier this year. Two issues discussed included:

1. Consolidating Data: Where are/who has the data, and if everyone is willing to provide their data collected since the mid-1980s to GCMRC for consolidation. A concern was raised about the proprietary nature of the data and how to make it data available to requests to a data center rather than a PI. The recommendation was that GCMRC investigate the upper Basin's dbms structure and use, and determine data sharing protocols to get a continuous account of native fish from the upper Basin through Grand Canyon. A meeting will be held in the fall to review the protocols that Barbara Ralston will develop for the group. Also to determine how those rules should be amended for the Grand Canyon area. It is anticipated that this will assist in the progress towards sharing data and getting agreement that some of the data that GCMRC doesn't currently have will be made available. The PI's projects were reviewed in case they may need portions of each other's data.

2. Developing baseline data for native and non-native fish in the Grand Canyon. Several people are working on PIT tag data to determine population structures for BBC, flannelmouth suckers and bluehead suckers. Carl Walters believes that he has all the PIT tag data, but portions of ASU's 1991-1995 data is missing from the link. This data was collected under a GCES contract which required ASU to submit a summary of the data, but not the actual data. GCMRC's contracts specify a summary as well as the actual data. It is anticipated that this collaborative effort may provide a consolidated PIT tag data base at the end of the project.

Dr. Ralston distributed summaries (Attachment 6) of progress associated with SWCA's contracts regarding second populations for HBC, and experimental flows. Please contact Steve Carothers or Rich Valdez (of SWCA) regarding questions.

Status of FY2000 Annual Plan: Barry Gold stated that a final draft plan (Attachment 7, dated June 1, 1999) was distributed to the TWG. The IWQP is not included because it is not yet completed. Some TWG members thought the revised plan would include a table of responses to comments and where they were incorporated or an explanation why they were not. Also, Chapters 1-3 were to be deleted.

Recommendation: GCMRC will delete Chapters 1-3 and replace them with a statement about why they were deleted. Chapters 4-5 will be included and an attached table of responses to comments by the TWG since the December 8, 1998, meeting. The plan will be finalized and distributed to the AMWG and the TWG in time for the July 1999 AMWG meeting.

AMP Guiding Document: Bruce Moore stated that a second draft Guidance Document (dated May 14, 1999) was taken on the AMWG river trip for review. It was to have been distributed to all AMWG and TWG members, and to interested parties. The TWG did not receive it. Scott Loveless is currently working on a final draft for the AMWG. Some TWG members are concerned about portions of the document's content, and would like to submit comments.

Recommendation: Bruce Moore will request that Scott Loveless (Solicitors Office) distribute a draft as soon as possible. Mr. Moore will communicate the TWG's request that Mr. Loveless re-open the comment period for about two weeks. If this is acceptable, Mr. Loveless will review the TWG's comments and decide on modifications and send the final version to Stephen Magnussen (Secretary's Designee). Mr. Magnussen will most likely send it to the AMWG and TWG (as a draft or a final) to provide guidance to them.

ESA Compliance: Christine Karas gave an update due to Tony Morton's unexpected absence. The USBR has received an official, draft BO from the USFWS yesterday. It is a No Jeopardy BO. Should a BHBF be triggered, the BO can be finalized in a timely manner. There would be incidental take of some species, and there are terms and conditions associated with the Opinion which would have to be incorporated into the Center's plan for research regarding the flow. The USBR is not yet ready to share the document with the TWG until it has worked with the USFWS and has a satisfactory draft to distribute. It is intended to be distributed to the federal Section 7 Team, which will review the requirements. The document will not be finalized unless it appears that a BHBF will be conducted.

Kanab Ambersnail Workshop: Bill Persons reported that Jeff Sorenson (AGFD) visited the three translocation sites and at all areas found live snails of reproductive sizes, and egg masses. A re-survey will be conducted July 17-27, 1999. The expert workshop is still planned for the year 2000. Details will be forthcoming from GCMRC. Larry Stevens' (GCMRC) snail genetic work is not yet completed.

FY2001 Budget/Tribal Participation: Bruce Moore stated that a bottom line figure

(Attachment 8a) was to be provided to the TWG for the AMWG to vote on at its July 1999 meeting. The list serve effort was not well utilized and was not a very productive effort. Barry Gold provided a response to budget questions from the TWG (Attachment 8b). The TWG discussed the budget at length. A suggestion was made to fund SASF implementation out of Section 8 construction appropriated funds rather than GCMRC's biological science funds. The USBR felt that would be an appropriate use of the Section 8 fund. It would be useful to have a spreadsheet listing items by funding source. The NPS and tribal interests disagreed with the \$73,000 decrease in the PA budget, and expressed concern regarding their ability to participate in this process if funding is decreased. Nancy Coulam (USBR) was unable to be reached to provide an explanation about the decrease.

On June 8, 1999, a motion was duly made and seconded: "To adopt the \$7,810,000 budget." During the discussion period, the motion was amended and seconded: That we approve a FY2001 budget of not to exceed \$7,850,000." (Vote: Yes: 10; No: 9; Abstention (USBR): 1.) It was decided to forward the vote to the AMWG. A PA Signatories meeting will be held in the interim.

Discussions continued on June 9, 1999, and a motion as duly made and seconded: Approve and send to the AMWG a budget of \$7,850,000, work on the details of this and other things to be discussed for several hours inside the context of this budget. Said motion was retracted.

Another motion was made, seconded and unanimously carried: "Recommend to AMWG to accept a FY2001 budget of \$7,850,000 with an ad hoc group of the TWG to draft the budget line item details, with special consideration given to lines IVC and V, if possible to separate out tribal participation to line V." (Vote: Yes: 22; No: 0; Abstentions: 0.) A clarification to the motion was made regarding the words, "to draft the budget line item details." That also includes other items in the budget.

An ad hoc group was formed (its task is underlined in the motion) including the following volunteers: Nancy Coulam, B. Gold, C. Palmer, K. Dongoske, A. Cheama, N. Henderson, J. Balsom, A. Heuslein, C. Barrett, R. Peterson, L. Jackson, B. Drye, D. Cohen, T. Begay. The Chair will be determined later, Randy Peterson will convene the first meeting, work with the PA- Signatories, and report back to TWG by July 20, 1999.

Recommendation: The recommendation contained in the motion carried will go forward to the AMWG at its July 1999 meeting. A spreadsheet showing funding sources will be prepared by Randy Peterson and Barry Gold.

Temperature Control Device: Randy Peterson stated that GCMRC will develop the monitoring program by this fall. A workshop involving a broad range of the best scientists will be conducted sometime between August and October of 1999, possibly at Flaming Gorge. Some information gleaned at the workshop will be used to strengthen the (revised or final) EA, which should be completed by November for the AMWG's January 2000 meeting. The TWG should be involved in the monitoring and research plan and attend the workshop. Norm Henderson presented a motion in support of the TCD construction (Attachment 9) for the

TWG to consider sending forward to the AMWG for a vote. Some members voiced concerns and would like to review more information and analyses, possibly through the fall workshop. A motion was made, seconded and withdrawn after discussion to, "Forward this to the AMWG." This topic will be on the AMWG agenda.

AD HOC GROUP REPORTS

Dave Cohen and Bill Persons are continuing their work on preparing a summary and guidelines for TWG Ad Hoc Groups which will include when they were formed and disbanded, the task, participants, process, recommendations, executive summary.

Experimental Flows Ad Hoc Group: TWG needs to recommend a proposed action or a set of proposed actions for Water Year 2000 because the current environmental compliance schedule is not in line with where we need to be in January 2000. Bill Persons stated that the ad hoc group needs to define a list of several experimental flows to forward to the compliance group. He will schedule another ad hoc group meeting. This discussion postponed in order to keep on schedule with the agenda.

AMP Strategic Plan Calendar and Outline: Norm Henderson presented a proposed calendar and outline for the AMP Strategic Plan (Attachment 10). The outline includes AMP roles and functions, laws, etc. The group felt they wanted a revised AMP Strategic Plan outline process rather than an outline document. Some members desired to form a small group to work further on the document along with Mr. Henderson. Randy Seaholm will provide the group notes from the February 4-5, 1999, ANT Strategic Plan meeting. The TWG would like some input from the AMWG on the outline.

Recommendation: The TWG shall provide comments to Norm Henderson by June 24, 1999. Persons interested in working as a small group on the ANT Strategic Plan shall contact Mr. Henderson by June 24, 1999, and continue developing the plan outline and revise the calendar. The TWG will need to approve it. Bill Persons will report to the AMWG that we have established a process and what progress has been made.

Vision/Mission: The TWG discussed the AMWG vision statement (Attachment 11a, draft, dated May 21, 1999). The AMWG had informally asked the TWG to develop and clarify selected definitions of terms (Attachment 11b). Mary Orton reviewed the process used to develop the vision during the AMWG river trip. Some TWG members desired to revise the vision statement. Others stated that amending the statement was not what the AMWG intended the TWG to provide assistance with. The TWG made some suggested revisions to the vision statement.

A motion was duly made and seconded, "That we write up a Vision Statement with the changes we have agreed to and we include the Vision Statement where we disagree." (Vote: Yes: 2; No: 14; Abstentions: 1.) The motion failed to carry.

Another motion was duly made, seconded and carried to, Forward this suggestion list to the AMWG for consideration in their Vision Statement." (Vote: *Yes: 16; No: 0; Abstentions: 1*).

Management Objectives and Information Needs: Due to time constraints, this topic was not discussed at this meeting.

WRAP-UP

Action Items: The Chairperson recorded action items during the meeting, and reviewed them with the group. A table was printed out after the meeting and provided to those members who requested it. The table will be posted on the AMWG/TWG web site.

Next Meeting: July 20, 1999 and July 22, 1999 (pre- and post-AMWG meeting).

Possible Agenda Items for Next Meeting: The Chairperson reviewed future agenda items identified during the meeting, including the Conceptual Model.

AMWG Agenda: The Chairperson reviewed TWG agenda items for the AMWG Meeting to be held July 21-22, 1999.

Meeting Evaluation: A meeting evaluation was not conducted for this meeting. A suggestion was made that someone besides the Chairperson record the flip chart notes. Another suggestion was made to follow Roberts Rules of Order more closely.

OTHER BUSINESS

2000 Tailwater Trout Symposium: An ad hoc group will meet at lunch today to plan the upcoming Symposium.

GCMRC Chief Vacancy Announcement: Barry Gold stated that USGS BRD will release a vacancy announcement for the position of Chief of the GCMRC on June 10, 1999. The position is open to any qualified person and applications will be accepted through July 8, 1999. The candidates interviewed will be informed that wherever the institutional home of GCMRC is placed, that is where the Chief's FTE will reside.

SHPO: Carol Heathington attended the TWG meeting and introduced herself as the State Historic Preservation Officer and gave a short update on the 36 CFR800 regulations (Attachment 12a and 12b).

Respectfully submitted,

Serena Mankiller, GCMRC Secretary

General Key to Adaptive Management Program Acronyms

ADWR - Arizona Department of Water Resources
AF - Acre Feet
AGFD - Arizona Game & Fish Department
AGU - American Geophysical Union
AM - Adaptive Management
AMP - Adaptive Management Program
AMWG - Glen Canyon Adaptive Management Work Group (a FACA committee)
AOP - Annual Operating Plan
BA - Biological Assessment
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.
cfs - cubic feet per second
CRBC - Colorado River Board of California
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 - Final 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 (Oct 1 to Sept 30 each year)
GCD - Glen Canyon Dam
GCMRC - Grand Canyon Monitoring and Research Center
GCNP - Grand Canyon National Park
GCNRA - Glen Canyon National Recreation Area
GCPA - Grand Canyon Protection Act
HBC - Humpback Chub (endangered native fish)
HMF - Habitat Maintenance Flow
HPP - Historic Preservation Plan
IEDA - Irrigation and Electrical Districts Association of Arizona
IN - Information Need (stakeholder)
IT - Information Technology (GCMRC program)
KAS - Kanab ambersnail (endangered native snail)
KAWG - Kanab Ambersnail Work Group
LCR - Little Colorado River
LCRMCP: Little Colorado River Multi-Species Conservation Program
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 Historical 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
Powerplant Capacity - 31,000 cfs
Reclamation - United States Bureau of Reclamation
RFP - Request For Proposals
RPA - Reasonable and Prudent Alternative
SAB - Science Advisory Board
Secretary('s) - Secretary of the Interior
SWCA - Steven W. Carothers Associates
TCD - Temperature Control Device (for Glen Canyon Dam water releases)
TCP - Traditional Cultural Property
TES - Threatened and Endangered Species
TWG - Glen Canyon Technical Work Group (a subcommittee of the AMWG)
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)