

**Minutes of
Technical Work Group Meeting
April 20-21, 1999**

FINAL

Presiding: Bill Persons, AGFD

Committee Members Present:

Clifford Barrett, CREDA
Kerry Christensen, Hualapai Nation
Dave Cohen, Trout Unlimited
Wayne Cook, UCRC
William E. Davis, EcoPlan Assoc./CREDA
Kurt Dongoske, The Hopi Tribe
Norm Henderson, GCRA
Amy Heuslein, BIA
Rick Johnson, GCT

Robert King, UDWR
Tom Latousek, American Rivers
Phillip S. Lehr, Col. River Comm/Nevada
Don Metz, USFWS
Bruce Moore, BOR
Bill Persons, AGFD
Randy Seaholm, CWCB
Robert Winfree, NPS (present 4/20/99)
Fred Worthley, CRBC

Committee Members Absent:

Mark Anderson, USGS
Andres Cheama, Pueblo of Zuni
Alan Downer, Navajo Nation
Brenda Drye, So. Paiute Consortium
Christopher Harris, ADWR
Robert King, UDWR

Clayton Palmer, WAPA
Andre Potochnik, GCRG
John Shields, Wyo. State Engineer's Office
Robert Winfree, NPS/GCRA (absent 4/21/99)

Alternates Present:

Nancy Hornewer, USGS
Timothy Begay, Navajo Nation
Matt Kaplinski, GCRG
Wayne Cook, UCRC
Gary L. Burton, WAPA
Jerome Montague, NPS (alternate on 4/21/99)

Alternate For:

Mark Anderson, USGS
Alan Downer, Navajo Nation
Andre Potochnik, GCRG
Robert King, Ut. Div. Of Water Resources
Clayton Palmer, WAPA
Robert Winfree, NPS

Other Interested Persons Present:

Timothy C. Begay, Navajo Nation
Barry Gold, GCMRC
Pamela Hyde, Grand Canyon Trust
Mike Liszewski, GCMRC
Robert S. Lynch, CAP/CREDA/IEDA

Steve Mietz, GCMRC
Jerome Montague, NPS
Anthony G. Morton, USBR
Tomas Pagano, Univ. of Arizona
Randy Peterson, USBR

Recorder: Serena Mankiller, GCMRC Secretary

MEETING OPENING AND ADMINISTRATIVE ITEMS

4/20/99: **Convened:** 10:00 a.m. **Adjourned:** 3:12 p.m.
4/21/99: **Convened:** 8:07 a.m. **Adjourned:** 3:38 p.m.

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 the last meeting were not yet available. A problem was identified that 1999 minutes have not been distributed in a timely manner. A suggestion was made to provide notes as soon as possible, and minutes within a month. Five official TWG and AMWG meetings were conducted within six weeks during January and February, which creates a workload problem for the GCMRC secretary. The GCMRC secretary has been recording AMWG meetings instead of the USBR Secretary. A "Quick Updates" page which lists scheduling and action items from the TWG meetings is available for review on the AMWG/TWG web site.

Recommendation: A printout of action items will be provided to key people at the end of each TWG meeting. The GCMRC and the USBR will determine a resolution to the workload problem. The USBR intends to use the new administrative assistant for the Adaptive Management Division to record future AMWG meetings.

Other Administrative Business

USBR Adaptive Management Division: The USBR has created a new Adaptive Management Division at the UC Regional Office in Salt Lake City, Utah. Randy Peterson was selected to head the division which will be responsible for TWG activities. Mr. Peterson will replace Bruce Moore as the USBR TWG member. The administrative assistant will perform FACA-related duties. Bruce Moore will be the head of the Engineering Division. He will continue to participate in the Adaptive Management Program through the AMWG meeting in July 1999. Bill Persons thanked Mr. Moore for his work on the AMP during the last 3-4 years of the program.

GCMRC Domain: GCMRC has a new domain. The GCMRC web site may be accessed at www.gcmrc.gov. It will contain the SCORE report, current data, etc. Some of the links are not yet complete. Information will be continually added.

GIS Coordinator: Steve Mietz was introduced as GCMRC's new GIS Coordinator.

Meeting Location: The group discussed moving the meeting location to save on the expense of car rentals. Bruce Moore will continue to investigate other locations.

Chairperson Vote/TWG Operating Procedures: A proposal was made to amend the operating procedures to allow the Chairperson to have a voting alternate present at TWG meetings. It is anticipated that this will enable the Chairperson to conduct the meetings in a more objective manner. The group also discussed amending the operating procedures to deal with the problem of moving forward on an issue when the group has not reached consensus.

Recommendation: Robert Winfree and Bill Persons will draft a proposal for the TWG regarding the voting alternate for the Chairperson, and Bruce Moore will bring an amendment to the operating procedures to the TWG meeting on June 8, 1999. The group decided not to amend the procedures regarding reaching consensus versus a majority vote/minority opinion.

Co-Chairperson Roles and Responsibilities: Bruce Moore plans to finalize the document by May 14, 1999.

Kanab Ambersnail Workshop: (Attachment 1) Bill Persons reported that the panel previously planned for August 1999 will be rescheduled to October 1999. Dr. Wu has not had time to work on the morphology. Discussion ensued as to whether he is a volunteer or under contract with the GCMRC. GCMRC might only be paying the lab costs. Concern was expressed that Dr. Wu plans to retire in September, and he may be the only expert able to determine the morphology. If he cannot complete it, the review panel may have to be postponed until next year. The genetics work is not yet done.

KAS Status Report: A small number of live KAS were still at one of the translocation sites. No snails were found at the other two sites. The researchers were unsure if that was because the snails were hidden from view, moved themselves from the stocking area, or perished. Snails were still dormant at Vaseys. At -9 Mile active snails were observed, and the habitat had extended down to the 35,000 cfs water line.

Recommendation: AGFD plans to supplement snails at all three translocation sites in late May 1999. Comments may be submitted to Bill Persons or Jeff Sorensen (AGFD) by April 30, 1999.

Basin Hydrology: (Attachment 2) Randy Peterson reported that much of the Basin is 75% of normal. April's final forecast was 62% of normal. Releases will not be reduced. Lake Powell is expected to fill to 10-11 feet from full at its highest level. Mr. Peterson discussed minimum and maximum release volumes. A BHBFB is not expected to be triggered this year (-5% chance).

1999 BHBF/Compliance: Tony Morton stated that USFWS does not expect compliance to be completed for a May BHBF, should that occur. The group felt that USFWS and USBR's staff time would be better used by discontinuing compliance activities for a May-July 1999 BHBF and concentrate on compliance for the possibility of a BHBF in WY2000 (consensus achieved). The group discussed different approaches to achieving compliance, and clarified some of the requirements. Mr. Morton developed a white paper addressing the pros & cons of continuing NEPA activity. He will finalize the white paper describing NEPA options for BHBFs paper and distribute it via e-mail by the next TWG meeting. It is hoped that compliance for a WY2000 BHBF can be tiered in with the programmatic compliance process.

Recommendation: Reclamation will send a letter to the USFWS formally requesting that consultation activities be suspended. The letter will be sent approximately May 1, 1999, when the forecast comes in.

AMP Vision Ad Hoc Group/Group Discussion on AMP Vision: Rick Johnson gave a status report from the ad hoc group. The AMWG will gather information regarding the vision during the upcoming river trip. Some reference materials (EIS, other adaptive management program information, etc.) will be given to the river trip participants. The group discussed ideas of what would constitute a vision, and what input from the AMWG would help in developing a vision statement. A vision statement should be developed prior to the AMP Strategic Plan. A suggestion from the public was to include articles written by Jack Schmidt and Robert Webb about biological river restoration (Attachment 3). The AMWG will not be conducting a meeting on the river trip which would necessitate public access and involvement. Mr. Johnson stated that the ad hoc group has given its report and is now disbanded.

Recommendation: The TWG may submit comments or questions to Bruce Moore tomorrow, or to Rick Johnson by April 30, 1999. The ad hoc group will list pros and cons of the Schmidt paper and give the information to the AMWG. He will work with Barry Gold to compile the questions for a white paper to be distributed to the Ad Hoc Group and Steve Magnussen. Mr. Johnson will distribute the white paper to the TWG by June 4, 1999, for review at the June 8, 1999, meeting. Norm Henderson will develop an AMP Strategic Plan outline and schedule, incorporate vision information, and review it with the TWG at its June 8, 1999, meeting. It will be included in the 30-day mailing to the AMWG on June 18, 1999, for its July 1999 meeting.

Temperature Control Device: Bruce Moore reported that the draft EA comment time has been extended to April 30, 1999. Positive feedback has been received regarding the USBR's expert panel review results, and some of those opinions were discussed. Funding issues were discussed. The budget for TCD construction over three years is: FY2000 \$5.5 million; FY2001 \$6.5 million; FY2002 \$3 million. Risks and uncertainties associated with the possibility of creating adverse environmental impacts were discussed. The USBR requested GCMRC to begin work on a monitoring plan. The final EA will contain the plan. It was requested that the final EA also

contain information about funding. The TWG gave current agency opinions about the advisability of going forward with construction and operation of the TCD. Several members felt that the overall concept to assist in recovery of species of concern is a positive step, but a 2-3 year data baseline needs to be established first. Public comment was also expressed on the baseline issue. A suggestion was made to use some of the construction monies to fund the baseline work. Some members expressed concern that the current advantageous political and financial climate may change if the decision to move forward is delayed 2-3 years. The USBR has not yet formulated its opinion. Cultural resource interests requested that the tribes' concerns get readdressed. The NPS brought copies of their comments for the TWG's information. The group was reminded that the decision to move forward with TCD plans is the responsibility of the USBR.

The following motion was made, seconded, discussed and subsequently withdrawn: (withdrawn motion: "The TWG make a recommendation to the AMWG: should we request that Reclamation take the present EA through another iteration in that they receive comments that address those comments they received in to the extent they can, out of the comments out of the five panel peer review, and put that out in another EA, a final or whatever you want to call it. And recognizing the time delay that causes, taking a look and see whether they can use part of the money that is presently in their FY2000 budget to initiate or augment the Center initiation of a fix on the concerns about baseline data, perhaps shooting to construction to start either late in 2000 and/or early program construction monies in later years." An amendment was made to the motion and seconded (the amendment was withdrawn along with the motion): "When they finalize the EA it will include the details on the research and monitoring program that the review panel asked for." The motion withdrawn after discussion. The group decided to have individual members of the TWG people submit their comments to Reclamation. Bruce Moore recused himself from any decisions regarding the motion.

Recommendation: Comments from the TWG were requested to assist the USBR in its decision making. All comments will be consolidated at the end of the comment period. Submit comments to Dave Trueman by April 30, 1999. A request was made that the USBR produce a second draft EA. The USBR plans to have some materials for AMWG review in the 30-day mailing (by June 18, 1999). Nancy Coulam (USBR) is working on formulating an opinion regarding cultural resources.

AMP Guiding Document: (Attachment 4) Phase I of the vision is the development of the AMP Guidance document. Scott Loveless, Bruce Moore and Robert Winfree have been working on a draft. Bruce Moore distributed a "AMWG FACA Committee Guidance" document on May 14, 1999, to the TWG. He reviewed this document with the group. The document represents thoughts and ideas about answers to questions that the TWG submitted to the Secretary's office. Minor revisions were made. The document was not distributed for approval or vote.

Recommendation: Submit written comments to Scott Loveless and Bruce Moore by May 7, 1999 (e-mail is acceptable). Another draft will be available by May 14, 1999. The new draft will be made available to the AMWG and the TWG at that time.

MO and IN Process: The annual review needs to include the entire TWG, rather than an ad hoc group. This will increase the TWG's overall understanding. The process needs to be addressed about whether we should begin revising the IN's before the vision has been developed. A suggested process was:

MO/IN Process:

1. Vision
2. Goals
3. Objectives
4. IN's

A schedule needs to be developed. The prioritization process needs to be revised. Redundancies need to be integrated. A suggestion was made to have the SAB review the MO/IN document with the TWG. The AMWG will be informed that the process has taken longer than planned.

Recommendation: The TWG will begin revising (wordsmithing) the MO/IN document dated 6/10/98, at its June 8, 1999, meeting. It is intended to have a final revised MO/IN document by October 1999.

AMWG River Trip: Barry Gold named the participants in the upcoming river trip to be conducted May 15-22, 1999. Almost full participation is confirmed. Three additional persons were invited to participate: Chip Groat, new Director of USGS; David Hayes (DOI), counselor to the Secretary on Colorado River water issues; Scott Loveless (Solicitor's Office), he is doing a lot of work on legal issues in support of the AMP. Various scientific presentations will be conducted before and during the trip. (The draft itinerary is on the AMWG/TWG web site.)

FY2001 Budget: GCMRC contracts will be renegotiated in FY2001. Barry Gold reviewed the FY2001 budget (Attachment 5). Three new research and monitoring activities are proposed for Physical Resources. Post TCD-construction biological activities were discussed. The TCD program plan will be peer reviewed. Funding was discussed at length. Proposed new work would probably be cut if the TCD funding comes out of the \$7.8 million budget, although GCMRC has not yet evaluated this issue. Bruce Moore stated that bottom line numbers are needed in early August 1999. Work plan details will be reviewed from September through December for finalization.

Recommendation: The TWG shall review and submit comments to GCMRC, allowing enough time to formulate responses to questions and distribute them back to the TWG prior to the June

8, 1999, meeting. The TWG will decide if the budget will move forward to the AMWG for its July 1999 meeting. A list serve will be set up for the purpose of commenting on the FY2001 budget.

Lake Powell Work Plan: Barry Gold will mail the Integrated Water Quality Monitoring Plan to the TWG approximately May 7, 1999.

AMWG Agenda Items: Potential agenda items were identified.

June TWG Agenda Items: Agenda items were reviewed.

Public Comment: Public comment was requested after discussion of major topics. Comments are identified under the specific topics in these minutes.

OTHER BUSINESS/UPDATES

FY2000 Annual Plan: Revisions will be finalized by the GCMRC and the final plan distributed to the TWG as soon as possible.

Data Synthesis: Barbara Ralston (GCMRC) is drafting a plan and framework for data synthesis. getting that done. A contract is in place with Carl Walters to record PIT tag data. The budget provides for \$20,00 to get the data compiled & analyzed. A question was raised about researchers turning over their data. Issues include proper data standards and interpretation, when data is no longer exclusive to the researcher and becomes public domain, and resource (rather than publishing) issues.

Recommendation: Barbara Ralston (GCMRC) will give a status report at the June 8, 1999, TWG meeting.

RFPs Status: Barry Gold reported that the three biological RFPs for the year 2000 are being edited and will be forwarded to the Salt Lake City USBR contracting office in two weeks.

NRC Report on GCMRC: The NRC report on GCMRC will be ready on June 21, 1999, and the final published version July 31, 1999.

Ad Hoc Group Committees: A need was identified for a complete list of ad hoc groups.

Recommendation: Dave Cohen will develop a list and send it to the GCMRC Secretary for posting on the web site.

Trout Report: Bill Persons brought copies of the following report: "Rainbow Trout and Lower

Tropic Levels in the Lee's Ferry Tailwater Below Glen Canyon Dam, Arizona" (T. McKinney, B. Persons; March 1999). The report was not discussed by the TWG, but copies were available.

Floods and Sandbars in the Grand Canyon: Bruce Moore distributed an article recently published by I. Lucchitta and L. Leopold (Attachment 6).

Meeting Evaluation: A meeting evaluation was conducted. Areas for improvement include:

- distribute agendas sooner
- distribute minutes and meeting materials in advance
- start meetings more on time
- members should remain at meeting until completion of day two
- a general notes taker is needed (TWG member?)

Next TWG Meeting: No meeting has been scheduled for May 1999. Due to an expanding agenda, an extra day was added to the June TWG meeting, and it will now be June 8-9, 1999, possibly at the Bureau of Indian Affairs Office in Phoenix, Arizona.

Respectfully submitted,

Serena Mankiller, GCMRC Secretary

TWG SCHEDULING & ACTION ITEMS CALENDAR
 (Identified at TWG Meeting April 20-21, 1999)

#	Topic/Issue for Discussion/Decision	Action Items (if applicable)	Action Deadline	Person/Group Resp	For Meeting Date
1	Guidance document	Submit specific written comments or suggested changes to B. Moore & S. Loveless	dist 5/7 prior to AMWG RO trip on 5/14	Indiv TWG members	July AMWG
2	AMP Vision - TWG version for AMWG consideration?	Develop Vision Statement (prior to Strategic Plan) -R Johnson to prepare Vision white paper for TWG review -B Persons to contact S Magnussen	to R Johnson by 4/30/99 June 8 Mail to AMWG June 18	TWG; R Johnson	July 99 AMWG meeting
	-Schmidt's pros & cons concept from TWG or other AM Vision stmts	-Ad hoc group list pros & cons on Schmidt document & give to AMWG	post-river trip		
	Find out what AMWG's Vision discussions were	-B Persons/R Johnson to share AMWG's Vision -TWG needs sideboards from AMWG to develop -TWG members get their AMWG member's feel from those discussions			
	Programmatic Environmental Compliance	Develop white paper & present to TWG	June 4	T Morton	TWG June 8
3	MO's & IN's Annual Review -Entire TWG -need to address process -integrate MO/IN's -scientist feedback -revise prioritization process -Maybe have SAB review MO's & IN's with the TWG	-wordsmith existing 6/10/98 document	June 8 '99		
		Produce Final MO/IN document	Oct 99		

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4	FY2001 Big Budget		8/99		
5	FY2001 Budget Details; Strategic Plan		Aug-Dec 99		
6	AMP Strategic Plan	<i>Develop AMP Strategic Plan Outline & Schedule, incorporating the Vision</i>	June 8- TWG; AMWG 6/18 mailing	N. Hender- son	July AMWG meeting
7	AMWG River Trip Itinerary	<i>TWG wants a copy</i>	Next Mon	B. Gold	
	SAB (referenced as IRP in the EIS)	<i>Get IRP in place</i>	hopefully by July	GCMRC	
8	FY2000 RFP Document status	<i>-still being edited; will be distributed to TWG</i>	two weeks	B Gold	June 8 TWG
9	Synthesis of data for fish baselines	<i>-status report at next TWG Meeting</i>	June 8	B Ralston	June 8 TWG
10	FY2001 Budget (GCMRC) -dist to TWG	<i>-review document & submit questions or concerns to B Gold; when list serve is set up will use that medium. -GCMRC will mail budget back to TWG</i>	Apr 28	TWG	June 8
			before June 8 TWG		
11	List Serve	<i>GCMRC to set one up for TWG</i>	TBD; ASAP	M Lis- zewski	n/a
12	Ad Hoc Group List & Tasks	<i>Develop list & submit to Serena for web site posting</i>	June 8	D Cohen	n/a
13	How to get minutes out faster?	<i>Figure out how to get this accomplished; status report at TWG</i>	ASAP	GCMRC BOR	June 8 TWG

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
AM - Adaptive Management	LCR - Little Colorado River
AMP - Adaptive Management Program	LCRMCP: Little Colorado River Multi-Species Conservation Program
AMWG - Glen Canyon Adaptive Management Work Group (a FACA committee)	MAF - Million Acre Feet
AOP - Annual Operating Plan	MA - Management Action
BA - Biological Assessment	MO - Management Objective
BE - Biological Evaluation	NAAO - Native American Affairs Office
BHBF - Beach/Habitat-Building Flow	NAU - Northern Arizona University (Flagstaff, AZ)
BHMF - Beach/Habitat Maintenance Flow	NEPA - National Environmental Policy Act
BHTF - Beach/Habitat Test Flow	NGS - National Geodetic Survey
BIA - Bureau of Indian Affairs	NHPA - National Historical Preservation Act
BO - Biological Opinion	NPS - National Park Service
BOR - Bureau of Reclamation	NRC - National Research Council
CAPA - Central Arizona Project Assn.	NWS - National Weather Service
cfs - cubic feet per second	O&M - Operations & Maintenance (USBR funding)
CRBC - Colorado River Board of California	PA - Programmatic Agreement
CRCN - Colorado River Commission of Nevada	PEP - Protocol Evaluation Panel
CREDA - Colorado River Energy Distributors Assn.	Powerplant Capacity - 31,000 cfs
CRSP - Colorado River Storage Project	Reclamation - United States Bureau of Reclamation
CWCB - Colorado Water Conservation Board	RFP - Request For Proposals
DBMS - Data Base Management System	RPA - Reasonable and Prudent Alternative
DOI - Department of the Interior	SAB - Science Advisory Board
EA - Environmental Assessment	Secretary('s) - Secretary of the Interior
EIS - Final Environmental Impact Statement	SWCA - Steven W. Carothers Associates
ESA - Endangered Species Act	TCD - Temperature Control Device (for Glen Canyon Dam water releases)
FACA - Federal Advisory Committee Act	TCP - Traditional Cultural Property
FEIS - Final Environmental Impact Statement	TES - Threatened and Endangered Species
FRN - Federal Register Notice	TWG - Glen Canyon Technical Work Group (a subcommittee of the AMWG)
FWS - United States Fish & Wildlife Service	UCR - Upper Colorado Region (of the USBR)
FY - Fiscal Year (Oct 1 to Sept 30 each year)	UCRC - Upper Colorado River Commission
GCD - Glen Canyon Dam	UDWR - Utah Division of Water Resources
GCMRC - Grand Canyon Monitoring and Research Center	USBR - United States Bureau of Reclamation
GCNP - Grand Canyon National Park	USFWS - United States Fish & Wildlife Service
GCNRA - Glen Canyon National Recreation Area	USGS - United States Geological Survey
GCPA - Grand Canyon Protection Act	WAPA - Western Area Power Administration
HBC - Humpback Chub (endangered native fish)	WY - Water Year (a calendar year)
HMF - Habitat Maintenance Flow	
HPP - Historic Preservation Plan	
IEDA - Irrigation and Electrical Districts Association of Arizona	