

Report to the Adaptive Management Work Group
on
Actions Taken by the Technical Work Group
at their
August Meeting

Produced by

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In preparation for your conference call, the following is a report on the recommendations made to the Adaptive Management Work Group by the Technical Work Group (TWG) as a result of their last meeting. The TWG met on 02 and 03 August 2006 in the Bureau of Indian Affairs' conference room in the Arizona Center Building, Phoenix, Arizona.

Five Year Review of AMWG Strategic Plan

The TWG noted that it has been 5 years since finalizing the AMWG's Strategic Plan and that it would be useful to perform a review of the strategic plan to evaluate its current applicability to the program. By employing the knowledge that we have gained over the past five years about the resources of concern, the TWG felt it would be productive to review the resource management objective targets to better define the desired future condition for each resource in quantifiable terms. The Grand Canyon Monitoring and Research Center (GCMRC) supports this effort because they feel that if they had clearly defined, quantified goals for each resource they could effectively track progress and identify successes in reaching resource goals.

If the AMWG believes that this is a worthwhile effort, the TWG would like direction from the AMWG regarding whether the AMWG wants to perform the review of the strategic plan themselves or direct the TWG to perform the review and report back to the AMWG with recommendations.

Status of Roles Ad Hoc Group Report

The TWG would like a report on the progress of the Interior Department's review of the Roles Ad Hoc Group report and when it might be distributed to the TWG. The TWG believes that many technical issues that come before us are complex and intertwined with management and policy issues and that the report from the Roles Ad Hoc Group would help clarify and provide direction to the TWG in generating recommendations to the AMWG.

FY 07 Hydrograph

The TWG discussed the various FY 07 hydrograph options that were brought before them as a product of the Science Planning Group. The four options were:

1. ROD Flows (MLFF)
- 2a. Steady late summer-fall flows (Oct 2006 would be 6-9K, Sep 2007 steady 8K, otherwise ROD)
- 2b. Same as Option 2a, but with winter fluctuations (winter fluctuations would be 5-20K Monday

through Saturday December through February, steady 5-8K on Sunday, and ramping rates of 5000 up and 2500 down).

3. Begin Stable Flows – MLFF with equal monthly volumes (Oct through Jul) then stable 10,000 cfs (Aug-Sept)

The hydrograph was discussed over the course of two days. The discussion focused on preferences for fluctuating flows or steady flows. Some stakeholders wanted to see research hypotheses clearly articulated if steady flows were going to be recommended and they expressed concern that 2 weeks of steady flows did not seem to be of sufficient duration to detect a biological response. Steady flows are supported because it is believed that they retain sediment within the system better than fluctuating flows and they facilitate warming and stabilization of the backwater areas. In contrast, fluctuating flows have less of an impact on power generation and may help to increase organic drift as a food base enhancer.

The TWG discussed the need for a Beach Habitat Building Flows (BHBF) in association with the discussion of the FY07 hydrograph. Discussions centered on the time of year that a BHBF would be scheduled if the sediment trigger was met. March and September were the two months that were identified as being targets for planning a BHBF. The TWG asked GCMRC if they had the funding to do the necessary scientific research associated with BHBF. GCMRC responded that they could only implement standard monitoring, but that they wouldn't be able to produce the appropriate scientific research. Based in part on GCMRC's response, the TWG discussion led to a vote on a motion to not include a BHBF in the 07 hydrograph. The result of the TWG vote is presented below.

Motion 1: Move that the Hydrograph for 07 not include any BHBF

Yes: 14

No: 8

Abstaining: 0

In order to narrow down the choice of hydrograph options for 07, the TWG considered combining two options (2a and 2b) into one option because these two options are very similar with minimal differences. The TWG then took a vote on a motion to combine options 2a and 2b.

Motion 2: Move to vote on 2a and 2b and decide on which to vote on a primary motion.

Yes: 10

No: 9

Abstaining: 3

A proposal discussed earlier by the Science Planning Group was put forward to begin experimentation using flows similar to what are contained in one option for the Long-term Experimental Plan. This proposal was added to the first two thus creating three hydrograph options.

Finally, the TWG voted on the three options for the 07 hydrograph. Each TWG member was asked to vote for their preferred hydrograph scenario for 07. The results of that vote are presented below. A motivating factor influencing the TWG votes may have been the previous memo to the AMWG from the Secretary's Designee that indicated 07 was to be considered a transitional year with a recommended hydrograph similar to those of recent years. An additional influence on TWG voting may have been a perspective that the specific science questions to be tested for the steady flows had not been sufficiently stated and that GCMRC had not designed their 07 work plan for a steady flow year, but was more focused toward a continuation of the MLFF.

Motion 3: Voting on all three options

1. ROD Flows (MLFF)

2. Steady late summer-fall flows (Oct. 06 would be 6-9K, Sept. 07 would be steady 8K, other wise ROD flows)
3. Begin Stable Flows – MLFF with equal monthly volumes (Oct-July), then stable 10K (Aug-Sept).

Option 1: 16 Option 2: 6 Option 3: 0

FY07 budget and Work Plan

The TWG heard the recommendations from the SPG regarding the FY07 budget and work plan. The SPG had identified work plan/budget issues that they forwarded to the TWG for consideration. The TWG then identified several other issues that were discussed and recommendations made for modifying the FY07 work plan and budget. Listed below are the TWG identified issues and how they were addressed.

1. Process: Some TWG members expressed frustration with the 07 work plan and budget review process. Particularly, there were no revisions to GCMRC's work plan and budget presented to TWG that resulted from the earlier review by the SPG. Rather, the TWG reviewed the same work plan and budget that was reviewed by the SPG leaving some stakeholders questioning the purpose of the SPG (Budget Ad Hoc) prior review and recommendation generation to the TWG.

2. Submerged Aquatic Vegetation: The SPG could not reach agreement on whether to support this GCMRC project and decided to remand it to the TWG for further consideration. Some TWG members felt that the scope of this project was too broad or that it should have been funded under the food base project. Others thought that the information generated from this project would be useful to the program. The project originally was funded at \$96,000, but GCMRC proposed to divide the funding across two years at \$48,000/year.

3. Mechanical Removal: This was discussed in terms of whether it needed to be included as part of the FY07 work plan. GCMRC recommended that it not be included because it was part of an experiment for controlling non-natives and the experimental design was to implement for four years and then discontinue for four years in a block design. It appears to have been effective in managing trout, but it is important to understand the duration of that effect; therefore, it should not be continued in 07. The SPG recommended discontinuation of the mechanical removal and that GCMRC's efforts be redirected toward other non-native species, provided that appropriate monitoring of native and non-native fish populations is conducted. Some TWG members posed the question of when does an experimental action become a management action.

4. Rainbow Trout Protocol Evaluation Panel: The SPG recommended that GCMRC should include funding in the project budget to support a rainbow trout protocol evaluation panel and recommended \$20,000 added to the budget to support this effort.

5. Terrestrial Map/Monitoring: GCMRC is working with Dr. Larry Stevens to develop the conceptual plan for this project. Field work will not occur in FY07 until completion of a protocol evaluation panel.

6. Little Colorado River Gage: GCMRC indicated that they added \$30,000 to this project to continue the operation at the request of the SPG.

7. Cultural Resources: The initial issue regarding the scope of the proposed archaeological site assessments has been resolved by the Cultural Resources Ad Hoc Group and that the resolution

should be reflected in a revised GCMRC work plan. The original proposed scope was modified with no changes to the requested budget.

8. NPS Permit Funding: The Grand Canyon National Park requested an additional \$7,000 to the \$103,000 in the budget for assistance in covering the cost of permitting projects associated with this program. GCMRC agreed to find this funding in their budget and it was accepted by the TWG.

9. Economic Assessment: GCMRC was asked to do an economic analysis of the effects of the flow options on hydropower generation. Western Area Power Administration agreed to perform that analysis which allowed GCMRC to reprogram \$146,000.

10. Tribal Monitoring Funding: The SPG recommended that \$125,000 be made available to the tribes (\$25,000/tribe) to continue their efforts at tribal monitoring or the development of tribal monitoring programs. It was suggested that the funding could come from the experimental flow fund and that it should be administered by the Bureau to avoid GCMRC's burden rate. GCMRC indicated that they had identified a funding source to cover this request without taking from the experimental flow fund.

11. Continuation of Korman's Research: Some TWG members felt that a continuation of Josh Korman's research on Rainbow Trout redds was necessary in FY07. GCMRC had not planned for that continuation in FY07. The continuation of Korman's research was suggested in-lieu of funding the subaquatic vegetation project.

12. Humpback Chub Monitoring: Fish and Wildlife Service requested \$30,000 to fully fund their continuation of humpback chub monitoring in the Little Colorado River in FY07.

As a result of discussing these work plan/budget issues, the TWG voted on whether to support the proposed submerged aquatic vegetation project identified by GCMRC or take that funding (\$48,000) and reprogram it into the humpback chub monitoring requested by the Fish and Wildlife Service or the continuation of Josh Korman's research on rainbow trout redds. The following is the result of that vote.

Motion 4: Move to choose one of three projects for a funding level of \$48,000 1) HBC, 2) SAV, 3) Korman's REDD's work.

1) HBC: 7 2) SAV: 1 3) RBT: 9 Abstaining: 2

The TWG voted to support the continuation of Korman's rainbow trout redds research. The TWG then voted on the proposed recommendation to the AMWG to approve GCMRC's FY07 work plan and budget and the Bureau of Reclamation's FY07 work plan and budget. The following is the approved motion and the result of the vote.

Motion 5: Approve and recommend to the AMWG the draft GCMRC FY07 work plan (updated 6/26/06) and budget (dated 7/28/06), and BOR budget/work plan (dated 7/28/06) subject to the following:

1. Provide the TWG/AMWG a final FY07 work plan/budget in time for the fall AMWG meeting.
2. Provide the AMWG an analysis by the TWG Chair of the budget review process used in FY07 with suggested changes for improvement.
3. Incorporate the discussion and agreements from the Aug. 3 TWG meeting.

Yes: 21

No: 0

Abstaining: 1

The TWG recommends to AMWG to approve the FY07 budget for the adaptive management program with 3 stipulations. The first stipulation requires GCMRC to produce a final and revised FY07 work plan and budget to the AMWG at their next meeting; there were no recommended changes to the Bureau of Reclamation's work plan and budget.

The second stipulation addresses the budgetary review process (see Process comments above under TWG identified issues) and a desire to have GCMRC be responsive to the budgetary review process established by the TWG. That review process is designed to produce a revised GCMRC work plan and budget based on comments received from the Budget Ad Hoc Group that would then be presented to the TWG with recommendations from the Budget Ad Hoc Group. The Budget Ad Hoc Group/TWG would also like to see a response to comments table produced by GCMRC and the Bureau of Reclamation as part of the review process. The TWG is working with GCMRC to develop a more productive, less cumbersome, process of supplying GCMRC with comments on various documents submitted by GCMRC for TWG review.

The third stipulation requests GCMRC to incorporate the changes, modifications, and clarifications requested by TWG to their FY07 work plan and budget. These revisions should be detailed in the revised work plan and budget presented before the AMWG.

This report is presented for your information and is intended to replace the need for a presentation during the upcoming AMWG conference call. I would gladly provide any additional information, clarification, or answer questions regarding this report during the conference call or prior to the call should you want to contact me at 928/289/9259.

Humbly submitted,

Kurt Dongoske
TWG Chair