

Budget Ad Hoc Group (BAHG)
FY 2010-11 Preliminary Budget Recommendation to the Technical Work Group
March 6, 2009

The BAHG had a series of conference calls and provides the following preliminary recommendations and considerations for TWG review on the draft biennial budget for 2010-11. The BAHG reviewed the February 12, 2009 budget version supplied by GCMRC and Bureau of Reclamation (BOR).

Anticipated dam releases

MLFF with fall steady flows in September and October.

This is based on the current 5-year plan (EA and BiOp for 2008-12) which included steady flows in September and October and one High Flow Experiment (HFE). For further discussion see the HFE discussion below (number 18).

FY 2010-11 Budget Recommendation

To forward the February 12, 2009 draft budget to AMWG with the following issues of concern:

Items with specific budget or line item implications:

1. Line 1: CPI could be lower than projected 3%, therefore budgets could be affected. The upper basin RIP has been instructed to consider level funding for 2010 and 2011, and similar concerns have been raised at the NPS. This may need to be adjusted in the final budget recommendation, and could result in program cuts. Another issue that the AMP should consider is the budget creep that occurs with increasing salary costs and other costs which seem to move faster than CPI. The result is that less and less money is available for science. There should be a thorough review of the budget with a discussion of budget creep and what should/could be done to deal with it.
2. Line 15: The TWG chair reimbursement should be expanded to include the ability to pay for limited facilitation when funds are not expended to pay for a TWG Chair.
3. Line 19: Compliance documents. This line item should be funded with the consideration that there may be compliance costs in any given year, but especially in 2012 when new compliance documents will be necessary to consider the next operation period after the 5-year program. If the money is not used in any given year, it should revert to the experimental fund, but be tracked and available for use in the future as a lump sum if needed for our compliance needs in 2012 (e.g., new biological opinion, NEPA, planning post-2012).
4. Line 24: Mainstem Non-native Mechanical Removal. BOR has placed funding for this project in their portion of the FY 2010-11 budget in response to GCMRC removing the project from their proposed budget (see line 74). GCMRC removed the project against the advice of FWS, NPS, and BOR. BOR has added the project for a number of reasons, not the least of which is that the control of non-native fish is a conservation measure in the 2007 and 2008 biological opinions. Fulfilling conservation measures is a term and condition for the successful completion of these non-jeopardy opinions. GCMRC contends that this project qualifies as a "management action", however the GCDAMP has not agreed to conditions or criteria for when an action or project would become a management action. Research questions voiced at the initiation of this project, which include whether these non-native fish are responsible for changes in the humpback chub population, have not been answered and there is no publication that purports to contain the answer to this research question. Fish and Wildlife Service has laid out an argument for using mechanical removal to control numbers of non-native fish, primarily salmonids, at a pre-determined level as part of a continued research experiment, and BOR agrees that this is a viable approach to helping resolve a high priority question of the AMWG.

The BAHG believes that since this activity was included in the conservation measures within the 2008 Biological Opinion that it must be funded and carried out in 2010 and 2011. If non-native removal remains within the program then the result is that about \$170k (which includes the 18k provided from Reclamation appropriated funds) removed by GCMRC from the budget must be replaced. Since the existing budget is over-committed, GCMRC should return the funding that it removed from the project to balance the FY2010-11 budget. To better understand the implications of doing so, GCMRC should identify where the funds previously allocated to non-native removal have been used in the FY2010-11 budget (see number 15 below).

NEW (Steven Mietz): The amount under line 24 only covers one removal trip; however, current research suggests multiple trips may be needed in 2010 and 2011 to return the trout population to levels described in the 2008 BiOp. The addition of a second trip would increase this line item to approximately \$300k. Any money not used for removal efforts would go into the non-native fish suppression contingency fund. Funding: use the funding which was previously in line 67, and was moved and bundled in line 64, this is about \$115k/year (still short about \$35k). This would remove any funding in 2010-11 for mainstem non-native removal efforts (gear testing and implementation of the non-native control plan). The argument is that money should not be explicitly provided for the implementation of the control plan until the plan is completed and approved. Efforts should be placed on removing non-natives in the vicinity of the LCR (line 24).

Steven Mietz proposed that this project remain in the BOR portion of the budget while Glen Knowles recommended it be moved under Goal 2 along with line 25 (nonnative contingency funding). Glen Knowles requested that funding for line 24 (moved to Goal 2) be provided from line 64 (monitoring mainstem fishes). However, Glen Knowles did not advocate for the increase that Steve Mietz did.

5. Line 74: Removal of this project, Mainstem Non-native Mechanical Removal. There were two primary comments on this line item expressed by GCMRC and by BOR.

GCMRC: GCMRC has determined that cold water non-native removal protocols have been well established and thus this is now an activity which should be conducted by an appropriate management agency (e.g., AZGFD, NPS) and funding for the effort should not come from the AMP science budget. GCMRC proposes to continue to support scientific components of the project (e.g., evaluating the humpback chub population response, estimating the size of the trout population in the control reach) but GCMRC argues that cold water non-native fish removal should no longer be considered a scientific activity.

BOR: GCMRC has removed this project from their science budget and argues that the GCDAMP budget is a "science" budget, but there is nothing in the program charter or legislation that precludes the budget from addressing environmental compliance, such as commitments for biological opinions. With regard to GCMRC's contention that the field work for this project can be done by a management agency, the Arizona Game and Fish Department (AZGFD) already collects the field data for this project. That is not an issue. What is an issue is that GCMRC has moved forward ahead of the rest of the program in making a determination that cannot be made solely by scientists. The determination must be made by scientists, managers, and stakeholders of the GCDAMP using procedures and lines of communication that are already in place. It is in that forum that this issue should not be resolved, not through a dismissal of the project as a part of the FY 2010-11 GCDAMP budget. Reclamation advocates that this project remain in the FY2010-11 budget and that the Fish and Wildlife Service proposal should be considered as a continuation of addressing the original research questions that led to this project. This research has not been completed to our satisfaction by GCMRC.

6. Line 31: Canyon Treatment Plan and Implementation. It is still unresolved whether this should be increased annually by CPI.

7. Lines 55, 62, 64, 82: Unbundle projects. In the 2010-11 budget, a number of research projects were bundled or aggregated into large funded entities. This makes tracking budgets and understanding the costs of individual projects difficult. This is especially true with the proposed bundling of items in Goal 2. The premise seems to be that these are ripe for Core Monitoring and thus should be bundled. We would like to see these projects remain as single projects at least until they are approved as core monitoring. For transparency, it is much easier to follow the work, budgets, and results when projects are smaller and easier to understand.

8. Line 58 (Q4): Projects under Goal 2 are preliminary pending the PEP recommendation this summer and TWG review and recommendations. However, the current proposal to continue surveys as status-quo is appropriate at this time. However, we should acknowledge that the Fish PEP may result in substantial changes to research and/or monitoring under Goal 2. This should be integrated into our final budget recommendation to AMWG this summer.

9. Line 77: Hamill. Extirpated species. No funding is specifically being proposed, but some work may be occurring using razorback suckers from upper Lake Mead to repatriate lower reaches of the Colorado River in the Grand Canyon. There is not agreement on whether razorback suckers have been extirpated from Grand Canyon. The Recovery Plan states that razorback suckers are currently only found in Lake Mead, but may (emphasis added; there is not data to support this) extend into the lower reaches of the Colorado River above Lake Mead. Larry Stevens is expected to provide a white paper on extirpated species to the TWG for review at its March meeting (for information only), with further review at the April AMWG meeting.

10. Goal 7 (NEW): Diamond Creek NASQAN station discontinuation. TWG will hear a presentation by Bob Hart at our March meeting on this water quality station. The current support for this gage is from outside the program and may not continue. Additional funding sources may need to be identified to continue the operation of this gage. This station provides valuable water quality data collection at the lower part of the Grand Canyon. Unknown funding needs.

11. Goal 10 (NEW): Norm Henderson. GCMRC should develop an economic valuation study for 2010/11 (socio/cultural program area). The purpose would be to quantify the various resource values (market/non-market) for Lake Powell and the river corridor within Grand Canyon and Glen Canyon. Funding source: \$116k should be taken from line 92 in 2010. If costs are anticipated to exceed this amount then the additional amount (total could be about \$150-200K/yr) should be taken equally (as a percentage) from the biology, sediment/quality of water, and DASA program areas. The economic research is a higher priority than arthropod monitoring. This is a critical research need of the program that has been underfunded. It has also been identified as needed by the previous PEP reviews and by the science advisors.

12. Goal 11 (NEW): Multiple. CRAHG: GCMRC should develop a proposal (RFP) for a project that would develop a geomorphological model to evaluate dam affects on cultural sites. The cost is roughly estimated at about \$200k/year for both 2010 and 2011. The CRAHG did not include a funding source for this project.

Funding source (recommended by Barger/Palmer without input from the CRAHG): reduce the GCMRC science budget by 2.5% across all projects.

13. Line 127: Steve Mietz. A line item should be added under the DASA portion of the budget which utilizes DASA funds to analyze historic aerial photos and determine the best method for use in change detection for sediment resources. This might involve unbundling of a portion of the DASA budget. Breedlove's analysis should also be included in this discussion.

14. High Flow Experiment (HFE): As described above, the current compliance documents describe an action which included only one HFE from 2009-2012. However, beginning in 2010, approximately \$400k could be available from the experimental fund (Line 22) to support an HFE, and about \$900k in 2011 (if unused in 2010). John Hamill proposed in his budget memo that an HFE study could be undertaken for about \$500k to \$750k (the 2008 HFE cost over \$3 million).

We did receive a number of comments on whether or not an HFE should be considered in the FY 2010-11 budget. Dennis Kubly and Shane Capron (TWG Co-chair and Chair) discussed this thoroughly and have concluded that this is not ripe for TWG discussion. We see three critical components to an HFE decision:

1. Technical: it is entirely appropriate for TWG to review the scientific aspects of a future HFE and those HFEs already completed. The current schedule calls for some reports to be concluded in late 2009 and the rest in early 2010. Any composite report would occur sometime after that. Therefore, from a technical aspect, TWG will not be able to evaluate the success and scientific merit of the last HFE until early 2010 at the earliest. Ideally, we would evaluate the last HFE before beginning the next one, but this could be influenced by policy choices made by AMWG (see number 3 below).
2. Funding: this is an appropriate discussion for the BAHG and TWG. The amount available in the experimental fund is described above. This is a generally agreed upon approach to put \$500k into the experimental fund each year.
3. Policy: the current policy for an HFE is described in the current compliance documents (2008 EA and BiOP) which provides for only one HFE which was completed in 2008. Any future HFEs would require additional compliance. The BAHG should not consider further impacts to the budget from an HFE in 2010 or 2011 without explicit guidance from AMWG to do so. In part, this is due to the controversial and policy-laden nature of the action. For example, because such limited money is available in the experimental fund, it is likely that an HFE could have substantial impacts to the proposed budget which would likely result in changes in priorities.

Thus, we propose to provide this information to AMWG at their April meeting and get guidance from AMWG as to whether TWG should consider the potential impacts of an HFE on the budget. The BAHG recommends that we add a place-holder line item in the budget for this possibility. This would be for funding needs beyond the availability of funds in the experimental fund.

15. Cultural program: three proposals for additional projects were made by the CRAHG with no specific funding source provided: (a) Line 114, add back in \$70k to the NPS, (b) NEW: Preservation Treatments, about \$35-50k, and (c) NEW: Tribal 106 support of about \$100k. These projects are considered by the CRAHG to be important for the support and implementation of management actions/compliance under Section 106. These activities are described in the BOR treatment plan, but are currently not being fully carried out. CRAHG is concerned that this year's treatment plan is primarily an excavation/data recovery plan and that other important components of the treatment plan are not being implemented with the funding currently available. Further, it may be that the \$500k per/year generally agreed to by AMWG for treatment of these sites may not be sufficient and further work at each of the treated sites is possible. Further, \$70k of the \$500k for treatment is currently being provided to the NPS for their participation in the treatment work. TWG should work with the CRAHG, GCMRC, and BOR to determine the following before proposing a final budget in the summer:

- Provide an explanation of current funding line items (more explicit description of accounting) and how they relate to the treatment plan and necessary compliance, including Lines: 23, 31, 114, and relevant portions of Lines 39-43 (response to BAHG by May 15).

- Describe why the CRAHG believes the treatment plan cannot be fully implemented using the current line items described above, specifically the \$500k allocated in Line 3 and ~ \$165k in Line 23 (response to BAHG by May 15).
- Discussions should occur between the NPS/GCMRC/BOR on the necessity of the \$70k for the NPS which was dropped this year from GCMRC's cultural budget (Line 114). DOI agencies should discuss this and determine who is responsible for that funding and provide a response to the BAHG by April 10 via their BAHG members.

General comments and concerns:

16. General comment on core monitoring: This budget assumes that we will have moved forward on core monitoring for a number of Goals under the AMP. Although this is reasonable to consider we feel it is moving too fast. We will begin to consider the General Core Monitoring Plan this summer and from there will have a better idea what may constitute core monitoring. TWG should, within the core monitoring discussion, evaluate cost-effectiveness of current monitoring programs (precision, accuracy, cost trade-offs). GCMRC is planning a core monitoring workshop before the next TWG meeting to discuss the draft plan. TWG should also discuss the TWG role in core monitoring.

17. General comment on the workplan. We are looking for additional clarity in the workplan on staff funding including a current organizational chart. We propose the following: (a) that staff time for individual projects be allocated under those projects, (b) the workplan be oriented in such a way that we can track staff time to 100%, (c) time be allocated in the workplan such that a substantial amount of time, about 20%, is allocated to writing reports and publications, and (d) any new staff additions or deletions be clearly outlined in the budget introduction and appropriate projects.

18. General comment on Goal 10. There is a lack of economic analysis capacity in the program to evaluate trade-offs or other economic concerns. Additional capacity should be considered. Unknown funding needs at this time, perhaps this could be dealt with by adding an economist as a science advisor or using the SAs for specific projects related to economics.

19. Line 74: Glen Knowles. Priorities and funding under Goal 2. GCMRC should provide an explanation of where funding used in FY 2009 for Mainstem Non-native Mechanical Removal has been reallocated within the program.

20. Line 71: Dennis Kubly. GCMRC should provide clarification on when we will get to review a report on this project which was funded from FY07-FY09. The report should relate to the work described in the workplan.

21. General comment on accounting. Dennis Kubly. Currently, BOR does not have adequate staff resources to track reports due by GCMRC from the workplan. Thus, there is inadequate tracking of deliverables by the AMP for projects funded by BOR funds. BOR should investigate options to provide staff resources in tracking reports.

Other proposals:

The BAHG received two proposals from CREDA which did not include a budget or funding source. They are provided here for TWG discussion. These do not contain funding amounts, funding sources, and are unclear.

1. Determine effects of varying ramping rates on food base and drift (Kennedy indicated a dramatic increase in numbers and biomass as a HFE occurs and drops to flat when flows decrease).

2. Determine the percent of campsite areas lost due to an increase in riparian vegetation and how much campsite area is actually needed. Also, we have no idea when the available campsite area becomes too small for the number of campers such that it creates a problem (Fairley said that amount of campsite desired as the objective has always been to have "more"). *Question for GCMRC, is this currently being accomplished?*

Balanced budget:

Over budget:

Line 24: (1) \$165k for nonnative removal (Kubly: GCMRC should find funding for this because they removed it, Knowles: should be funded from line 64),

(2) Mietz would double this to \$300k, funding from line 64 for the increased cost.

Line 114: add back in \$70k to the NPS

NEW: Preservation Treatments, \$50k?

NEW: Tribal 106 support, \$100k

NEW: maintain Diamond Creek NASQAN site

Budget neutral:

NEW: Geomorphological model (RFP) for \$200k in 2010 and 2011, reduce GCMRC by 2.5%

NEW: HFE in 2010 or 2011 based on sediment triggers, \$400-750k from experimental fund

NEW: economic valuation study, \$116k should be taken from line 92 in 2010. If costs are anticipated to exceed this amount then the additional amount (total could be about \$150-200K/yr) should be taken equally (as a percentage) from the biology, sediment/quality of water, and DASA program areas.