

Budget Ad Hoc Group (BAHG) Conference Call – February 14, 2012 (9a-12p MST)

TWG Chair: Shane Capron
Facilitator: Mary Orton

Participants:

Kerry Christensen (Hualapai Tribe)
Marianne Crawford (USBR)
Helen Fairley (GCMRC)
Dave Garrett (Science Advisors)
Leslie James (CREDA)
Glen Knowles (USBR)
Ted Melis (GCMRC)

Don Ostler (UCRC)
Clayton Palmer (WAPA)
Jack Schmidt (GCMRC)
Larry Stevens (GCWC)
Bill Stewart (AGFD)
Mike Yeatts (Hopi Tribe)

Shane told the group Kurt Dongoske couldn't participate on the call but requested the group not do anything with his comments. He said the group would be using the Consolidated Comments distributed to the BAHG on Feb. 13, 2012, for today's call. **Comments and questions were captured in red.**

Two Environmental Assessments: HFE and NNF Control.

1. Highest priority should be the activities related to compliance associated with the two EAs. Specifically, biological work to determine if mortality of young humpback chub is from downstream transport during HFEs or merely relocation? Is humpback chub mortality from increased predation caused by more trout production from HFEs? (CREDA)
2. The science and monitoring necessary to support the two environmental assessments needs to be a top priority as well—and we understand that these costs could be substantial. (Colorado)
3. Bureau of Reclamation needs to specifically define their compliance responsibilities under both MOAs for non-native fish control and the high flow experimental protocols and the respective costs, including identifying and mitigating adverse effects to traditional cultural properties. (Zuni)
4. HFE Science Plan Implementation: Propose that GCMRC restructure the budget for projects relating to the HFE science plan and incorporate all of the science needed to implement the plan within the projects. The last budget had separate sections for HFE add-ons and was very confusing. (WAPA)
5. Compliance associated with the two EA's: As mentioned by others, we also would like to see how the budget is connected to the science behind the EA's. (Nevada)
6. Now that the HFE and NNFC MOAs appear to be all but signed, it would be appropriate to anticipate some of the future monitoring needs and get a head start on gathering information that may help guide those actions. In particular, traditional tribal knowledge (under which traditional ecological knowledge, or TEK, is subsumed), would theoretically become a significant part of the tribes' participation. This should be integrated with the tribes' previous monitoring efforts with the goal of revising future work in a way that addresses the concerns outlined in the MOAs (particularly for the HFEs). This should be of particular concern in upcoming budget development. (Hualapai)
7. HFE Science Plan – Rapid Response: A science plan needs to be developed to study the Rapid Response HFE and to compare the effect of this HFE with the Store and Release HFE. The Rapid Response HFE is scheduled for testing beginning in 2013. The following additional items will be needed:
 - Since the Rapid Response HFE requires that a flood at Glen Canyon Dam match Paria floods, additional gaging and monitoring of the Paria River will likely be required.
 - The GCMRC standard sediment monitoring will likely be inadequate to determine the success of a Rapid Response HFE and compare it to the Store and Release HFE. (WAPA)

8. We have concerns about the apparent limited funding directed to the archaeology/cultural portion of the budget and the riparian monitoring. Given that we are entering into a ten-year program of potential high flow experiments, the need to assess their affects in the riparian zone and to aspects of the cultural resource landscape is critical. Further, the MOA being developed to address compliance with section 106 of the NHPA is assuming that monitoring activities will addressing whether the HFEs are having positive, negative, or no affects on the historic properties in the CRE. Without adequate funding in these two program areas, it may not be possible to understand HFE affects, thereby making the program out of compliance. (Hopi, GCRG)
9. Monitoring done for the High Flow Experiments may and perhaps should become part of the Long term Monitoring Program. (Colorado)
10. Follow recommendations of the Tribes regarding nonnative fish control (GCWC).

Don asked how the new two EAs and the LTEMP would be funded. Shane said there has been a mix between the work being funded by Reclamation and GCMRC. Glen said there are a number of things associated with the most recent BO that Reclamation has funded through the AMP over the years. There are a few projects that were funded by appropriations and Reclamation is continuing to identify the need for further appropriations in the future. The ones people are most familiar with would be translocation of HBC to Shinumo Creek and Havasu Creek and the monitoring and non-native fish control associated with that work as well as Reclamation's assistance with NPS in removing non-native fish from BAC. Those activities have been funded as conservation measures through appropriations and they intend to continue to request money for those projects.

Jack asked how the group moves from individual stakeholders' comments to consensus opinions. He asked if the group would be trying to reach consensus in prioritizing the importance of the comments. Shane said that since there are so many new pieces to the workplan budget that have been set in place by Reclamation with the two EAs and the BO and other changes, it's too early in the process to do but thought it would occur in the next phase after DOI provides some initial responses. When the TWG gets the budget in March, Shane said they would get into more budget details and would be looking for consensus on technical issues. Those will then go to Lori Caramanian for further debate before the final draft workplan is developed for June. Policy level issues will be raised to the AMWG.

Humpback Chub

11. Ongoing work on the Humpback Chub Comprehensive Plan needs to continue. (Colorado)
12. Propose a humpback chub range restoration study, particularly if trout are removed from Paria-Badger Reach - \$100,000 (GCWC).
13. Aggregation Sampling: We are concerned with potential over-sampling of the humpback chub aggregations. The 2011 biological opinion calls for annual assessments of the aggregations but there is the potential to over-sample these given they are very small populations and we are using intrusive gear in some cases (e.g., trammel nets). Consider flows which would help to limit native fish take during sampling especially with trammel nets. Also, consider a sampling regime for the aggregations that allows some years off between sampling and that GCMRC assess the potential impact of take on these aggregations. Some aggregations may warrant more sampling to understand the impacts of translocations (e.g., LCR aggregation, Shinumo aggregation), while others that may be more vulnerable to take could be sampled less often (e.g., 30 mile). If we begin to see an effect on these aggregations, we might assume it was related to flows or some other impact when, in fact, it could be the research. Request that GCMRC consider experience in the upper basin as well as the draft humpback chub research plan which did implicate research effects in the negative status of upper basin populations. (WAPA) Jack said this is something significant and GCMRC will have to work with FWS on the issues like the assertion on over sampling. Shane said the request here is that whatever sampling regime is developed clearly articulates how the

program is going to determine whether we're having an impact or not, or whether or not we're actually measuring impacts from the action and not the sampling program.

14. PBR Trout Removal: We support implementation of the PBR removal project in 2012 and beyond. We request close coordination and updates with the TWG and evaluation. If 2012 and 2013 are learning periods, GCMRC and Reclamation should consider full implementation of the PBR removal project in the 2014 workplan. (WAPA)
15. Tracking Incidental Take: It is unclear how Reclamation will track the incidental take of humpback chub in the revised Incidental Take Statement in the 2011 biological opinion. If the current number is 24,000 young of the year (YOY) or juvenile humpback chub, how will Reclamation ensure that the ITS is not reached? Will Reclamation track the number of trout in the LCR reach and estimate predation related mortality annually from those trout and consider removals if the ITS is reached? The previous ITS of 6,000 adult humpback chub was much easier to track and understand. (WAPA)
16. Chute Falls Translocation Plan: The TWG was promised a Chute Falls translocation plan by GCMRC and the FWS, yet that plan has yet to be provided to the TWG. Please finalize the plan for the June TWG meeting so that the TWG can understand the goals of the program, success to date, and data to support how those translocations are leading to the recovery of the species. (WAPA)
17. Humpback Chub Incidental Take: Request that as part of the workplan FWS provide annual updates of incidental mortality of humpback chub related to research take including trammel nets, electroshocking, removal, etc., from all sources in the lower basin recovery unit. (WAPA)
18. Brown Trout Removal: We support implementation of the brown trout removal program described in the biological opinion. Compliance should be secured in 2012 and the 2013-14 workplan should include an aggressive program to extirpate brown trout from the mainstem area near Bright Angel. This program should be fully coordinated with a Bright Angel stream removal project to remove both spawners and the mainstem population. (WAPA) **Shane said that AGFD plans to continue to do a mark-recapture population estimate for BT in the 2013-14 workplan which will provide some baseline information on population size before any removals may take place in the mainstem near Bright Angel.**

Native American Values and TEK

19. Concern that the entire AMP is losing sight of humanistic values associated with Grand Canyon and the Colorado River ecosystem. This is most likely the unintended result of a strong materialist, science program that seeks to understand the laws governing the interaction of matter within this system. This philosophical/paradigm shift in focus struck me during the two day knowledge assessment workshop where there was minimal mention of the Native American perspective on the various research on resources that were presented. Clearly Native American values regarding fish, sediment, water, etc are not a part of the science program administered and developed by GCMRC; a trend that has over the years become increasingly focused on shutting the door on the tribes. This is not just my philosophical rant, but a real concern about how this issue plays out FY13-14 budget and work plan development. (Zuni, GCRG)
20. Additionally, the knowledge assessment workshop was in part designed to help inform the Argonne National Laboratory technical staff about the science issues associated with the Colorado River ecosystem and the operations of Glen Canyon Dam, but the blatant lack of presented information regarding Native American issues within this program was a significant information need that they did not hear. How this deficit in knowledge will be overcome during the EIS process is a great concern to Zuni. (Zuni)
21. Colorado is troubled by the continued complaints from the tribes that the GCAMP is losing sight of the human values associated with the Grand Canyon and the Colorado River ecosystem and that tribal interests in particular aren't being adequately addressed in the GCAMP process. If there are

GCAMP funds that were not expended in prior years we believe some should go to address tribal concerns where there is mutual agreement between the tribes, federal agencies and GCAMP participants. (Colorado)

22. There are indications that the Department of the Interior is considering possible ways of incorporating Traditional Ecological Knowledge (TEK) or Traditional Knowledge into the GCDAMP. If they are serious about this, then the development of the FY 13 and 14 work plan and budget would be an effective place to begin this integration through the development of a pilot project that involves one or more Tribes and GCMRC. It should be acknowledged up front that this integration may not be initially as effective or successful as anticipated, but will take a sincere effort by Tribal representatives and scientists at communication, innovation, and a willingness to evolve philosophically, methodologically, and personally. (Zuni, GCT, Hualapai)
23. Incorporation of TEK into GCMRC approaches (study) -\$50,000 (GCWC) Jack said Helen Fairley undertook a serious background literature review and wrote a white paper on the status of incorporating TEK into land management programs, and they couldn't find any evidence of TEK being incorporated into a program that involved management of an engineering facility. They found TEK had lots of potential benefit in deciding what the desired future conditions might be, but desired future conditions have already been resolved by the stakeholders. They also found that TEK leads to certain perspectives and opinions such as having no lethal killing of trout or that there should have more focus on riparian ecosystems but at the end of the day those opinions might not be listened to by a larger stakeholder group because that's one perspective among many. He said incorporating TEK becomes a code word for "we want you to take us more seriously." He fully supports that but wants the TWG to be extremely explicit about what this means. Glen said the federal agencies are struggling with the specifics and need to know what the tribes see as a pragmatic approach to actually doing that. Mike said the tribes are wrestling with the same thing because they haven't done much TEK integration into a western program and are not entirely sure how it best fits in and said that was the intent of a *pilot* program. Helen said the white paper was shared with DOI and that the CRAHG is trying to look at the bigger picture of how tribal viewpoints are heard and duly considered with everyone's concerns. Jack will check with the Department on sharing the white paper with the GCDAMP. Shane said he would talk offline on how to integrate the things John Halliday is working on with the CRAHG assignments.

GCMRC and LTEMP

24. There should be a line item in the budget to cover GCMRC's participation in the LTEMP process. (CREDA) Jack said GCMRC is very aware of the potential impact on its staffing and identifying additional staff needs to participate in the LTEMP process because it's hard to imagine at GCMRC has the time to commit to it in its entirety. Glen said Reclamation has typically had a line item for compliance, but they're using appropriations to pay for the LTEMP and not power revenues. As co-lead on the LTEMP, NPS is probably using appropriations as well. Jack said GCMRC hasn't met with Reclamation and Argonne to identify whether the major modeling activities will be done at GCMRC or elsewhere which may result in needing additional staff. The GCDAMP can weigh in on that, but it will then be elevated to a policy level for further discussion.
25. Concerned about the LTEMP EIS process and what will be required of GCMRC to provide science support to this EIS process and how that will negatively impact the GCDAMP FY13-14 budget/work plans. It was expressed that the LTEMP EIS is a separate, but parallel, process from GCDAMP; where is the funding coming from for the science studies for the EIS and will it employ power revenues? (Zuni)
26. GCMRC's participation in the LTEMP process. How is this budgeted? (Nevada)
27. Also, the GCMRC is involved in the LTEMP process, which is a separate but parallel process. It hasn't been clearly articulated how the LTEMP will be funded, but perhaps a specific line item for

that involvement should be included as it is unlikely all GCMRC involvement can be carried out within the existing work. (Colorado)

Missing, At-Risk, and Extirpated Species Shane said he thought this is a policy level discussion for the AMWG and would bring it up at the February AMWG meeting to get feedback on whether they want to explore these topics within the budget. Item was moved to the end of the list of concerns forwarded to DOI for discussion at AMWG.

28. Review of distribution and status of missing and at risk species -\$50,000 (GCWC)
29. I'd like to see some consideration made in the 2013-14 budget for reintroducing extirpated species in Grand Canyon. At the least, I think we should put in a budgetary placeholder for scoping out future activities to reintroduce missing species. (GCT, Anglers).
30. With regard to the requests for including a "budgetary placeholder" for scoping the reintroduction of extirpated species, I would request further discussion of the advisability of inclusion in the FY 13-14 budget. The AMWG will soon be asked to consider "Desired Future Conditions" goals for the program, including the following goal for extirpated species: "Re-establish fishes extirpated from Grand Canyon, where feasible and consistent with recovery goals for humpback chub and the recovery goals of those extirpated fishes." Given the most recent information provided regarding the status/trend of the humpback chub, there seems to be considerable uncertainty regarding both the feasibility and consistency with the recovery goals. I would hope that any reintroduction effort would only be undertaken after careful consideration of the potential adverse impacts to existing populations of both humpback chub and other aquatic species. (Arizona)
31. Colorado firmly believes the existing efforts outlined above should not be compromised by undertaking work on issues that are outside the scope of the GCAMP, such as the reintroduction of extirpated species or work outside the defined Colorado River ecosystem that would deter the focus of the GCAMP directives. Efforts to reintroduce extirpated species, for example, are more appropriately addressed through the budgets of the USF&WS or NPS and the importance of those reintroductions reflected in the budgets of the USF&WS and NPS. (Colorado)

Riparian Vegetation

32. Riparian vegetation model development -\$100,000 (GCWC) Jack said there isn't a riparian model and GCMRC has worked on this over the years. There has been resistance from NPS in giving them permits to the work since NPS feels they are already doing the work. He feels it should be included in the next budget round and take another run at working with NPS collaboratively. Mike said the Hopi Tribe is concerned work isn't being done in the riparian zone.
33. Increased focus on Riparian Vegetation knowledge --- In light of the newly presented science, we would like to see some answers on the role of riparian vegetation and sediment retention. (Nevada, WAPA, CREDA) Clayton said that getting sand on the beaches is a necessary condition, but not a sufficient condition for beaches. WAPA is very interested in the 2013-14 budget having a riparian monitoring program relative to beaches and potentially experiments and management actions related to vegetation encroachment.
34. Colorado agrees with Nevada's suggestions, and in particular, agrees that work associated with vegetation studies should be included within the budget. (Colorado)
35. Concerned that the funding for riparian vegetation monitoring isn't sufficient to address -a) continuation of past monitoring, b) synthesizing past information which has been collected, c) monitoring vegetation encroachment on camping beaches (GCRG)

TWG Management

36. FY 2013 River Trip: GCMRC and Reclamation should include a new budget item under program support for a river trip in FY 2013. This trip should be in support of the recommendation made in the Roles Report and following on recommendations being considered by the CRAHG/TWG

related to integrating stakeholder values. The trip could be organized in two sections so that members could participate in either half or all of the trip. It could be focused in support of the LTEMP and a continuation of the knowledge assessment. We can discuss further what we might accomplish on such a trip, it could really be a lot and it is moments like this that the program could take a big step forward. (WAPA, GCRG) **Jack said it needs to be determined how critical a river trip would be to the mission of the program and how soon it should be scheduled.**

37. TWG Meetings: Reclamation should include adequate funding to support TWG meetings in alternate locations to support the recommendation being developed by the CRAHG in fostering the inclusion of stakeholder values in the program. (WAPA)
38. Colorado agrees that the budget should accommodate a meeting (or meetings and or a river trip) that would allow TWG and/or AMWG to visit the resources we are charged to protect and conserve. (Colorado)

Model

39. Refinement of the Colorado River ecosystem model to incorporate landscape and riparian processes and species -\$200,000 (GCWC)
40. Colorado would encourage more work on a comprehensive model that will help balance the tradeoffs of various test flows. The GCAMP is developing many individual models but efforts to incorporate information from those models into a comprehensive model for the GCAMP has been lacking. In particular, a model that would explore the tradeoffs associated with fish management flows, and how different flows associated with fish management would affect other resources, could be helpful. (Colorado)

Scientific Control

41. Use of Cataract Canyon as a scientific control: what do we need to know and what can we learn in relation to the DFCs? -\$75,000 (GCWC, GCRG) **Jack said he would like the guidance say, "explore the applicability of other canyons as scientific controls." Don requested that GCMRC identify high, medium, and low priorities. This would also involve spending on work outside the program. Bill suggested adding tailwater fisheries. (or other canyon or area) was added after Cataract Canyon per comments made to include other possible areas.**

Programmatic Agreement

42. Bureau of Reclamation needs to specifically define their compliance responsibilities under the existing 1994 programmatic agreement with respect to the 2007 treatment plan and the monitoring of archaeological sites for adverse effects/condition and the respective cost. The Bureau has not, to the best of my knowledge, accomplished any progress or efforts to remain in compliance with the PA for the past two years (at a minimum) and they need to be more responsive and responsible. (Zuni) **Helen said \$500K has been put in the budget for the last couple of years and wonder if that still needs to be done and also where is the \$1 million. Once the compliance is completed and funding identified, and WAPA wants to know what monitoring would be like and actions would be done under Section 106. Reclamation may use carry over funding to fund the treatment plan line item (about 500k).**

Archaeological Sites

43. Archaeological site preservation is currently a physical resource research effort and all humanistic values associated with these sites are being minimized; while it is a hypothesized benefit to preserving these sites that they get buried by Aeolian sand that is the result of high flow events there has been no consideration if the burying of these site and their respective artifacts and surface features negatively impacts the feelings and associations that the Zuni religious leaders experience when they visit these sites during monitoring trips and this needs to be explored. (Zuni)

Focus on Sediment

44. There appears to be too much focus on understanding sediment suspension and transport in this program especially if the benefits of high flow events that are restricted to 45k cfs are minimal and primarily only serve to build sandbars/beaches that begin to immediately erode. Perhaps a re-evaluation of the focus on sediment as such an important resource is needed and how that impacts the FY13-14 budget/work plans. (Zuni)

Field Aquatic Ecosystem Study

45. Feasibility analysis for a field aquatic ecosystem study arena in the gravel pits at Lees Ferry - \$50,000 (GCWC). **Shane asked Larry to provide copies of the presentations he has made to the TWG on this subject.**

Old High Water Zone Monitoring

46. Colorado questions the need to monitor the Old High Water Zone as previous research indicates it is not sustainable and over time most of those species will migrate down into the New High Water Zone to extent possible given the Tamarisk invasion. (Colorado) Jack suggested that this be broken down into two parts and have GCDAMP do a field aquatic study

Nutrient Dynamics

47. Nutrient dynamics model pilot -\$100,000 (GCWC)

Shinumo Creek Fish Interactions

48. Study of rainbow trout/native fish interactions in Shinumo Creek -\$100,000 (GCWC)

Administrative History

49. Administrative AMP history pilot study -\$100,000 (GCWC). **This budget would help frame the larger study but the next phase could be around \$500,000.**

Higher Planned Floods

50. What is there to be learned from higher (>60,000 cfs) planned floods in relation to sediment and ecosystem management? (GCWC)

Results of Research and Monitoring

51. Colorado is concerned that the results of the research and monitoring are not forthcoming in a timely manner and we would like to see that improved even if that requires some increased funding. Colorado would also like to see more fact sheets produced to help make the Knowledge Assessments more user friendly to the public. (Colorado) **Jack said he continues to encourage his staff to develop a document with concise results versus having the TWG and AMWG rely on just the PPT presentations.**

General Comments – Budget Focus and Format

52. Colorado recommends that the FY 2013-14 budget and workplan should stay consistent with the direction contained in the Grand Canyon Protection Act. This budget should be focused on the monitoring and research required to arrive at dam operations that will benefit the Colorado River ecosystem and cultural resources while minimizing the impacts to hydropower. Towards this end, the highest priority should be continuation of the current monitoring efforts and evaluation and improvement of those monitoring efforts so that they provide the best information and data possible for Glen Canyon Dam Adaptive Management Program (GCDAMP). (Colorado) **Ted Kowalski wasn't on the call so they will have to weigh in on this at the next meeting.**
53. Experimental Fund: The concept of the Experimental fund is outdated. We recommend modifying the budget to reflect current needs such as nonnative fish management. It is unclear how DOI intends to deal with potential LCR removals, potential HFEs, etc., within the budget framework.

How can the budget be nimble to incorporate these potentially costly events? The science plans were very basic, but how will the budget incorporate this uncertainty? What about an HFE and LCR removals in one year? (WAPA) More discussion needs to occur on what the EFF should be used for and a need to consider all contingencies that may come up and projected costs. Shane recommended we be strategic about what funds are placed in what areas to meet our needs. How do we want to prepare for these experiments?

54. Colorado shares the concerns articulated by the Western Area Power Administration and believes the budget could be consolidated and made more precise.

The following comment was provided by ADWR but due to an email oversight was missed during the compilation of the comments and an ADWR representative could not make the BAHG call to address the issue, thus the TWG Chair did not learn of the comment until after the meeting. However, given the nature of the comment and that we intended to be inclusive of all stakeholder comments we are adding this to the list of issues per the Chair's discretion. Further consideration can be made by the TWG and the AMWG if there are objections or discussion needed among the stakeholders.

55. We would like a clear link from the budget to the core monitoring plan to support and evaluate our progress on delisting and downlisting of the humpback chub:
 - (a) In regards to the "Humpback Chub 5-year Review" and "U.S. Fish and Wildlife Service's Response to Westerns concerns over the Humpback Chub 5-year review": the U.S. Fish and Wildlife Service outlines what needs to be accomplished to move toward the downlisting of the humpback chub.
 - (b) Has carrying capacity been reached for the humpback chub? If so, what do we need to see to improve carrying capacity?
 - (c) Is there a remaining disagreement between Reclamation and AGFD on sampling/research protocols in regards to humpback chub monitoring?
 - (d) How are these issues being addressed in context of the Budget 2012/2013 and Monitoring Plans and are we on track for being able to evaluate when recovery goals have been met for the delisting/downlisting of humpback chub? (ADWR)