

MEMORANDUM

TO: Kate Kitchell, Mark Sogge, Ted Melis

CC: Suzette Kimball, Mike Shulters, Deanna Archuleta, Lori Caramanian

FROM: Anne Castle, Secretary's Designee, Assistant Secretary for Water and Science

DATE: March 31, 2011

RE: Grand Canyon Monitoring and Research Center (GCMRC) Science Planning

As we discussed in my office last December, GCMRC is in the midst of a transition. With the lamentable departure of John Hamill, GCMRC will soon have a new Chief. In addition GCMRC is nearing the final year of its five-year science plan and, therefore, is beginning to consider the next five years of Grand Canyon science, and begin its science planning process. This process will inform how GCMRC proposes to commit its resources over the next few years. There are a number of factors influencing this planning process, and we have discussed the priorities for the program that will be used to focus the work of GCMRC and facilitate planning.

First, we have learned a great deal from past GCMRC science. There is a large degree of consensus around the idea that we are at a transition point between an almost wholly experimental science program and one that includes more components of management support. This is something that has been talked about for many years. The work being done now on the two EAs (HFE Protocol and non-native fish control) highlights this transition, even though the HFEs and non-native fish control remain experimental in nature. And this is what adaptive management is all about. So the science plan for GCMRC needs to reflect this course adjustment.

Second, we have had and are likely to continue to experience very limited budgets. We cannot expect any additional funding for the operation of the Adaptive Management Program and its research and monitoring component. So we have to plan very wisely to deal with this limitation.

As a result, we need to focus on priorities. We'll do that by looking at the Desired Future Conditions (DFCs), still in draft but nearing a final recommendation to the Secretary, but we also have to narrow the field because the DFCs are very comprehensive. Our first and foremost priority is compliance with the Endangered Species Act, which means focus on the native fish and particularly the humpback chub. Second, we need to focus on sediment, which was an instigating factor for the Grand Canyon Protection Act and continues to be an issue with resources downstream of the dam. That includes being able to respond if the high flow protocol goes forward and it calls for a high flow experimental release. Third, and these are competing priorities, we need science on both non-native fish control and the recreational trout fishery. These are the primary areas where I have asked GCMRC to concentrate its resources.

These priorities are largely consistent with those adopted by the Glen Canyon Dam Adaptive Management Work Group (AMWG) in August 2004. Those priorities focused on the humpback

chub, sediment, and the “best” flow regime (no specification of what resources it would be best for). In addition, the 2004 priorities posed questions about cultural resources and the operation of a Temperature Control Device (TCD). While cultural resources remain a very high priority, it is not clear that there are significant science questions involving those resources, or the TCD, that require attention at this time. These conclusions may change over the course of the next five-year plan.

It may be helpful to also explain what is not intended by establishing these priorities. First, it does not mean that long-term monitoring of core ecosystem components will not be continued. Second, it does not mean that no other issues should be considered for scientific investigation – if there are issues outside of these priorities that have widespread support and further the purposes of the Adaptive Management Program, they can be considered as well. Finally, it does not mean that we have to have new science in each of these priority areas every year. The intent behind the establishment of priorities is to enable GCMRC to better direct its limited resources and resist the Christmas tree approach to science planning.

We anticipate a two-phase process: (1) developing the FY2012 work plan and (2) following up with a five-year science plan that would be developed next year and be informed by the planning that has occurred at that point through the Long Term Experimental and Management Plan process, with the ultimate goal of integrating analysis of a long term science plan with the LTEMP as part of that process.

In developing the FY2012 workplan, I requested that GCMRC conduct a streamlined planning process that focuses on these key priorities, but also provides for TWG and AMWG input. An outline of the streamlined process is attached. The revised FY2012 workplan and a process for subsequent long-term science planning will be presented to the AMWG at the August meeting this year. The AMWG will be involved in the science plan revision process.

I appreciate GCMRC’s invaluable contributions to the Adaptive Management Program and I appreciate your willingness to re-evaluate GCMRC’s role as we tackle the challenges of the next five years.