

## Whetton, Linda A

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**From:** Whetton, Linda A  
**Sent:** Tuesday, April 05, 2011 11:04 AM  
**To:** Aaron, Patricia (Patti); 'Benemelis, Perri'; 'Castle, Anne'; 'Charley Bullets'; 'Downer, Alan'; 'Gimbel, Jennifer'; Gold, Anamarie; 'Halliday, John'; 'Heuslein, Amy'; 'Jackson-Kelly, Loretta'; 'James, Leslie'; 'Jansen, Sam'; 'Jordan, John'; 'Kucate, Arden'; 'Kuwanwisiwma, Leigh J.'; 'Kyriss, LaVerne'; 'Lash, Nikolai'; 'Lopez, Estevan'; 'Martin, Steve P.'; 'Orton, Mary'; 'Rampton, Ted'; 'Senn, Michael J.'; 'Shields, John W.'; 'Spiller, Sam'; 'Stevens, Larry'; 'Strong, Dennis J.'; 'Walkoviak, Larry P.'; 'Zimmerman, Gerald R.'; 'Balsom, Janet R.'; 'Barrett, Clifford'; 'Bills, Debra'; 'Cantley, Garry'; 'Christensen, Kerry'; 'Cox, Jerry'; 'Davis, William'; 'Dongoske, Kurt'; 'Hahn, Martha'; 'Harris, Christopher'; 'Joe, Tony'; 'Johnson, Rick'; 'King, Robert'; 'Kowalski, Ted'; 'Ostler, Don'; 'Palmer, S. Clayton'; 'Peterson, McClain'; Ryan, Thomas P; 'Skrzynski, LeAnn'; 'Sponholtz, Pam'; 'Stewart, Bill'; 'Yazzie, Curtis'; 'Yeatts, Michael'  
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**Subject:** Message from Anne Castle on GCMRC Science Planning Process  
**Attachments:** 2011-03-31 GCMRC priorities MKS.docx; Streamlined GCMRC - AMP Workplan Process Summary ver 4-3-11.docx  
**Importance:** High

Dear AMWG Members,

We discussed at the AMWG meeting in February the priorities that the Department of the Interior has established for the initial budgeting and science planning process of the Grand Canyon Monitoring and Research Center (GCMRC). The same topic was also discussed with the TWG during its meeting on March 8, 2011. The attached memo from me to GCMRC memorializes and confirms those discussions, and also explains the intended use and scope of the priorities that were described. As set forth in the memo, and emphasized in our discussions, this process is not intended to undermine the input and advice historically provided to GCMRC by the TWG and the AMWG. Full and complete opportunities will be provided for that input, just as has been the case in the past. We also anticipate having an all-inclusive discussion of GCMRC's FY2012 workplan and the 5-year science planning process at the August AMWG meeting.

Anne Castle

## 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.

**Table 1.** Approximate timelines for a streamlined process for development of a biennial workplan (BWP) and budget, plus consideration of changes to the second year of the BWP. Dates shown are estimated targets.

<b>Month</b>	<b>Year-1 (development of biennial workplan &amp; budget)</b>	<b>Year-2 (consideration of year-2 of biennial workplan &amp; budget)</b>
November	USGS produces GCMRC annual project reports document	USGS produces GCMRC annual project reports document
January	Annual reports meeting (2 days) followed by 1-day TWG meeting to review budget and provide guidance to GCMRC and BOR. TWG reviews progress in addressing Information Needs and research accomplishments.	Annual reports meeting (2 days) followed by 1-day TWG meeting to review GCMRC budget and provide guidance to USGS and BOR on any potential changes to consider for year-2 of the budget. TWG reviews progress in addressing Information Needs and research accomplishments.
February	Based on a revised Strategic Science Plan and Monitoring and Research Plan, DOI establishes/updates general work plan priorities/hydrograph assumptions and communicates those to AMWG USGS and BOR will meet will meet with the DOI Family to solicit their input on DOI priorities and major issues to be reconciled. Any disagreements will be resolved by DOI in consultation with the DOI Family	USGS initiates internal review of BWP in relation to ASWS priorities and funding constraints. Identifies proposed revisions and analyzes scenarios/implications.
March	USGS and BOR will develop an initial BWP and budget spreadsheet based on DOI priorities and input from (a) scientists and the TWG during the January Annual Reports meeting and (b) the DOI family. Initial BWP presented to ASWS.	USGS provides initial draft BWP spreadsheet for ASWS consideration.
April	USGS and BOR meet with DOI Family to discuss BWP. TWG meets to consider and provide input on the initial BWP. Unresolved issues or conflicting priorities will be resolved by DOI in consultation with the DOI Family.	USGS meets with the DOI Family to solicit input on draft BWP. USGS provides revised draft BWP and briefing to ASWS.
May	USGS and BOR provide a draft BWP to the TWG Budget Ad Hoc Group (BAHG) and Science Advisors for their review and comment.	USGS provides draft BWP to the BAHG and Science Advisors for review. TWG Budget Ad Hoc Group meets to consider and provide input on the draft BWP.
June	TWG meets to provide input on the draft USGS and BOR BWP and provide a recommendation to the AMWG.	USGS provides a final draft BWP to the TWG and Science Advisors for review. TWG meets to provide input on the final draft BWP.
July	USGS and BOR provide a final draft BWP to the AMWG for their review	USGS revises and provides final draft BWP to the AMWG for their review.
August	AMWG meets to provide input on the USGS and BOR draft BWPs and provide a recommendation to the SOI	AMWG meets to provide input on the final draft BWP and provide a recommendation to the SOI
September	Secretary of the Interior reviews the budget and work plan recommendation from AMWG.	Secretary of the Interior reviews the budget and work plan recommendation from AMWG.

### **Criteria for Review and Revisions of the Year-two Budget**

In order for BWP development process to be successful in reducing the administrative burden on the USGS/GCMRC, BOR and the GCDAMP it must have clear criteria for making changes to the year-two budget. The burden of an appropriate rationale for proposing a change falls upon the proposer to make a persuasive argument. The following criteria will be used by USGS, Reclamation, and TWG in making recommendations to AMWG on changes to the year-two budget:

- **Scientific requirement or merit:** New information gained during the implementation of monitoring and research projects may result in a need to alter methods, scope, or timelines in the work plan or substantially alter or eliminate a project. This is a science-based need based on the experience of implementing an already approved project. This does not represent a shifting priority, but a scientific learning process which results in needed modifications to carry out the goals.
- **Administrative needs:** Administrative or programmatic changes may occur within the time-frame of an approved budget. Examples include the mitigation of an impact as a result of ESA consultation or tribal consultation, a change in the “overhead” charges of a federal or state agency, a significant reduction of the balance of the Colorado River Basin Fund or a failure to secure NPS permits for work in the Grand Canyon. As soon as an administrative event occurs that affects the budget, USGS (or relevant agency – such as DOI) will notify the TWG.
- **New initiatives:** New initiatives or modifications to projects that may or may not be based on a scientific merit must be vetted through DOI. DOI will consider whether to direct USGS/BOR to work on these new initiatives or whether to consider them during the next full budget cycle. Given that the budget will likely be fully accounted for, direction on where to locate the funds within the current budget will be requested from DOI.