

**From:** Randall Peterson  
**To:** Begay, Steven; Broscheid, Bob; Bullets, Charley; Gold, Rick; Groseclose, Jay; Jackson Kelly, Loretta; James, Leslie; Kuwanwisiwma, Leigh; Lehr, Phillip; Martin, Steve; Potochnik, Andre; Rampton, Ted; Ramsey, Nikolai; Sabo, David; Shields, John; Spiller, Sam; Steffen, Mark; Stevens, Larry; Strong, Dennis; Warren, Brad; Werner, Bill; Whetton, Linda; Zimmerman, Gerald  
**Date:** Fri, Jul 20, 2007 3:03 PM  
**Subject:** Request to prepare desired future resource conditions

During the past decade, the Glen Canyon Dam Adaptive Management Program (AMP) has implemented specific monitoring and research to improve our understanding of the ecosystem in Glen and Grand Canyons and the effects of actions taken by the Secretary of the Interior to improve resource conditions. Numerous experiments have been conducted to both improve our scientific understanding and improve resource conditions, including changes in dam releases, non-native fish removal, Kanab ambersnail and humpback chub translocations, as well as beach/habitat-building flows. During this period we have also studied the effects of the natural warming of dam releases accompanying the recent drawdown of Lake Powell.

Last year, we began work on a Long-Term Experimental Plan (LTEP) designed to further improve both our scientific understanding and the status of key resources in the Grand Canyon. Work on the LTEP builds on previous experiments and experimental designs considered by the Science Planning Group (SPG), an ad-hoc group within the Adaptive Management Work Group (AMWG). The AMWG forwarded the four experimental approaches that were generated by the SPG effort for consideration within the LTEP process.

With the assistance of 16 cooperating agencies, Reclamation is now preparing an EIS in compliance with the National Environmental Policy Act. Consistent with input from the cooperating agencies, we anticipate that some of the alternatives in the EIS may utilize current and desired future resource conditions as triggering mechanisms for conducting or modifying specific experimental actions. These desired resource conditions are also evidenced in the management objectives of the draft AMP strategic plan, but have never been quantified or finalized. Definition of these objective targets could improve future decision making during the term of the LTEP experiment, recognizing that the ultimate goal of the LTEP is to better define which management actions will lead to achieving these desired future resource conditions. During the LTEP agenda item on our May 22, 2007 AMWG conference call and during the June 25-26, 2007 Technical Work Group (TWG) meeting, Reclamation updated the AMWG and TWG on the benefits of defining these targets to assist in the development of the LTEP EIS. Accordingly, after discussion within DOI, Reclamation would like to request that the TWG dedicate sufficient effort to develop a set of technical options for these desired resource condition targets, and present its approaches on these targets for consideration by the full AMWG by December 2007.

These technical options for resource target levels should consider what would be desired over the long term and identify what may be achievable within the next 10 years to correspond to the potential duration of the LTEP. As these targets are considered, we would encourage that an ecosystem perspective be utilized as individual targets are discussed, while recognizing that dam capabilities and hydrology may limit actions to achieve these targets. The TWG should consider targets for each of the strategic plan management objectives but should initially concentrate on the two main resources of focus in the LTEP, i.e., humpback chub and sediment conservation. Ideally, options for these targets should be:

- o Easily understandable
- o Measurable
- o Geographically specific
- o Feasible both financially and scientifically
- o Written at a level of detail consistent with current knowledge
- o Compatible with the AMP goals and management objectives

Maps, photos, graphs, or other materials that would assist the AMWG in understanding the technical aspects of the target levels should be included. In addition, the TWG should assess such things as the potential effects of such target levels (including effects on other resources).

Thank you for your dedicated efforts in the AMP.

**CC:** Alberts, Jason; Alpine, Andrea; Andersen, Matthew; Balsom, Janet; Barger, Mary; Barrett, Clifford; Beard, Chris; Bryant, Nora; Burke, Kelly; Christensen, Kerry; Conrad, Tara; Crist, Dena; Daly, Karen; Damp, Jonathan; Davis, William E.; Dongoske, Kurt; English, Jeff; Fairley, Helen; Garrett, L. David; Hamill, John; Harris, Christopher; Henderson, Norm; Johnson, Rick; Kaplinski, Matt; Kelleher, Jayne; Kincaid, Chris; King, Robert; Kite, John; Knowles, Glen W.; Kubly, Dennis; Lee, Leona; Mankiller, Serena; McMullen, Ken; Melis, Ted; O'Brien, John; Orton, Mary; Ostler, Don; Palmer, Clayton; Persons, Bill; Rogers, Roland; Ryan, Tom; Schoblom, Sara; Seaholm, Randy; Skrzynski, LeAnn; Steffen, Tim; Yeatts, Michael