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To: Dennis Kubly – Bureau of Reclamation, [protocol@usbr.gov](mailto:protocol@usbr.gov)

From: Grand Canyon River Guides, Inc.  
Sam Jansen – Adaptive Management Work Group representative  
Jerry Cox – Technical Work Group Representative

Re: Comments on the revised Draft EA for a High Flow Experiment Protocol

Date: July 18, 2011

Thank you for the opportunity to comment on the Revised Draft Environmental Assessment for the development and implementation of a protocol for high flow experimental releases from Glen Canyon Dam. The revised plan is an important step toward accelerating our understanding of whether carefully planned, multiple high flow experiments can successfully rebuild and maintain sandbars over a decadal time scale in Grand Canyon.

We have reviewed our previous comments dated March 8th, 2011 in light of the revised draft EA reissued for public comment on July 5th. We would like to reiterate the following important points which we feel still need to be addressed.

## **FLOWS BETWEEN HFE's**

*Primary Concern: Fluctuating flows following HFE's will quickly erode/negate the benefits from the High Flow Experiments.* From the science conducted to date within the GCDAMP, we have learned that the longevity of high flow deposits is dependent upon the subsequent flow regime. As Page 61 of the High Flow Protocol EA states: “*High-volume MLFF releases from Glen Canyon Dam that followed the 1996, 2004, and 2008 HFEs have been implicated in the rapid erosion of sandbars.*” Yet on Page 26, the EA makes clear that, “*For the remainder of the*

*proposed action period, through 2020, dam releases would follow the provisions of MLFF as defined in the 1996 ROD and the 2007 ROD unless required as an outcome of future ESA consultation.”*

We are appreciative that this revised draft EA incorporates an important new section delineating the relationship and integration of this EA and the upcoming Long Term Experimental and Management Plan (LTEMP) EIS process that will examine a full range of differing flow alternatives. And we understand that the limited scope of this Environmental Assessment precludes addressing flows other than MLFF. However, we offer the following suggestion:

**This HFE Protocol EA should make every effort to address the preservation of sand deposits *within the MLFF framework* by designing post-HFE hydrographs that optimize ecosystem goals (i.e. sediment retention) to the greatest extent possible.**

## **RAPID RESPONSE**

*Primary Concern:* **Although we see some merit to the concept of Rapid Response, it seems premature and confusing to include it as part of this High Flow Protocol EA since it is only an idea, the efficacy of which has not yet been established.**

- It is not at all clear how the "rapid response" flows would fit into the overall HFE experimental plan. When would they happen? Would they delay or substitute for "store and release" HFEs? Would it confound results from the store and release model?
- The plans for carrying out "rapid response" flows are sketchy. Significant issues, such as potential negative impacts to private property and safety, have yet to be worked out.
- There is no science plan for measuring the effectiveness of the rapid response model.
- The proposed maximum flow for these experiments is 31,500 to 33,200 cfs, but as this EA acknowledges, "*...previous powerplant capacity releases did little to improve sandbars and beaches relative to the higher releases conducted in 1996, 2004, and 2008.*" (page 31). If there are reasons for keeping the flows to the lower ranges, they should be elucidated. Otherwise, "rapid response" flow levels should be as high as best suits the river corridor resources and program goals.

**For these reasons, GCRG feels that if Rapid Response is subsequently determined to be logistically feasible and complimentary to the Store and Release model, Rapid Response would require it's own NEPA compliance through a dedicated EA and science plan (or a new EA thoroughly integrating the Rapid Response and Store and Release models into a new expanded Science Plan).**

## **EXAMINATION OF ENVIRONMENTAL CONSEQUENCES**

*Primary Concern:* **Resources other than sediment or fish are not examined thoroughly within**

**this EA. Specifically, thorough tribal consultation should have been conducted prior to and incorporated into the draft EA as required by the Cultural Programmatic Agreement of the GCDAMP.** That agreement requires consultation regardless of whether the level of documentaion is an EIS or an EA, as well as requiring agencies to *contact the tribes early and allow sufficient time for consultation to be constructive.* **Thorough tribal consultation would provide critical information that could significantly flesh out Section 3.3.2, “Cultural Resources under Proposed Action” by addressing both risks and benefits.** Truly, when the EA spends 26 pages addressing the environmental effects on fish and just 2 pages on cultural resouces, it shows the distinct inequality of all resources addressed within the GCDAMP and sends the wrong message to the tribal stakeholders that their concerns and perspectives are less important.

*Other observations:* **The text of the Cultural Resources Section does not discuss possible beneficial effects from aeolian (windblown) sand deposits that could potentially protect archeological sites from erosion.** Nor does the draft EA discuss potential beneficial effects from the establishment of higher sand bars at the mouths of gullies, which can in the short term, reduce the rate of gully incision into cultural sites. These potential beneficial effects are listed in the summary of impacts chart (Table 18, page 137) and they are further addressed through the Science Question, *“Will multiple high flows conducted over a period of 10 years improve archaeological site condistions as reflected in increased sand deposition, increased site stability, and reduction in rate of erosion.”* (Science Plan, Page 16, lines 655-657).

**We therefore suggest that the *text* of the cultural resources section should be consistent with both the “summary of impacts to resources chart” and the Science Plan by acknowledging these potential beneficial impacts to cultural resources resulting from repeated HFE’s.**

## **SOCIO-ECONOMICS**

*Primary Concern:* **The science plan should include socioeconomic studies of the river corridor in Grand Canyon.** In the General Monitoring and Research Plan for High Flow Experimental Protocol (Appendix B), Task 9 is "Evaluate Lees Ferry Recreation Experience Quality." There is no corresponding task to evaluate Recreation Experience Quality downstream of Lees Ferry. This an enormous oversight that must be addressed.

*Other observations:*

**What would the estimated non-use value for the High Flow Experiments be?** What procedures can be put in place to accomplish this?

We sincerely thank you for the opportunity to provide additional comments and for all the hard work that the Bureau of Reclamation has invested in developing and refining a protocol for high flow experimental releases from Glen Canyon Dam. We are very encouraged that the revised Draft EA builds in flexibility and experimentation by advancing our learning and maximizing the

possibility of sediment retention in the CRE. We are also appreciative of the new sections addressing the interrelationships between this EA and the Non-Native Fish Environmental Assessment as well as the Long Term Experimental and Management Plan EIS.

We are hopeful that the recommendations outlined above will serve to assist you in building in more detail for a strong Final EA. We share with you the goal of long term sustainability for *all* of the resources of the Colorado River corridor downstream of Glen Canyon Dam. Please let us know if you have any questions.