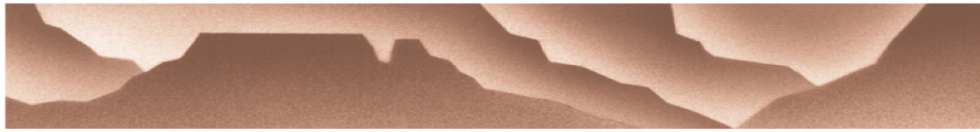


GRAND CANYON TRUST



February 22, 2008

Grand Canyon Trust Comments on the 2008 Environmental Assessment: Experimental Releases from Glen Canyon Dam, Arizona, 2008 through 2012

This Environmental Assessment is deficient in many ways. In general, it needs to be better connected with the Grand Canyon Protection Act, as described below. Our specific comments also address violations being committed under the National Environmental Policy Act and Endangered Species Act.

National Environmental Policy Act Issues

We are disappointed in the Bureau of Reclamation's lack of adherence to NEPA in connection with the Proposed Action. The Environmental Assessment is inadequate for several reasons, including the following:

1. The Bureau of Reclamation (Reclamation) failed to provide a Federal Register notice on the availability of the Environmental Assessment (EA) for public comment. 40 C.F.R. § 1506.6 states, "In the case of an action with effects of national concern notice shall include publication in the Federal Register and notice by mail to national organizations reasonably expected to be interested in the matter"
2. Reclamation has not allowed sufficient time for a 30-day public comment period between a Finding of No Significant Impact (FONSI) on the EA and the scheduled Beach/Habitat-Building Flow (BHBF). As we noted in our 24 January 2008 letter to Secretary Kempthorne, this EA triggers the NEPA requirement for a 30-day public review for several reasons including: 1) there is substantial scientific and public controversy regarding the timing and duration of the steady flow component of the EA; and 2) the proposed action is similar to one which normally requires preparation of an Environmental Impact Statement (EIS). We believe that a 30-day public review is required following the issuance of a FONSI on any action that includes steady flows.

3. Reclamation has not included the National Park Service (NPS) staff in developing the EA. A 30 January 2002 memo from James Connaughton, the Chairman of the Council on Environmental Quality (CEQ), to the heads of Federal agencies recommends the designation of cooperating agencies in the preparation of EAs. As we advised in our comments on the Long-Term Experimental Plan (LTEP), “[t]he need to comprehensively address park resources and values strongly supports designating the National Park Service as a joint lead agency.” If resources under the jurisdiction of the National Park Service, a sister agency in the Department of Interior, are being affected by releases from Glen Canyon Dam, then NPS should be intimately involved in the design and implementation of any experimental releases.
4. Reclamation’s action affects the development of the Long-Term Experimental Plan as noted in Reclamation’s February 12, 2008 Federal Register notice. Section 1506.1 of the CEQ regulations limits actions during the NEPA process until a Record of Decision is issued.
5. Reclamation fails to provide a range of alternatives in the EA as required under Section 1508.9 of the CEQ regulations. As evidenced in the LTEP EIS (and the LTEP scoping comments), there are several alternative approaches to providing the spawning and rearing conditions in the mainstem that are necessary to remove jeopardy to humpback chub and meet the intent of the GCPA. As we noted in our 24 January 2008 letter to Secretary Kempthorne, “If a decision on an alternative in the LTEP requires multiple alternatives analyzed in an Environmental Impact Statement (EIS) with full public process, how can the same decision now require merely an EA with no analysis of alternatives and insufficient public participation?”

Purpose and Need

The Purpose and Need section of the EA is inadequate. This section should acknowledge that existing operations are not meeting the intent nor the letter of the Grand Canyon Protection Act (GCPA) and the Endangered Species Act (ESA), thereby necessitating the proposed action. The 2005 SCORE (“State of the Colorado River Ecosystem”) report is an excellent resource that documents the failings of Reclamation's existing operations.

This section should also describe how the proposed action is intended to meet the intent of the GCPA and the ESA. The GCPA states, “The Secretary shall operate Glen Canyon Dam in accordance with the additional criteria and operating plans specified in section 1804 and exercise other authorities under existing law in such a manner as to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use.” The values for which the park units were established (e.g., “... maintain the closest approximation of the natural condition....”) are identified in the 2006 NPS Management Policies. The purposes of the ESA “... are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved....” Consistent with these purposes, the

1994 Biological Opinion (BO) directs the “[a]ttainment of riverine conditions that support all life stages of endangered and native fish species...” Nowhere does Reclamation state how these requirements will be achieved through the proposed action.

Authorizing Actions, Permits, or Licenses

In addition to the permits mentioned, Reclamation must obtain a water quality certification from Arizona under section 401 of the Clean Water Act.

Alternatives

The EA states that under the no-action alternative, “Reclamation would continue to operate the dam as described in prior NEPA analyses (Reclamation 1995, 2007a). No experimental flows or actions would occur from 2008-2012.” However, these sentences are not internally consistent. In prior NEPA analyses (e.g., the EIS/ROD on Operation of Glen Canyon Dam), the Secretary made several commitments to experimentation. The no-action alternative is what is legally required by the ROD and the Biological Opinion, not what has actually occurred. The status quo is illegal as set forth in the Biological Opinion.

Steady Flows

No scientific justification exists in the EA for conducting steady flows only in September and October. Reclamation implies that they believe summer steady flows are more beneficial to young-of-year humpback chub than the proposed steady flows by stating, “Recognizing that [increased hydropower costs] would be a significant adverse environmental justice impact, the impact was reduced by proposing a steady flow test during the fall rather than the summer when much higher economic impacts would occur.” The lack of scientific justification for September and October steady flows precludes the ability to make a FONSI determination on the steady flow component of the EA.

We find comments in the EA regarding the timing of the steady flows to be misleading. The EA states, “The timing of fall steady flows follows young-of-year emergence of humpback chub from the Little Colorado River into the mainstem.” However, to test the effects of steady flows on rearing habitat for young-of-year humpback chub, Reclamation must provide the needed habitat conditions when young-of-year are emerging from the Little Colorado River (LCR), not following their emergence. By September, it is likely that the vast majority of young-of-year from the LCR will have already migrated into the mainstem and perished in the cold, fluctuating water. Because the majority of post-larval humpback chub probably migrate into the mainstem during monsoonal floods in August, a legitimate test of the effects of steady flows on humpback chub rearing must begin by August at the very latest.

The EA incorrectly states that, “The experimental design is fully reflected in the science plan developed by GCMRC [Grand Canyon Monitoring and Research Center].” The GCMRC science plan only addresses the 2008 BHBF.

The September and October steady flows proposed in the EA are invalid as a test of the Seasonally-Adjusted Steady Flows (SASF) analyzed in the 1995 EIS and required in the 1994 Biological Opinion. Steady flows in September and October do not meet the requirement in Element 1 of the Reasonable and Prudent Alternative (RPA) to attain “riverine conditions that support all life stages of endangered and native fish species....”

Another problem with the proposed experiment is that the monthly volumes during September and October are not well specified. The EA states, “if possible, dam operations would be managed so September and October releases would be similar (Table 3), but September releases may be structured to provide a transition between August and October monthly volumes.” It is unclear how this would occur and what the potential effect of the different volumes (and thus flows) would be on young-of-year chub.

Another problem with the proposed experiment is that the SASF description in the EIS and BO not only specifies steady flows, but also monthly volumes. The September and October monthly volumes are significantly higher under the EA (~600 kaf) than SASF in the EIS (~500 kaf).

Another problem with the proposed experiment is that allowable daily fluctuations for SASF is ± 1000 cfs/24 hours (see page 32 of the EIS), whereas the EA defines steady as ± 1200 cfs within each hour. Because no information is provided on the likely daily stage variation resulting from AGC during the steady flows, it is not possible to determine the potential impact to nearshore habitats and young-of-year humpback chub.

The only justification that is provided in the EA for conducting steady flows in September and October, as opposed to the SASF requirement in the Biological Opinion, is to meet the intent of Executive Order 12898 regarding Environmental Justice. However, the EA does not provide an analysis demonstrating a “disproportionately high and adverse human health or environmental effects of [the proposed action] on minority populations and low-income populations.” It is not clear to us, especially with the costs of replacement power being borne by taxpayers, how the experiment could lead to “rising electric costs.”

Beach/Habitat-Building Flow

Testing the effects of a BHBF under the high sediment conditions that currently exist in Grand Canyon is crucial for advancing our knowledge of sediment dynamics in Grand Canyon. However, we believe that research efforts should be focused not only on how BHBFs can be used to rebuild beaches and sediment-related habitats, but also on how to

maintain that sediment through time. As stated in the EA, “While Reclamation has conducted two prior high flow tests with initial positive results, sandbars and backwaters reverted back to their previous state....” Reversing the continued decline of sediment in Grand Canyon is essential for meeting the intent of the GCPA and the ESA, and preventing impairment of park resources and values.

We are very concerned about the constraints that the EA suggests in regards to additional BHBFs. We concur with John Hamill, Chief of Grand Canyon Monitoring and Research Center, that additional BHBFs beyond 2008 are required to understand sediment dynamics and how best to use BHBFs to meet the goals for sediment in Grand Canyon. Although the rationale for eliminating additional BHBFs is not stated, we presume this is in response to opposition by water and power interests based on their interpretation of law. However, we believe that the Secretary of Interior has broad discretion to operate Glen Canyon Dam to meet the intent of the ESA and the GCPA. If options for meeting the intent of the ESA and GCPA are being constrained by interpretation of law, then we request a formal Solicitor’s Opinion to settle the issue.

We are concerned about shifting the time frame of the BHBF from late March or early April (the optimal timing for a BHBF based on resource considerations) to the first week of March based on the “... public perception of the impacts to fishing success in the Lees Ferry reach.” If the issue is an inaccurate public perception, then we suggest that a more reasonable mitigation measure is to educate the public rather than a shift in the timing that is unlikely to benefit the guides, the public, or the resource.

The EA omits discussion of aeolian processes following a BHBF for protecting archaeological sites, even though it is discussed in the GCMRC Science Plan. Protecting archaeological sites is not a trivial issue and must be addressed.

Socioeconomic Assessment

The socioeconomic assessment is deficient. For example: 1) there is no analysis or discussion of non-use values or economic effects other than hydropower; 2) there are no supporting studies cited for assertions regarding hydropower impacts; 3) there is no analysis regarding the hydropower impacts of the fall steady flows; and 4) the “analysis” of hydropower impacts uses the “average annual energy generation” from the Shortage EIS, rather than an actual estimate of generation in 2008 (which is presumably lower).

It is unclear from the text who shoulders the various “costs” of the experiments—is it taxpayers, or are the costs passed down through the utilities to their customers? The unsupported assertions in regard to environmental justice effects are inexcusable.

It would be useful to know the “opportunity cost” of the water that would bypass the generators in the proposed BHBF (92,375 af would be routed through the jet tubes and thus would not be available for generating hydropower) compared to the cost of acquiring replacement power. It also would be useful to know the magnitude of the various costs

when compared to a 2008 year without a BHBF. It appears from a table recently provided to the AMWG by Western Area Power Administration (WAPA) that under the current contracts, WAPA will need to acquire over \$37 million dollars of replacement power costs in WY 2008 whether or not a BHBF is implemented. WAPA's estimated "cost" of the 2008 BHBF appears to be a reduction in the "surplus revenues" available during the summer of just over \$3 million.

The paragraph on carbon emissions is also lacking. There is no support provided for the assumption that replacement power would come from carbon-producing sources, that there would be a reduction of 41 GWhr of energy generation in 2008, or that this would produce additional carbon emissions of 45,800 tons. The "eGRID 2006" citation is not referenced in the literature cited.

Best Scientific Information

Assertions in the EA are not adequately supported, and consequently, they have little credibility. A FONSI on such a poorly documented EA cannot be justified.

The EA also suffers from the lack of an experimental design. It will be virtually impossible to assign a cause-and-effect relationship between any change in the abundance of humpback chub and the steady flows proposed in the EA. Although the EA suggests that non-native control "should begin as soon as possible," it is likely that recruitment by humpback chub in the mainstem is dependent upon several processes including hydrology, predation/competition by non-natives, temperature, turbidity, and availability of stable nearshore habitats. An efficient and effective experimental design would need to consider all of these explanatory variables concurrently.

Conclusion

There have been numerous violations of NEPA process, and the EA itself is incomplete, inaccurate, self-contradictory, and poorly supported. We are surprised at the poor quality of the EA as it is far below both the quality of previous EAs, and the capability of Reclamation's professional staff. We believe it would be inappropriate to issue a FONSI on the steady flow component of the EA.

We encourage the Department of Interior to implement a revised approach that, first and foremost, benefits Grand Canyon resources. We suggest: 1) immediately rectifying violations of NEPA process; 2) immediately developing a new EA focused solely on the 2008 BHBF; and 3) immediately restarting the LTEP process to develop a program of experimental flows and other actions that will meet the intent and letter of the GCPA and the ESA.

Although we are cognizant of the time constraints for the 2008 BHBF, we believe that: 1) implementation of the BHBF could be pushed back to the last week of March or first

week of April (and in fact, the delay would probably benefit resources); 2) Reclamation, the National Park Service, and the U.S. Fish and Wildlife Service have the professional staff capability to develop and analyze an EA for a BHBF in this time frame; and 3) it would be negligent, given the high value that the American public places on Grand Canyon, to not take advantage of the large amount of sediment that is currently in the river in a manner consistent with the GCPA and ESA.

This Environmental Assessment is far off the mark for restoring Grand Canyon. It is a piece of an unfortunate political puzzle wherein Reclamation is compromising the health of Grand Canyon for the benefit of water and power interests. Notwithstanding politics, Grand Canyon National Park is deserving of the best care and protection possible.

Sincerely,

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Cc: Dirk Kempthorne, Brenda Burman, John Hamill, Steve Martin, Randy Peterson, Dave Sabo, Lynn Scarlett, Steve Spangle