MEMORANDUM

To: Secretary

From: Michael R. Gabaldon
Secretary Designee and Chairman, Glen Canyon Dam Adaptive Management Program

Subject: Report and Recommendations to the Secretary of the Interior from the Glen Canyon Dam Adaptive Management Program Federal Advisory Committee

The Glen Canyon Dam Adaptive Management Work Group met on April 17-18, 2002, to discuss actions taken to meet responsibilities under the Federal Advisory Committee Act (FACA), the Grand Canyon Protection Act, and the Glen Canyon Dam Environmental Impact Statement Record of Decision. As your designee and chairman, and in accordance with the group's charter under the FACA, the following recommendation is hereby formally transmitted:

"GCDAMP (Glen Canyon Dam Adaptive Management Program) should adopt an experimental framework that includes Scenarios 1 through 4 and possibly other scenarios to benefit resources of concern with a twice-a-year evaluation of data by the AMWG (Adaptive Management Work Group).

Implement Scenario 1, 3, or 4, as appropriate in Water Year 2002-2003. Scenario 1 will be implemented in the first year that fall tributary inputs occur. Scenario 2 will be implemented in the next year that fall tributary inputs occur.

1 By way of definition, Scenario 1 consists of alternating 2-week periods of low steady flows (8,000 cfs) and low fluctuating flows (6,500 to 9,000 cfs) from September to January in a year in which a fall sediment input occurs, followed in January by a beach habitat building flow (41,000 cfs) similar to that which occurred in 1996, followed in January through March by highly fluctuating flows (5,000 to 25,000 cfs).

Scenario 2 is identical to Scenario 1, except that the September to January flows would consist of moderately fluctuating flows (5,000 to 10,000 cfs) allowed under the current Glen Canyon Dam EIS Record of Decision."
Initiate all needed activities (consultation [include endangered Humpback chub],
compliance, development of a science plan, public outreach, development of a
captive breeding population of Humpback Chub from Grand Canyon).

Direct that GCMRC (Grand Canyon Monitoring and Research Center) in
consultation with the TWG (Technical Work Group) and the SAs (Science
Advisors) develop an experimental plan for long-term implementation."

As you are aware, the Glen Canyon Dam AMWG also made five recommendations at a previous
meeting, held on January 16-17, 2002. I would like to take this opportunity to formally transmit
these recommendations:

Recommendation 1 - "Recommend the (Adaptive Management Program) Strategic Plan to
the Secretary of the Interior as adopted and as amended with the language changes made
today."

Recommendation 2 - "In support of Goal 2 (of the Strategic Plan), the AMWG (Adaptive
Management Work Group) recommends the following actions subject to environmental
compliance to include assessing recreational use, ESA (Endangered Species Act), in
consultation with the tribes and other affected state agencies.

1. Evaluate methods to remove non-native fish, except rainbow trout, from Bright
Angel Creek in 2002.

2. Evaluate methods to remove non-native fish from the LCR (Little Colorado
River) in 2002.

3. Gather public input and conduct public education and environmental compliance
on long-term removals in #1 and 2 above.

Scenario 3 consists of a year in which fall sediment inputs do not occur. Dam releases would consist of
normal operations allowed under the Glen Canyon Dam EIS Record of Decision through December
followed in January through March by highly fluctuating flows (5,000 to 25,000 cfs). If a sediment input
occurs during this high fluctuating flow period, a beach habitat building flow would be immediately released.

Scenario 4 consists of a year in which no significant sediment inputs occur. Dam releases would consist of
normal operations allowed under the Glen Canyon Dam EIS Record of Decision through December
followed in January through March by highly fluctuating flows (5,000 to 25,000 cfs).

In all scenarios, dam releases after the high fluctuating flow period of January through March would consist
of normal operations allowed under the Glen Canyon Dam EIS Record of Decision.
4. Establish a TWG (Technical Work Group) ad hoc committee to develop a 2002-2006 research monitoring and management work plan for meeting MO (Management Objective) 2.5 and 2.6 of the August 17, 2001, Draft of the AMP (Adaptive Management Program) Strategic Plan. The TWG will report back to the AMWG at the next meeting.

5. Using data from #1-4 above to make recommendations on future removal."

Recommendation 3 - "The AWMG concurs with the findings of the TWG white paper on sediment."

"In concert with RPA [Reasonable and Prudent Alternative of the biological opinion] flows for native fish, during 2002-2003 request that the GCMRC [Grand Canyon Monitoring and Research Center], in consultation with the TWG, design an experimental flow sequence that tests hypotheses for conservation of sediment. Report to AMWG in April 2002 on the proposed flow sequence."\(^2\)

Recommendation 4 - "Incorporate KAS (Kanab ambersnail) recommendations from TWG as outlined in presentation paper."

Recommendation 5 - "Approve the FY 2003 Budget ($9,904,000)"

The next meeting of the Adaptive Management Work Group will be held on July 17-18, 2002, in Phoenix, Arizona. Agenda items will likely include the Fiscal Year 2004 work plans, a proposal to construct a selective withdrawal structure on Glen Canyon Dam, and more detailed discussion on the April experimental flow proposal which is intended to conserve sediment and benefit endangered fish. I will forward any recommendations that may result from the July meeting.

\(^2\) This recommendation lead to development and adoption of the recommendation adopted at the April 17-18, 2002 meeting.
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