



United States Department of the Interior

OFFICE OF THE SECRETARY
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MEMORANDUM

To: Brent Esplin, Designated Federal Officer, Bureau of Reclamation
Regional Director, Upper Colorado Region
Kathleen Callister, Resources Management Division Manager, Bureau of Reclamation
Upper Colorado Region
Scott VanderKooi, Chief, Grand Canyon Monitoring and Research Center (GCMRC)
U.S. Geological Survey (USGS)

From: Timothy R. Petty, Ph.D.
Secretary's Designee
Assistant Secretary for Water and Science

Subject: Glen Canyon Dam Adaptive Management Program Guidance

The Colorado River faces many challenges in the coming years, especially with an ongoing drought now in its 19th year. As such, it is important that the Glen Canyon Dam Adaptive Management Program (GCDAMP) is managed in such a way as to ensure consistency with the Grand Canyon Protection Act (GCPA) and the priorities of the Secretary of the Interior, and in accordance with the Law of the Colorado River and the Glen Canyon Dam Long Term Experimental and Management Plan (LTEMP) Record of Decision (ROD) and Final Environmental Impact Statement (FEIS).

The GCDAMP plays a central role in ensuring compliance with multiple laws associated with the operation of Glen Canyon Dam. It provides a process for cooperative integration of dam operations, downstream resource protection and management, and monitoring and research. Under the GCPA, Reclamation and GCMRC conduct research and monitoring and consult with specific stakeholders on that research and monitoring. The Adaptive Management Working Group (AMWG), a Federal Advisory Committee, is the vehicle through which Reclamation accomplishes this consultation. The AMWG also makes recommendations to the Secretary per the LTEMP ROD.

LTEMP Implementation

The primary guiding documents for the GCDAMP will continue to be the LTEMP FEIS and ROD, which provide the framework for adaptively managing Glen Canyon Dam operations and management actions associated with downstream resources through 2037. This program guidance document will help ensure continuity and continued successes within the GCDAMP under the current administration and in the years to come. The priorities identified in the LTEMP ROD for the GCDAMP are as follows:

- Management and Experimental Actions
- Mitigation and Environmental Commitments
- Research and Monitoring

In addition, the Department of the Interior (Interior) has recently prioritized the responsible development and production of renewable energy on federal lands. To this end, I encourage the GCDAMP to work within the LTEMP framework to seek ways to improve the value of the hydropower resource. This work may include continued engagement with Project N of the GCDAMP Fiscal Years (FY) 2018-20 Triennial Workplan (TWP) and with interested AMWG stakeholders regarding the current science and policy regarding dam operations.

Updating Guidance Documents

I direct Reclamation, USGS, and other Interior agencies to work with the AMWG to update the GCDAMP guiding documents to reflect and be fully consistent with the priorities outlined in the LTEMP FEIS Section 1.4 and emphasized in Section 6.1(c) of the LTEMP ROD. These guiding documents include the GCDAMP strategic plan, vision, mission, and charter.

With the challenges faced in FY 2018 regarding funding for the GCDAMP and the need to ensure appropriations are requested through the federal budget process, Interior supports continuing with the three-year workplan and budget process. The current FY 2018-20 GCDAMP TWP and budget process demonstrated that it can improve program efficiency by reducing the time and effort spent on annually developing a workplan and budget. The GCDAMP should continue to review the TWP annually to ensure it meets the priorities and goals of the GCPA and GCDAMP.

The development of the TWP and budget for FY 2021-23 will commence in late FY 2019 and continue through FY 2020. Its development should include consultation with members of AMWG, who will recommend to the Secretary whether they support the planned projects and funding. Reclamation and GCMRC will take the lead in drafting the FY 2021-23 TWP. The TWP and budget should focus on compliance priorities including:

- Maintaining dam releases consistent with applicable laws;
- Activities associated with the Endangered Species Act;
- Actions necessary for compliance with the National Historic Preservation Act; and
- Research and monitoring as required by the Grand Canyon Protection Act.

Activities that concern annual release volumes from Glen Canyon Dam—including discussion of Drought Contingency Planning and new negotiations of the Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead—will be underway in FY 2019 or in the coming years. The GCDAMP and AMWG guidance documents discussed here should consider any implications of these ongoing discussions.

The LTEMP Scientific Monitoring Plan will continue to provide a framework for the scientific support needed to complete the monitoring and experimentation specified in the LTEMP FEIS

and ROD. This plan will help ensure that long-term monitoring and research activities are aligned with the LTEMP FEIS and ROD and the GCDAMP decision making process. In accordance with the LTEMP ROD, the Science Plan will be reviewed every three years and may be updated as needed. The next review will occur in conjunction with the start of the next TWP development process in early FY 2020. Also, in accordance with the LTEMP ROD, specific details concerning the means to collect, analyze, and report information required to support development of recommendations by the AMWG and decision making by Interior will be included in the TWP.

It is also important that the GCDAMP develops and implements monitoring metrics for the resource goals and objectives defined in the LTEMP ROD. Interior directs the AMWG to develop recommendations for these monitoring metrics to assist Interior in their development. The recommended metrics should build on existing LTEMP conservation measures, environmental and recreational goals, and other easily identifiable goals. As the process continues, additional goals can be developed.

Future research proposed and undertaken by the GCDAMP should be tied directly to LTEMP resource goals and objectives and continue to be focused on providing the best available science such that decision making is science-based and continues to work towards ensuring benefits to as many resources downstream of the dam as possible. This should be done in a collaborative process involving AMWG and TWG members, the Science Advisors Program, and ad hoc groups as needed. Several areas to consider as identified by the GCDAMP partners include:

- Evaluation of the threat posed by invasive non-native species.
- Exploring vegetation management to benefit high value recreational beaches and protect vulnerable archaeological sites.
- Considering impacts to hydropower as part of the development of a LTEMP experiments and study plans.

Operating Criteria and Operational Flexibility

The LTEMP ROD provides guidance for hourly, daily, and monthly releases (see, for example, Table 3, p. B-4). In accordance with the LTEMP ROD Attachment B Section 1.2 (Page B-7), I encourage Reclamation to continue to utilize operational flexibility at Glen Canyon Dam in response to varying hydrological and other resource-related conditions. As warranted, Reclamation, in consultation with Western Area Power Administration (WAPA), should continue to make adjustments to hourly, daily, and monthly release volumes within the water year in response to operational, resource-related, and hydropower-related issues.

In response to stakeholder input at recent AMWG meetings, the feasibility of conducting Spring High Flow Experiments (HFE), along with modeling for improvements and efficiencies that benefit resources including natural, cultural, recreational, and hydropower should be explored. As a potential starting point, I encourage you to consider opportunities to conduct higher spring releases within power plant capacity, along with spring HFEs that may be triggered under the current LTEMP Protocol.

Conclusion

This guidance is not meant to be all encompassing or to preclude additional scientific investigations that can improve the resources downstream of Glen Canyon Dam that are consistent with the LTEMP. The GCDAMP should seek ways to continuously improve the program, including searching for efficiencies and improvements and listening to the States, Tribes, and other program stakeholders.

The GCDAMP and AMWG are vital to ensuring Interior's responsibilities under the GCPA and the LTEMP ROD, and I greatly appreciate Reclamation, USGS, other Interior bureaus, and our external partners' dedication to ensuring Glen Canyon Dam is operated in a manner that protects, mitigates impacts to, and improves downstream resources.