



# United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, D.C. 20240

## MEMORANDUM

To: Brent Rhees, Regional Director  
Upper Colorado Region, Bureau of Reclamation

From: Tim Petty, Chair, Glen Canyon Leadership Team  
Assistant Secretary – Water & Science

Subject: Approval of Recommendation for Macroinvertebrate Production Flow releases at  
Glen Canyon Dam, May 1 through August 31, 2018

 APR 13 2018

On April 12, 2018, the Glen Canyon Technical Team (Technical Team) recommended Experimental Macroinvertebrate Production Flow (Bug Flow) releases be implemented at Glen Canyon Dam from May through August 2018 (Attachment 1, Technical Team Recommendation to Implement Macroinvertebrate Production Flow releases at Glen Canyon Dam May – August 2018). This recommendation was developed to implement the provisions of the 2016 *Record of Decision for the Glen Canyon Dam Long Term Experimental and Management Plan Final Environmental Impact Statement* (LTEMP ROD) concerning annual planning for flow-based experiments.

The LTEMP ROD specifies the representation in planning for experiments at Glen Canyon Dam and is based on past successful planning and implementation of high flow experiments. The Technical Team includes technical representatives from the Bureau of Reclamation (Reclamation), the National Park Service (NPS), the Fish and Wildlife Service (FWS), the Bureau of Indian Affairs (BIA), the United States Geological Survey's (USGS) Grand Canyon Monitoring and Research Center (GCMRC), Western Area Power Administration (WAPA), the Arizona Game and Fish Department (AGFD), the seven Colorado River Basin States (States), and the Upper Colorado River Commission (UCRC). The Glen Canyon Leadership Team (Leadership Team) is made up of decision makers from the same agencies.

The LTEMP ROD also specifies that Traditionally Associated Tribes shall be notified at least 30 days in advance of planned experimental flows. On March 22, 2018, notification of the possible Bug Flows experiment and offer for consultation was mailed to the Tribes and parties to the LTEMP cultural Programmatic Agreement. Upon request, on April 5, 2018 Reclamation met with leadership from the Pueblo of Zuni to consult on the potential experiment. No other requests for consultation were received.

The Leadership Team carefully reviewed and considered the Technical Team's recommendation and Tribal feedback. The Leadership Team also considered the assessment of key resources that may be impacted or affected by 2018 Bug Flows based on the most recent scientific information.

On an April 12, 2018 conference call, the Leadership Team unanimously recommended to the Assistant Secretary for Water and Science to proceed with the recommended Bug Flow experiment. The Assistant Secretary for Water and Science concurs and has decided to proceed with this recommendation.

This Bug Flow experiment will be the first experiment conducted under the 2016 LTEMP ROD and demonstrates the utility of the LTEMP to allow for experiments when conditions warrant and the experiment would not cause unacceptable adverse impacts to other resources. Bug Flows consist of steady weekend releases from Glen Canyon Dam that provide favorable conditions for insects to lay eggs along the Colorado River margins and slightly higher fluctuating releases during the weekdays designed to prevent the eggs from drying out. This experiment is expected to have positive benefits to the food base of the aquatic and terrestrial ecosystems below Glen Canyon Dam. The recommended Bug Flow experiment will provide resource benefits in the near term and will also provide scientific information to be used in future decision making. The Bug Flow experiment is consistent with applicable laws concerning the operation of Glen Canyon Dam and will satisfy the Department's goal to ensure effective and coordinated implementation of important research that the Department of the Interior is undertaking through the Glen Canyon Dam Adaptive Management Program.

This is the first full year of implementing the process for annual experimental planning under the LTEMP ROD, which requires the Department to "schedule implementation / planning meetings or calls with DOI bureaus (USGS, NPS, FWS, BIA, and Reclamation), WAPA, AZGFD, and one liaison from each Basin State and from the UCRC, as needed or requested by the participants." For this initial year, the Department used the Leadership Team and Technical Team recommendation process developed from planning high-flow experiments in the past. At the conclusion of the experiment, the Technical Team will review the planning process, implementation, and monitoring activities and develop a list of "lessons learned" to inform potential future experiments and experimental planning. In accordance with the LTEMP, the Department may make the decision to conduct future flow-based experiments (High Flow Experiments, Bug Flows, Trout Management Flows, and Low Summer Flows) at Glen Canyon Dam if it is determined that there are no unacceptable adverse impacts on other resource conditions. For future experimental planning, the Department welcomes input from you and other Leadership Team members as to whether this or another process should be used to satisfy the coordination and communication process of the LTEMP ROD.

The Leadership Team would like to thank the Technical Team for the sustained hard work that has led to this recommendation. The individual efforts from members of the Technical Team and coordination of the team as a whole has made this process a success that will ensure benefits to the incomparable resources of Grand Canyon National Park and Glen Canyon National Recreation Area.

Attachment

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cc: **Glen Canyon Leadership Team**

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