United States Department of the Interior

BUREAU OF RECLAMATION
Upper Colorado Regional Office
125 South State Street, Room 8100
Salt Lake City, UT 84138-1102

IN REPLY REFER TO:
UC-731
ENV-1.10

MAR 06 2017

Mr. Wally Rist
Grand Canyon Private Boaters Association
809 W. Riordan Road
Suite 100, #431
Flagstaff, AZ 86001

Subject: Response to Grand Canyon Private Boaters Association Regarding High Flow Experiment (HFE) Recommendations

Dear Mr. Rist:

Thank you for your December 19, 2016, letter enclosed with observations and comments regarding the recently concluded HFE from Glen Canyon Dam. Your letter includes the recommendation to consider a longer ramp down duration for future HFEs to minimize calving and promote gently sloped beaches.

Under the recently signed Long Term Experimental and Management Plan Record of Decision (LTEMP ROD), HFEs are important experiment that will be conducted over the next 20-years when conditions warrant and we will continue to learn from the results of each HFE. An important step in the LTEMP HFE Protocol is the consideration of new science, the results from past HFEs, and an evaluation of the status of resources. Recommendations such as a longer HFE ramp down duration will be considered and evaluated through the adaptive management framework of the LTEMP.

A longer HFE ramp down has been considered for past HFEs and was implemented for the 2012 HFE. For that HFE, evidence suggests that the longer ramp down did affect sandbar shape for some sites. Because there is a constraint on HFE duration, the longer down-ramp has a tradeoff of shortening the duration of the HFE peak, which likely results in less overall sediment deposition. However, we do not currently have sufficient data to analyze the precise tradeoff between longer time for the peak versus a longer down-ramp. We continue to learn with each HFE. Each time we plan an HFE, results from previous HFEs are incorporated in the decision for the HFE ramp-up, peak magnitude, duration, and down-ramp.

The potential effect of HFE down-ramp on bar shape was discussed among Grand Canyon Monitoring and Research Center (GCMRC) scientists and representatives from Grand Canyon Private Boaters Association and Grand Canyon River Guides at the Adaptive Management Program Annual Reporting Meeting last month in Phoenix, Arizona. GCMRC scientists

expressed interested in the issues you raised and research on this topic will be considered when developing the next proposed three-year work plan.

Reclamation will work with GCMRC scientists and the HFE Technical Team to ensure that your recommendation for a longer ramp down is considered when developing the next HFE recommendation and three-year work plan.

If you have any questions regarding this letter or a future HFE, please contact Katrina Grantz at 801-524-3635 or kgrantz@usbr.gov or Kathleen Callister at 801-524-3781 or kcallister@usbr.gov.

Sincerely

Brent Rhees
Regional Director

Enclosure

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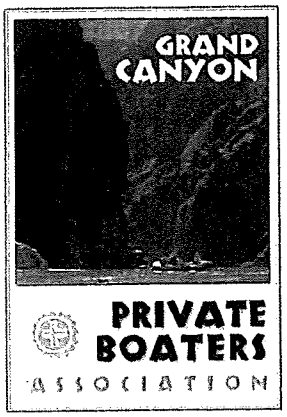

THE GRAND CANYON
PRIVATE BOATERS ASSOCIATION

809 W. RIORDAN ROAD
SUITE 100, #431
FLAGSTAFF, AZ 86001

December 19, 2016

Brent Rhees, Regional Director
Upper Colorado Regional Office
125 South State Street, Room 8100
Salt Lake City, UT 84138
Dear Mr. Rhees

This letter is to convey the Grand Canyon Private Boater's Association's (GCPBA) observations and offer comments regarding the recently concluded High Flow Experiment releases from Glen Canyon Dam.

GCPBA is a non-profit organization dedicated to advocacy on issues surrounding private boater access to the Colorado River through Grand Canyon National Park. Founded in 1996, GCPBA represents a paid membership as well as a long-established internet constituency.

John Vrymoed, who is on our Board of Directors and is a registered, Geotechnical Engineer, was on the river during the HFE and was able to observe the impacts of the high flows starting at the beginning and end of the experiment. He observed that the overall impact on beaches was positive especially those having a gentle slope. Some of the steeply sloped beaches suffered damage due to calving as seepage had not had enough time to adjust to the receding water level during the ramp down portion of the experiment. As a result, the material that was deposited was lost.
To enhance the positive impacts of the HFE, we recommend that consideration be given to a longer ramp down duration. There are various ways to achieve this without affecting the overall yearly inflow to Lake Mead such as reducing the duration from 4 days to 3 days and similarly increasing the ramp down period.

Your consideration of these observations and recommendation is much appreciated. John Vrymoed can be reached at (916) 451-0684 or vrymoed@gmail.com should you or your staff wish to contact him.

Sincerely yours,
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Cc
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