DECISION MEMORANDUM FOR THE SECRETARY

From: Jennifer Gimbel Jennifer Gimbel
Secretary's Designee, Glen Canyon Dam Adaptive Management Work Group
Principal Deputy Assistant Secretary – Water and Science

Subject: Report and Recommendations from the Glen Canyon Dam Adaptive Management Work Group Federal Advisory Committee Meetings held on February 25-26, 2015, May 28, 2015, and August 26-27, 2015

I. RECOMMENDATION

The AMWG brings a diverse group of stakeholders to the table that provide scientifically informed and broadly supported resource management recommendations to protect downstream resources in the Grand Canyon. The Department of the Interior (Department) agencies, my staff and I work closely with the AMWG to ensure good dialogue and informed and practical recommendations. Two recommendations from the August 2015 meeting were adopted by consensus and I recommend you approve both. The recommendations are to:

1. Approve the final Fiscal Year (FY) 2015-17 Triennial Budget and Work Plan for implementation in FY 2016.
2. Approve the Water Year 2016 Hydrograph for Glen Canyon Dam.

II. SECRETARY'S DECISION

X APPROVE
____ DISAPPROVE

November 19, 2015
Date

Sally Jewell
Secretary

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

DECISION MEMORANDUM FOR THE SECRETARY

To: Secretary

From: Jennifer Gimbel Jennifer Gimbel NOV 12 2015
Secretary's Designee, Glen Canyon Dam Adaptive Management Work Group
Principal Deputy Assistant Secretary – Water and Science

Subject: Report and Recommendations from the Glen Canyon Dam Adaptive Management Work Group (AMWG) Federal Advisory Committee Meetings held on February 25-26, 2015, May 28, 2015, and August 26-27, 2015

Introduction

The Glen Canyon Dam AMWG is a Federal advisory committee chaired by a designee of the Secretary of the Interior. I am the current designee. The AWMG provides advice and recommendations to the Secretary relative to the operation of Glen Canyon Dam and the actions of the Glen Canyon Dam Adaptive Management Program (GCDAMP) and reports to the Secretary through the Secretary's designee.

Members of the AMWG are appointed by the Secretary with representation from the Colorado River Basin states, tribal nations, environmental and recreational groups and power interests. The Department of the Interior (Department) is represented by the U.S. Fish and Wildlife Service (FWS), the National Park Service (NPS), the Bureau of Indian Affairs, the Bureau of Reclamation (Reclamation) and the U.S. Geological Survey (USGS). Western Area Power Administration is also represented.

Background

The AMWG held three meetings in 2015. The first was a 2-day in-person meeting on February 25-26, 2015, in Salt Lake City, Utah. The second was a 3-hour webinar on May 28, 2015. The third was a 2-day in-person meeting on August 26-27, 2015, in Phoenix, Arizona. The meetings were constructive and well attended. This memorandum contains a summary of issues discussed, actions taken, and recommendations for your consideration.

February 25-26, 2015, Meeting:

The AMWG held a 2-day in-person meeting on February 25-26, 2015 in Salt Lake City, Utah. The following were discussed:

Renewal of the AMWG Charter. The AMWG Charter is due for renewal in August 2015. The Charter Ad Hoc Group was asked to review and revise it according to concerns raised by the members.

DOI-DOE Hydrograph Development for Water Year 2016. In cooperation with the other Federal agencies, Reclamation developed the Department's recommendation for the 2016 Hydrograph. The 2016 recommendation is based on the 2015 Hydrograph incorporating new information that may influence its development. Reclamation will review the hydrograph information and an analysis will be conducted that includes the Technical Working Group (TWG) and the Department. A recommendation for the AMWG's consideration will be provided later this year.

Updates from the 2015 Annual Reporting (AR) Meeting. The AR meeting was held in January 2015 and included updates on sand mass balance, correlation between channel geomorphology and sandbar building, updates on native and nonnative fish populations, an introduction to a model for re-vegetation, reports on humpback chub translocations, Bright Angel trout removal, invasive species updates, aquatic foodbase assessments, and tribal monitoring. Results were further discussed at the TWG's April meeting.

Long-Term Experimental and Management Plan (LTEMP) EIS Update. The LTEMP Team has finalized modeling, analysis, and edits in anticipation of a draft EIS by March 2015. Analyses of the seven alternatives, including the newly developed hybrid alternative, were presented.

Panel on Current Projects and Issues in Utah. Presentations were made on the following:

- Central Utah Project (CUP). The CUP began construction in May 1959; the Bonneville Unit was completed in 1964. The CUP captures flows from the Uinta Mountains and through a transbasin diversion delivers water to the Wasatch Front. The CUP Completion Act (CUPCA) of 1992 provides policy guidance and direction for completing the CUP and transfers construction responsibilities from Reclamation to the Central Utah Water Conservancy District, while retaining Federal oversight.
- Utah Reclamation Mitigation & Conservation Commission. This presidential commission was established in July 1994 under the CUPCA of 1992. Common issues facing the Glen Canyon Dam Adaptive Management Program and CUPCA include water supply and delivery, ecosystem needs, hydropower generation, endangered species, and funding.
- State of Utah. The Utah Division of Water Resources is the State's water planning and development agency and assists local water suppliers and users with planning and anticipated future needs. Population growth is driving conservation efforts and Utah has established a goal of reducing water use 25% by 2015.

In addition, Reclamation hosted a High Flow Experiment Workshop following the AMWG Meetings to review the effects of these flows on downstream resources and answer questions of the stakeholders.

May 28, 2015, Webinar:

This webinar/conference call focused on the following issues:

Renewal of AMWG Charter. The revised Charter was presented to the AMWG for further discussion and approval. An unresolved issue is the inclusion of an individual from an academic institution on the AMWG. The AMWG continued to discuss and may amend the charter at a later date when the details have been worked out.

DOI-DOE Hydrograph Development for Water Year 2016. Modified Low Fluctuating Flows will be optimized by targeting lower August and September monthly releases in order to retain sand inputs high in the system in anticipation of a High Flow Experiment. In cooperation with the FWS, Reclamation has been exploring the idea of reducing June volumes. The TWG provided a recommendation for the AMWG's consideration at their August meeting.

Fiscal Year (FY) 2016 Budget and Work Plan. Adjustments were made to both Reclamation's and the Grand Canyon Monitoring and Research Center's (GCMRC) budgets to reflect Consumer Price Index (CPI) changes. The FY16 overhead rate was estimated at 21.3%, but is now projected to be about 13%. It is too late in the year to adjust the USGS overhead rates so some of the burden that GCMRC paid to USGS will be returned to GCMRC, which is equal to the CPI adjustment. The AMWG will review and make a formal recommendation at its August meeting.

August 26-27, 2015, Meeting:

This meeting was held in Tempe, Arizona. The following were discussed:

Renewal of AMWG Charter. The Charter was revised in accordance with Federal Advisory Committee Act guidelines and signed by Secretary Sally Jewell on August 24, 2015.

Fiscal Year 2016 Budget and Work Plan. Reclamation and the GCMRC proposed changes to their budgets based on the CPI rate. The members discussed and passed the following motion by consensus:

The AMWG recommends to the Secretary of the Interior for her approval the Final FY 2015-2017 Triennial Budget and Work Plan from the Bureau of Reclamation and the Grand Canyon Monitoring and Research Center as recommended by the AMWG August 28, 2014, for implementation in FY 2016, with a FY 2015 corrected CPI of 1.7% and corrections to the GCMRC overhead rates.

DOI-DOE Hydrograph for Water Year 2016. The AMWG discussed the proposed DOI-DOE hydrograph and passed the following motion by consensus:

The AMWG recommends to the Secretary of the Interior for her approval the WY2016 Hydrograph for Glen Canyon Dam.

- ***Annual Release Volumes*** *will be determined by the 2007 Interim Guidelines and shall be reviewed and adopted through the normal annual operating plan process (in consultation with the Basin States as appropriate).*

- ***Monthly Release Volumes*** *are anticipated to shift depending upon: (1) the projected Annual Release Volume, (2) power plant capacity, and (3) the magnitude of a potential High Flow Experiment.*

- ***Monthly Release Volumes*** *may vary within the targets identified below. Any remaining monthly operational flexibility will be used for existing power production operations under the Modified Low Fluctuating Flow (MLFF) alternative selected by the 1996 ROD and contained in the 1995 FEIS and in compliance with all applicable NEPA compliance documents (HFE EA, NNFC EA, 2007 Interim Guidelines). Monthly release volumes proposed in this hydrograph will not affect operating tier determinations for Lakes Powell and Mead under the 2007 Interim Guidelines.*

- ***Release objective for June is:***
  600 to 650 kaf for annual releases below 9.0 maf
  800 kaf for annual releases of 9.0 maf to less than 9.5 maf
  900 kaf for annual releases of 9.5 maf to less than 10 maf
  Greater than 900 kaf for annual releases 10 maf and greater

- ***Release objective for August is:***
  800 kaf for annual release below 9.0 maf
  900 kaf for annual releases of 9.0 maf to less than 10 maf
  Greater than 900 kaf for annual releases 10 maf and greater

- ***Release objective for September is:***
  600 kaf for annual releases below 9.0 maf
  700 kaf for annual releases of 9.0 maf to less than 10.0 maf
  800 kaf or greater for annual releases of 10.0 maf or greater; up to power plant capacity for high equalization releases

- ***Monthly Release Volumes*** *will generally strive to maintain 600 kaf levels in the shoulder months (spring and fall) and 800 kaf in the December/January and July/August timeframe.*

Additionally, Reclamation will continue to apply best professional judgment in conducting actual operations and in response to changing conditions throughout the water year. Such efforts will continue to be undertaken in coordination with the DOI-DOE agencies and in consultation with the Basin States as appropriate, to consider changing conditions and adjust projected operations in a manner consistent with the objectives of these parameters as stated above and pursuant to the Law of the River.

Fish Management Recommendation. The AMWG recreational fish representation and the angling community, with the cooperative participation of Arizona Game and Fish Department, recognized that the provisions of the National Park Service Comprehensive Fishery Management Plan (CFMP) for both the recreational trout fishery and the fishery as a whole would benefit from an expansion of the CFMP to include more detailed proposed actions. A draft Lees Ferry Recreational Trout Fishery Management Recommendations document was developed and provided to interested agencies for review and comment. The AMWG passed the following motion by consensus:

The AMWG requests the Secretary's Designee direct GCMRC to conduct a technical review of the Lees Ferry Recreational Trout Fishery Management Recommendations and report its findings to the TWG; and directs the TWG to evaluate the GCMRC review at their October 2015 meeting, and report its findings to AMWG at its February 2016 meeting.

Glen Canyon Dam Long-Term Environmental and Management Plan Environmental Impact Study (LTEMP EIS) Update. A cooperating agencies draft EIS was distributed on June 29 for a 30-day comment period. At the request of the cooperators, the comment period was extended to 90 days and comments were submitted on September 30, 2015. A public draft is planned to be distributed by mid-December 2015 with a 60-day public comment period.

Recognition of Service. The AMWG acknowledged the work and contributions made by Dr. L. David Garrett, former Executive Director of the Science Advisors. The following motion was approved unanimously:

The Adaptive Management Work Group formally recognizes the longstanding and significant contributions of Dr. L. David Garrett to the Glen Canyon Dam Adaptive Management Program (GCDAMP) in many different capacities, including first chief of the Grand Canyon Monitoring and Research Center (1996-1999) and the Executive Coordinator of the Science Advisors (2001-2013). Dr. Garrett has significantly helped the GCDAMP to address the many complex science and operational issues associated with Glen Canyon Dam and the Grand Canyon National Park and environs. The AMWG wishes to express its sincere thanks to Dr. Garrett and our warmest wishes for his happy and successful future.
Approved unanimously.

Introduction of new Science Adviser – Reclamation has contracted with Sound Science LLC for science adviser services, the executive coordinator is Dr. David Braun.

Special Tribute to Mr. Jason Thiriot. The AMWG paid special tribute to Mr. Jason Thiriot who had served as an AMWG alternate for the State of Nevada since August 2013. Jason was involved in many aspects of the GCDAMP and instrumental in leading public outreach efforts. The AMWG teamed with the Arizona Diamondbacks major league baseball team to raise funds for the Thiriot Children Memorial Fund, they also made personal cash donations.

Conclusion

The AMWG endeavors to provide informed recommendations concerning the operations of Glen Canyon Dam for your endorsement. Decisions are made by a group of diverse and committed stakeholders that span the resources and values of the Grand Canyon. Their decisions are informed by leading edge science conducted by GCMRC and they are advised by the participating Department agencies.

Recommendation

The AMWG brings a diverse group of stakeholders to the table that provide scientifically informed and broadly supported resource management recommendations to protect downstream resources in the Grand Canyon. The Department of the Interior (Department) agencies, my staff and I work closely with the AMWG to ensure good dialogue and informed and practical recommendations. Two recommendations from the August 2015 meeting were adopted by consensus and I recommend you approve both.

The attached approval document is provided for your consideration.

cc: Principal Deputy Assistant Secretary, Fish, Wildlife and Parks
Assistant Secretary, Indian Affairs
Acting Director, U.S. Geological Survey
Commissioner, Bureau of Reclamation
Director, U.S. Fish and Wildlife Service
Director, National Park Service
Director, Bureau of Indian Affairs

Assistant Director, Wildlife Management, Arizona Game and Fish Department,
5000 W. Carefree Highway, Phoenix, Arizona 85086-5000
Attention: Mr. James deVos

Bureau of Indian Affairs, 2600 N. Central Avenue, 4th Floor, Phoenix, Arizona 85004
Attention: Mr. Chip Lewis

Department of Energy-WAPA, Western Area Power Administration,
150 E. Social Hall Avenue, Suite 300, Salt Lake City, Utah 84111
Attention: Ms. Lynn Jeka

The Hualapai Tribe, PO Box 310, Peach Springs, Arizona 86434
Attention: Ms. Loretta Jackson-Kelly

Director, Cultural Preservation Office, The Hopi Tribe, PO Box 123,
Kykotsmovi, Arizona 86039
Attention: Mr. Leigh Kuwanwisiwma

National Park Service, Grand Canyon National Park, PO Box 129,
Grand Canyon, Arizona 86023
Attention: Mr. David Uberuaga

Executive Director, Department of National Resources, Navajo Nation, PO Box 9000,
Window Rock, Arizona 86515
Attention: Ms. Ora Marek-Martinez

Pueblo of Zuni, PO Box 339, Zuni, New Mexico 87327
Attention: Mr. Kurt Dongoske

San Juan Southern Paiute Tribe, PO Box 2656, Tuba City, Arizona 86045

Southern Paiute Indian Consortium, Kaibab Paiute Indian Reservation,
Tribal Affairs Bldg., HC 65 Box 2, Fredonia, Arizona 86022
Attention: Mr. Charley Bulletts

Field Supervisor, U.S. Fish and Wildlife Service, Arizona Ecological Services
Office, 2321 W. Royal Palm Road, Suite 103, Phoenix, Arizona 85021-4951
Attention: Mr. Steve Spangle

Arizona Department of Water Resources, 3550 N. Central Avenue,
Phoenix, Arizona AZ 85012
Attention: Mr. Tom Buschatzke

Executive Director, Colorado River Board of California, 770 Fairmont Avenue,
Suite 100, Glendale, California 91203-1035
Attention: Ms. Tanya Trujillo

Upper Gunnison River Water Conservancy District, 210 West Spencer, Suite B,
Gunnison, Colorado 81230
Attention: Mr. John McClow

Colorado River Commission of Nevada, 555 E. Washington Avenue, Suite 3100,
Las Vegas, Nevada 89101-1048
Attention: Ms. Jayne Harkins

New Mexico Interstate Stream Commission, PO Box 25102,
Santa Fe, New Mexico 87504
Attention: Ms. Deborah Dixon

Interstate Streams Engineer, State Engineer's Office, 122 W. 25th Street,
Cheyenne, Wyoming 82002
Attention: Mr. Steve Wolff

Director, Division of Water Resources, 1594 W. North Temple
Salt Lake City, Utah 84114
Attention: Mr. Eric Millis

Grand Canyon Wildlands Council, PO Box 1315, Flagstaff, Arizona 86002
Attention: Mr. Larry Stevens

Grand Canyon River Guides, 453 W. Mulberry Drive, Phoenix, Arizona 85013-4349
Attention: Mr. Sam Jansen

National Parks Conservation Association, 307 West 200 South, Suite 5000,
Salt Lake City UT 84101
Attention: Mr. David Nimkin

Colorado River Energy Distributors Association, 10429 S. 51st Street, Suite 230,
Phoenix, Arizona 85044
Attention: Ms. Leslie James

Utah Associated Municipal Power Systems, 155 N. 400 W., Suite 480,
Salt Lake City, Utah 84103
Attention: Mr. Ted Rampton

Federation of Fly Fishers, 4510 E. Joshua Tree Lane, Paradise Valley, Arizona 85253
Attention: Mr. John Jordan

Deputy Regional Director, Upper Colorado Region, U.S. Bureau of Reclamation,
125 S. State Street, Room 8100, Salt Lake City, Utah 84138
Attention: Mr. Daniel Picard

Regional Director, Upper Colorado Region, U.S. Bureau of Reclamation,
125 S. State Street, Room 8100, Salt Lake City, Utah 84138
Attention: Mr. Brent Rhees

Adaptive Management Work Group Alternates
Technical Work Group Members and Alternates
(via e-mail)