

**GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM  
HUMPBACK CHUB, OTHER NATIVE FISH, AND NONNATIVE FISH KNOWLEDGE WORKSHOP  
April 2026**

**Schedule:**

**Tuesday, April 7**

- 8:30-12:30 Conference Room B at the Little America Hotel, 2515 East Butler Avenue; Flagstaff, Arizona 86004
- 12:30-1:45 offsite lunch
- 1:45-5:00 pm Room 670 at the Grand Canyon Monitoring and Research Center, 2255 N. Gemini Drive Flagstaff, AZ 86001
- 5:30 pm BBQ at Buffalo Park next to the Grand Canyon Monitoring and Research Center Campus

**Wednesday, April 8**

- 8:45 a.m. to 12:00 pm Conference Room B at the Little America Hotel, 2515 East Butler Avenue; Flagstaff, Arizona 86004
- 12:30-1:15 offsite lunch
- 1:15-5:00 pm Conference Room B at the Little America Hotel, 2515 East Butler Avenue; Flagstaff, Arizona 86004

**Virtual Participation Options:**

Please note that in-person workshop attendance is limited to Technical Working Group members and invited guests. For all others, there is an option to attend online. To join online, see registration links below:

- [Humpback Chub, Other Native Fish, Nonnative Knowledge Workshop Day 1 Registration](#)
- [Humpback Chub, Other Native Fish, Nonnative Knowledge Workshop Day 2 Registration](#)

**Objectives of the Knowledge Workshop Series:**

- Provide baseline background information and create shared understanding of the resources in the Long-Term Experimental and Management Plan (LTEMP).
- Assess ongoing needs for monitoring to sustain crucial knowledge.
- Identify existing knowledge gaps from stakeholders and discuss how to close them.

See [Resources for Workshop](#) for reference materials on the humpback chub, non-native fish, and other native fish.

## **Day 1 Agenda:**

**Tuesday, April 7, 2026**

*The session will start promptly at 8:30 am. Participants are encouraged to arrive by 8:15.*

### **8:30 am WELCOME AND ADMINISTRATIVE**

- Objectives:
  - Welcome Technical Working Group members
  - Share how stakeholder feedback was incorporated into the workshop agenda

### **9:00 am PRE-DAM CONDITIONS Presentation & Discussion**

- Objectives:
  - Understand the pre-dam environment and how this relates to species life history
  - Learn about the introduction/extirpation histories of various Grand Canyon fishes

### **9:30 am POST-DAM CONDITIONS (ERA 1: 1970-1990S) PRESENTATION & DISCUSSION**

- Objectives:
  - Understand limitations/threats to aquatic communities under conditions of a full reservoir and how the dam was being operated during this era.
  - Examine what (if any) management actions were occurring.
  - Review what studies were conducted during this time (GCES period).

### **10:10 am BREAK**

### **10:25 am POST-DAM CONDITIONS (ERA 2: 2000-2025) PRESENTATION & DISCUSSION**

- Objectives:
  - Understand how conditions are changing under the lower reservoir conditions.
  - Learn about dam operations and management actions.
  - Consider how understanding of fish communities in Grand Canyon changed during this time.
  - Identify key management actions during this timeframe.
  - Discussion on last 25 years of monitoring fish in a warming river, with changes in flow experiment and monitoring effort/approach over time

### **11:15 pm ENDANGERED SPECIES ACT COMPLIANCE PRESENTATION & DISCUSSION**

- Objectives:
  - Provide better understanding of ESA requirements and when those can be reduced or need to be increased
  - Discuss ESA and GCPA compliance
  - How does the monitoring and research conducted in recent work plans link to LTEMP Biological Opinion Conservation Measures?
  - What type and frequency of sampling is needed to inform triggers?

**11:45 am UPPER BASIN NATIVE AND NONNATIVE FISH OVERVIEW PRESENTATION & DISCUSSION**

- Objectives:
  - Improve understanding of upper basin Colorado River fish program (history, ecology, threats, management actions).
  - Learn more about interactions between native and non-native species.
  - Understand if challenges/management in other areas analogous to Glen/Grand Canyon.

**12:30pm LUNCH (offsite)**

**TWO IMPORTANT NOTES:**

- 1. After lunch, the remainder of the Day 1 session will be held at Grand Canyon Monitoring and Research Center (2255 N. Gemini Drive Flagstaff, AZ 86001).**
- 2. There is no virtual option for the agenda item starting at 1:45 as it is a hands-on activity. \* Virtual participants should log back on to the Microsoft Teams meeting around 3:50 pm.**

**1:45 pm FISH ECOLOGY, MONITORING, AND MODELING DEMOS**

- Objectives:
  - Learn about tradeoffs associated with sampling, cost, and information to better understand the differences in various approaches to sampling.
  - Learn more about differences between fish species to help decision making for different species.

**3:50 pm CURRENT GRAND CANYON FISH MONITORING, RESEARCH, AND METRICS**

- Objectives:
  - Provide overview of fish monitoring metrics, why they were chosen, and work plan ties.
  - Address stakeholder questions on monitoring and modeling

**4:45 pm DEBRIEF / WRAP-UP**

**5:00 pm ADJOURN**

**5:30 pm BBQ HOSTED BY GCMRC**

**Location: Buffalo Park next to GCMRC Campus**

## **Day 2 Agenda:**

**Wednesday, April 8, 2026**

*The session will start promptly at 8:45 am. Participants are encouraged to arrive by 8:30.*

**8:45 am WELCOME AND ADMINISTRATIVE**

- Objectives: (Bill Stewart and Jeremy Hammen, Reclamation)
  - Discuss takeaways from Day 1
  - Review Day 2 agenda topics

**9:15 am TRIBAL ROUNDTABLE**

- Objectives: (Erik Stanfield, Navajo Nation)
  - Increase communication between scientists and Tribes.
  - Identify opportunities for joint projects.

**10:15 am BREAK**

**10:30 am NONNATIVE FISH RISK AND RESPONSE TO MANAGEMENT ACTIONS:  
PRESENTATION & DISCUSSION**

- Objectives:
  - Address stakeholder questions regarding nonnative fish risk and responses to management (Charles Yackulic)
  - Discuss nonnative fish risk and response of smallmouth bass to cool mix flows and rapid response efforts

**12:00 pm LUNCH (offsite)**

**1:15 pm RESEARCH TO ADDRESS UNCERTAINTIES IN THE STATUS OF NONNATIVE AQUATIC  
SPECIES: PRESENTATION & DISCUSSION**

- Objectives:
  - Gain a better understanding about ongoing research including genetic kinship work, environmental DNA, otolith aging, SMB diet work, and other nonnatives.
  - Discussion on ongoing research projects designed to reduce uncertainty around status of nonnative aquatic species and entrainment.

**2:15 pm FUTURE ENVIRONMENTAL CONDITIONS, HYDROLOGY, AND POST-2026 MODELING:  
PRESENTATION & DISCUSSION**

- Objective:
  - Provide information on future conditions in the Colorado River and Post-2026 modeling related to smallmouth bass
  - Provide opportunity to discuss basin hydrology and desired future conditions for fish resources

**3:15 pm BREAK (exact time may vary)**

**3:40 pm SMALL GROUP REFLECTIONS & PLENARY DISCUSSION**

- Objective:
  - Continue discussions from the previous session as a plenary group

**4:30 pm BRING IT ALL TOGETHER AND THE WAY FORWARD**

- Objectives:
  - Reflect on key takeaways from Day 2 and workshop
  - Prep for the Technical Working Group session

**5:00 pm ADJOURN**