

Glen Canyon Dam Long-Term Experimental and Management Plan Supplemental Environmental Impact Statement

TWG Meeting, Nov 7, 2023

# How does the LTEMP SEIS differ from other current planning activities?







NEAR-TERM COLORADO RIVER OPERATIONS (Interim Guidelines SEIS)	GLEN CANYON DAM LONG-TERM EXPERIMENTAL AND MANAGEMENT PLAN (LTEMP SEIS)	LONG-TERM COLORADO RIVER OPERATIONS (Post-2026 Process)
Limited sections of the 2007 Interim Guidelines  Focus on annual releases	Limited sections of the 2016 LTEMP ROD;  Sub-annual flows - timing of hourly, daily, monthly and experimental releases from Glen Canyon Dam	Revisit all sections of the 2007 Interim Guidelines and other operating agreements that expire in 2026.  Focus on annual releases
2024 – 2026 (3 YEARS)	2024 – 2027 (Flow Alternatives) 2024 – 2036 (HFE protocol)	2026 AND BEYOND



### Purpose and Need

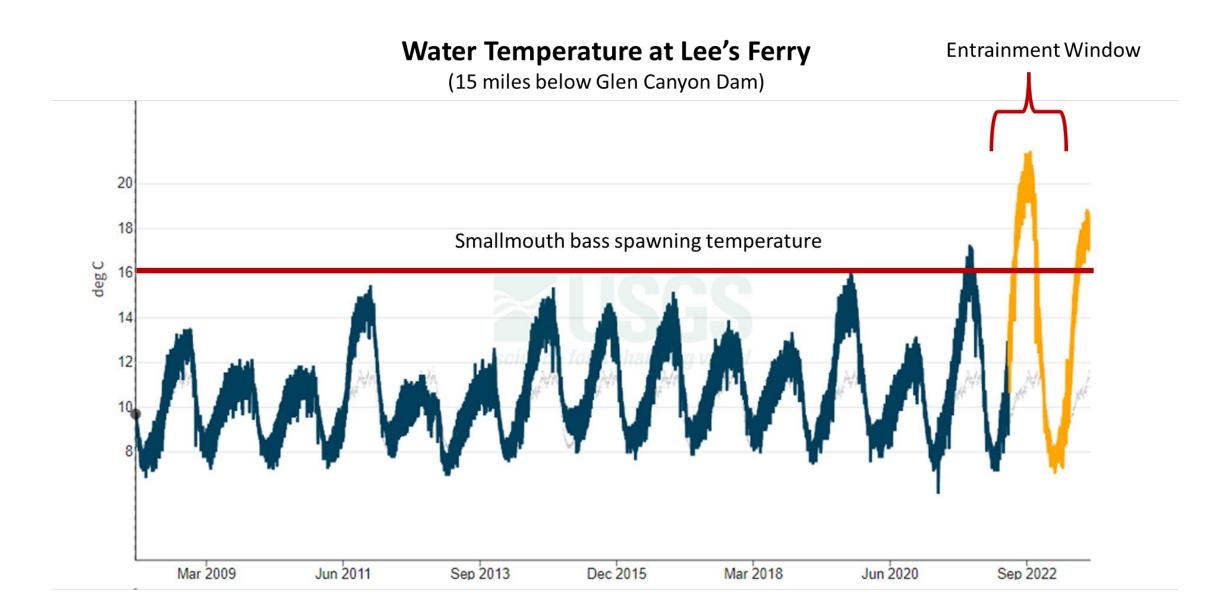
- The purpose of the LTEMP SEIS is for Reclamation to analyze additional flow options at Glen Canyon Dam in response to invasive smallmouth bass and other warmwater nonnatives recently detected directly below the dam.
- The need is to prevent the establishment of smallmouth bass below the Glen Canyon Dam (by preventing additional spawning), which could threaten populations of threatened humpback chub downstream.
- The LTEMP SEIS will also consider the HFE protocol by including the latest scientific information to improve Reclamation's ability to implement HFEs as originally intended in the LTEMP EIS. Specifically, Reclamation is considering adjusting the sediment accounting periods and implementation windows.



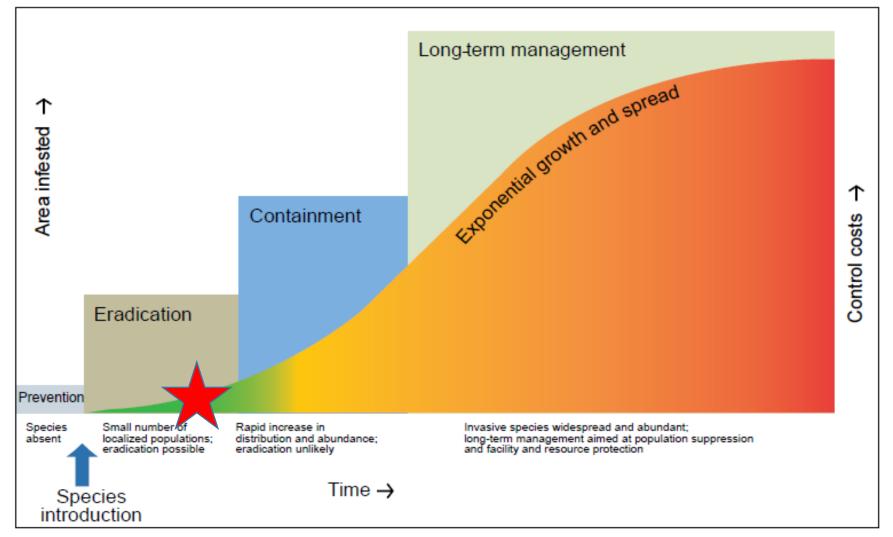
#### Invasive Threat to Native Fish

Full Pool **Current Elevation** Issue 2: Warm water > 16C is suitable 3573 ft Glen for smallmouth bass spawning Minimum Power Pool Canyon 3490 ft Dam Dead Pool 3370 ft **Lake Powell** 

Issue 1: Entrainment



## The Invasion Curve from DOI Invasive Species Strategic Plan (2021-2025)





### Glen Canyon Dam/Smallmouth Bass Flow Options Draft Environmental Assessment (EA)



Glen Canyon Dam/
Smallmouth Bass Flow Options
Draft Environmental Assessment



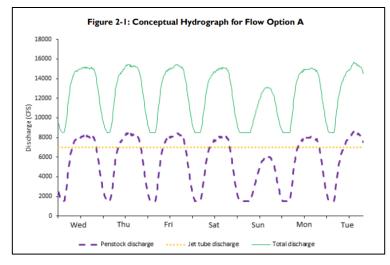
US Department of the Interior Bureau of Reclamation Upper Colorado Basin Region 125 South State Street, Room 8100 Salt Lake City, UT 84138

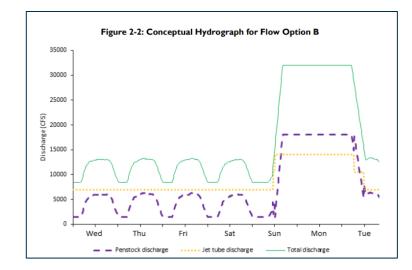
February 2023

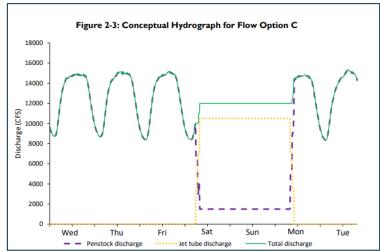
- Published February 2023
  - Evaluated operational alternatives at Glen Canyon Dam that may serve to disrupt spawning of smallmouth bass and other warmwater invasive fish that pass through the dam.
  - Nearly 7,000 comments received with many comments focused on the effects to hydropower generation and revenues as well as the effects on Tribal resources.
  - Reclamation concluded that additional analysis was warranted.

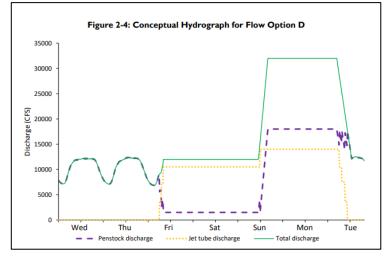
#### **Preliminary Alternatives**

Four actions analyzed in the Glen Canyon Dam/Smallmouth Bass Flow Options Draft Environmental Assessment (February 2023).











### **Preliminary Alternatives**

• All action-alternatives will include a revised annual sediment accounting period and implementation window associated with the HFE protocol.

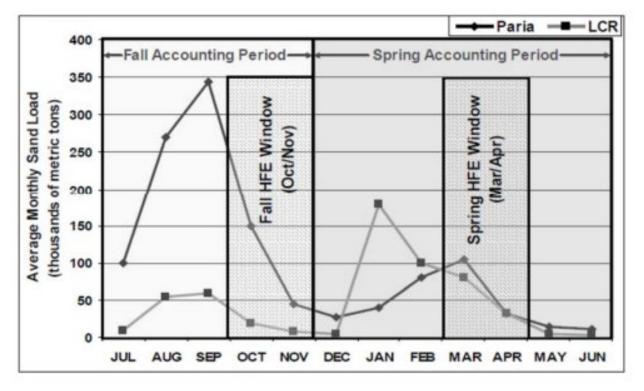


FIGURE 1 Average Monthly Sand Load from the Paria River and Little Colorado River Showing the Fall and Spring HFE Accounting Periods and Implementation Windows



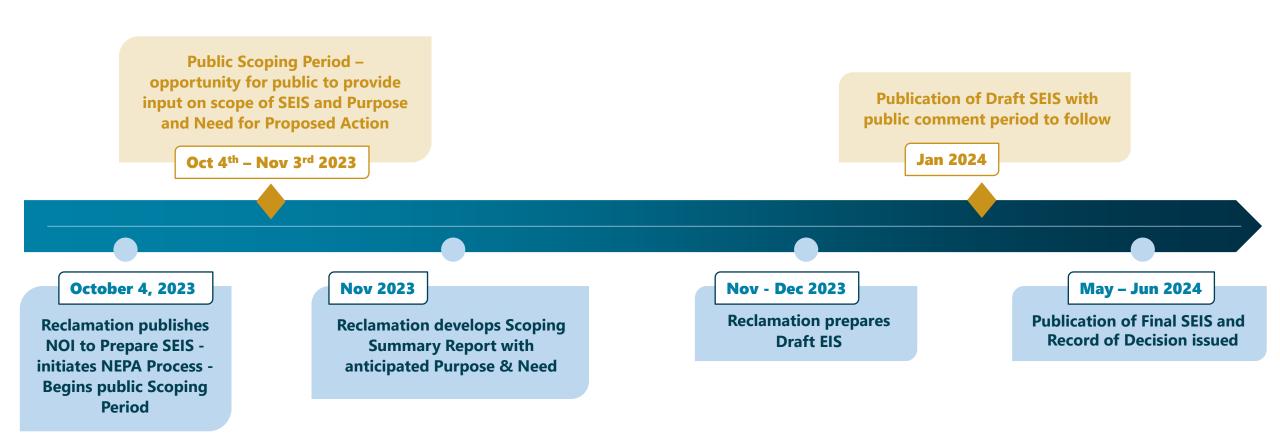


### **Scoping Process**

- Notice of Intent was published in the Federal Register on October 4, 2023.
- 30-day public scoping comment period ended **November 3, 2023.**
- Public Webinars are held on October
   18 and 20, 2023.
- Glen Canyon Dam Adaptive Management Program | Bureau of Reclamation (usbr.gov)



### LTEMP SEIS: Proposed Schedule





Key NEPA Process milestones – Opportunities for Tribal, State, Partner, Stakeholder, and Public engagement



