



Non-native Fish Strategic Plan

Review and Status

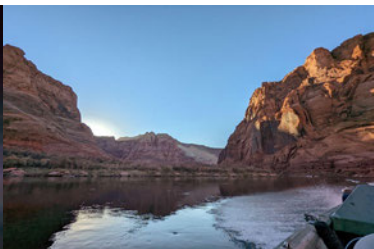
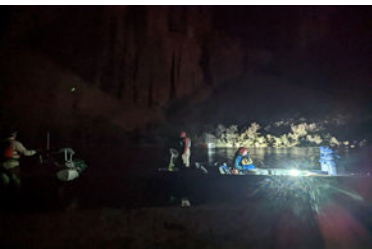
February 26, 2026
Adaptive Management Work Group Meeting

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Invasive Fish Species Below Glen Canyon Dam: A Strategic Plan to Prevent, Detect and Respond

Developed by the Smallmouth Bass Ad Hoc Group, through the Technical Work Group of the Glen Canyon Dam Adaptive Management Program in partnership with the Grand Canyon Monitoring and Research Center and the Bureau of Reclamation

Presented to the Glen Canyon Dam Adaptive Management Group
Technical Work Group on January 26, 2023, and accepted by the Adaptive Management Work Group on
February 16, 2023.



Highlights from the Guiding Principles (pg. 5-6)

1. Presence and establishment of invasive fish could dramatically alter the CRe and the status of federally listed fish.
2. Prevention is essential to reduce or eliminate further entrainment through GCD and limits future taking of life.
3. Negative impacts from the actions provided in this Plan to LTEMP resources should be avoided, minimized, and/or mitigated.
4. Funding for actions to prevent invasive fish establishment (e.g., GCD modifications and/or an offset for forgoing power generation) should be pursued outside of existing GCDAMP funds where possible.
8. Actions implemented early in the timeline of invasion are less costly and more likely to be successful than actions that are implemented later (see DOI's Phases of the Invasion Curve, Figure 1).
9. A combination of flow and non-flow actions will be necessary to successfully prevent the introduction, spread, and establishment of invasive fish.
10. Actions may be limited by conditions beyond the control of the GCDAMP.

What's in the Plan?

- A consensus strategy to address high-risk nonnative fish below Glen Canyon Dam
 - Considered actions from a technical, western science perspective
- A multi-faceted approach:
 - Long-term actions to limit entrainment from Glen Canyon Dam
 - Mid-term actions to prevent successful spawning of SMB already below the dam
 - Short-term actions to prevent widespread dispersal and establishment
- Framework for considering actions, including:
 - Triggers
 - Tradeoffs and mitigation
 - Offramps

What's *NOT* in the Plan?

- Specific actions or scope of work
- Detailed triggers, offramps, or mitigation
- Long-term management for an established species
- Nonnative fish management from a tribal perspective

Additional coordination and stakeholder discussion was identified by the Strategic Plan as necessary for further development

Long-term Actions: Fish exclusionary device to prevent entrainment
- In Consideration

Mid-term Actions: Flow operations to disrupt spawning of fish below GCD
- Implemented in 2024 & 2025, for consideration 2026

Short-term Actions: Rapid response to remove invasive fish in the GLCA
and GCNP
- Occurring annually

Attachment F: Supplemental Actions

- Modification of -12 Mi Slough - Completed
- Generation to bypass tubes
- Temperature Control Device
- Re-introduce Colorado Pikeminnow - In Consideration
- Educational Outreach
- Maintain Lake Powell Elevations

What's changed?

- DOI SMB Rapid Response Charter: Defined agency roles
- Rapid response and monitoring
 - Efforts are unable to occur consistently
 - Resource gaps have increased since originally identified in the Plan
- Attachment D: Hot spots
 - Slough modification, dam slough
- Attachment F: Supplemental Actions
 - In various stages of progress
- Attachment G: Implementation Considerations
 - SBAHG completed annual review via survey

This Plan is intended to be a living document and should be periodically re-evaluated and/or updated by the GCDAMP, to account for ongoing changes in the CRe. pg. 12

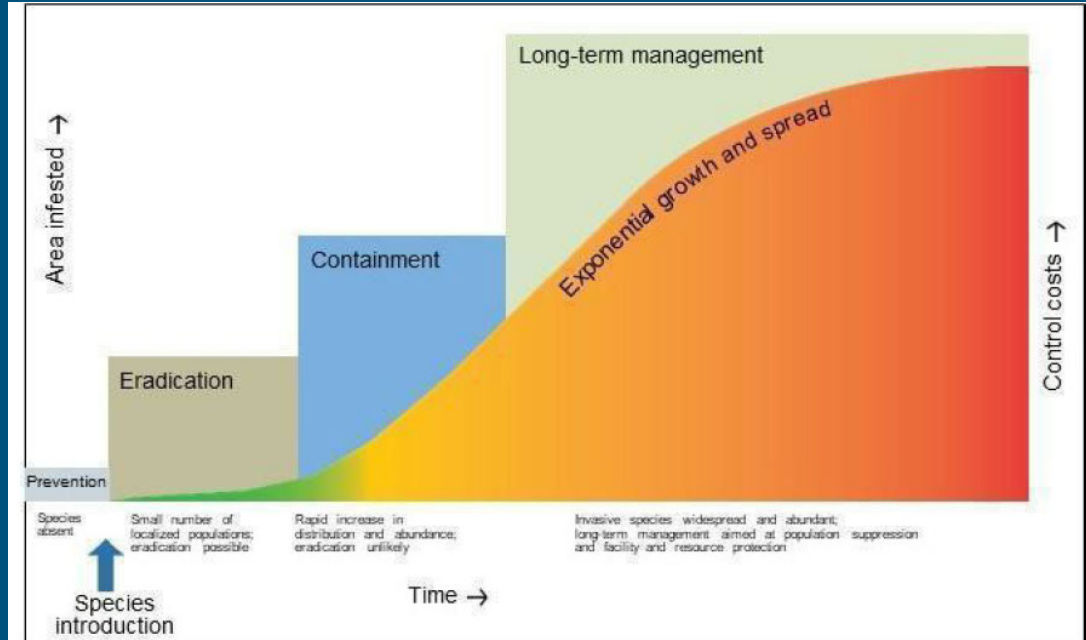


Figure 1. Phases of the Invasion Curve. United States Department of the Interior, Invasive Species Strategic Plan 2021-2025 (Adapted from Rodgers. 2010. Invasive Plants and Animals Policy Framework. State of Victoria, Department of Primary Industries).



Thank You

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SBAHG Current Charge:

The Smallmouth Bass Ad Hoc Group is charged with evaluating warmwater nonnative fish actions to assess their effectiveness, and as necessary, review and recommend updates to the “Invasive Fish Species Below Glen Canyon Dam: A Strategic Plan to Prevent, Detect and Respond” (i.e., the Strategic Plan).

Background & Purpose of Plan

- Address May 2022 Directive
 - Concerns previously raised by the SMB Task Force, heightened by early July discovery of SMB below GCD
- Support the LTEMP non-native fish species goal to '*minimize or reduce the presence and expansion of aquatic non-native invasive species*'
- Builds on existing agency management plans, using DOI invasive species strategy documents
- Intended to coordinate actions for a holistic approach without restricting any management agencies existing actions

Offramp Considerations

- (1) the distribution of an invasive fish (by river miles),
- (2) population numbers and evidence of spawning,
- (3) effectiveness of the action(s),
- (4) the associated costs if such action(s) were continued,
- (5) consideration of the time and resources that have been dedicated to existing actions,
- (6) shifting to more appropriate actions if deemed necessary, and
- (7) the current stage and location in the DOI's Phases of the Invasion Curve