

Management through **Stewardship** Targets | Grand Canyon Example

COOPERATIVE
CONSERVATION
ALTERNATIVE

Harmonizing Water Management with Environmental Priorities

The Colorado River Basin faces pressing and evolving challenges to its ecosystems and the diverse community of sovereigns and stakeholders who call it home. The Cooperative Conservation Alternative proposes management through **Stewardship Targets** to help advance our shared priorities.



Photo 1. Grand Canyon, Arizona. Credit: Sinjin Eberle

COOPERATIVE CONSERVATION PRIORITIES

- **Stabilize storage** and avoid crisis management
- **Ensure mitigation and stewardship** is part of operations
- **Incentivize conservation** and operational flexibility
- **Maintain Cienega, Delta flows** and River connections
- **Call for parallel resilience** building processes

Climate change and reservoir management decisions impact natural systems throughout the Colorado River Basin. However, environmental priorities are frequently segmented from decisions for operating Lakes Powell and Mead from year to year. The result has been that rules governing **annual operations** do not factor in storage and release measures that could help forestall the degradation of the Basin's ecosystems while still working within the Law of the River.




*Cooperative Conservation proposes integrating Stewardship Targets to reflect a **holistic approach to reservoir management and environmental conservation** in the post-2026 era.*

Grand Canyon Stewardship Targets introduce flow considerations for Grand Canyon resources into annual criteria for operating Lake Powell. The targets help set the stage for annual storage conditions to consider, where possible, Grand Canyon resource needs without upsetting coordinated operations of Lakes Powell and Mead under the Law of the River. These targets would be based on key resource considerations that can be influenced by storage conditions at Lake Powell from year to year. They would not serve as critical Powell elevations that must be protected but rather as guidance to help optimize storage and releases from Powell to ensure ongoing compliance with the Endangered Species Act and work through the Long-Term Experimental Management Plan.

The **Management through Stewardship Targets** approach would encourage increased releases if Powell storage is above 3600 feet and decreased releases as Powell storage approaches elevation 3525 feet. It would also strive to ensure varied minimum flow releases through the Grand Canyon of at least 5000 cubic feet per second but preferably 6000 cubic feet per second throughout the Water Year.


This strategy underscores the inseparable connection between water management and natural resource protection. It helps carry out the Basin's commitment to the stewardship of one of the nation's most iconic natural landscapes while ensuring the operational flexibility needed to respond to the Colorado River Basin's complex water management challenges.

Promote **Lake Powell** storage levels that . . .




TEMPERATURE

support Glen Canyon Dam releases above 12°C / below 20°C to benefit Humpback Chub, preserve Trout and deter invasive species




INVASIVES

prevent invasive species, such as Small Mouth Bass, from bypassing Glen Canyon Dam and Lee Ferry



FLOWS

increase probability of High Flow Experiments (over 24 hours) to be once every 3 years (when sediment is present in the system)



TIMING/MINIMUMS

ensure flows that avoid destruction of ecosystem integrity, river connectivity and recreation within Grand Canyon

Figure 1. (Above) The stewardship targets aim to promote Lake Powell storage levels that improve the health of Colorado River and key species.

Figure 2. (Below) Target Lake Powell pool elevations and Glen Canyon Dam Releases described in the Cooperative Conservation Alternative. The left side highlights Grand Canyon flow recommendations associated with pool elevations.

