



U.S. Fish And Wildlife Service
Southwest Region

USFWS & NPS Joint Concepts for Post 2026

2024 CRWUA Conference

December 5, 2024



Compliance with Laws & Agreements



ESA
Recovery
Programs
NHPA
Organic Act



Federal Lands

Treaty Obligations

Grand Canyon Protection Act



Lower Colorado River Multi-Species Conservation Program



Principles & Goals

Plan for continued Aridification

- Test alternatives against natural flows as low as 10-11 maf
- Avoid dropping below critical reservoir levels through proactive building of storage



Utilize Combined Storage for Determining Releases



Principles & Goals

Healthy Riverine Processes

- Mimic natural hydrograph system wide
- Retain ability to conduct High Flow Experiments at Glen Canyon Dam
- Minimize nonnative fish entrainment and establishment



Photo Credit: Melissa Trammel

Maintain higher elevations at Lake Powell



How to Get There

- Balance supply and demand
- Use **combined storage** to determine releases
- Shape delivery releases to maximize benefits & mimic natural hydrograph
- Maintain Upper Basin Colorado River Storage Project reservoir RODS



How to Get There

- Prioritize storage of water in Lake Powell
- Maintain Mead above 1000' and below Pearce Ferry Rapid
- Increase flexibility of water release variability from Powell



Other Benefits

- Interannual variability
- LCR MSCP & Colorado River Delta deliveries
- Protects minimum flows
- NPS infrastructure & river based recreation
- Rainbow trout fishery



Proof of Concept

Operational strategies can generally perform well for priority resources under a wide range of hydrologic futures, **especially when partnered with protecting infrastructure by not falling below Power Pool at either dam**



It can be done!

Metric	Powell <3500		Mead <1000		Mead < 950		HFE Prob		Marble Canyon Sand		SMB entrained		SMB lambda		Lake Mead Elev between 1000-1135
Desired condition	<1%		ideally <5%		<1%		>0.5 probability		>0 tons		lowest		<0.96 rate of change		ideally >90%
NPS-USFWS Strgy #1	0.0		0		0		0.55		659		9		0.91		60
NPS-USFWS Strgy #2	0.5		2		0		0.54		658		14		0.94		90
Current Ops	51.7		57		38		0.15		393		118		1.14		44



The Ask

Request Reclamation consider these **Values and Metrics** when modeling different alternatives to understand potential impacts of alternatives on natural resources.

