

CRWUA 2021

No Spare Change: Impacts
of Falling Revenue on Basin
Environmental Programs

December 14, 2021
Las Vegas, NV

Tom Chart, former Director of the Upper Colorado River
Endangered Fish Recovery Program

on behalf and in coordination with:

Julie Stahli, USFWS, Director, Upper Colorado River
Endangered Fish Recovery Program; Julie_Stahli@fws.gov

Melissa Mata, USFWS, Coordinator, San Juan River Basin
Recovery Implementation Program; melissa_mata@fws.gov

Scott Vanderkooi, USGS, Director, GCMRC - Glen Canyon Dam
Adaptive Management Program; svanderkooi@usgs.gov

An underwater photograph showing a person's hand holding a small, light-colored fish. The hand is positioned at the bottom of the frame, with fingers gently cupping the fish. The fish is oriented vertically, facing upwards. The water is clear, and the background shows the rippling surface of the water and some dark, rocky structures. The lighting is natural, creating soft shadows and highlights on the hand and fish.

Outline

Which Programs are we talking about

Importance of the Programs

Historical Reliance on Hydropower Revenues

Post 2023 Planning – an Upper Basin issue

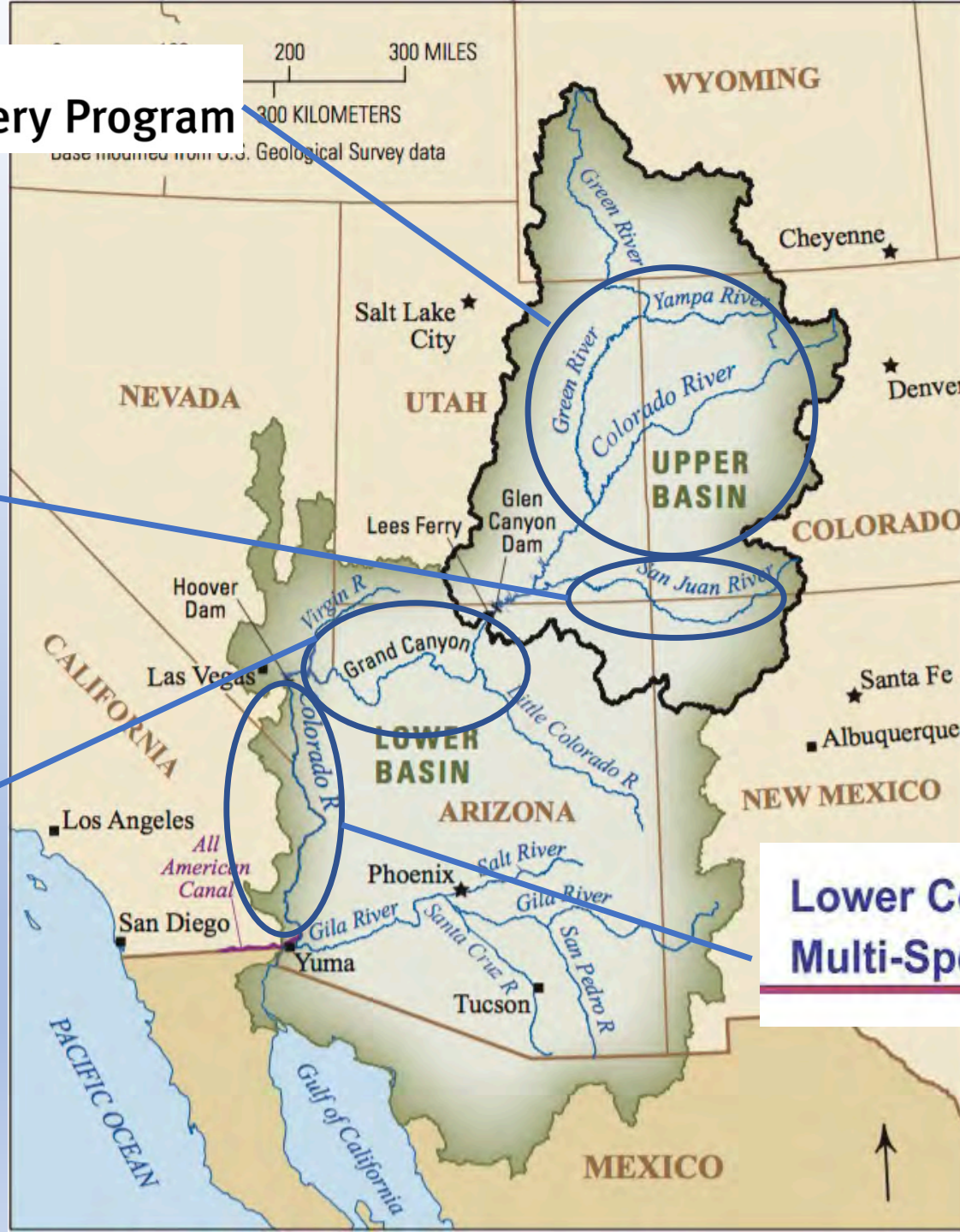
Where we go from here



Upper Colorado River Endangered Fish Recovery Program



**Glen Canyon Dam Adaptive
Management Program**



Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

LCR MSCP GOALS & OBJECTIVES

- Conserve habitat and work toward recovery of T&E species as well as reduce the likelihood of additional species being listed
- Accommodate present water diversions and power production and optimize opportunities for future water and power development
- Provide the basis for incidental take authorizations



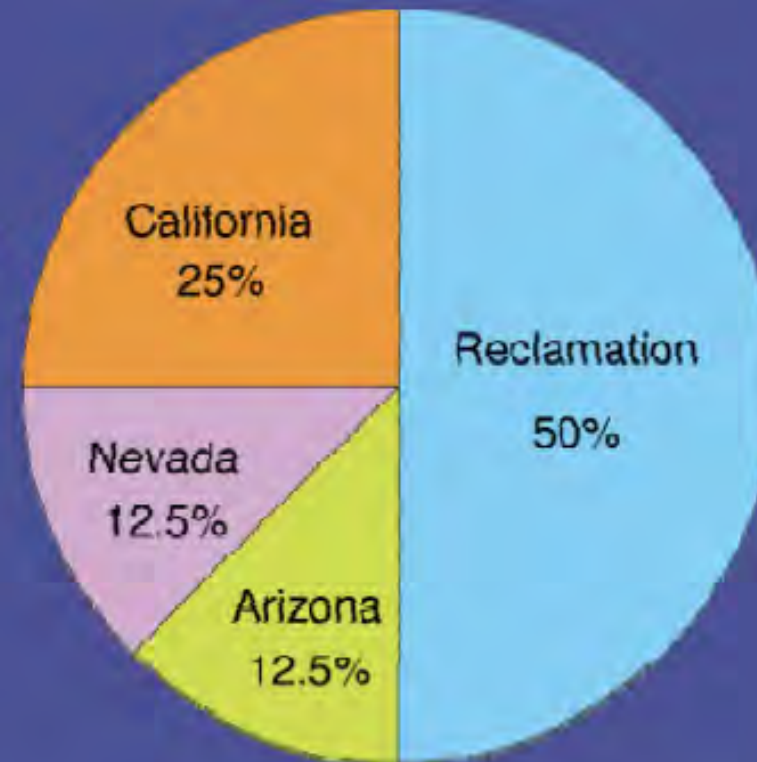
Lower Colorado River Multi-Species Conservation Program



Balancing Resource Use and Conservation

COST SHARING

- Total Program Cost
\$626 million (2003 dollars)
Adjusted Annually for Inflation
- Federal / State Cost Share
Split 50/50





Goals of the UCR and SJR Recovery Programs

Recover the endangered fish as water development proceeds in compliance with the Endangered Species Act, state water law, interstate compacts, and federal trust responsibilities to tribes

GCDAMP Goals:

1. Protect or improve the aquatic food base so that it will support viable populations of desired species at higher trophic levels
2. Maintain or attain viable populations of existing native fish, remove jeopardy for humpback chub and razorback sucker, and prevent adverse modification to their critical habitats
3. Restore populations of extirpated species, as feasible and advisable
4. Maintain a naturally reproducing population of rainbow trout above the Paria River, to the extent practicable and consistent with the maintenance of viable populations of native fish
5. Maintain or attain viable populations of Kanab Ambersnail
6. Protect or improve the biotic riparian and spring communities, including threatened and endangered species and their critical habitat
7. Establish water temperature, quality, and flow dynamics to achieve the GCDAMP ecosystem goals
8. Maintain or attain levels of sediment storage within the main channel and along shorelines to achieve the GCDAMP ecosystem goals
9. Maintain or improve the quality of recreational experiences for users of the Colorado River ecosystem, within the framework of the GCDAMP ecosystem goals
10. Maintain power production capacity and energy generation, and increase where feasible and advisable, within the framework of the GCDAMP ecosystem goals
11. Preserve, protect, manage, and treat cultural resources for the inspiration and benefit of past, present, and future generations
12. Maintain a high-quality monitoring, research, and adaptive management program

The UCR and SJR Recovery Programs Provide ESA compliance for Water Projects

An aerial photograph of a wide, muddy river flowing through a semi-arid landscape. In the foreground, a concrete dam with several spillways is visible, with water cascading over it. The riverbanks are dotted with green trees and shrubs. In the background, there are rolling hills and a prominent mesa under a clear blue sky. The overall scene depicts a water management project in a natural setting.

	Wyoming	Colorado	Utah	New Mexico
Projects	416	1,545	278	23
Acre-Feet/Yr	~120,000	~2,341,000	~626,000	~654,000

Endangered Species Recovery Actions Address Threats



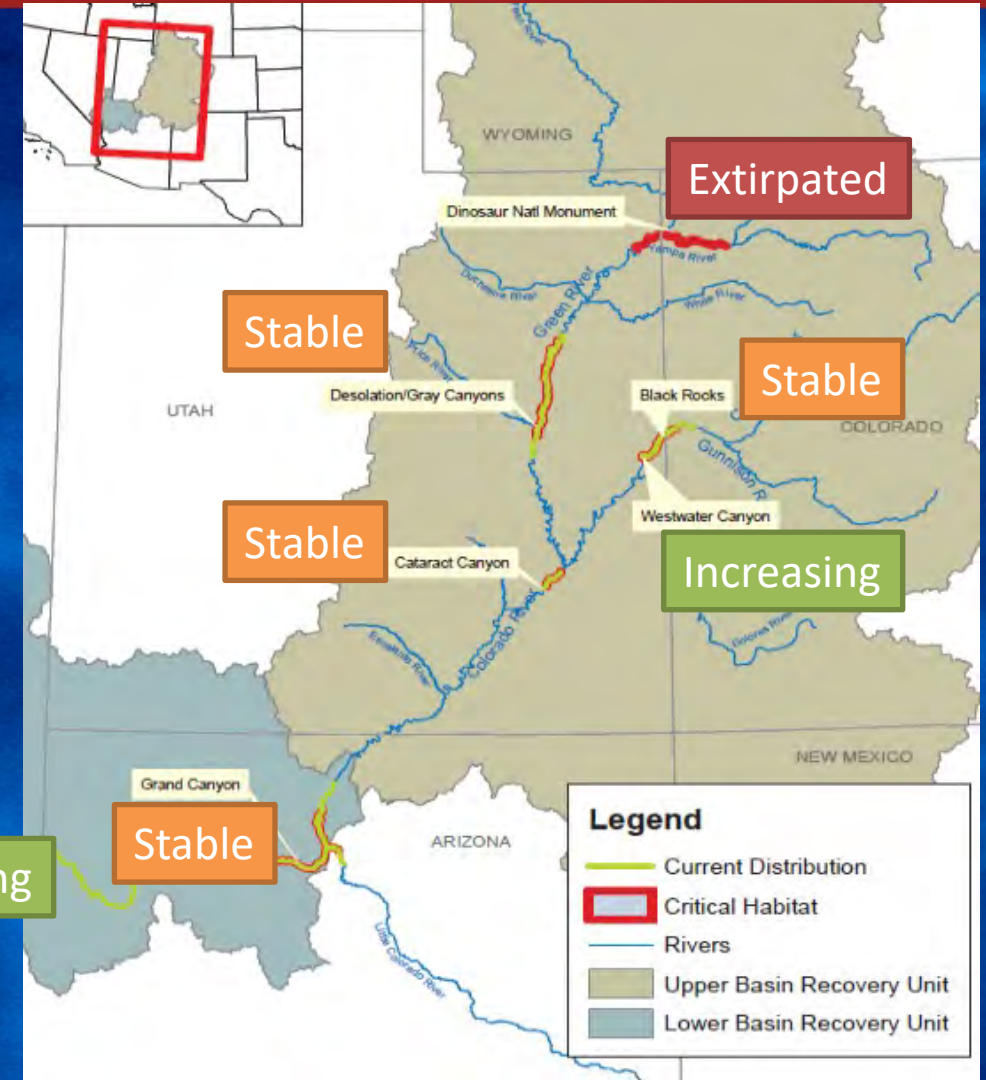


Humpback Chub Reclassified to Threatened Status

Large and increasing in Westwater Canyon
Three smaller, stable upper basin populations

Large and stable in Little Colorado River
Large and increasing in Western Grand Canyon

**On Nov 17, 2021, USFWS Downlists
Humpback Chub to Threatened Status**





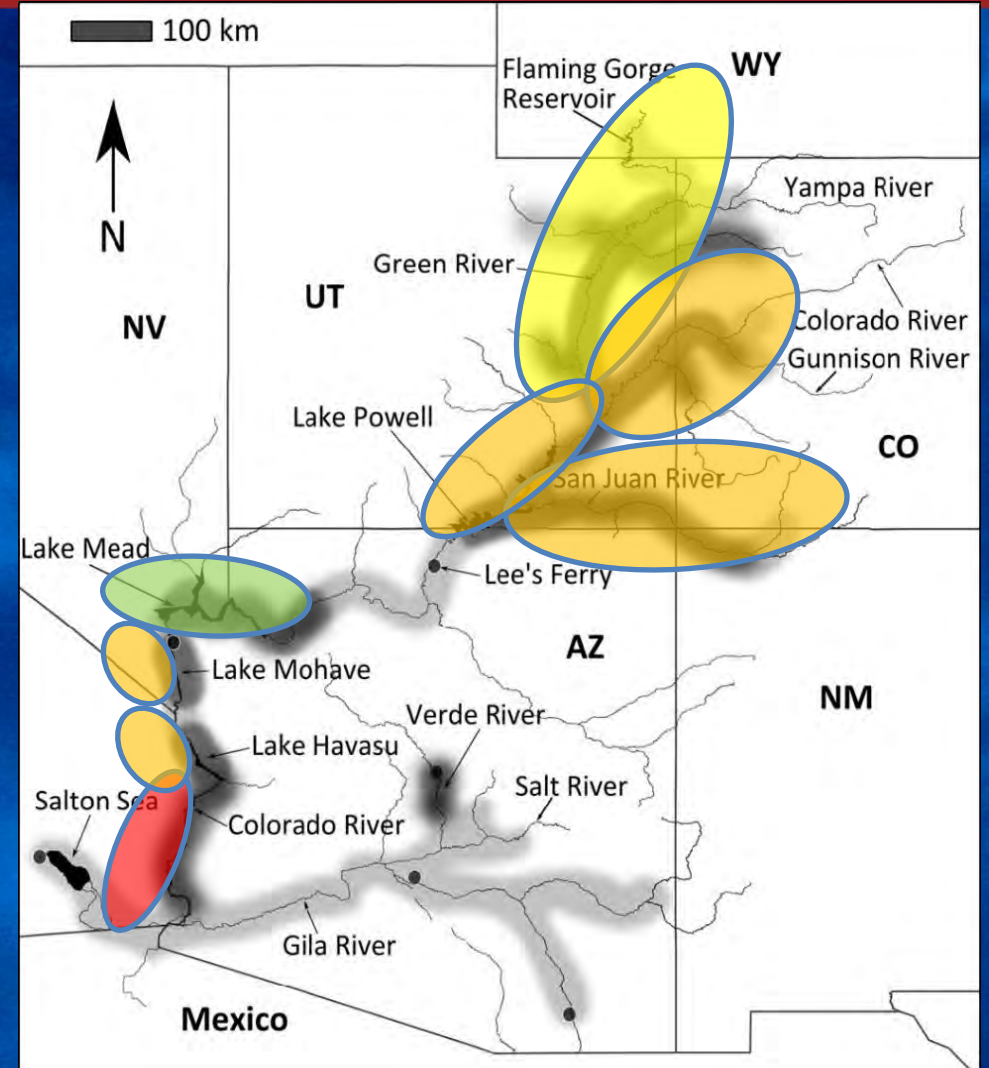
Species Status: Razorback Sucker

Large, reproducing populations of stocked fish in the upper basin;
Signs of recruitment

Small, wild population in Lake Mead

Stocked populations in lower basin

**USFWS Published Proposal to Downlist in July 2021;
comment period closed Sept. 2021**





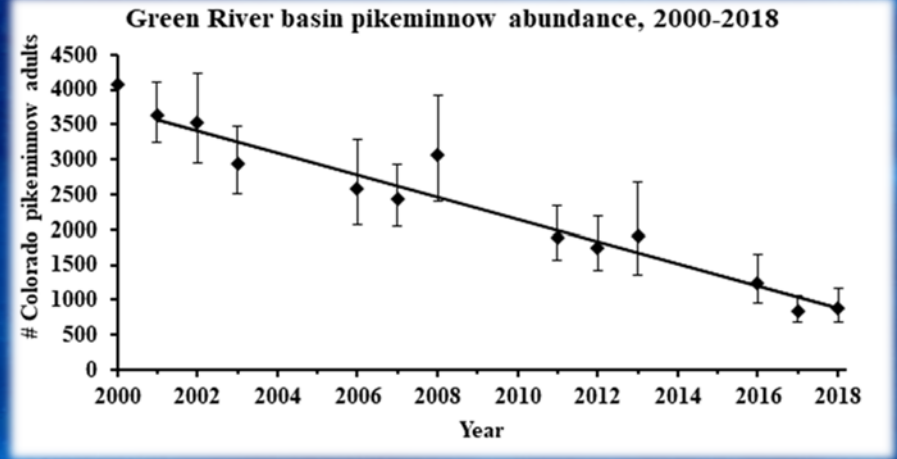
Species Status: Colorado pikeminnow

Declining wild population in the Green River

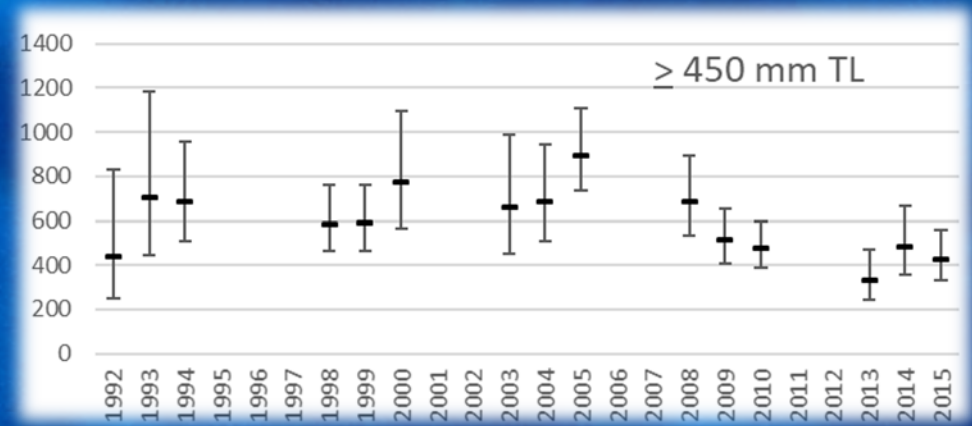
Stable wild population in Colorado River

Stocked populations in San Juan River

USFWS Currently Revising the Recovery Plan



Green River adult pikeminnow abundance



Colorado River adult pikeminnow abundance



Species Status: Bonytail

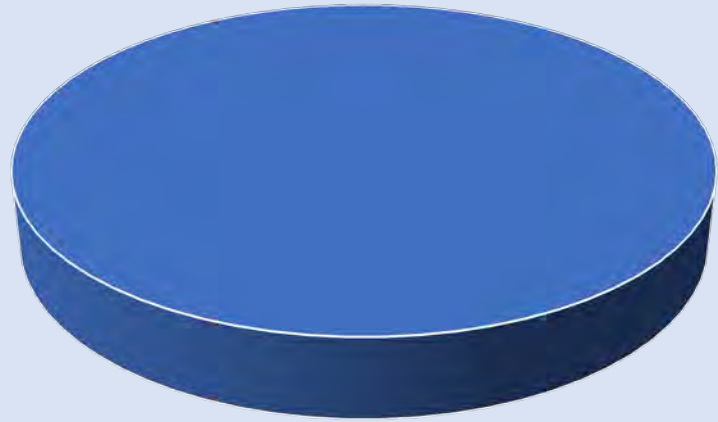


- Program has increased number and size of stocked Bonytail
- Encouraging discoveries of this spp. use of floodplain habitats
- PIT antenna reveal more re-sights than traditional sampling techniques
- However, survival is still critically low

USFWS will re-evaluate the species status in the next 5-year review in 2024

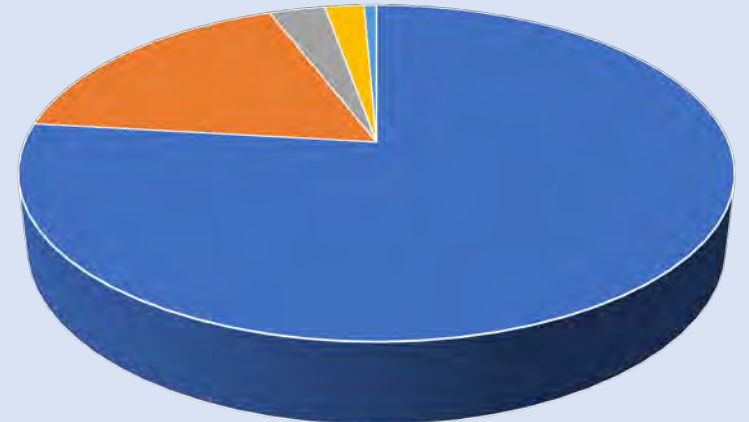
Program's Reliance on Hydropower Revenues

GCDAMP - Total = 11,360,000.00



■ Hydropower Revenues

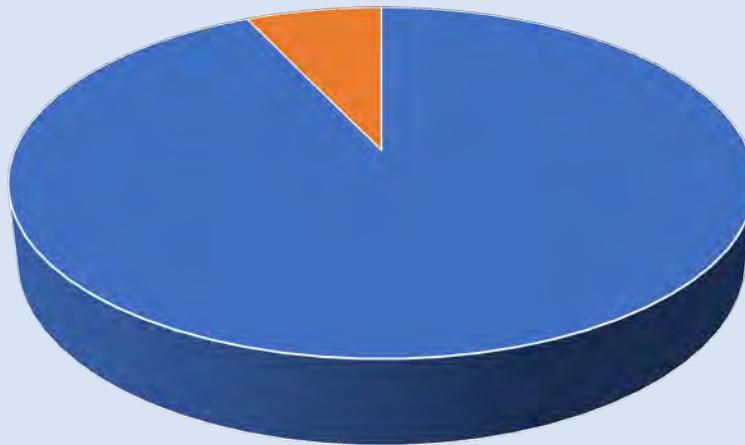
UCREFRP - Total = 7,938,210.00



■ Hydropower Revenues ■ USFWS Approps ■ CO ■ UT ■ WY

**FY21
Annual
Funding**

SJRBRIP - Total = 2,843,949.00



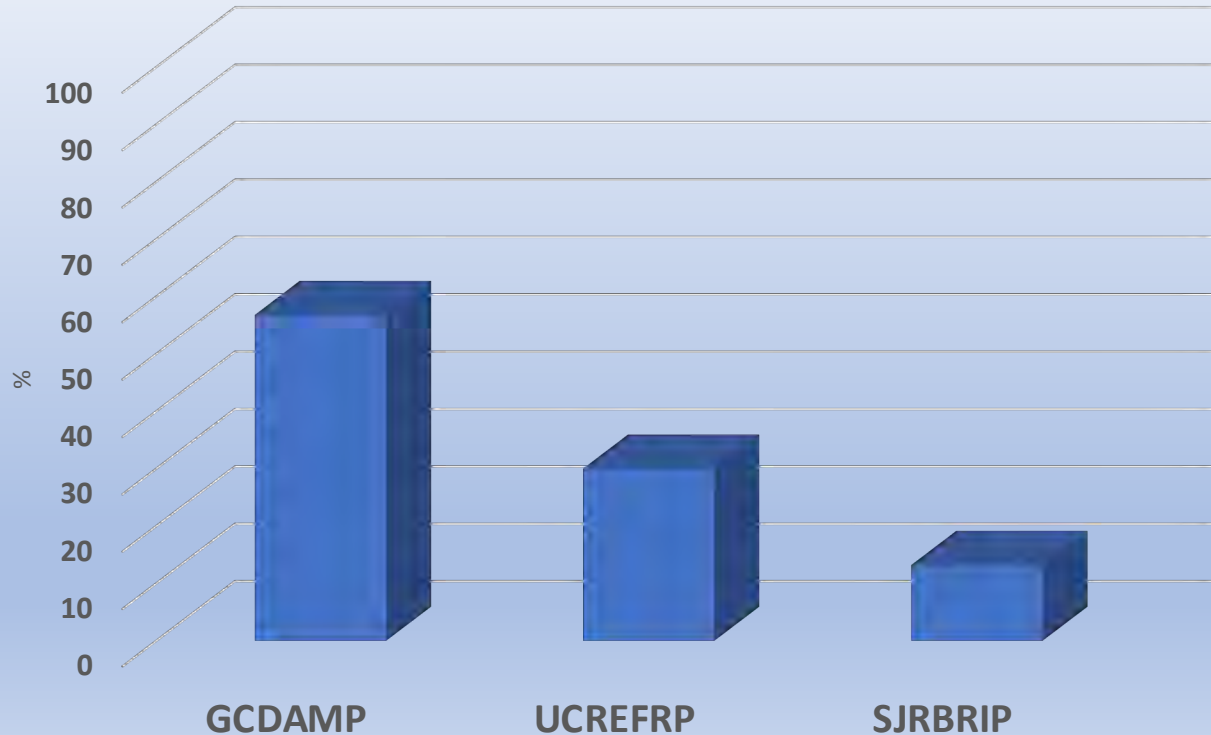
■ Hydropower Revenues ■ USFWS Approps

Basin Fund Contributions Through Time

Program	Year of Inception	Estimated Contributions Through the Life of the Programs
UCREFRP	1988	\$116M
SJRBRIP	1992	\$50M
GCDAMP	1996	\$250M
TOTAL		\$416M

Current Distribution of Hydropower Revenues

Current Programmatic Distribution
~\$20M Total in FY21

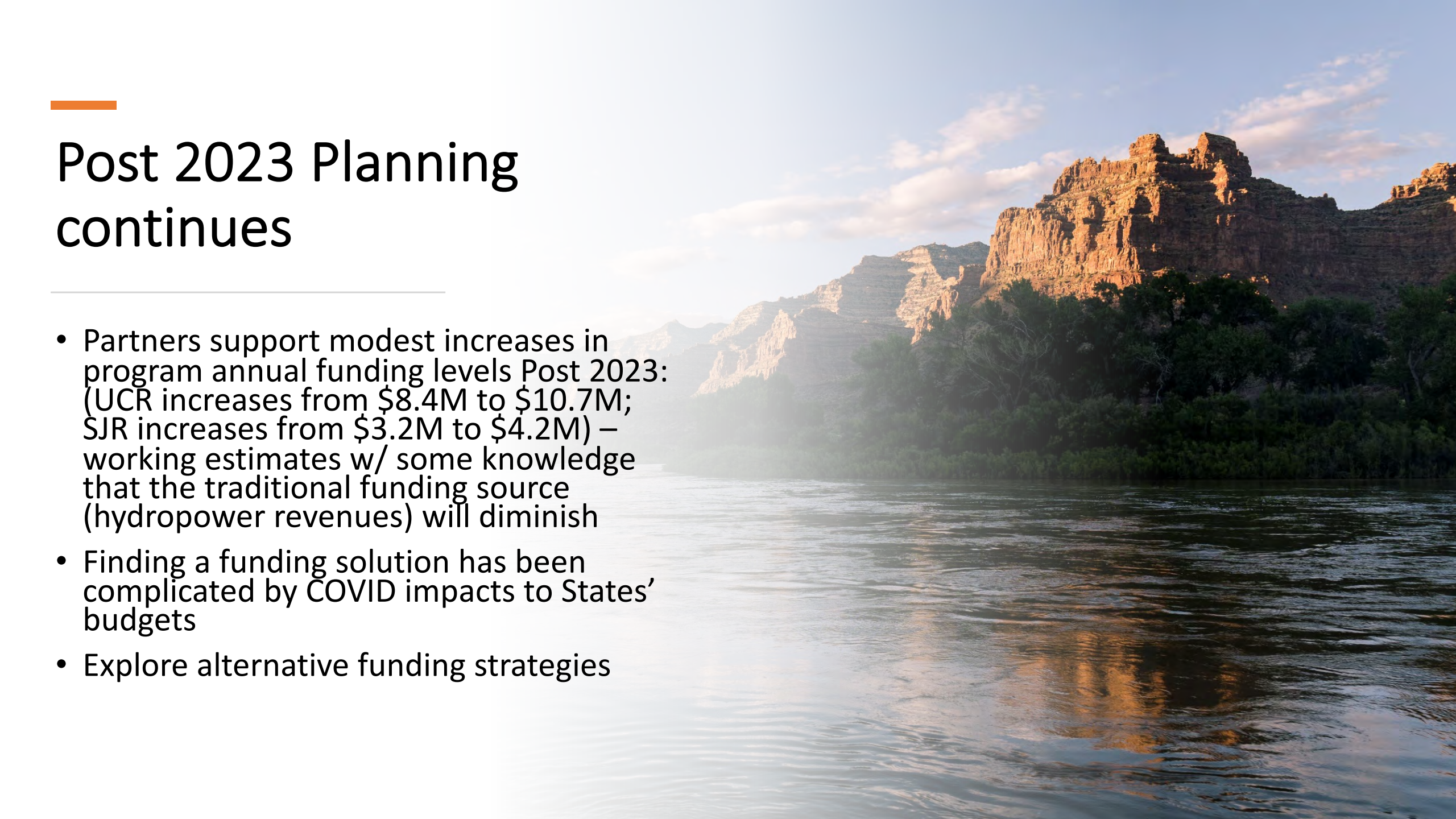




Post 2023 Planning

- UCR and SJR Program's Cooperative Agreements Expire in 2023
- Partner reaffirm commitment to the Programs and their goal of species recovery
- Process starts with determination of the size (\$\$) of future programs
- (Glen Canyon and LCRMSCP not affected)
- WAPA signals that 'constructive returns' will diminish





Post 2023 Planning continues

- Partners support modest increases in program annual funding levels Post 2023: (UCR increases from \$8.4M to \$10.7M; SJR increases from \$3.2M to \$4.2M) – working estimates w/ some knowledge that the traditional funding source (hydropower revenues) will diminish
- Finding a funding solution has been complicated by COVID impacts to States' budgets
- Explore alternative funding strategies

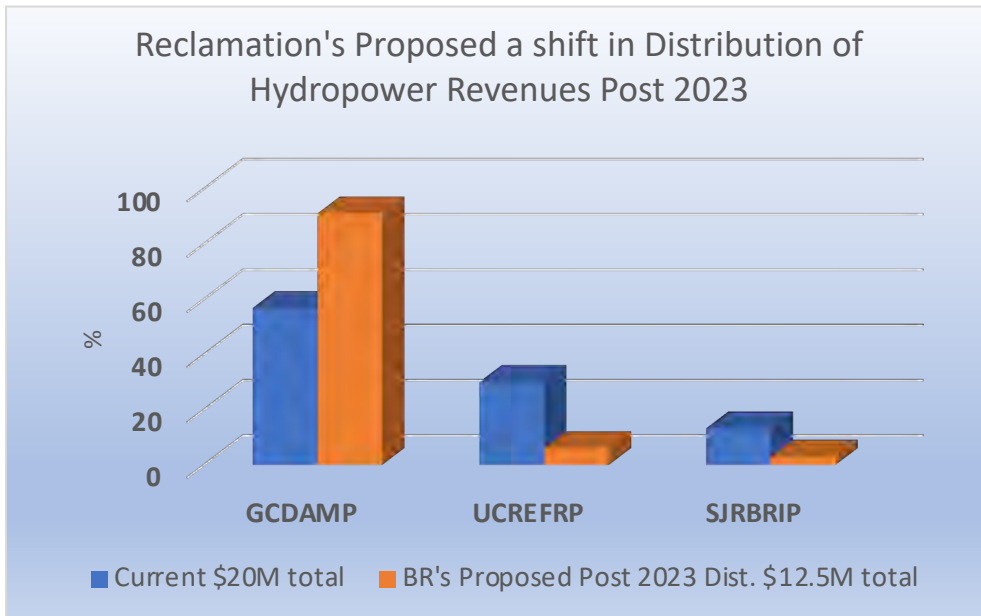


Spring 2020, the Programs get a clearer picture on diminishing “constructive returns”

- WAPA reports a 38% reduction in hydropower revenues for the 3 Programs (\$20M down to 12.5M) starting in FY23 thru FY32; likely further reductions after that.
- Drought Impacts could deepen those cuts

Reclamation Builds a Proposal Based on WAPA's Basin Fund projections

- Prioritize use of remaining basin funds to the GCDAMP



- Seek 50:50 fed / non-fed cost share in UCR Program



Upper Basin States Respond to BR's Proposal; Partners Support this as the Working Model

- Recognizes the new, revised Program costs: UCR - \$9.7M + SJR - \$4.2M - **\$13.9M** total; increases covered with fed appropriations
- 15 year timeframe w/ a 10 yr checkpoint
- Annual funding amounts must be indexed
- Promotes historical distribution of hydropower revenues; federal appropriations cover any annual funding shortfalls due to redistribution.
- State and other non-federal in-kind contributions (historically not tracked) be recognized as a non-federal contribution





What's next:

- After 23 Funding Group meetings, the Recovery Program partner are committed to finding a solution. “The Programs are too important to fail.”
- Upper Basin partners are considering shorter funding horizons, Post 2023, to explore greater non-federal contributions, but in the meantime annual cost will likely need to be covered with federal appropriations.
- NPS appropriations could represent a new piece of the funding portfolio - TBD
- ‘Post 2023’ has forced the UCR and SJR program partners to look at future funding strategies that are less reliant on hydropower revenues. GCDAMP is too, but perhaps less urgently
- SOI will describe the funding levels (annual and capital); funding strategy; and timeframes via a Rep. to Congress by the end of FY22.