Fish at the table and in the river: Nearing a quarter-century in the Upper Colorado River Endangered Fish Recovery Program

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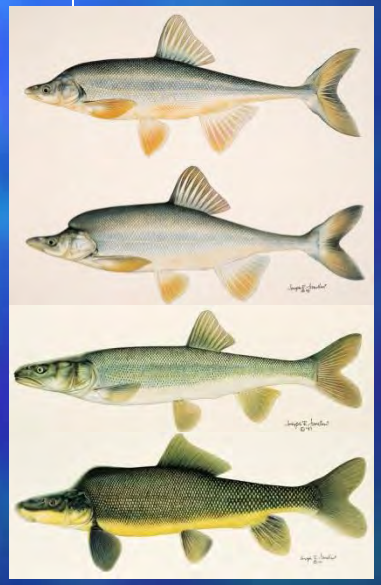
Upper Colorado River Endangered Fish Recovery Program

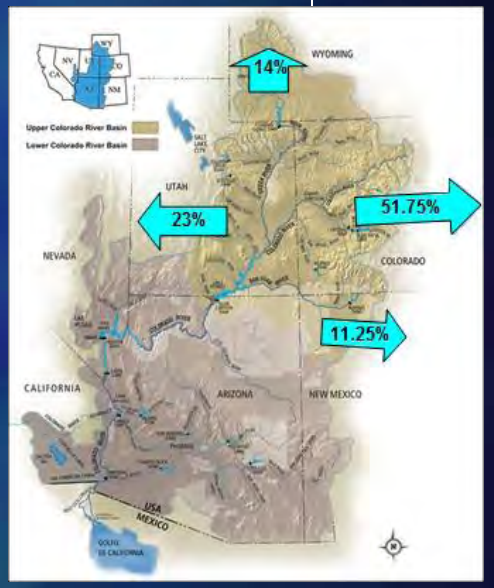
Partners

- State of Colorado
- State of Utah
- State of Wyoming
- Bureau of Reclamation
- Colorado River Energy Distributor Association
- Colorado Water Congress
- National Park Service
- The Nature Conservancy
- U.S. Fish and Wildlife Service
- Utah Water Users Association
- Western Area Power Administration
- Western Resource Advocates
- Wyoming Water Association

Endangered Species Act

Law of the River





Upper Colorado River Endangered Fish Recovery Program

- Accomplishments
- Fish status
- What's next

Accomplishments

Providing instream flows

Research and monitoring

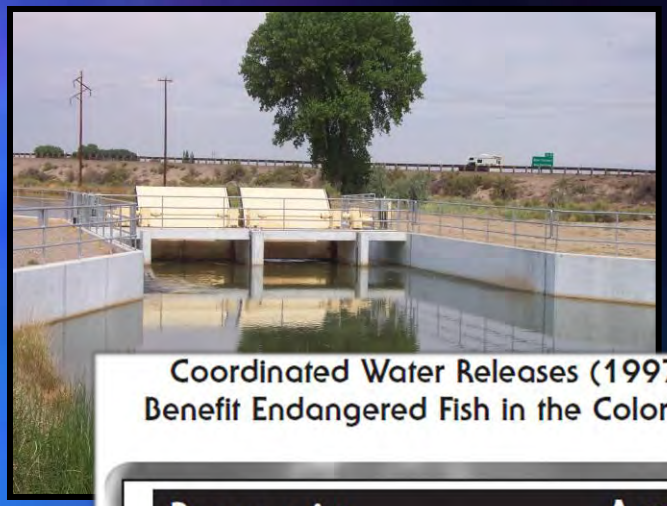
Restoring habitat

Stocking endangered fish

Managing nonnative fish

Flow management

- Instream flow recommendations
- Federal reservoir re-operation
- Cooperative reservoir operations, contracts
- Partnered in a new water storage project (Elkhead)
- Improved efficiency of irrigation systems



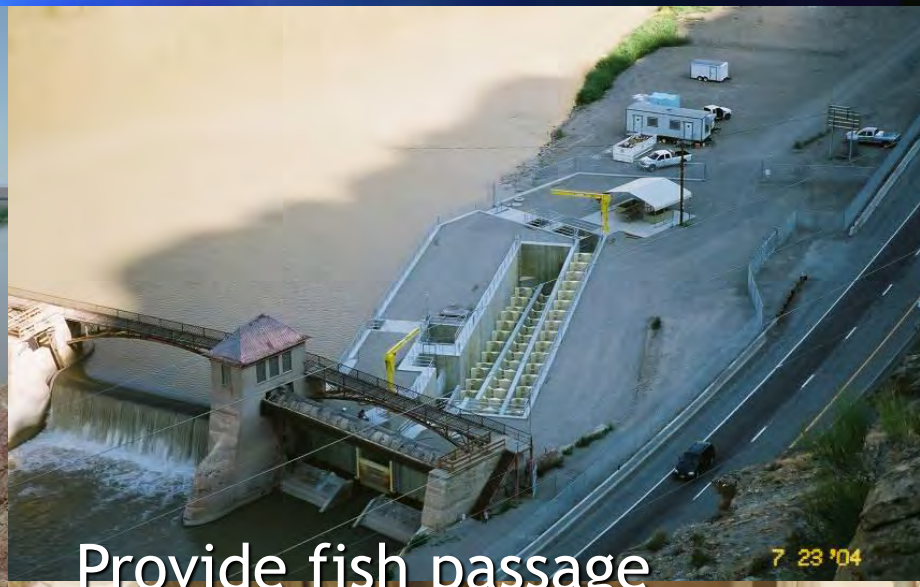
Coordinated Water Releases (1997-2010)
Benefit Endangered Fish in the Colorado River

Reservoirs	Acre-Feet
Windy Gap	3,718
Willow Creek	9,853
Granby	39,914
Palisade Bypass	72,572
Williams Fork	84,471
Wolford Mountain	129,465
Ruedi	258,180
Green Mountain	500,120
Total	1,098,293

Welcome to Your
State Wildlife
Area
AMPA RIVER

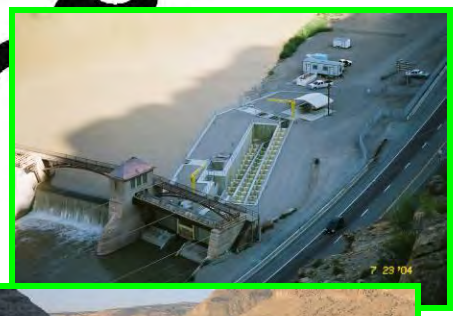
Habitat restoration

Restore floodplains



Provide fish passage

Screen diversions



PARACHUTE

DEBEQUE

Colorado River

to UTAH

Government Highline Canal

Grand Valley Project Diversion

Colorado River

GRAND JUNCTION

Price-Stubb Diversion

Grand Valley Irrigation Company (GVIC) Diversion

Redlands Canal

GVIC Canal

Redlands Water and Power Company Diversion

Gunnison River

to DELTA, COLO.

Nonnative fish management

- In-river management of most problematic species
- Research on flow manipulation to disadvantage nonnatives
- Regulate nonnative fish stocking
- Prevent escapement from impoundments
- Modifications to state fishing regulations

Propagation, genetics, and stocking

Annual stocking targets

Bonytail
16,590 ~8”

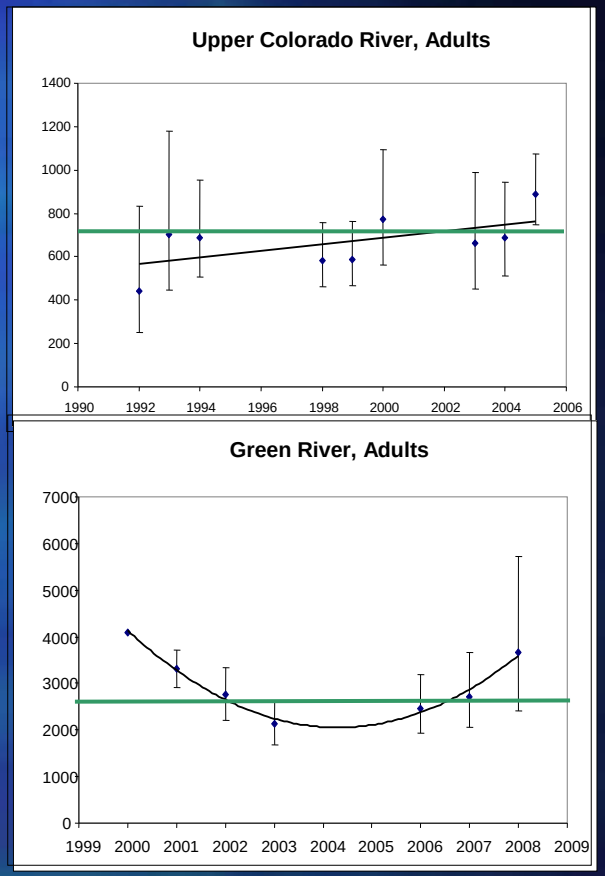
Razorback sucker
29,700 ~12”

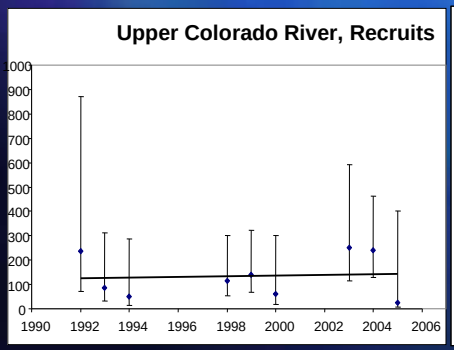
Total fish stocked

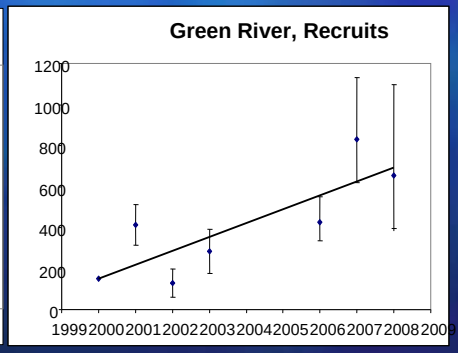
Species	Period	Stocking Target	Number Stocked	% Target
Bonytail	2000-2010	127,920	127,575	100%
Razorback Sucker	2003-2010	238,320	218,409	92%

Research and monitoring

Colorado Pikeminnow Status



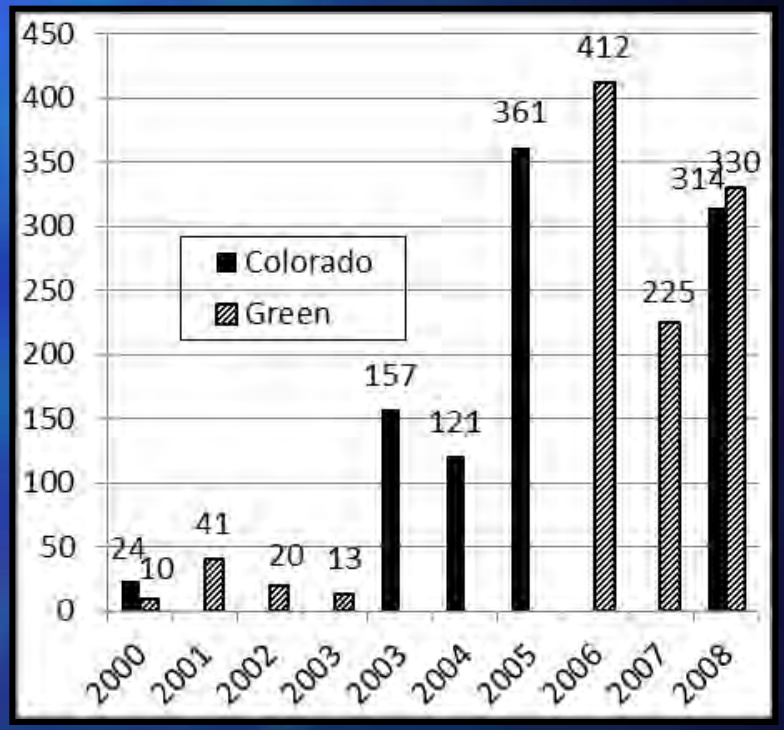




Horizontal lines indicate recovery goal downlisting demographic criteria.

Razorback Sucker Status

Hatchery reared razorback sucker are surviving well.



Razorback sucker recaptures

Humpback Chub Status

Trends in Humpback Chub Population										
	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09
Black Rocks	↓			↔	↑			↓	↔	
Westwater Canyon	↓	↔		↔	↔	↔		↔	↔	
Cataract Canyon				↔	↓	↑				↑
Desolation Canyon		↔	↑	↓			↓	↓		*
Yampa Canyon	↔			↓	↓			*		

Bonytail Status

Survival of hatchery fish has been low, however recaptures in 2009 and 2010 were better than ever.

Information the U.S. Fish and Wildlife Service Will Consider and Monitor During Downlisting Decision-Making Process

Species	Demographic and Threats Criteria	Timeline to Downlist/Delist
Colorado pikeminnow	Demographics: IF, populations in the Colorado and Green rivers do not decline significantly from current levels and 1,000 age-5 fish are present in the San Juan River, there is a moderate to high likelihood that downlisting in 2013 is possible. Threats: 78% of the downlist criteria have been met or partially met.	2013/2020
Razorback sucker	Demographics: Stocking programs in the Colorado, Green, and San Juan rivers appear to be successful. Although neither recovery program has initiated population estimates, current information indicates the 2020 timeline is still achievable. Threats: 85% of the Upper Basin downlist criteria have been met or partially met.	2020/2023
Humpback chub	Demographics: IF, over a 5-year period beginning in 2011, one of the five Upper Basin populations rebounds to meet the "core criteria" of 2,100 adults, and the other Upper Basin populations increase there is a low to moderate likelihood that downlisting could occur in 2016. Threats: 60% of the Upper Colorado River Basin (Upper Basin) downlist criteria have been met or partially met.	2016/2019 possible, but represents best case scenario
Bonytail	Demographics: Stocking programs in the Colorado and Green rivers have been marginally successful. There is not enough new information to suggest the 2020 deadline should be revised. Threats: 72% of the Upper Basin downlist criteria have been met or partially met.	2020/2023

Recovery Program Provides ESA compliance for Historic and New Water Depletion Projects

1/1/1988 – 3/31/2011		Historic Depletions	New Depletions	Totals
State	Number of Consults	Acre-feet / yr	Acre-feet / yr	Acre-feet / yr
Colorado	1,146	1.915,322	205,936	2,121,258
Utah	206	517,670	85,908	603,578
Wyoming	339	83,498	33,833	117,332
Regional*	238	(regional)	(regional)	0
Total	1,929	2,516,850	330,128	2,846,978

* Amount included in individual state's new depletions

Future Challenges

- Nonnative fish management
- Instream flow management / legal protection
- Razorback sucker nursery habitat (floodplains) management

CLIMATE CHANGE

The Colorado River

Home to native fish for millions of years

www.coloradoriverrecovery.org

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