

1993 WASHINGTON, D.C., BRIEFING

**RECOVERY IMPLEMENTATION PROGRAM
FOR ENDANGERED FISH SPECIES
IN THE UPPER COLORADO RIVER BASIN**

1993 WASHINGTON, D.C., BRIEFING PACKET

**RECOVERY IMPLEMENTATION PROGRAM
FOR ENDANGERED FISH SPECIES OF THE
UPPER COLORADO RIVER BASIN**

March 29 - April 3, 1993

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Photographs/brochure:

- Flooded Bottomlands
- Redlands Diversion Dam
- Hatchery Facility
- Recovery Program Brochure

► MISSION STATEMENT AND PROGRAM PARTICIPANTS ◀

MISSION

The Recovery Program is an interagency consortium of Federal, State and private groups whose mission is to recover four endangered fish in the Upper Colorado River Basin while providing for future water development to proceed in compliance with the Endangered Species Act.

PROGRAM PARTICIPANTS

U.S. Fish and Wildlife Service
U.S. Bureau of Reclamation
Western Area Power Administration
State of Colorado
State of Utah
State of Wyoming
Colorado Water Congress
Utah Water Users Association
Wyoming Water Development Association
National Audubon Society
Environmental Defense Fund
Colorado Wildlife Federation
Wyoming Wildlife Federation
Colorado River Energy Distributors Association

► FY 94 CONGRESSIONAL ACTION ITEMS ◀

SUMMARY

Fish and Wildlife Service:

- ✓ Earmark FWS Recovery funds (\$624,000/Recovery)
- ✓ Earmark Section 6 funds (\$200,000/Grants to States)
- ✓ Operation and maintenance funds for hatchery (\$389,000/Hatchery Operation and Maintenance)

Bureau of Reclamation:

- ✓ Redlands fish passage - Colorado (\$128,000/Construction Program)
- ✓ Yampa River fish passage - Colorado (\$70,000/Construction Program)
- ✓ Price Stubbs Dam fish passage - Colorado (\$10,000/Construction Program)
- ✓ Habitat restoration - Utah and Colorado (\$1,100,000/Construction Program)
- ✓ Endangered fish hatchery design - Utah/Colorado (\$200,000/Construction Program)

► FY 94 CONGRESSIONAL ACTION ITEMS ◀

Fish and Wildlife Service

Earmark FWS Recovery Funds
(\$624,000/Recovery)

The Recovery Program is requesting that Congress earmark \$624,000 for the Fish and Wildlife Service's participation in the Recovery Program. This is the same amount that was included in the FY 93 appropriation.

Earmark Section 6 Funds
(\$200,000/Grants to States)

In Fiscal Years 1992 and 1993, Congress earmarked \$200,000 of funds provided to the States pursuant to Section 6 of the Endangered Species Act for recovery of endangered Colorado River fish. These funds will be used to partially support involvement of States' fish and wildlife agencies in the Recovery Program. The Recovery Program requests that similar language be included in the FY 94 appropriations bill.

Operation and Maintenance Funds for Hatchery Facilities
(\$389,000/Hatchery Operation and Maintenance)

Funding is needed to maintain hatchery facilities being used to hold captive or refuge populations of the endangered fishes. Currently, captive populations are being maintained at the Ouray National Wildlife Refuge; the Horsethief State Wildlife Area; the Bellvue Fish Research Center; the Wray, Colorado, Fish Hatchery; and the Wahweap, Utah, warmwater fish ponds. The facilities currently maintain some of the last remnants of the most critically endangered stocks of razorback sucker, bonytail chub, and Colorado squawfish.

► FY 94 CONGRESSIONAL ACTION ITEMS ◀

Bureau of Reclamation

Table 1 identifies cost by fiscal year of 11 projects being conducted by the Bureau of Reclamation to recover the endangered fishes. In FY 94, the water acquisition projects identified in the table will be funded with a portion (\$534,000) of the funds appropriated by Congress in 1988 for the Recovery Program. Additional funding is needed for the Bureau of Reclamation to continue work on the following projects:

Redlands Fish Passage

(\$128,000/Construction Program)

The Redlands Diversion Dam has prevented upstream fish passage on the Gunnison River since near the turn of the century. In FY 93, the Fish and Wildlife Service and the Bureau of Reclamation will initiate design work on the fish ladder and will work to resolve problems a ladder might create for Redlands Water and Power Company's operation. FY 94 funding will be used for final design, NEPA compliance, and Federal permitting. Construction is planned for FY 95 and is expected to cost approximately \$968,000.

Yampa River Fish Passage

(\$70,000/Construction Program)

The Yampa River is recognized by biologists as the best remaining habitat for the endangered fish in the Colorado River basin. Several low height agricultural diversion dams on the Yampa River are believed to be barriers to fish passage at low flow periods from August through September. In FY 94, the feasibility of building permanent diversions that would allow fish passage will be assessed.

Price Stubbs Dam Fish Passage

(\$10,000/Construction Program)

This 15-foot high dam on the Colorado River, approximately 18 miles upstream of Grand Junction, Colorado, has been a barrier to fish passage since the turn of the century. It has not been functional for 80 years and is in a state of disrepair. FY 94 funds are needed to assess the feasibility of removing the structure or build a fish passageway, conducting NEPA compliance, and obtaining Federal permits.

Improvement	1993		1994		1995		Balance to complete	1996	1997	1998	1999	2000	2001	2002	2003
	USBR GI	Others	USBR GI	Others	USBR GI	Others									
1. Restoration of fish passage to historical habitat in the Gunnison and Colorado Rivers.															
a. Redlands Passage - Gunnison River near Grand Junction															
Noncontract															
Plan/Feasibility	84,000		80,000												
NEPA/Permitting			48,000												
Design					128,000										
CES					800,000										
Construct							36,000								
Total	1,120,000						300,000								
b. Price/Stubb Passage - Colorado River near Palisade															
Noncontract															
Plan/Feasibility	24,000		10,000												
NEPA/Permitting					20,000										
Design					18,000										
CES					12,000										
Construct															
Total	420,000														
c. Carmeo Passage - Colorado River near Debeque															
Noncontract															
Plan/Feasibility	80,000														
NEPA/Permitting															
Design															
CES															
Construct															
Total	1,400,000														
2. Yampa River instream flow protection and water development															
a. Elkhed Enlargement															
Noncontract															
Plan/Feasibility	400,000														
NEPA/Permitting															
Design															
CES															
Construct															
Environmental mitiga															
Total	22,425,000														
b. Yampa River Structures - passage along the Yampa from Hayden to Dinosaur															
Noncontract															
Plan/Feasibility	400,000														
NEPA/Permitting															
Design															
CES															
Construct															
Environmental mitiga															
Total	2,425,000														
3. Water Acquisition and development for the 15 - Mile Reach															
a. Grand Valley Water Management															
Noncontract															
Plan/Feasibility	400,000														
NEPA/Permitting															
Design															
CES															
Construct															
Total	7,000,000														

Table 1. Bureau of Reclamation Endangered Fish Recovery Projects Costs

▶ FY 94 CONGRESSIONAL ACTION ITEMS ◀

Improvement	1993			1994			1995			Balance to complete	1996	1997	1998	1999	2000	2001	2002	2003
	USBR GI	RIP	Others	USBR GI	RIP	Others	USBR GI	RIP	Others									
19-Jan-93																		
b. Coordinated Colorado River Water Supply																		
Scoping																		
Phase I																		
Phase II																		
Total																		
c. Owens Creek																		
Noncontract																		
Plan/Feasibility																		
NEPA/Permitting																		
Design																		
CES																		
Construct																		
Wildlife mitigation																		
Total																		
d. Colbran Operations																		
Noncontract																		
Plan																		
NEPA/Permitting																		
O&M/Contract																		
Operate																		
e. Silt Operations																		
Noncontract																		
Plan																		
NEPA/Permitting																		
O&M/Contract																		
Operate																		
Total																		
4. Habitat Restoration																		
Identification and restoration																		
Noncontract																		
Plan/NEPA																		
Contract																		
Restoration																		
Total																		
5. Endangered Fish Augmentation Facility																		
Noncontract																		
Plan/Feasibility																		
NEPA/Permitting																		
Design																		
CES																		
Construct																		
Total																		
CONTRACT																		
NONCONTRACT																		
TOTAL																		

Table 1 continued

► FY 94 CONGRESSIONAL ACTION ITEMS ◀

Habitat Restoration

(\$1,100,000/Construction Program)

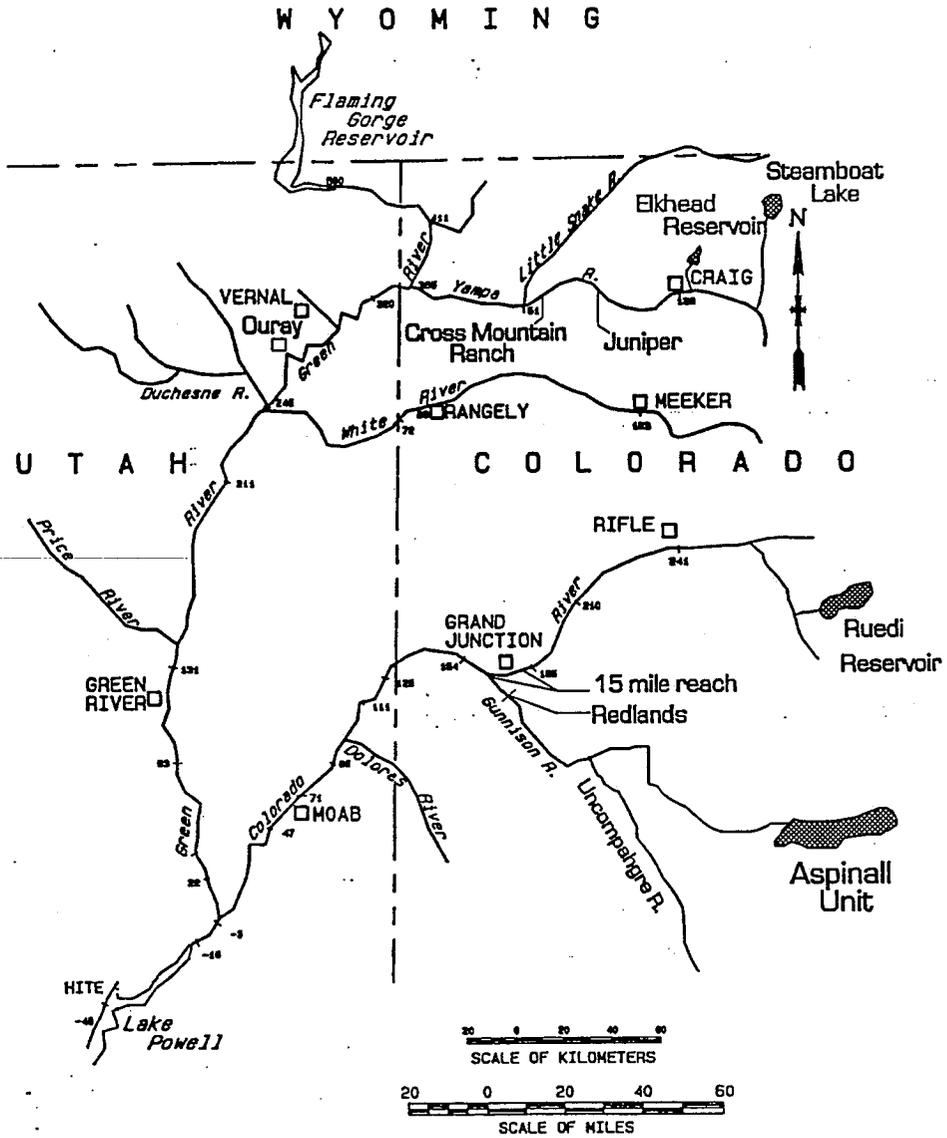
Historically, floodplains throughout the Upper Colorado River Basin were inundated each year by spring runoff, but today much of the river has become channelized by levees, dikes, rip-rap, and the invasion of the exotic plant, tamarisk. Numerous studies have documented the importance of flooding to the overall health of the river ecosystem and the associated fish community. Restoration of flooded bottomlands is thought to be especially important for the endangered razorback sucker and will provide benefits for a variety of wetland-dependent wildlife. Five sites (three in Utah and two in Colorado) are being evaluated in FY 93 for potential acquisition, restoration, and/or management. FY 94 funding is needed to acquire the Escalante Ranch near Jensen, Utah, and implement management and restoration plans at all five sites.

Endangered Fish Hatchery Design

(\$200,000/Construction Program)

Additional hatchery and research facilities are needed in the upper basin to prevent extinction of the endangered fishes, protect against the loss of unique genetic resources, produce fish for stocking/reintroduction efforts, and provide a laboratory for research on the endangered fishes. Current facilities are overtaxed and inadequate to meet anticipated needs. FY 94 funds will be used to conduct a feasibility study and prepare preliminary design specifications. Final design, NEPA compliance, and construction costs are estimated at \$12.5 million for FY 95-98.

► RECOVERY PROGRAM UPDATE ◀



Upper Colorado River Basin
Recovery Program Activities

► RECOVERY PROGRAM UPDATE ◀

Status and Overview

1. Funding and Program Management

GOAL: Ensure effective implementation and coordination of the Recovery Program.

DISCUSSION: Figure 1 identifies the sources and uses of funds in the Recovery Program from 1989-1993. Over the Recovery Program's projected 15-year term, the budget is expected to total \$80-\$130 million. The money is to come from the following sources:

- o An operating budget of at least \$2.5 million (\$2.9 million for FY 1993) is contributed by the U.S. Bureau of Reclamation; the U.S. Fish and Wildlife Service; the States of Colorado, Utah and Wyoming; and water development groups.
- o Congressional appropriations of \$50-\$100 million will be requested. Approximately \$18-50 million of this is to acquire water and water rights and to implement and maintain adequate instream flows for the fish, and \$32-50 million is for capital construction projects such as building fishways, hatcheries, and/or restoring flooded bottomlands.
- o Water development depletion fees are projected to provide \$2 million over 15 years.

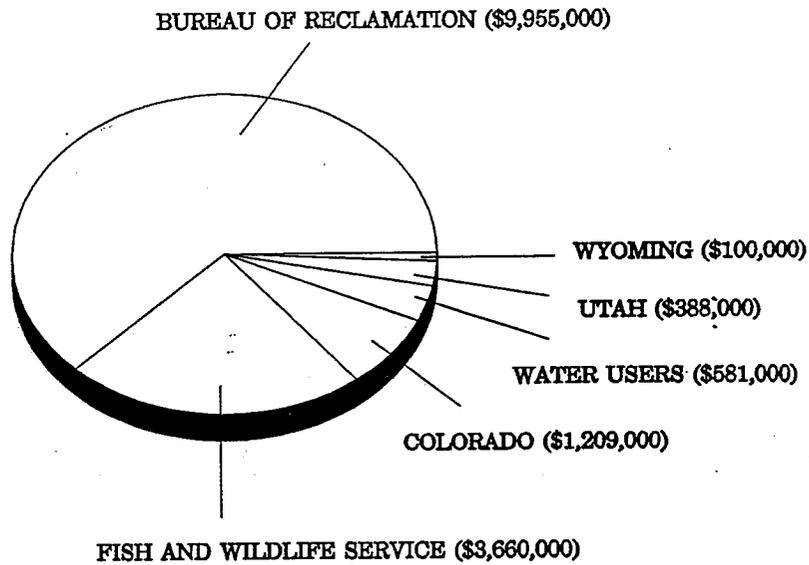
STATUS:

- o All parties are actively participating.
- o The FY 93 Work Plan has been fully funded and is being implemented on schedule.
- o Fish and Wildlife Service funding for FY 94 is uncertain.
- o Funding for operation and maintenance and capital projects is needed in FY 94 and beyond.
- o The Colorado River Energy Distributors Association has joined the Recovery Program.

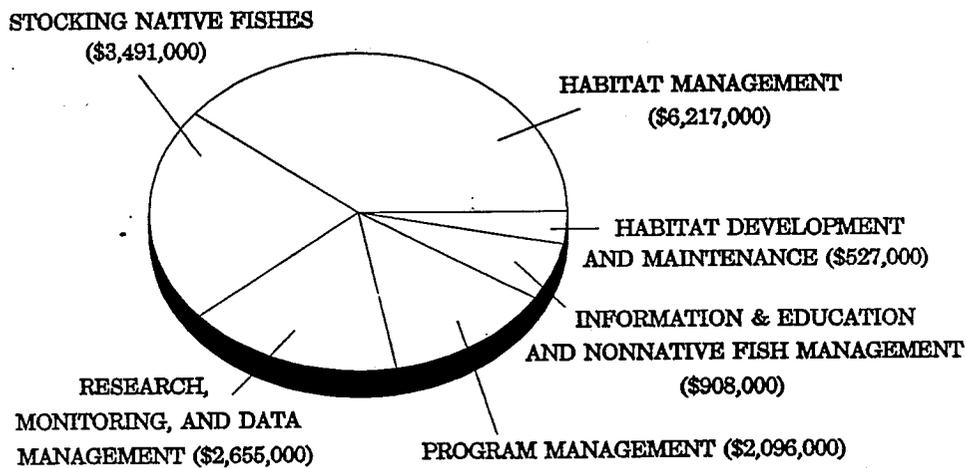
► RECOVERY PROGRAM UPDATE ◀

FY 89-93 Budget (\$15,894,000)

FUNDING SOURCES (FY 89-93)



FUNDING TARGETS (FY 89-93)



► RECOVERY PROGRAM UPDATE ◀

2. Habitat Management (Instream Flows)

GOAL: To protect sufficient instream flows to support self-sustaining populations of the fishes.

DISCUSSION: Recovery Program funds will be used to identify and acquire adequate instream flows for the fish in accordance with State water laws and interstate compacts. Funds also will go toward refining operation of Bureau of Reclamation dams to meet the instream flow needs of the fish.

STATUS:

- o 10,000 acre-feet (AF) of water is being provided from Ruedi Reservoir (long-term). A 5-year agreement is being pursued for an additional 10,000 AF.
- o A long-term agreement is being negotiated to acquire 2,000 AF of water from Steamboat Lake (Yampa River).
- o Flaming Gorge Reservoir is being re-operated to provide higher spring flows and lower, more stable flows in the remainder of the year.
- o The Aspinall Unit (Gunnison River) is being re-operated to provide research flows.
- o The Colorado Water Conservation Board has applied to water court for a 581 cfs instream flow right in the 15-Mile Reach of the Colorado River near Grand Junction, Colorado, for July-September.
- o A proposal is being evaluated to acquire the Juniper-Cross Mountain water rights on the Yampa River for instream flows.

3. Habitat Development and Maintenance

GOAL: To provide or enhance habitat for the rare fishes through habitat development or management measures.

DISCUSSION: Research has identified the need to open up access to historic habitats by constructing fishways and restoring and managing flooded bottomland habitats.

► RECOVERY PROGRAM UPDATE ◀

STATUS:

- o NEPA and preliminary design of the fish passageway at Redlands Dam (Gunnison River) has been initiated.
- o The Bureau of Reclamation is evaluating opportunities for acquisition, restoration, and management of six flooded bottomlands along the Green and Colorado Rivers.
- o The rehabilitation of several diversion structures on the Yampa River to reduce annual maintenance and provide fish passage is being evaluated.

4. Stocking Native Fishes

GOAL: Produce a sufficient supply of hatchery-reared fish to support research and recovery activities and to conserve the genetic diversity present in the wild by protecting representatives of wild stocks in "refugia."

DISCUSSION: Researchers are developing ways to identify and maintain genetic stocks of native fish and evaluating the feasibility of constructing a hatchery to provide "refuge" and broodstock for endangered fish. They also are refining techniques for raising Colorado squawfish in hatcheries and are spawning wild razorback suckers to be reintroduced to the wild and used in research.

STATUS:

- o Genetic surveys of wild stocks will be completed in FY 94.
- o Refuge/brood stock populations are being established.
- o The Fish and Wildlife Service's hatchery/research facility at Ouray, Utah, is being expanded.
- o Refuge ponds at Horsethief State Wildlife Area, Grand Junction, Colorado, have been developed and are on line.
- o Current hatchery facilities are inadequate to meet future needs.

► RECOVERY PROGRAM UPDATE ◀

5. Nonnative Fishes and Sportfishing

GOAL: Minimize the impacts to endangered fishes from nonnative fishes and incidental take associated with sport fishing.

DISCUSSION: Over 42 species of nonnative fishes are found in the upper basin. Many of these species are believed to prey on the endangered fishes and compete for food and space. Biologists are monitoring sizes of native and nonnative fish populations and are studying competition between the two.

STATUS:

- o In general, stocking of nonnative fish has been limited to areas where there appears to be no conflict with the four rare native fish.
- o Information is being distributed to the public to reduce accidental taking of endangered fish by anglers.
- o A policy on stocking of nonnative fishes is being developed by the Fish and Wildlife Service and the States.

6. Research Monitoring and Data Management

GOAL: Collect critical information on the life history and habitat needs of the endangered fishes to support recovery efforts.

DISCUSSION: Biologists are monitoring long-term population trends, making recommendations on river flows, and evaluating genetic differences between fish populations from different rivers. Data from all studies are compiled in a centralized computer database.

STATUS:

- o Determine habitat/flow needs of the fish.
- o Clarify confusion in the taxonomy of Gila (chubs).
- o Long-term monitoring programs established.
- o Interagency data management program established.

► RECOVERY PROGRAM UPDATE ◀

- o Integrated research efforts to refine/validate flow recommendations related to Flaming Gorge and Aspinall.
- o Impacts of sampling on fish being evaluated.

7. Information and Education

GOAL: To promote public understanding, appreciation, and support for efforts to recover the endangered fish.

STATUS:

- o Public meetings are being conducted in local communities.
- o Recovery Program newsletter is produced 2-3 times/year.
- o Information about the fish and Recovery Program:
 - Brochure and poster.
 - Signs and fishing regulations.
 - Slide/tape show and video production.
- o Public attitude survey.
- o Media relations and press releases.

8. Section 7 Consultation

GOAL: To allow water development to proceed in the Upper Colorado River Basin in compliance with the Endangered Species Act.

STATUS:

- o "No jeopardy" biological opinions have been issued on 77 projects since the inception of the Recovery Program in 1988.
- o Agreement has been reached on how future Section 7 consultations will be conducted on historic projects.
- o The final biological opinion on Flaming Gorge Dam was issued in October 1992.

► MAJOR RECOVERY PROGRAM ISSUES ◀

Section 7 Consultation, Sufficient Progress, and Historic Projects

The purpose of the Recovery Program is to recover the endangered fish while allowing for water development to proceed in compliance with the Endangered Species Act. To achieve this purpose, Recovery Program participants have reached agreement on how the Fish and Wildlife Service will conduct Section 7 consultation on new and historic water projects in the upper basin. A basic premise of the approach is that activities and accomplishments of the Recovery Program will serve as the reasonable and prudent alternative that avoids jeopardy to endangered fish.

Nonnative Fish Stocking

The Fish and Wildlife Service and the States of Colorado, Utah, and Wyoming are developing a policy to address the issue of stocking nonnative sport fish that may compete with the endangered fishes. The policy will take into account the dual role of State wildlife agencies in protecting endangered species while providing opportunities for sport fishing. In general, stocking of nonnative fish species is confined to areas where there is no potential conflict with rare or endangered fish. This applies to such fish as channel catfish, northern pike, largemouth and smallmouth bass, green sunfish, black crappie, and white crappie. However, rainbow, brown, and cutthroat trout are still stocked in higher elevations of the Colorado River basin. Trout live in colder stretches of the river, such as immediately downstream of dams, and generally are not considered competitors with the endangered fishes.

Water Rights Acquisition and Compact Development

Participants in the Recovery Program's Water Acquisition Committee have been working to remove several legal, institutional, and policy impediments to water acquisition for the endangered fishes. Most of the identified impediments had to do with two issues: (1) uncertainty about the magnitude and location of development of Colorado's compact allocation and (2) uncertainty about the Fish and Wildlife Service's flow recommendations to legally support appropriation of instream flows. To resolve potential conflicts, protection of flows on an interim basis within existing Colorado law is being explored. The concept calls for filing for absolute instream flow rights in some cases, interim instream flow rights in some cases, and a combination of absolute and interim instream flow rights in other cases, depending on the degree of certainty of the flow recommendations and impacts of the flow recommendation on Colorado's compact.

► MAJOR RECOVERY PROGRAM ISSUES ◀

Critical Habitat for Endangered Fish

In response to a recent U.S. District Court decision, the Fish and Wildlife Service has proposed designating 1090 miles of rivers in the upper basin as critical habitat for the four endangered fishes. Critical habitat, as defined by the Endangered Species Act, includes the physical and biological features essential to the conservation of a listed species. The effects of the critical habitat designation on the Recovery Program and future Section 7 consultations on water development projects are uncertain.

► FISH POPULATION STATUS & RECOVERY GOALS ◀

Colorado Squawfish

Populations of this fish species are largest in the Green River and are showing evidence of increasing. Elsewhere, squawfish populations are small and may be declining in the Colorado River and appear to be stable in the Yampa River.

Recovery goals for the Colorado squawfish in the Upper Basin are to establish naturally self-sustaining populations in the Green River and Colorado River subbasins.

Humpback Chub

In the Green and Yampa Rivers, humpback chub populations are very small. In the Colorado River near the Utah-Colorado State line, the population is relatively large and appears healthy.

Recovery goals are to establish five viable, self-sustaining wild populations and protect their habitat. Primary recovery areas in the upper basin include: the Black Rocks/Westwater Canyon of the Colorado River near the Colorado/Utah State line; the Yampa and Green rivers in Dinosaur National Monument; Gray and Desolation Canyons in the Green River; and Cataract Canyon in the Colorado River.

Razorback Sucker

Most razorbacks captured in recent years in the Green, Colorado, and Yampa Rivers are thought to be more than 20 years old, and there is no known "recruitment" of young fish into the adult population. In other words, no young are surviving to adulthood. As a result razorback sucker populations are considered "critical."

The first recovery priority for the razorback is to prevent its extinction in the wild.

Bonytail Chub

The bonytail chub is the most endangered of the four listed fish. The last confirmed sighting was in 1981 in the Colorado River near the Colorado-Utah State line. Captive populations of bonytail are being maintained at Dexter National Fish Hatchery (New Mexico) and the Horsethief State Wildlife Area (Colorado). Like the razorback, the primary recovery goal is to prevent its extinction in the wild.

► RECOVERY PROGRAM D.C. TRIP PARTICIPANTS ◀

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► WASHINGTON, D.C., CONTACTS ◀
(Tentative)

Fish and Wildlife Service (Monday)

Director
Deputy Director

Mike Spear, Assistant Director, Ecological Services
Gary Edwards, Assistant Director, Fisheries

Chief of Endangered Species and staff (Arlington, Virginia)

Kathy Tynan, FWS Budget Officer
DOI/FWS Budget Officer
OMB/FWS Budget Examiner
Kris LaMontagne FWS/Ecological Services Budget Officer

Bureau of Reclamation (Monday, P.M.)

Commissioner and staff
Budget staff

Department of the Interior (Monday, P.M.)

Bruce Babbitt, Secretary of the Interior
Assistant Secretary for Fish and Wildlife and Parks
Assistant Secretary for Water and Science

Colorado Delegation (Tuesday)

Senator Brown
Dan McAuliffe, Senator Campbell
Jackie Lowey and Congressman Skaggs
Congressman McInnis
Congresswoman Schroeder
Congressman Hefley
Congressman Allard

Environmental Community (Tuesday, P.M.)

Delegation of Environmental Groups
Amos Eno, National Fish and Wildlife Foundation

► WASHINGTON, D.C., CONTACTS ◀
(Tentative)

Utah Delegation (Wednesday, A.M.)

Senator Orrin Hatch
Senator Bennett
Congresswoman Shepherd
Congressman Orton
Congressman Hansen

Wyoming Delegation (Wednesday, P.M.)

Brent Erikson, Senator Simpson
Senator Wallop
Congressman Thomas

FWS and BR Congressional Committees (Thursday and Friday)

Senate Appropriations Committee, Subcommittee for Interior and Related Agencies

Bob Davison and Minority staff, Committee on the Environment and Public Works,
Subcommittee on Environmental Protection

Staff, Committee on Merchant Marine and Fisheries

Neal Sigmon, Committee on Appropriations, Subcommittee for Interior and Related
Agencies

Dana Cooper, Staff, Senate Subcommittee for Energy, Natural Resources, Water and
Power

Steve Lanich, Staff, House Subcommittee for Natural Resources, Oversight, and
Investigations

David Gwaltney, Staff, Senate Appropriations Committee, Subcommittee on Energy
and Water Development

Robert Schmidt, Staff, House Appropriations Committee, Subcommittee on Energy
and Water Development

► FY 88 WATER ACQUISITION APPROPRIATION STATUS ◀

In 1988, Congress appropriated \$1 million to initiate acquisition and appropriation of water rights to provide instream flows for the endangered fishes. To date, \$229,500 has been expended to investigate water conservation management aimed at increasing flows for endangered fish in the Grand Valley (\$200,000) and to lease water from Steamboat Reservoir to sustain habitat for endangered fishes in the Yampa River during late summer (\$29,500). In FY 94, \$534,000 will be expended on Grand Valley water conservation, coordinated operations, and reservoir management to provide increased flows for the endangered fish and feasibility studies on enlargement of Elkhead Reservoir (part of a package to acquire the Juniper-Cross Mountain water rights on the Yampa River for instream flows). These expenditures will result in a balance of \$236,500.



