

RECOVERY PROGRAM DIRECTOR'S UPDATE
March 2000

Population Status: Little change in population status.

SPECIES	RIVER		
	MIDDLE GREEN ¹	LOWER GREEN ²	COLORADO
Colorado pikeminnow	Stable/increasing	Stable	Stable/increasing
Humpback chub	<u>Yampa Canyon:</u> Stable/small	<u>Desolation/Gray Canyon:</u> Stable?/small	<u>Black Rocks Canyon:</u> Stable/doing well <u>Westwater Canyon:</u> Stable/doing well <u>Cataract Canyon:</u> Stable?/small
Razorback sucker (All populations are currently being augmented through stocking)	<500 adults, very limited recruitment	Few adults, very limited recruitment	Few adults, no recruitment
Bonytail	Populations are currently being re-introduced in Colorado and Lower Green rivers.		

¹ Middle Green River consists of the Yampa River to approximately 30 miles SSW of Ouray, Utah.

² Lower Green River is from the end of the Middle Green River section to the confluence of the Colorado River.

Recovery goals: The Program has approved interim management objectives (target numbers of each species for the various river reaches). With the help of a consultant, the Recovery Team is in the process of drafting specific recovery goals. The Management Committee has requested additional review prior to publication in the Federal Register for public comment.

I. Instream Flow Identification and Protection

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

- Status:
- A revised draft final of the Flaming Gorge biology/hydrology synthesis report, with flow and temperature recommendations to benefit endangered fishes in the Green River, was re-submitted to the Biology Committee in February 2000. The report is expected to be approved as final in March 2000, and will be used in preparing a new biological opinion on operation of Flaming Gorge Dam operations. Flow recommendations in the Green River synthesis report will be used by the State of Utah to pursue extending current protection of flows for the endangered fishes in the Green River downstream to the Colorado River confluence.
 - A draft of the Aspinall biology/hydrology synthesis report, with flow recommendations to benefit endangered fishes in the Colorado and Gunnison rivers, was submitted for peer review in January 2000. A revised draft is expected to be submitted to the Biology Committee in spring or summer 2000.

- The final 15-Mile Reach Programmatic Biological Opinion (PBO) was signed in December 1999. The first Recovery Agreement under the PBO was signed in February. Signing of the PBO removed one of the final obstacles for construction of the checks and water-control structures to implement the Grand Valley Water Management Plan, which will provide an additional 30,000 acre-feet of water to augment flows to meet flow recommendations for the endangered fishes.
- Agreements have been negotiated between the Colorado River Water Conservation District and the Service, and between Denver Water, Colorado Water Conservation Board and the Service for annual release of 10,825 acre-feet (5,412.5 acre-feet each from the River District and Denver Water) to benefit the endangered fish under the terms of the PBO.
- A multi-party agreement was completed in 1996 that established a working group known as the Managing Entities. Beginning in 1998 and continued in 1999, the Managing Entities implemented a program of managing releases of surplus water from Green Mountain Reservoir and coordinating releases from Ruedi and Woford Mountain reservoirs for the endangered fishes. The Managing Entities group has been successful in providing up to 30,000 acre feet of water from Green Mountain Reservoir and, combined with releases from other reservoirs, meeting the Service's baseflow recommendations in the 15-Mile Reach.
- Program participants coordinated operations of several reservoirs in Colorado during spring 1997–1999 to provide water for the endangered fishes. The 1999 releases supplied additional flows in the Colorado River of about 2,500 cubic feet per second for one week during spring runoff. High flows during this time are crucial for endangered fish spawning.
- The Coordinated Facilities Project was initiated in 1999 to investigate alternatives for providing up to an additional 20,000 acre-feet (average annual) of water on the spring peak in the Colorado River. Phase I of this project to identify a short-list of alternatives is nearing completion. Phase II, which will include a detailed feasibility analysis of each alternative, has begun.
- Colorado State Parks continues to release up to 3,300 acre-feet of water annually from Steamboat Lake per their agreement with the Colorado Water Conservation Board and the Service. The Yampa River synthesis report was finalized in 1999, and development of a management plan for the Yampa River is underway to benefit the endangered fish as well as covering existing depletions and up to about 50,000 acre-feet of new depletions in the Yampa River Basin.
- A draft biological opinion for the Narrows Project on the Price River was released September 21, 1999. This biological opinion is now being revised; the final opinion is expected in spring 2000. Pursuant to the Reasonable and Prudent Alternative in the biological opinion, revisions were made to the RIPRAP to include action items for the Price River. FY 2001 program guidance includes a project to evaluate overwinter use of the Price River by subadult/adult Colorado pikeminnow and develop potentially year-round flow recommendations.
- From 1988 through December 31, 1999, the Service consulted on 220 projects with a potential to deplete a total of 597,235 af of water in the Upper Colorado

River Basin, of which 69 are historic projects depleting 465,352 af. Three of these "projects" are blanket consultations for depletions under 100 af, up to 6,000 af total. These consultations have covered 355 actual projects depleting a total of 5,080 af. (3,798 af in Colorado, 795 af in Utah, and 487 af in Wyoming). Another of these 220 "projects" is the 15-Mile Reach programmatic biological opinion which covers an average of 1 million acre-feet per year of existing depletions (through September 30, 1995) and up to 120,000 acre-feet of new depletions (since September 30, 1995) in the Colorado River above the confluence with the Gunnison River.

- The Service continued to waive charges for water projects that deplete fewer than 100 acre-feet of water per year. This arrangement has simplified the section 7 consultation process for many water projects in the upper basin.
- The Service's annual assessment of "sufficient progress" (assessment of the Recovery Program's progress and its continued ability to serve as a reasonable and prudent alternative to jeopardy for Upper Basin water development) will be sent to the Management Committee in draft in May.

II. Habitat Restoration

Goal: To provide or enhance habitat for the rare fishes through habitat development or management measures such as:

- fish passageways
- screens to prevent fish entrainment into diversion canals
- restoration of flooded bottomland habitats.

Status: • The fish ladder at Redlands Diversion Dam on the Gunnison River has been operational since June 1996. The ladder has been used primarily by native fishes, including 47 Colorado pikeminnow. Two of the pikeminnow have used the ladder twice. Native fishes that were marked and released above the dam dispersed upstream, some as far as 57 river miles to the base of the Hartland Diversion Dam.

- A fish passage structure was constructed at the Grand Valley Irrigation Company Diversion Dam on the Colorado River in January 1998. Ten adult Colorado pikeminnow were captured above the GVIC dam between August 19 and September 24, 1998. Providing fish passage at this structure, Price-Stubb, and the Grand Valley Project Diversion Dam will restore 55 miles of historically-occupied habitat for endangered fishes.
- Design options are being developed to restore fish passage at the Price-Stubb Diversion Dam. Construction was tentatively scheduled to begin in the fall of 1998. However, complex issues (e.g., potential effects of passage restoration on railroad, highway, Reclamation's siphon, and Ute pumping; ownership of property and FERC license) have caused delays. The schedule for construction is pending a decision by FERC on the amendment to the hydropower license. Construction is tentatively scheduled for completion in 2003.
- Pre-construction activities are ongoing through FY 01 to restore fish passage at the Grand Valley Project Diversion Dam. Construction is scheduled for completion in 2002.

- Design options are being developed for a fish screen at the Tusher Wash Diversion canal on the Green River in Utah. Construction is scheduled for completion in 2003.
- Design options for a fish screen at the Grand Valley Irrigation Company diversion canal on the Colorado River will be developed during FY 2000. A construction contract award is expected in the fall of 2000.
- Restoration of passage at Hartland Diversion Dam on the Gunnison River has been delayed because of other priorities. Construction is scheduled for completion in 2003.
- Between March 1997 and March 1998, levees were breached at 8 sites along the Green River, resulting in 1216 to 1734 floodable acres (depending on flows), and filling out the eight-site block design recommended by the Levee Removal Evaluation Group and subsequently approved by the Biology and Management committees. A report based on preliminary results of data collected from 1996 through 1998 was submitted to the Recovery Program in December 1998. A final report is due in July 2000.
- Both public and private lands continue to be screened for contaminants and relative floodability (pre-acquisition; pre- and post-restoration). Land acquisition activities have resulted in acquisition of eight properties (580 acres) along the Green and Colorado rivers thus far. Currently 30 additional properties (1,600 acres) are in the land acquisition process.
- Razorback suckers 3 to 5 inches in length were stocked into 3 floodplain wetlands along the Green River near Bonanza Bend in April 1999. In the presence of large numbers of nonnative fishes, the razorbacks grew to 14 inches in length. Of the 5,955 razorbacks that were stocked, 1,100 were recaptured.

III. Nonnative Fishes and Sportfishing

Goal: Minimize the impacts of nonnative fishes and incidental take associated with sport fishing on the endangered fishes.

- Status:
- Mechanical removal of nonnative cyprinids from backwater nursery areas used by native fishes in reaches of the Green and lower Colorado (Utah) rivers was begun in 1998 and is scheduled to continue through 2001. For 1998 and 1999 combined, approximately 93,000 nonnative cyprinids (plus 1,300 other nonnatives) were removed from backwaters of the Green River, and approximately 149,000 nonnative cyprinids (plus 1,500 other nonnatives) were removed from backwaters of the lower Colorado River.
 - A project to mechanically remove (through seining) small nonnative cyprinids and centrarchids from backwaters on the Colorado River in Colorado, was initiated in 1999. A total of 65 backwaters was sampled in 1999, including 38 in the 15-Mile Reach and 27 in the 18-Mile Reach. Data are still being analyzed, but an interim progress report was submitted on September 25, 1999. In a companion study initiated in 1999, electrofishing in spring and autumn is being used to remove centrarchids from Colorado River backwaters. Data from that study are still being analyzed. Preliminary results indicate that about 5,800 nonnative fishes were removed, but suggest that the spring removal

effort did not have a significant depletive effect (i.e., catch rates in autumn were essentially unchanged from those in spring).

- Mechanical removal of channel catfish from reaches in Yampa Canyon on the Yampa River was initiated in 1998 and continued in 1999. For 1998 and 1999 combined, approximately 4,400 channel catfish were collected. Data are still being analyzed, but preliminary results suggest a depletion effect on channel catfish populations and that numbers of channel catfish in Yampa Canyon are lower than anticipated. The final report is expected in 2000.
- The project to remove adult northern pike from the Yampa River and translocate these fish to off-channel sites in compliance with the 1996 Nonnative Stocking Procedures was initiated in 1999. After a late start due to delays in identifying appropriate receiving waters and in obtaining collecting permits, 164 northern pike were collected. Of those, 80 were translocated to ponds at the Yampa State Wildlife Area, and 72 were returned alive to the Yampa River (returned alive because at time of capture no appropriate receiving waters had been identified). Response of local anglers fishing the translocation ponds was very positive. With an expected earlier start in 2000, it is anticipated that substantially more northern pike will be collected and translocated.
- Removal and control of nonnative fishes in Colorado and Gunnison River floodplain source ponds began in 1998 and continued in 1999. As of December 13, 1999, 104 ponds had been surveyed. Of those, 19 had been chemically reclaimed, 1 had been reduced in depth to allow for winterkill, and 5 are managed annually through filling and drying. An objective of the project is to reclaim/control water levels/reshape/isolate 150 floodplain ponds of the Colorado and Gunnison rivers through 2003.
- A fish barrier net was installed on August 18, 1999, in Highline Lake Reservoir to reduce or eliminate escapement of nonnative sportfishes from the reservoir and into reaches of critical habitat in the Colorado River. Evaluation of the operation, maintenance, and effectiveness of this fish barrier net is ongoing. This effort will allow active management of Highline Reservoir to provide warmwater fishing opportunities. Similar devices to control escapement of nonnative fishes from reservoirs are being considered for Elkhead Reservoir, Bottle Hollow Reservoir, and possibly other reservoirs.

IV. Stocking Native Fishes

- Goal:
- Produce a sufficient supply of hatchery reared fish to support research and recovery activities.
 - Conserve the genetic diversity present in the wild.
- Status:
- The table on the following page identifies the species stocked from September 1998 through November 1999.

Species	Date	River Section	Number	Approximate Size (inches)
Bonytail	10/98	Colorado	3,280	5
	10/98	Lower Green	3,000	5
	3/99	Colorado	15 (with radio tags)	10
	4/99	Colorado	10,000	4
	4/99	Lower Green	10,000	4
Razorback sucker	10/98	Middle Green ¹	125	6-8
	4/99 - 8/99	Middle Green ¹	6659	4-8
	5/99	Middle Green ¹	≈57,900	<1
	5/99	Middle Green	35 (with radio tags)	>10
	6/99	Middle Green	738	10-16
	9/98	Gunnison	249	9
	10/98	Gunnison	126	16
	5-11/99	Gunnison	2,772	8
	9-10/99	Colorado at Parachute	3,498	8
Colorado pikeminnow	4/99	Middle Green	36	16

¹ These smaller fish were stocked in depression wetlands where early life stages can take advantage of resources for growth and protection.

- This past year, 34 adult razorback suckers were recaptured from the middle Green River. Of these, 14 were wild fish and 21 were hatchery fish stocked the previous fall. Four of the hatchery fish were collected from the spawning bar.
- Over 20,000 bonytail have been stocked in the Colorado River, with 17 captured this year, representing 11 from this year's spring stocking and 6 from previous years' stockings. In the Green River, 13,000 bonytail have been stocked with a total of 81 being recaptured, 3 from previous years' stockings.
- The Program plans to stock approximately 10,000 bonytail into Dinosaur Monument this year. Half will go into the Lodore reach of the Green River and the other half will be stocked near Warm Springs on the Yampa River.
- In addition to stocking events, seven new lots were added to the brood stock development of razorback sucker for the middle Green River and over 8,000 razorbacks are at the hatchery for stocking this year.
- In 1999, the Program attempted stream side spawning and subsequent intensive culture of Colorado pikeminnow from the Colorado River. Two family lots were produced and reared in two circular tanks at the Grand Valley facility. Cannibalism has been high and of 6,500 larvae, only 420 fish have survived thus far.

- Construction of 12, 0.4 acre ponds at the Wahweap State Fish Hatchery was completed. In addition, a new residence, hatchery building and well should all be completed in FY01.
- The Program continues to obtain grow out ponds both in the Grand Valley, CO and Vernal, UT areas. We currently have approximately 25 acres of ponds in Grand Valley with approximately 20 more acres being processed for this year. Approximately 27 more acres have been identified for first year grow out ponds in the Vernal, UT vicinity. The Leota 10 site that is being modified for second year grow out is approximately 150 acres.

V. Research, Monitoring, and Data Management

Goal: To support recovery activity, monitor endangered fish status and trends, and maintain Recovery Program data archives.

- Status:
- The Program is currently developing population estimates for Colorado pikeminnow in the Colorado River; and humpback chub in Yampa, Black Rocks and Westwater canyons. Future population estimates are planned for Colorado pikeminnow in the middle Green River and humpback chub in Desolation/Gray canyons.
 - A population estimate for Colorado pikeminnow was initiated in 1991-1994. At that time the Colorado pikeminnow population in the Colorado River to the confluence of the Green River was estimated at around 600 adults. The 1998-1999 estimates were around 765, indicating an increase.
 - A population estimate for humpback chub in Black Rocks for 1998 was approximately 1,500; the 1999 data is expected to tighten the confidence limits around that estimate.

VI. Public Involvement, Information, and Education

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

Status: The Program is pleased to report active participation by all members of the Information and Education Committee. Members have developed a Communications Plan for the Recovery Program and have revised the scope of work process for public involvement. These efforts should improve both internal and external communication for the Program. Chris Treese of the Colorado River Water Conservation District was elected Committee Chair commencing with the March meeting. Presently, Committee members are being sought to represent the State of Colorado and environmental organizations. In the absence of such representation, appropriate Management Committee members are informed of all I & E activities.

Key I & E activities in the past six months include:

- September through January news media provided extensive coverage of the barrier net installation at Highline Lake State Park, razorback sucker stocking and the announcement of the signed PBO for the 15-Mile Reach. News clips

are provided routinely to I&E Committee members and are available to anyone else upon request.

- The Program display was placed in the lobby of Norwest Bank in Grand Junction for one month. Similar opportunities are being sought to raise awareness with the general public in locations where recovery efforts are ongoing.
- Information on the endangered fishes was included in the Utah Fishing Proclamation produced in November.
- The Recovery Program newsletter was produced and mailed in December. The new design was well received. The next issue is slated for June.
- The Colorado Division of Wildlife represented the Program at the Denver and International Sportsmen's shows in January and February. In return, the Recovery Program represented CDOW at Eagle Fest 2000 in January at the Rocky Mountain Arsenal.
- A permanent interpretive exhibit on endangered fishes was installed at Brown's Park National Wildlife Refuge in December.
- A bookmark was designed and produced to replace the fish identification card.
- Production of a video on Grand Valley Recovery Program activities is in process. Recovery actions are being filmed this spring to begin production of a general Program video.

VII. Program Management

Goal: To ensure effective implementation and coordination of the Recovery Program.

- Status:
- The funding authorization legislation for Colorado River and San Juan Recovery Programs was introduced in the House (H.B. 2348) and Senate (S.B. 1544) in 1999. Reintroduction in the Senate with the new language incorporating the CREDA amendments is pending, as is a Senate hearing. Program participants are working diligently with Congressional staff to encourage swift action and passage of the bill this year. State cost-share funding is in place.
 - Extending the Recovery Program beyond 2003 - Recognizing the need to make the Program's Cooperative Agreement (which currently goes through 2003) conform with the dates in the long term funding legislation, Program participants have discussed amending the Cooperative Agreement to extend the Program, but have deferred action until the recovery goals are completed.
 - The Program's electronic listserver has over 150 subscribers and is one of two key components of the Program's electronic communication (with about 10 messages posted per week). All Program participants are strongly urged to subscribe. The Program participants' web site (<http://www.r6.fws.gov/crrip/>) has detailed Program information such as upcoming meeting dates and times; meeting agendas and summaries; a bibliography of the Program library; the RIPRAP; a tracking list of Program assignments, and numerous other Program documents. The site is regularly updated and expanded.