

RECOVERY PROGRAM DIRECTOR'S UPDATE
March 2002

Recovery Goals: Progress continues on responding to comments received on the September 7, 2001, draft recovery goals during the public-review period. Expectations are to have the responses ready for Dr. Ralph Morgenweck's review before the end of March 2002, with a plan for moving forward to finalize the recovery goals established shortly thereafter. Final recovery goals are still scheduled for completion in 2002.

Status of Population Estimates: Numbers reflect the best currently available point estimates of the mean number of adults.

SPECIES	RIVER		
	MIDDLE GREEN ¹	LOWER GREEN ²	COLORADO
Colorado pikeminnow	About 3,500	Population estimate conducted in 2001; data being analyzed	About 700
Humpback chub	<u>Yampa Canyon:</u> Population small (200–1,000) A precise estimate through a mark-recapture model may not be attainable; an index of population status and trends is being investigated.	<u>Desolation/Gray Canyon:</u> A preliminary population estimate in 1996, based on a limited number of sample sites, was 1,500; effort will be expanded in 2002.	<u>Black Rocks Canyon:</u> About 1,000 <u>Westwater Canyon:</u> 2,200–5,200 based on 3 sampling sites in 1996-1997 and in 2000; effort will be expanded in 2003 <u>Cataract Canyon:</u> About 500; a mark-recapture will be investigated in 2002.
Razorback sucker	<500 wild adults; population being augmented through stocking; stocked fish returning to spawning bar	Few adults; population being augmented through stocking	Few adults; population being augmented through stocking
Bonytail	Populations are currently being re-introduced in Colorado, lower Green, middle Green and Yampa rivers.		

¹Middle Green River includes the Yampa River (Craig to Echo Park), White River (Taylor Dam to Green River confluence), and mainstem Green River (Split Mountain to Sand Wash)

²Lower Green River includes Desolation/Gray canyons (Sand Wash to Green River City), and the lower mainstem (Green River City to Colorado River confluence).

I. Instream Flow Identification and Protection

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

- Status:
- Authors of the Green River flow recommendations met with the Flaming Gorge EIS staff and the Recovery Program staff to discuss USBR's application of flow recommendations in modeling their impacts to reservoir operations. There was concern that the USBR model was too operationally rigid and applied inappropriate assumptions, resulting in alarmingly high reservoir level fluctuations while failing to meet flow recommendations. Modifications will be made to the model to more closely simulate the most likely application of flow recommendations in their hydrologic context, including consideration of antecedent conditions.
 - The USBR published a draft water-demand analysis for the Gunnison River in May 2001 and continued to receive public comments through January 2002. However, the State of Colorado ultimately must decide how much water is likely to be developed in the Gunnison River Basin under the Colorado River compact within a 50-year planning horizon, and whether to consult on all or a portion of the foreseeable future depletions at that time. Whatever increment of depletions is selected will serve as the basis for a Programmatic Biological Opinion (PBO) for the Gunnison River Basin. The PBO would likely be completed late in FY 2003.
 - The FWS continues to work with WAPA, CREDA, Upper Basin Water Users, and State of Colorado to address concerns regarding flow recommendations for the Gunnison River and Colorado River downstream from the Gunnison. Recovery Program staff met with FWS biologists, Drs. John Pitlick (CU) and Kirk LaGory (for WAPA) to resolve issues relating to the role of spring peak flows in sediment transport. The FWS believes that this and other issues can be resolved in a timely manner (possibly by April 2002) and expects completion of flow recommendations that will allow for operational flexibility of the Aspinall Unit and meet the habitat needs of the fishes. Once the flow recommendations and depletion estimates are known, the USBR can begin modeling Aspinall Unit operations to serve them.

- In 1978, the NPS was granted a 1933 reserve water right for the Black Canyon of the Gunnison and instructed to quantify the right. Talks have continued within the “Federal family” concerning NPS Black Canyon reserved water rights, and there have been several meetings of the technical workgroup assigned to direct the modeling effort. NPS is awaiting resolution of the FWS flow recommendations before opening negotiations with objectors to its water right application.
- Reclamation completed work on the Green Mountain Municipal Recreation contract in 2001, which allows surplus water from the Green Mountain Historic Users Pool (HUP) to be released and protected under Colorado Water Law. The cities of Grand Junction, Palisade, and Fruita are parties to the contract. This is a 5-year renewable contract that is dependent on the amount of water available. Water availability will be determined by the HUP management agencies using the surplus criteria instituted in the Orchard Mesa check case. During the late summer and fall of 2001, a total of 68,186 acre-feet (af) of water was released from four contributing reservoirs to benefit flow in the 15-Mile Reach (34,656 af from Green Mountain Reservoir, 20,825 af from Ruedi Reservoir, 8,490 af from Wolford Mountain Reservoir and 5,412 af from Williams Fork Reservoir).
- No Coordinated Reservoirs activities were initiated in 2001 because flows did not reach the desired 12,900 cfs threshold at Cameo. Based on current snow accumulations in the basin and depressed reservoir levels, it is also unlikely that any Coordinated Reservoirs releases will be made in 2002.
- The Coordinated Facilities Operations Project (CFOPS) was initiated in 1999 to investigate alternatives for supplying up to an additional average annual 20,000 acre-feet of water to the 15-Mile Reach of the Colorado River. Phase I of this project examined a wide range of possible alternatives that were subjected to a preliminary screening process to arrive at a short list of alternatives that would be intensively studied in Phase II. The final report on Phase I was completed in September 2000. Phase II modeling is under way and is expected to be completed by June 30, 2002.
- A second draft of the Yampa River Management Plan was completed in October 2001 and posted on the Recovery Program website; hard copies also were mailed to about 150 stakeholders and Recovery Program participants. Public scoping meetings were held in late November 2001 in Steamboat Springs and Craig, Colorado, and Baggs, Wyoming. In addition, the public-comment period for written comments to be submitted was extended through December 2001. Oral and written comments will be considered in revising the management plan and in preparing an environmental assessment (EA) on the plan (draft in May 2002). A biological assessment (BA) will accompany a request to initiate formal intra-Service section 7 consultation in March 2002

that will result in a PBO for the Yampa Basin by the end of September 2002.

- The CDPOR has drafted a long-term lease agreement to extend the Steamboat Lake lease of 2,000 af of water through 2013. The lease is under review by the Colorado Attorney General's office and the Colorado Department of Natural Resources. The lease is expected to be completed by summer 2002.
- Since 1988, the Service has consulted on 142 projects with a potential to deplete a total of 1,674,088 acre-feet (af) in the Upper Colorado River Basin, of which 1,451,133 af are historic depletions. Three of these "projects" are blanket consultations for depletions under 100 af, up to 6,000 af total. Thus far, these three consultations have covered 396 actual projects depleting a total of 5,831 af (4,143 af in Colorado, 1,050 in Utah, and 638 af in Wyoming). Another of these 140 "projects" is the 15-Mile Reach PBO which covers an average depletion of up to 1 million af per year of existing depletions (through September 30, 1995) and up to 120,000 af of new depletions (since September 30, 1995) in the Colorado River above the confluence with the Gunnison River. Thus far, the 15-Mile Reach PBO has covered 115 actual projects. In total, then, since January 1988, the Service has consulted on 649 projects depleting water from the Upper Colorado River Basin.
- The FWS continues 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.

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 the Redlands Diversion Dam on the Gunnison River has been operational since June 1996. The ladder has been used primarily by native fishes (more than 45,000), including 52 Colorado pikeminnow and five previously-stocked razorback suckers. Six of the Colorado pikeminnow have used the ladder twice; one has used it three times. 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 screen will be installed at Redlands during the fall of 2003, if deemed necessary, to prevent entrainment of endangered fishes into the diversion canal.

- 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 56 miles of historically-occupied habitat for endangered fishes. Construction of a canal fish screen is scheduled for completion in March 2002.

- Construction to restore fish passage at the Price-Stubb Diversion Dam 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. At present, fish passage restoration is awaiting a congressional decision on the project proponents' request for a FERC license extension (Jacobson Hydro FERC #4515-014). Construction is tentatively scheduled for 2003–2004. A fish screen will not be necessary because water has not been diverted at this site since 1919.
- Preconstruction activities are ongoing through FY 2002 to restore fish passage at the Grand Valley Project Diversion Dam. Construction is scheduled for 2002–2003. Installation of a fish screen is scheduled for completion by February 2004.
- Design options have been developed for a fish screen at the Tusher Wash Diversion canal on the Green River in Utah. Screen construction cannot begin until a water-rights dispute has been settled in court. Therefore, construction has been postponed until 2005.
- Restoration of passage and installation of a fish screen at the Hartland Diversion Dam on the Gunnison River is on hold pending reassessment of the need for passage this far up the Gunnison River and assessment of the feasibility of warming releases from the Aspinall Unit.
- The Recovery Program sponsored a workshop in November 2001 to review the habitat-restoration program. Workshop results and continued evaluation of the habitat-restoration program will guide future Recovery Program actions to provide habitat for endangered fishes.
- Floodplain habitat has been restored at five Bureau of Land Management sites on the Green River, three sites at Ouray National Wildlife Refuge, two sites on the Colorado River near Grand Junction, and the Escalante State Wildlife Area on the Gunnison River. The Recovery Program has acquired 976 acres of floodplain/wetland habitat along the Green, Colorado, and Gunnison rivers. A quarterly update on land acquisition was distributed in January 2002.
- A revised final draft report which evaluates the success of levee-removal efforts is expected to go to the Biology Committee by March 1, 2002.

III. Nonnative Fishes and Sportfishing

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

- Status:
- A workshop was held February 13–14, 2002, to discuss and evaluate nonnative fish control efforts implemented to date. A draft summary of major conclusions and recommendations from the workshop was submitted to the Management and Biology committees for their review and comment, with a full report on the workshop forthcoming.
 - 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 Fish Stocking Procedures (NNFSP) 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 positive. In 2000, about 350 northern pike were translocated to Rio Blanco Lake (in-basin sites that meet the criteria of the NNFSP agreement were unavailable). During 2001, approximately 500 northern pike (~50% from critical habitat and ~50% from upstream) were removed from the Yampa. Of those, 230 were translocated to the Yampa State Wildlife Area. All northern pike removed from critical habitat were released into Rio Blanco Lake. Based on the amount of effort expended for the number of northern pike captured within critical habitat, it appears that there may have been a depletive effect from northern pike removal efforts.
 - Approximately 250 northern pike were removed from the Green River during 2001.
 - Removal and control of nonnative fishes in floodplain source ponds along the Colorado and Gunnison rivers began in 1997. As of the end of 2001, 335 ponds have been investigated, and 75 ponds reclaimed to remove over 3 million nonnative fish. Follow-up surveys indicated rapid re-invasion by nonnative fish. As a result, efforts are being redirected toward identification and screening of major source areas.

- 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 suggests that it has significantly reduced escapement of nonnative fishes from the reservoir. Although largemouth bass in the lake doubled from 1999 to 2000, the number of bass captured below the lake fell by almost 50 percent. This effort has allowed 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. Propagation Activities

- 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 March 2000 through October 2001.
 - This past year, more than 37,000 bonytail were stocked in the Colorado River subbasin and more than 56,500 were stocked in the Green River subbasin.
 - State stocking plans have been revised and accepted by the Recovery Program to stock larger but fewer fish. This resulted in fewer grow out ponds required to meet production. At this time no additional grow out ponds are required.
 - The J.W. Mumma Native Aquatic Species Restoration Facility (CDOW) is currently raising 25,000 bonytail and 15,000 razorback sucker in excess for the Recovery Program which will be made available to the San Juan Program. The Mumma facility will be raising bonytail and Colorado pikeminnow to meet the revised stocking numbers and sizes in the State of Colorado's stocking plan.

Stocking Status: Below are the species, numbers, and sizes stocked into various river reaches for the Upper Colorado River Endangered Fishes Recovery Program, from April to October 2001.

Species	Date	River Section	Number	Approximate Size (inches)
Bonytail	April 2001	Colorado (Utah)	27,968	4–7
	April 2001	Green	46,522	4–7
	April 2001	Colorado (Colorado) ¹	10,000	4–7
	April 2001	Yampa	5,000	4–7
	April 2001	Middle Green ²	5,000	4–7
Razorback sucker	Spring 2001	Riverside Ponds	66,100 ³ 1,697 916	<1 4 6–14
	Spring 2001	Middle Green	9,540	4
	April/October 2001	Colorado	2,154	10–16
	April/October 2001	Gunnison	4,101	6–20+

¹ Colorado River at Parachute, CO.

² This reach of the middle Green River was in the Lodore Canyon.

³ These smaller fish were stocked in depression wetlands where early life stages can take advantage of resources for growth and protection.

V. Research, Monitoring, and Data Management

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

- Status:**
- A population estimate for Colorado pikeminnow was initiated this spring for the lower Green River stock. More than 500 Colorado pikeminnow were caught and tagged. In addition about 40 razorback sucker, 35 humpback chub and 1 bonytail were caught on a pass through Desolation/Gray canyons.
 - A workshop on population estimates was conducted on December 6–7, 2001. Recommendations are being developed to modify sampling protocols to provide more precise estimates.

VI. Public Involvement, Information, and Education

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

Status: The Information and Education Committee met October 10 in Denver and January 18 in Grand Junction. Committee members remain active, helping the Recovery Program achieve its I&E goals. Betsy Blakeslee joined the Committee in October representing The Nature Conservancy. In the absence of a power user representative, CREDA and WAPA Management and Implementation Committee members are informed of all I & E activities.

Key I & E efforts include:

- News Media: The Recovery Program's visibility through the news media remains high. Key stories from September through February included *Federal Register* publication of the draft recovery goals, Yampa River Management Plan public meetings and a proposed expansion of Elkhead Reservoir, and the signing of the extension of the Recovery Program's Cooperative Agreement. News clips are faxed routinely to the I&E Committee, interested Management Committee members, and anyone else upon request.
- The Recovery Program newsletter was printed and distributed in November.
- A signing ceremony was organized for the extension of the Cooperative Agreement. The event resulted in newspaper and television coverage.
- The Recovery Program exhibited at the Wyoming Water Association's annual meeting in October, the Colorado Water Congress Annual Convention in Northglenn in January, and the Utah Water Association's Annual Meeting in St. George in March. In addition to raising the Recovery Program's visibility, an average of 20 new names are added to the newsletter mailing list from each event.
- Four-color interpretive signs were completed and distributed to Colorado, Utah and New Mexico hatcheries that are raising endangered Colorado River fish. The signs will also be used at The Nature Conservancy's Carpenter Ranch and at an aquarium being installed at the Montrose Pavilion.
- Interpretive Exhibits: In Grand Junction, collaborative efforts with local government and private organizations are underway to landscape and place interpretive signs at the Confluence Habitat Restoration Area (the former Jarvis site.) A memorandum of understanding will be prepared between the Recovery Program and the City of Grand Junction to address maintenance of the site.

A broader plan is in place with some of the same local organizations to develop signs on endangered fish and other topics along the entire Colorado Riverfront Trail. A grant request through the National Park Service Foundation was put on hold and alternative funding sources are being sought.

Aquariums featuring endangered fish should be in place by this summer at the Montrose Pavilion and The Nature Conservancy's Carpenter Ranch. An information kiosk is being built at Ouray National Fish Hatchery.

The Colorado Department of Natural Resources may pursue establishing a permanent aquarium at the Colorado State Fair site in Pueblo. The Recovery Program may have an opportunity to incorporate fish and interpretive messages at this exhibit.

- Interactive Map – The Colorado River Water Users Association is cooperating with the Recovery Program to develop an interactive, web-based GIS map of the Colorado River. The Southwest Data Center has joined the effort and has offered to host the information. A base map is anticipated by next fall.
- The *2001-2002 Program Highlights* publication will be available in March.

VII. Recovery Program Management

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

- Status:
- Extending the Recovery Program - According to the Recovery Program's long-term funding legislation (PL 106-392), Recovery Program participants were required to extend the Recovery Program's Cooperative Agreement by January 21, 2002. At the Colorado State Capitol on December 6, 2001, Department of the Interior Secretary Gale Norton joined Colorado Governor Bill Owens, Wyoming Governor Jim Geringer, and Western Area Power Administration Administrator Mike Hacsckaylo in signing a cooperative agreement extending the Upper Colorado River Endangered Fish Recovery Program another 10 years.
 - The Recovery Program's electronic listserver and web sites have been inoperational since mid-December due to disconnection of Department of Interior offices from the Internet. The reconnection date is unknown and Recovery Program participants are exploring options for an interim alternate listserver (perhaps hosted by the National Park Service or Western Area Power Administration).
 - The annual briefing trip to Washington, D.C. is scheduled for March 13-19, 2002.