COLORADO RIVER RECOVERY PROGRAM
RECOVERY PROGRAM
FY 2002 ANNUAL PROJECT REPORT
PROJECT NUMBER: 98a

I. Project Title: Translocation of northern pike from the middle Yampa River.

II. Principal Investigator:
John A. Hawkins
Department of Fishery and Wildlife
Colorado State University
Ft. Collins, CO 80523
voice: (970) 491-2777
fax: (970) 491-5091
jhawk@lamar.colostate.edu

III. Project Summary:

Northern pike, *Esox lucius*, is a nonnative species introduced into the Yampa River system in the early 1980s. They have established a reproducing population in the upper Yampa River and expanded their number and range within the Yampa and Green rivers. Northern pike are voracious predators and are considered a threat as competitors and predators to endangered and other native and game fishes in the Yampa River. This project implements nonnative-fish-management actions described in the Colorado Division of Wildlife Aquatic Wildlife Management Plan for the Yampa River Basin (CDOW 1998) which includes active trapping and translocation of northern pike. Previous sampling in 1999 resulted in the capture of 164 northern pike in both the spawning area near Hayden, Colorado, and from backwaters in the critical habitat reach downstream of Craig, Colorado, and the translocation of 80 northern pike to Yampa State Wildlife Area ponds. In 2000, 475 northern pike were captured in critical habitat and 350 were moved to Rio Blanco Reservoir. In 2001 and 2002, again we focused on capturing northern pike that occupy critical habitat for Colorado pikeminnow downstream of Craig, Colorado. In 2001, we captured 269 northern pike, moving 261 to Rio Blanco Reservoir. During 2002, we sampled on four occasions, capturing 302 and moving 288 northern pike to Rio Blanco Reservoir. Flows were low and ranged from 1,500 to 3,000 cfs for the first three sampling occasions. Few backwaters were connected at these flows and backwaters that did connect were too shallow for fyke-net sampling. Flows for the fourth sampling occasion were around 700 cfs, preventing access in many reaches and limited sampling of available shoreline habitat. Sampling in critical habitat and translocation of northern pike to Rio Blanco is planned again for 2003 in conjunction with abundance sampling for Colorado pikeminnow.

IV. Study Schedule: Initial Year: 1999
Final Year: Ongoing

MYampa pike 98a page 1
V. Relationship to RIPRAP:
GREEN RIVER ACTION PLAN: YAMPA AND LITTLE SNAKE RIVERS
III. Reduce negative impacts of nonnative fishes and sportfish management activities (nonnative and sportfish management).
   III.A.1. Implement Yampa Basin aquatic wildlife management plan.
   III.A.1.b(1) Remove and translocate northern pike and other sportfishes from the Yampa River.

VI. Accomplishment of FY 2002 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

   Task 1. Contact private landowners and obtain permission for property access for fish removal sampling. Field crew training and equipment preparation.

   Task 2. Capture, remove, and translocate juvenile and adult northern pike from critical habitat reaches. Three to four 12-day sampling trips

   Task 3. Data entry and analysis. Equipment maintenance.


   All tasks were accomplished. County maps and plat books were examined for location and ownership information of tributaries downstream of Craig, Colorado, and an initial list of suitable sample sites were identified. Landowners of several key locations were contacted for permission to access sites from their property; otherwise, land-based sampling only occurred on public lands. Field crew members were trained in boat and electrofishing skills and safety and fish handling and tagging techniques (Task 1). Four sampling trips were conducted in critical habitat during spring runoff and northern pike were captured and translocated to Rio Blanco Reservoir (Task 2; Table 1). All fish-capture data have been analyzed and PIT-tag information for endangered fishes will be submitted to the FWS database manager (Task 3). A final report for results to date will be submitted for approval in January 2003 (Task 4).

   We sampled 32 days in the spring from April 25–May 3, May 11–19, May 26–June 3, and June 12–16. Sampling occurred below Craig, Colorado, just above Milk Creek (river mile 122) to Deerlodge Park (river mile 46) covering about 76 river miles. This was an exceptionally dry water year. Spring runoff was short and continuously low during all sample occasions. Both sides of the river were sampled concurrently, but no backwaters filled enough for extensive sampling. Effort included 166 hours of shoreline electrofishing. No fyke-net sampling was done in backwaters due to low water that did not flood backwater habitat. Only one backwater was sampled, using the block and shock method, on one occasion during the 2002 season, adding less than two-tenths of an hour to total effort.
All pike were tagged with a Floy tag under the dorsal fin and moved to Rio Blanco Reservoir in Rio Blanco County in the White River Basin. A total of 302 northern pike were captured of which 288 were transported to Rio Blanco Reservoir (Table 1). Two northern pike escaped back to the river and 12 died or were severely injured and euthanized. Average length of all pike caught in 2002 was 536 mm (range 176–858 mm; SD 148).

Usually the only fish we netted when electrofishing were northern pike or Colorado pikeminnow. Other fish such as smallmouth bass or channel catfish were either not netted or, if netted, were returned alive to the river. We also caught 33 Colorado pikeminnow in 2002, significantly fewer than in previous years. As in past years, several Colorado pikeminnow were collected with northern pike bites, providing evidence of attacks and likely predation. Public relations information and knowledge of this project by other agencies has improved and, as a result, local residents and fishermen were better informed, but there is still the need for increased information and education.

VII. Recommendations:

Public information and education programs about the project should continue for local landowners, the boating and fishing public, schools, and especially for personnel in other agencies such as Colorado State Parks who interact with large numbers of river users and fishermen.

VIII. Project Status:

Final Report will be submitted for approval in January 2003. The project is on-track and ongoing for 2003.

IX. FY 2002 Budget Status

A. Funds Provided: $63,500
B. Funds Expended: $63,500
C. Difference: $0
D. Percent of the FY 2002 work completed, and projected costs to complete: 100% completed.
E. Recovery Program funds spent for publication charges: None

X. Status of Data Submission (Where applicable):

PIT-tag records for endangered fishes captured and tagged in 2002 will be submitted in January 2003. Other fish capture records for all previous years will also be submitted at the same time.

XI. Signed: John Hawkins 12/10/02
Principal Investigator Date
References:


Table 1. Number of northern pike captured from the Yampa River and moved to Rio Blanco Reservoir in 2002.

<table>
<thead>
<tr>
<th></th>
<th>Juniper</th>
<th>Maybell</th>
<th>Lily Park</th>
<th>Total # captured All Reaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass 1</td>
<td>42</td>
<td>26</td>
<td>5</td>
<td>73</td>
</tr>
<tr>
<td>Pass 2</td>
<td>73</td>
<td>27</td>
<td>10</td>
<td>110</td>
</tr>
<tr>
<td>Pass 3</td>
<td>41</td>
<td>43</td>
<td>20</td>
<td>104</td>
</tr>
<tr>
<td>Pass 4</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>163</td>
<td>99</td>
<td>40</td>
<td>302</td>
</tr>
</tbody>
</table>

filename=02MYampa-pike-rpt.wpd