

I. Project Title: Population abundance and dynamics of introduced northern pike, Yampa River, Colorado

II. Principal Investigator(s):

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Category: Expected

III. Project Summary:

Research to better understand abundance and population dynamics of northern pike in the Upper Colorado River Basin needed for managers to proceed with effective control strategies. Our basic approach will be to conduct comprehensive abundance estimates at appropriate geographic scales, which when coupled with movement data, should allow for a more comprehensive understanding of abundance dynamics of pike populations in the Yampa River. This understanding will allow managers to assess the role of the buffer removal area in the vicinity of Hayden, Colorado, on pike populations in downstream critical habitat and will also aid assessment of immigration from sources upstream of there, and explore more effective means to achieve recovery of native fishes. Influence of important environmental factors on northern pike abundance dynamics, such as stream flow levels and subsequent reproductive effort, will allow simultaneous assessment of trajectories of pike populations under different levels of removal effort. This information should increase the ability of managers to understand effectiveness of removal programs and formulate a comprehensive control strategy that will effectively reduce populations of northern pike and enhance prospects for recovery of native fish populations.

IV. Study Schedule: Initial Year 2011
Final year 2013

V. Relationship to RIPRAP:

Green River Action Plan: Yampa and Little Snake Rivers

III.A.1. Implement Yampa Basin aquatic wildlife management plan to develop nonnative fish control programs in reaches of the Yampa River occupied by endangered fishes. Each control activity will be evaluated for effectiveness and then continued as needed.

Green River Action Plan: Mainstem

III. Reduce negative impacts of nonnative fishes and sportfish management activities (Nonnative and sportfish management)
III.A.2.c Evaluate the effectiveness (e.g., nonnative and native fish response) and develop and implement an integrated, viable active control program.

VI. Accomplishment of FY 2011 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

We have begun to gather and organize northern pike capture recapture data. As described in the scope of work, we have only recently begun this task but have made some progress to date. An update on that progress will be presented at the non-native fish workshop in early December 2011. We still need to acquire data on upstream populations of northern pike from CDOW personnel.

VII. Recommendations: Continue with project.

VIII. Project Status: On track and ongoing.

IX. FY 2011 Budget Status

- A. Funds Provided: \$60,000
- B. Funds Expended: \$4,800
- C. Difference: \$54,000, late project start date and inability to begin analyses until late September 2011.
- D. Percent of the FY 2011 work completed, and projected costs to complete: 8%, we have sufficient budget to complete work.
- E. Recovery Program funds spent for publication charges: none.

X. Status of Data Submission (Where applicable): NA

XI. Signed: Kevin Bestgen and Koreen Zelasko 11 November 2011
Principal Investigator Date