

NORTHEAST REGIONAL CONSERVATION NEEDS GRANT

2012 PROGRESS REPORT

Quarter: (circle one)

2012 1st

2012 2nd

2012 3rd

2012 4th

Grant Program, Number and Title: In-stream Flow Recommendations for the Great Lakes Basin of New York and Pennsylvania; grant number 2010-02

Organization: The Nature Conservancy

Project Leader: David Klein

Abstract: Please provide a short (1-2 paragraphs) abstract that addresses EACH of the following: the objectives of your project, accomplishments to date, future plans and timelines with an estimate for when the project will be completed.

This project will employ the Ecological Limits of Hydrologic Alteration (ELOHA) framework in the Great Lakes drainage of New York and Pennsylvania to develop an objective, spatially explicit process for evaluating the ecological impacts of new withdrawals of water from the tributaries of Lakes Erie, Ontario, and the Upper St. Lawrence River. The goal is to provide the scientific information necessary to support development and implementation of in-stream flow standards for managing the Great Lakes surface and ground-waters of New York and Pennsylvania under the terms of the Great Lakes Compact.

During the 4th quarter, we organized information on flows and species needs in streams of different types into several graphic formats that fostered discussions by the technical advisory team at the project's third and final workshop. This workshop was held on December 6, and was attended by 21 members of the advisory team. Following the workshop, we have prepared a detailed summary of the discussions and developed draft flow recommendations. These draft flow recommendations will be discussed with the technical advisory team in a WebEx on Feb. 21, 2013. Based on this discussion, we will refine the recommendations for inclusion in the project's final report. This report will be presented to the NYS Department of Environmental Conservation prior to the project's end date, April 15, 2013.

Were planned goals/objectives achieved last quarter?

During the 4th quarter, we focused on outcomes 8 and 9 in our project narrative. Outcome 8 (Conduct flow recommendations workshop, and issue final report) was partially accomplished through implementation of the flow recommendations workshop on Dec. 6, and we are preparing the final report now. The Cornell post-doctoral research associate, Dr. Jason Taylor, has made presentations on the project to the regional and annual meetings of the American Fisheries Society. Manuscripts to scientific journals are in preparation.

Progress Achieved: (For each Goal/Objective, list Planned and Actual Accomplishments)

Outcome 6: Conduct testing to refine specific hypotheses of ecological response with existing data sets. As mentioned in our previous report, Dr. Jason Taylor used causal criteria analysis, a literature-based approach to hypothesis testing, to measure the degree of scientific support for each of the hypotheses framed during our second workshop. Hypotheses with scientific support were aggregated to 10 basic flow needs for aquatic organisms. The results of hypothesis testing, and the seasonal flow needs, provided the basis for the flow recommendations that resulted from our third workshop.

Outcome 7: Prepare a draft summary report and draft ecosystem flow recommendations for streams of

different types. Summary tables of the flow recommendations developed by the advisory team have been completed, and will be used during the final project WebEx on Feb. 21. We have prepared draft final flow recommendations for discussion during the WebEx, and Dr. Taylor has completed other supporting analyses and materials.

Outcome 8: Conduct flow recommendations workshop, and issue final report. As discussed above, the flow recommendations was held on Dec. 6 at the Welch-Allyn Lodge in Skaneateles, NY, and we are now working on the final report.

Difficulties Encountered:

No further difficulties were encountered beyond those highlighted in previous reports, all of which have been addressed.

Activities Anticipated Next Quarter:

We will hold a final consultation with the technical advisory team during a WebEx on Feb. 21, and complete the final report by April 15, 2013.


Expected End Date: April 15, 2013

Costs:

Total life to date expenses (include this quarter): \$92,129.90

Total Approved Budgeted Funds: \$100,000

Are you within the approved budget plan and categories? Yes

Signature: 

Date: February 14, 2013