

# NORTHEAST REGIONAL CONSERVATION NEED GRANT QUARTERLY REPORT

Grant Number: Northeast Regional Conservation Needs Grant 2007-02

Grant Title: Northeast Regional Connectivity Assessment Project

Grant Receipt: The Nature Conservancy

Grant Contact Name: Colin Apse, Deputy Director, Eastern U.S. Freshwater Program, [capse@tnc.org](mailto:capse@tnc.org)

Report #- 7 (Quarter ending December 31, 2009)

Were planned goals/objectives achieved last quarter? Yes

Regional Conservation Need Addressed: Development of Habitat Conservation Initiatives at a Landscape Scale.

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

- *Completed as Planned:* 3 Virtual Meetings, the first of which continued our discussion of metric selection focused on freshwater system size and type. The second call focused on collection of new spatial data on anadromous fish range of abundance as well as natural falls location—which will be a major contribution of this project. For our third call we restarted our practice of having featured presentations from practitioners with a call focusing on invasive aquatic risk estimation, given by Nick Lapointe from VA Tech.
- *Completed as Planned:* We defined Initial Connectivity Screening Metric recommendations, which were finalized using Workgroup input during two virtual meetings and intervening work by the TNC core team.
- *Significant Progress:* We have almost completed Barrier Database 1<sup>st</sup> Draft Compilation, which will include attributed spatial information on stream barriers from all 13 states. This compilation will be used to create, to the best of our ability, a seamless and accurate database for the NEAFWA region over the course of the project. We also manually corrected the spatial location of the dam dataset in Maine as a first step towards improving database accuracy.
- *Past Presentations & Documentation at:* <http://conserveonline.org/workspaces/neconnectivity>

Difficulties Encountered: Continuing efforts to get dam database information from New Jersey and Pennsylvania have been unsuccessful due to homeland security concerns. We believe we can overcome this situation in the next quarter.

Not yet able to sign and execute a contract to develop a spatial data tool for critical connectivity metrics in to be calculated using ArcGIS. Cost and quality of results has been a concern, given the limited budget of this project. If outside funds can be found, this should be overcome in the next quarter.

Activities Anticipated Next Quarter:

- 3 Virtual Meetings, each of which will feature a speaker that will present on the latest aquatic science

related to connectivity restoration and impacts. This will include Ben Letcher, USGS; Scott Jackson, UMASS. The calls will also keep the workgroup updated on our progress in sending out data for QA/QC, addition of data on anadromous fish runs, and locations of natural falls and developing metric tools.

- We expect to be able to finalize the Ecological Metric for Connectivity spreadsheet for purposes of doing a pilot metric analysis for the Connecticut River Basin.
- Completion of Barrier Database draft compilation, which will include attributed spatial information on stream barriers from all 13 states. This will require final agreements with New Jersey and Pennsylvania. We will use this compilation to create, to the best of our ability, a seamless database for the NEAFWA region over the course of the project.
- Signing and initial execution of a contract with one of three potential contractors (Horizon Systems Corporation, GeoData Institute, or a Canadian researcher) to develop a spatial data tool for critical connectivity metrics in to be calculated using ArcGIS. TNC anticipates that it will share the cost of this tool with other groups within TNC or our partners. The network processing tool is designed to be easy to use and should allow for a range of scenarios. Any tool developed under this project will likely be available to state agencies in NEAFWA and we expect it to be quite useful to them.

Costs:

Are you within the approved budget plan? Yes

Are you within approved budget categories? Yes

Signature

A handwritten signature in black ink, appearing to read "Colin Ryse". The signature is written in a cursive, flowing style with a large loop at the end.

Date: January 10, 2010