

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2013 PROGRESS REPORT

Quarter: (circle one)

2013 1st

2013 2nd

2013 3rd

2013 4th

Grant Number and Title: **NALCC 2012-07 Revisions to the Northeast Aquatic Habitat Classification.**

Grant Receipt/Organization: The Nature Conservancy

Grant Project Leader: Dr. Mark Anderson

Were planned goals/objectives achieved last quarter? Yes, although the work completed this quarter was merged with and charged to the RCN Northeast Aquatic Habitat Guide award.

NALCC Conservation Need Addressed: Supporting a Standardization of Terrestrial and Wetland Habitat Classification and Mapping that Includes Characterization of Climate Sensitive Systems.

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

This quarter we completed the revision and addition of a tidal stream category to the Northeast Aquatic Habitat Classification. Because the work dovetailed with the creation of the Northeast Habitat Guides we charged the work to the RCN award for completing the habitat guides. This meets our agreed upon goal of completing the tidal classification and map in time for it to be included in the guides.

Summary of Progress: (Provide a paragraph describing progress, work to come, and timelines)

Goal 1) Complete the classification of tidal stream and rivers in the Northeast and Mid-Atlantic.

We completed the simplification of the aquatic classification and the addition of a tidal stream component. Details on the tidal stream systems are described in pages 253-258 of the Northeast Habitat Guides and a map is shown at the end of this update. The definition of tidal rivers (page 29) was as follows:

Streams and rivers that connect directly to the ocean or to large tidal river estuaries are influenced by ocean tides. Their water level and flow fluctuates with the tides, and salinity can range from freshwater (0 to 0.5 ppt salinity), to brackish (0.5 to 18 ppt), to saline (18 to 30ppt or greater), depending on the extent of tidal influence along the length of the reach. In tidal rivers there is also a vertical salinity gradient, with a surface layer of fresh water (salinity less than 0.5 ppt) floating over a deeper layer of brackish water (salinity between 0.5 and 18.0ppt). Vegetation and faunal communities found in and along these streams and rivers are determined by both depth and salinity, and include tidal- fresh marshes, brackish marshes, salt marshes, and intertidal sand and mud flats. Streams and river reaches with potential tidal influence were placed into three size categories for the habitat guide. These groupings were based strongly on the distribution of anadromous fish, which vary in their preference for size of tidal river or stream.

Difficulties Encountered:

Yes, although we completed the stream portion of the classification and were able to integrate it into the aquatic habitat guide as we hoped, the demands of finishing the habitat guide project as well as the geospatial condition analysis were such that we were not able to focus on the lake classification. We are just beginning to compile the needed information and we will be requesting an extension on this project in order to complete the lake classification.

Activities Anticipated Next Quarter:

Goals for the upcoming Quarter include:

- Compile information on the size, depth, pH, geology, elevation of lakes in the Northeast and Mid-Atlantic.
- Activate the steering committee to inform final decisions on the lake classification.

Expected End Date:

Currently December 2013, but we will be requesting an extension

Costs: *Note almost all expenses for this work this quarter were charged to the overlapping grant to create an aquatic habitat guides.*

Funds Expended to Previous to this Report: \$0

Amount of NALCC Funds Requested within this Report: \$0

Total Approved Budgeted NALCC Funds: \$25,000

Are you within the approved budget plan? Yes

Are you within approved budget categories? Yes

Signature:






Mark Anderson

Director of Conservation Science

The Nature Conservancy, Eastern Division

Date: October 28, 2013

Tidal Class

-  Tidal Headwaters and Creeks
-  Tidal Small and Medium Rivers
-  Tidal Large Rivers

