NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2013 PROGRESS REPORT

Quarter: (circle one)

2013 1st

2013 2nd

2013 3rd

2013 4th

<u>Grant Number and Title</u>: Application of the Coastal and Marine Ecological Classification Standard (CMECS) to the Northeast

Grant Receipt/Organization: The Nature Conservancy

Grant Project Leader: Mark Anderson

Were planned goals/objectives achieved last quarter? Yes

NALCC Conservation Need Addressed: Topic 1, Classification of Coastal and Marine Habitats

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

CMECS Marine and Coastal classification

Goal 1.) Complete Phase 1: Crosswalks and Catalog of Mappable CMECS Units in the NW Atlantic

This goal was completely met this quarter. All three cooperators: MADEP (local), URI (sub-regional) and TNC (regional) developed crosswalks for their specific scales and organized crosswalk tables for each scheme to CMECS components. Throughout the crosswalking process, the group constantly interacted with Mark Finkbeiner who offered guidance and advice on crosswalking methods and challenges. These crosswalks were presented to the benthic habitat committee in Gloucester, Massachusetts, and also to the CMECS developers (Kathy Goodin, Mark Finkbeiner and others) at the NatureServe conference in Baltimore (reviews from both meetings were very positive).

These crosswalks were compiled into a catalog of CMECS units mapped at the local, subregional and regional scales in the NW Atlantic. This catalog was organized by each CMECS component and subcomponent denoted by its appropriately mapped scale. This catalog is a non-exhaustive list of mappable CMECS units in the NW Atlantic; however, contains all the components mapped in this project (and new CMECS recommendations) and demonstrates the degree of overlap between CMECS and smaller scale/scope habitat classification schemes. This catalog will be submitted with the final report as a supplementary appendix.

Goal 2.) Initiate Phase 2: Mapping of CMECS units.

We have started this phase of the project by creating draft CMECS maps for the Northwest Atlantic Ecoregional Assessment (NAMERA) by modifying the seabed forms, sediment grain classifications and bathymetry zones in CMECS terminology. These maps were shown to the research team and we received positive feedback on ways to make them more accurate. MADEP also presented a draft NOAA ESI map in which the research group offered mapping advice. The subregional scale group shared their mapping ideas and are in process of creating draft maps. As each group developed their maps, we identified discrepancies between individual class thresholds for each CMECS component (e.g. depth classes, grain size classes) and are in the process of preparing justification for each. A mapping template was also created for the final report and once maps are finalized they will be imported into the template for the final report.

Additionally, TNC organized all of the Northwest Atlantic Marine Ecoregional Assessment (NAMERA) data into a geospatial attribute table that has each NAMERA component crosswalked to its appropriate CMECS component to facilitate the creation of CMECS "biotopes" (combinations of organisms and physical settings).

This also prepared the data for mapping.

Goal 3.) Create structure of report and started writing final report

We have developed a table of contents and outline for the final report and we circulated this to the research team to begin writing assignments. To date, the team has approved the structure and is beginning to write and populate these sections.

<u>Difficulties Encountered</u>: The primary researcher on Dr. John King's team on the sub-regional scale analysis (Dr. Emily Shumchenia) left the project leaving the URI researchers short-handed. Emily is well-versed in CMECS classification and will continue to participate voluntarily on the team calls. If possible, we will keep her engaged through the end of the project.

<u>Activities Anticipated Next Quarter</u>: Next Quarter, we will complete the phase 2 mapping phase and circulate the results to the research group. We will also compile the final report and circulate a draft report to the NROC benthic habitat committee for review.

Expected End Date: December 2013

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Costs:

Funds Expended Previous to this Report: \$29,724.18 Amount of NALCC Funds Requested within this Report: \$20,271.01 Total Approved Budgeted NALCC Funds: 130,000.00 Are you within the approved budget plan? Yes Are you within approved budget categories? Yes

Signature:

Date: July 27, 2013