



Eastern Division Conservation Science Office
The Nature Conservancy
99 Bedford Street, 5th Floor
Boston, MA 02111

Phone: (617) 532-8300
Fax: (617) 532-8400
nature.org

February 7th, 2014

Dear Scot, Meghan, and Committee,

On behalf of the Eastern Division Conservation Science Office of The Nature Conservancy, University of Rhode Island's Graduate School of Oceanography, and the Division of Marine Fisheries (Massachusetts Department of Fish and Game) we would like to submit the final deliverables for the North Atlantic Landscape Conservation Cooperative award NALCC 2011-09 titled: "*Application of the Coastal and Marine Ecological Classification Standards (CMECS) to the Northeast.*" We are grateful for your support of this project.

The **final report** and all **deliverables** are attached via a large file transfer or you may also download them here: http://easterndivision.s3.amazonaws.com/Marine/CMECS_02062014.zip

These include:

1. A final report including:
 - a. Local, subregional and regional data sources used in the crosswalking process
 - b. CMECS crosswalk and mapping methodology
 - c. Descriptions of the classification units and detail on how each component was crosswalked
 - d. Crosswalking & mapping challenges
 - e. Recommendations for improving CMECS framework and CMECS units
 - f. Final local, subregional and regional scale crosswalked maps
 - g. Tables of source schemes units crosswalked to CMECS
 - h. List of Northwest Atlantic United States CMECS Habitats identified within this project
2. An excel spreadsheet for each crosswalked source scheme containing the source unit with accompany CMECS units with relationship and confidence classes as well as crosswalking notes. These can also be found as appendices in the final report.
3. CMECS maps (in final report) with habitats classified at the regional (1:5,000,000), subregional (1:250,000), and local (1:5,000) scales.

In addition to the deliverables we accomplished the following **project milestones**:

1. Presented intermediate project results at the Northeast Regional Ocean Council (NROC) Benthic Habitat committee on May 1st, 2013 in Gloucester, Massachusetts.
2. Presented final results at the final workshop of the NROC benthic habitat classification workshop on September 25th, 2013 in Narragansett, Rhode Island. We did not end up hosting this meeting as this final workshop was already planned; instead we were a presenter.
3. Project team was invited to present results at the NROC fall council Meeting on December 12th, 2013 in Narragansett, Rhode Island.
4. CMECS project website was created where the final report, crosswalk tables (local, subregional and regional), and the NAMERA crosswalked CMECS dataset will be posted in the near future. <http://nature.ly/EDcmecs>

5. Worked with CMECS implementation group members: Mark Finkbeiner (NOAA) and Kathy Goodin (NatureServe) for guidance on crosswalking datasets.
6. Sent final draft report to NROC Benthic Habitat committee for review.

Finally, here is a short **summary of the project**, you may use in your postings:

In the Northeast United States region, efforts are underway to better organize and integrate spatial marine data to support ocean planning and management efforts. An important step in this process is translating existing data with varying purposes, sources, methodologies, and optimal scales of application to a common language, so heterogeneous data can be viewed in a common, region-wide framework to better facilitate decision-making. The need for an inclusive and standardized approach to classifying marine habitats throughout the United States has resulted in the development of the Coastal Marine and Ecological Classification Standard (CMECS). CMECS provides a common language in which the terminology of existing schemes can be consistently crosswalked to a common schema. This project tested the utility of the classification standard in crosswalking and mapping legacy classified benthic habitat data at the local, subregional and regional scales. The results of this project will be useful in understanding how the standard can be used to maximize the utility of existing data and in developing methods to aid in crosswalking. In this project we crosswalked 40 existing classification schemes to CMECS from local (1:5,000), subregional (1:250,000), and regional (1:5,000,000) scaled datasets and provided maps for a select few schemes/datasets. At the local scale (small scale estuary-specific) we investigated high-resolution benthic information for Boston Harbor (Massachusetts). At the subregional scale we used datasets assembled for marine spatial planning efforts in Rhode Island and adjacent federal waters as well as representative schemes from Maine, New Hampshire and Connecticut. At the regional scale we applied the classification to The Nature Conservancy's Benthic Habitat Model from the Northwest Atlantic Marine Ecoregional Assessment (NAMERA) and The National Estuarine Research Reserve System Classification (NERRSC) scheme. All of our methods, results, crosswalks, maps challenges and recommendations are captured in the final submitted report and supplementary crosswalk table spreadsheet. We also summarized our work by creating a working list of Northwest Atlantic United States habitats representative of a wide range of marine environments throughout the region.

Thank you for support of this project and for the opportunity to test applying the CMECS at the local, subregional and regional scales. We hope this project will be useful as CMECS continues to evolve and we hope our methods and results will help future crosswalkers as they crosswalk existing and future datasets to CMECS.

Sincerely,



Mark Anderson Ph.D.
Director of Conservation Science
The Nature Conservancy: Eastern Divisions