

THE NATURE CONSERVANCY'S NORTHWEST ATLANTIC MARINE ECOLOGICAL ASSESSMENT: INTEGRATED PLANNING AND CONSERVATION OF COASTAL AND MARINE ENVIRONMENTS AND RESOURCES

*Sally Yozell, The Nature Conservancy
Jennifer Greene, The Nature Conservancy*

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The Nature Conservancy has developed a science-based ecoregional assessment framework that provides a vision of success for conserving the representative biodiversity of an ecoregion and identifies priorities for conservation action to achieve that vision. A marine ecoregional assessment synthesizes information from oceanography, chemistry, geology, biology, and social science to provide a snapshot of coastal and marine ecosystems. By integrating this information at a regional level, we will provide a greater understanding of the interrelated biological diversity of an ecoregion, a clearer picture of the condition of its natural areas, and the challenges to their continued survival. These assessments are designed to identify a portfolio of priority sites for natural resource management and a full range of conservation strategies that will be evaluated based on ecological, social, economic and political needs of individual places.

In this presentation, we will review the rationale for the Northwest Atlantic Marine Ecoregional Assessment (NAM ERA) and give an overview of the products from the two phases of the project. The geographic extent of the NAM ERA spans from Cape Hatteras in North Carolina to the northern limit of the Gulf of Maine and extends out to the continental shelf/slope. The ecoregion has been subdivided into three biogeographic subregions to facilitate appropriate data stratification and development of appropriate conservation priorities and strategies (Mid-Atlantic Bight, Southern New England, and the Gulf of Maine). Ten categories of targets were identified as the primary structure for the assessment and include coastal and estuarine habitats, benthic habitats, diadromous fish, demersal fish, pelagic fish, forage fish, nearshore shellfish, shorebirds and seabirds, marine mammals, and sea turtles. The first phase of this plan provides a robust, transparent, and distributable baseline of information, to serve as a resource to marine decision makers and managers with a wide range of interests, including marine spatial planning, ecosystem-based management, and regional ocean governance. This phase also includes a geodatabase, downloadable GIS data, and a web mapping application to allow for easy access of the data. Additionally, the second phase of the assessment will include the use of decision support tools to integrate information about human uses, economics and biodiversity that will support ecologically identified areas. The outcome of this effort is to create an integrated marine ecosystem assessment or baseline that will be accepted and used by decision makers and partners so as to improve conservation action at all levels of engagement.

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Sally Yozell
The Nature Conservancy
Eastern U.S Region
11 Avenue De Lafayette
Boston, MA 02111
syozell@tnc.org
(617) 542-1908