MARCO
Mid-Atlantic Regional Council on the Ocean

Scopes and Objectives for Information Synthesis to Support Mid-Atlantic Regional Ocean Planning

In support of Mid-Atlantic regional ocean planning efforts, the Mid-Atlantic Regional Council on the Ocean (MARCO) continues to manage three projects for data and information synthesis. Scopes and objectives for information synthesis projects are meant to complement each other, and there is coordination across projects and with stakeholders. Summary information for these projects is provided below:

Ecological Data Synthesis Project:

Objectives/Outcomes: The Ecological Data Synthesis project is being conducted by the Marine Life Data & Analysis Team (MDAT), led by Duke University Marine Geospatial Ecology Lab, NOAA National Center for Coastal Ocean Science, NOAA Northeast Fisheries Science Center, and Loyola University. The project seeks to *develop the Mid-Atlantic regional marine life database and web services* by hosting marine mammal, sea turtle, avian, and fish data products, as well as other synthesized ecological data (including corals, canyons and other benthic habitats) for use in desktop GIS systems and data portals, in particular the Mid-Atlantic Ocean Data Portal. As part of this objective, the MDAT will produce maps of distribution and abundance for diverse species. Spatial data products will include models based on observations and environmental co-variates, observation based density maps for fishes and a suite of maps that characterize uncertainty for model based products. MDAT will also provide technical support at MARCO and Mid-Atlantic Regional Planning Body (MidA RPB)-sponsored meetings with state, federal, and tribal entities to ensure the utility of the information for decision-making. MDAT will develop synthetic data products and overlays to identify preliminary areas of ecological richness across multiple taxonomic groups, including additional habitat considerations. The final product set will be completed in December 2015.

Human Use Data Synthesis Project:

Objectives/Outcomes: The Human Use Data Synthesis (HUDS) project, led by RPS ASA and SeaPlan, seeks to *compile spatial data on human uses and develop synthesized data products and tools* to advance ocean planning priorities in the Mid-Atlantic region. Work products will support decision-makers' consideration of human use data. The team will characterize the strengths and caveats associated with the project's available human use data and develop synthesis methods and new spatial data products in consultation with MARCO and the Mid-Atlantic Ocean Data Portal Team. A new data summary tool will be developed to reveal and highlight locations where multiple uses occur, identify patterns of use intensity, provide summary information for user selected ocean areas, and help illustrate where improved Inter-jurisdictional Coordination (IJC) will benefit ocean health and promote sustainable use. The project team will produce a final report to include:

- Summary of human use data prioritization criteria,
- Evaluation of available human use data,
- Documentation of data gaps,
- Summary of identified potential future human use data, and
- Data synthesis methods and guidance for use of an interactive summary tool.

The project team will also develop clear user-friendly fact sheets for all synthesis products that describe the human use data sets and explain caveats, collection methods, interpretability, and any classification or scaling techniques that were applied. The HUDS final product will be completed in December 2015.

Regional Ocean Assessment Project:

Objectives/Outcomes: The Regional Ocean Assessment (ROA) project, led by Waterview Consulting and E&C Enviroscape, seeks to *characterize ocean uses and resources in the Mid-Atlantic* with a priority focus on two broad ocean planning goals: Healthy Ocean Ecosystems and Sustainable Ocean Uses. The project will also develop an innovative, dynamic, and easily updated web-based system to deliver the final ROA product. The project team will gather, integrate, and distill the best available information from publications, data sources, subject-matter experts, and related MARCO projects to characterize biological, chemical, ecological, physical, cultural, economic, and historical conditions of the Mid-Atlantic Ocean.

The project will:

- Highlight relationships and potential linkages between and among ecosystem features and human uses;
- Highlight knowledge/data gaps by assessing data using a common framework and metrics;
- Suggest appropriate scales of interpretation, analysis, and application of data for decision-making; and
- Provide information needed to jumpstart potential new data products that address ecosystem services valuation, definition of ecologically rich areas, cumulative impact analysis and/or vulnerability, and resilience assessments.

The project will produce a dynamic digital information resource that conveys the best available scientific information in an engaging and useful way. It will also serve as a quick reference and summary to MidA RPB members, agencies and the public on the best available information for decision-making. The ROA final product will be completed in January 2016.