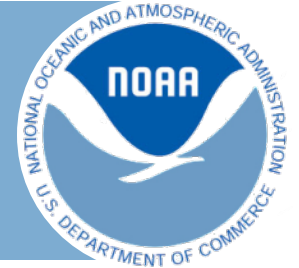




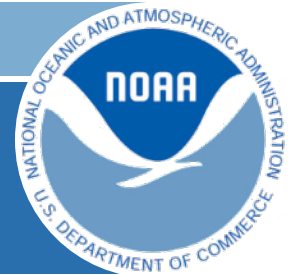
UNITED STATES DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION



# CMSP Policy Developments and Coastal Information Systems in the United States

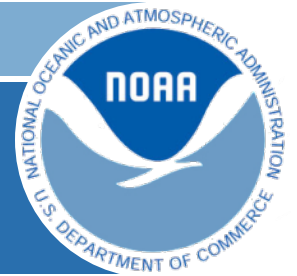
International Coastal Atlas Network (ICAN) Workshop 5  
Oostende, Belgium

August 31, 2011

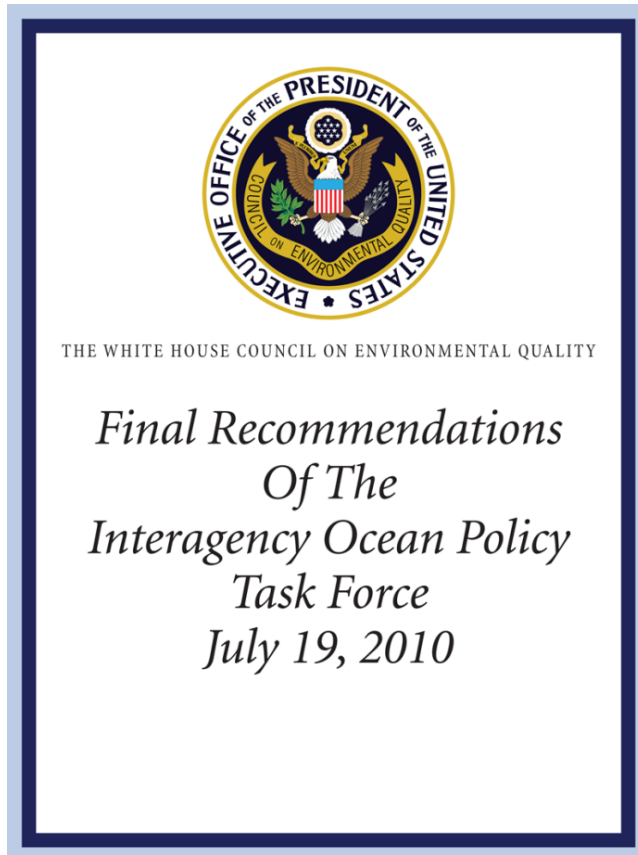


# Discussion Topics

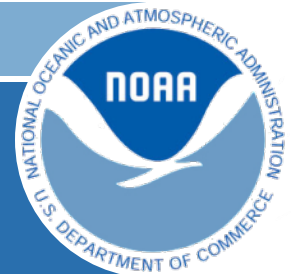
- Review National Ocean Council (NOC) efforts to develop the National Information Management System (NIMS)
- Examine planned functionality in NIMS prototype
- Highlight planned activities for the coming year



# Creating a National Ocean Policy



- National Ocean Policy
- National Ocean Council
- 9 National Priority Objectives
- Framework for Coastal and Marine Spatial Planning (CMSP)

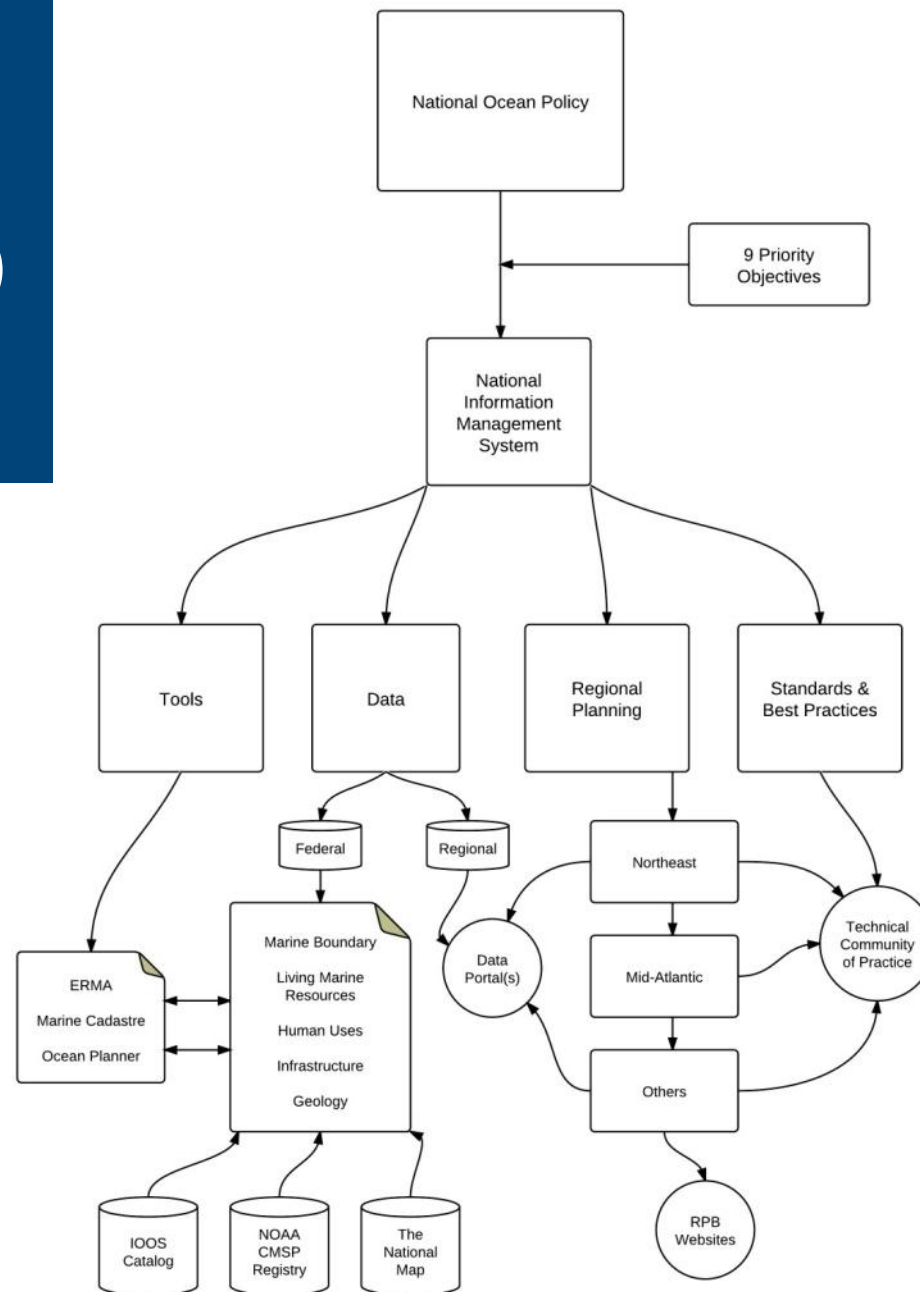


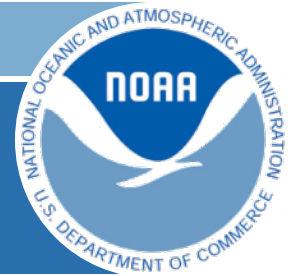
# National Information Management System (NIMS)

*'A robust national information management system dedicated to coastal and marine scientific data and information products is required to meet the diverse data and application requirements of CMSP, and the varying technical capabilities of users.'*

- Responsive to CMSP user requirements at all levels
- Compatible with existing Federal information initiatives
- Built upon existing national data systems and resources
- Has effective governance and accountability across agencies
- Interagency NOC Data Working Group
  - Consists of 15 Federal agencies and reports to NOC Steering Committee
  - Developing NIMS Prototype in partnership with GSA and Data.gov
  - Identifying strategies for a collaborative approach for long-term management of the NIMS

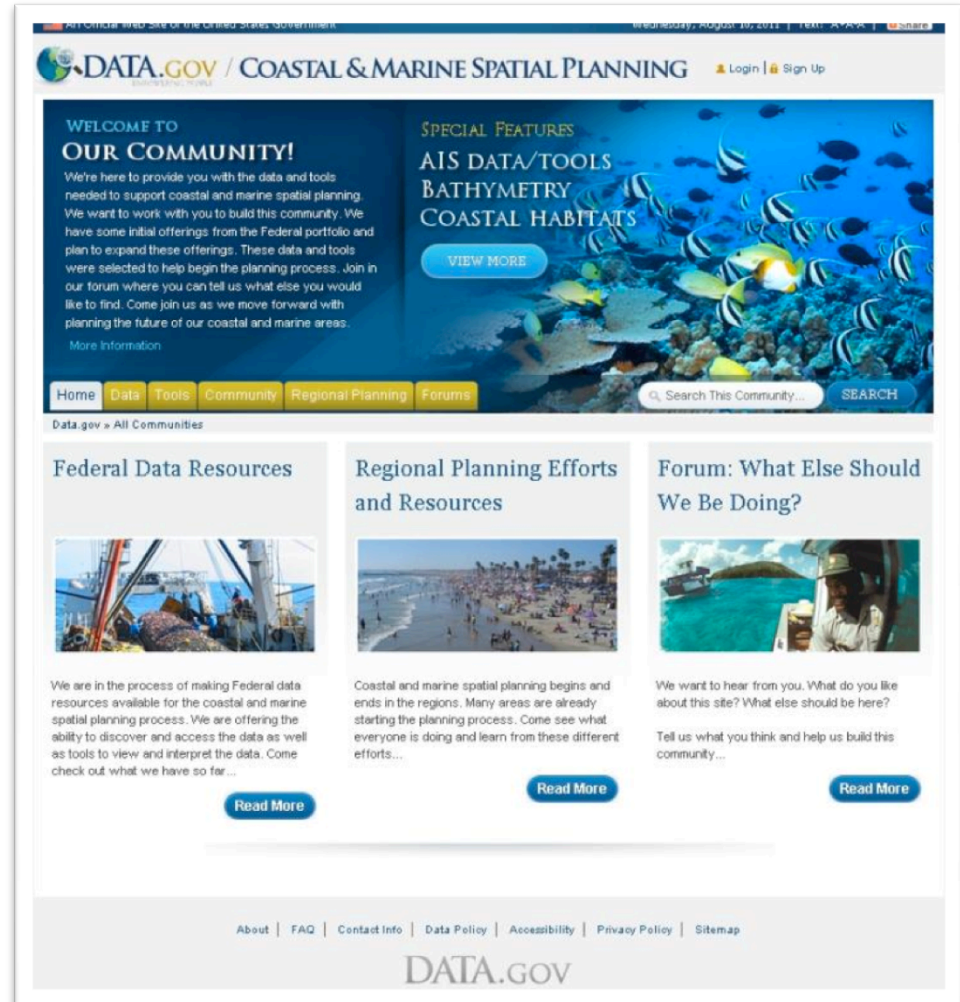
# National Information Management System (NIMS) Conceptual Diagram

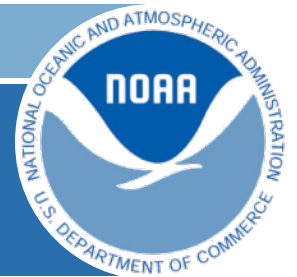




# NIMS Demonstration

- NIMS will be a Community of Practice hosted on Data.gov, US government's principal open government data portal
- Geospatial One-Stop migration





# NIMS Demonstration - Data

## Coastal and Marine Spatial Planning Data

Welcome to the Coastal and Marine Spatial Planning data page. Explore, discover and access a variety of rich spatial and non-spatial data. This page will be frequently updated and enhanced based on feedback from the forums.

**Coming Soon**

Search

National/Federal  All

**Featured Data**

- Benthic Cover Data**  
NOAA  
Nearshore benthic habitat polygons derived from aerial optical or swath acoustic imagery  
[More Info](#) [Get It Now](#)
- Estuarine Bathymetry**  
NOAA  
Digital raster compilation of hydrographic survey data for selected U.S. estuaries  
[More Info](#) [Get It Now](#)
- Marine Jurisdictions**  
NOAA  
Authoritative U.S. marine boundaries depicting the sovereignty and jurisdiction over maritime areas  
[More Info](#) [Get It Now](#)
- National Wetlands Inventory**  
U.S. Fish and Wildlife Service  
Vector data depicting the extent and status of the wetlands  
[More Info](#) [Get It Now](#)
- Offshore Wind Resource Potential**  
National Renewable Energy Laboratory and NOAA  
Vector data set depicting offshore annual average wind resource  
[More Info](#) [Get It Now](#)

**Featured Resources**

- Digital Coast
- Marine Cadastre
- NOAA CMSP Registry
- National Map
- IOCM Catalog

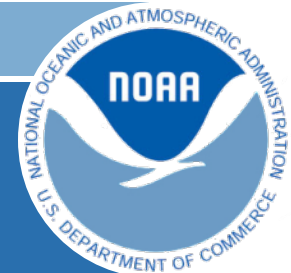
**DATA.GOV / COASTAL & MARINE SPATIAL PLANNING**

Coastal and Marine Spatial Planning Data

**Full Inventory**

- Albers**  
Research highway-level data for the world and observational data for North America, Europe and more.  
Web Map by user (last modified: May 22, 2012)  
5 stars (13 ratings, 6 comments, 10479 views)
- Swath Topographic Basemap**  
Swath topographic basemap built from 100000+ data maintained by the Dutch Coastal Data Center.  
Web Map by user (last modified: July 1, 2012)  
5 stars (17 ratings, 0 comments, 1905 views)
- Ocean Basemap**  
The ocean basemap includes bathymetry, surface and subsurface feature names, and derived depths.  
Web Map by user (last modified: June 26, 2012)  
5 stars (13 ratings, 2 comments, 10100 views)
- Topographic**  
Topographic data which includes boundaries, elevations, water features, all geographic features, parks, infrastructure, transportation, and buildings.  
Web Map by user (last modified: May 22, 2012)  
5 stars (17 ratings, 0 comments, 10000 views)
- Imagery**  
Satellite imagery for the world and high-resolution aerial imagery for coastal areas. You can look at images showing boundaries, streets, and transportation including street names.  
Web Map by user (last modified: April 2, 2012)  
5 stars (17 ratings, 0 comments, 10000 views)
- AccGIS Online Basemap Tour**  
An AccGIS Explorer Online presentation providing a tour of AccGIS Online Basemap.  
Web Map by user (last modified: July 1, 2012)  
5 stars (0 ratings, 0 comments, 0 views)

- Provide access to metadata, datasets, and web map services
- Catalog approach and geospatial functionality currently in development
- Esri part of contract team



# NIMS Demonstration - Tools

- Access to a range of decision support tools, widgets, and methodologies
- Ability for users to nominate tools for inclusion in the NIMS site

DATA.GOV / COASTAL & MARINE SPATIAL PLANNING

Home Data Tools Community Regional Planning Forum

TOOLS

Science and data are fundamental to effective coastal and marine spatial planning (CMSP). Comprehensive CMSP involves complex analyses of the status and potential uses of 3-dimensional areas of coastal, marine and Great Lakes ecosystems (including the water column) and their potential changes over time. Therefore, relevant spatial data and derived interpretive and analytical products will help inform all phases of the CMSP process, including:

- identification of regional objectives for the long-term use and conservation of specific areas;
- assessment of the status and trends of ecosystems, resources, and human uses;
- creation, long-term implementation and adaptive management of comprehensive CMS plans to sustainably match those uses to appropriate areas; and
- assessment of CMSP effectiveness in achieving established objectives. (Draft National Information Management System for CMSP, Version 4, 18 April 2011).

The Center for Ocean Solutions produced a **Decision Guide** intended to assist resource planners and managers (practitioners) in selecting appropriate Decision Support Tools (DSTs) that can help enable effective coastal and marine spatial planning. Several existing DSTs were assessed for their relevancy to the CMSP process.

### Selecting the Appropriate DST

DSTs that enable practitioners to make well-informed decisions at each marine spatial planning process step must possess certain critical functional elements. Tool functions can be divided into six categories, including:

- **Data management** refers to tools that improve efficiency of data gathering and management and help to *Gather Data & Define Current Conditions*. ([more](#))
- **Mapping and visualization** functionality is important throughout the process from *Defining Current Conditions to Refining Goals and Objectives*. ([more](#))
- **Alternative scenario development and analysis** is a major function provided by DSTs that can aid in *Identifying Issues, Constraints, and Future Conditions; Developing Alternative Management Measures; and Evaluating Alternative Management Measures*. ([more](#))
- **Management measure option proposal** is an important tool function that can aid in *Developing Alternative Management Measures and Evaluating Alternative Management Measures*. ([more](#))
- **Stakeholder participation and collaboration, and community outreach and engagement** are important throughout all steps of the planning process. ([more](#))
- DSTs that incorporate **adaptive management and assessment of achieving objectives** functionality into their tools are important for *Evaluating Alternative Management Measures, Monitoring and Evaluating Management Measures, and Refining Goals and Objectives*. ([more](#))

### Applicable Tools

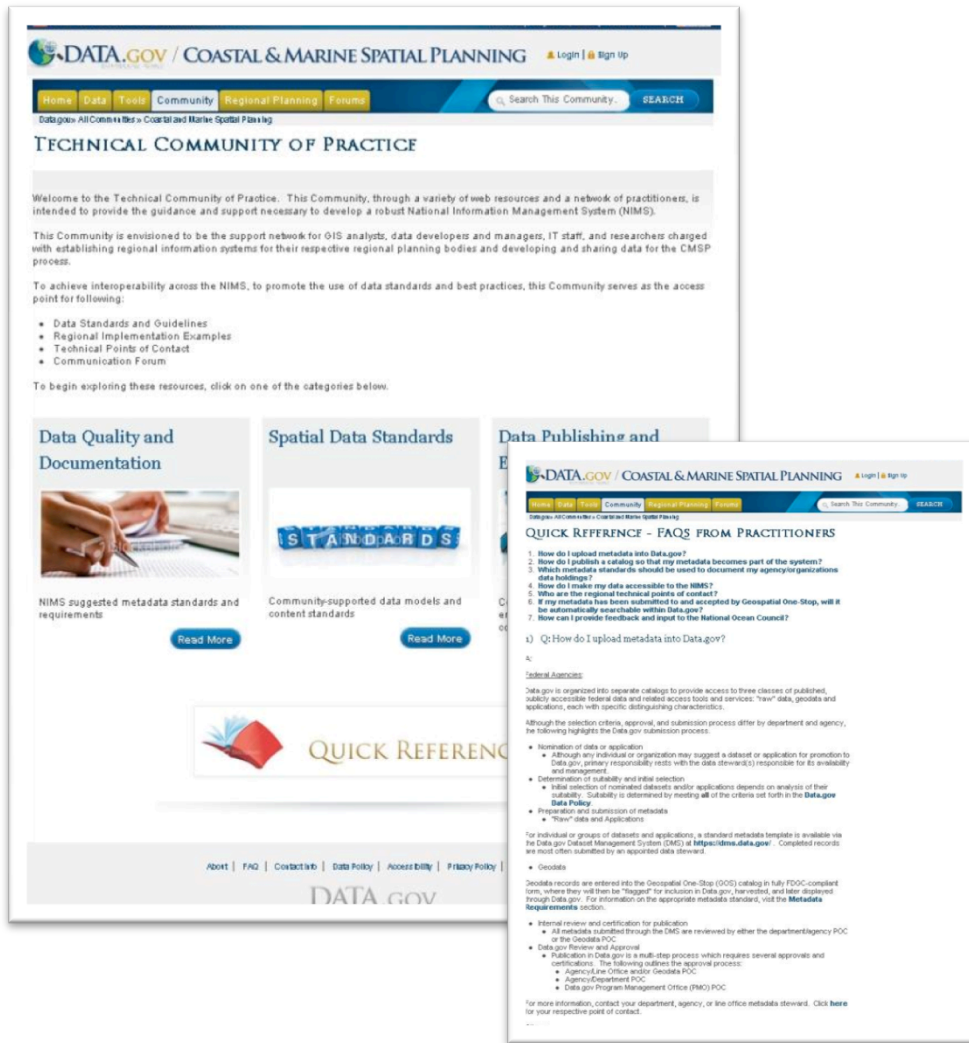
Click on each tool to learn more about its purpose, how it works, and applications.

- **Artificial Intelligence for Ecosystem Services (ARIES)**
- **Atlantis**
- **Coastal Resilience**
- **Cumulative Impacts**
- **Digital Coast**
- **InVEST**
- **MarineMap**
- **Marxan with Zones**
- **Multi-scale Integrated Models of Ecosystem Services (MIMES)**
- **Multipurpose Marine Cadastre (MMC)**

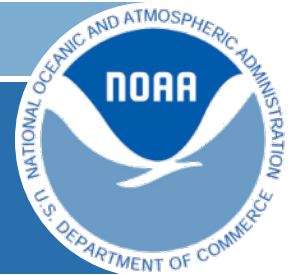
**NOMINATE AND DISCUSS OTHER TOOLS**



# NIMS Demonstration - Tech Support

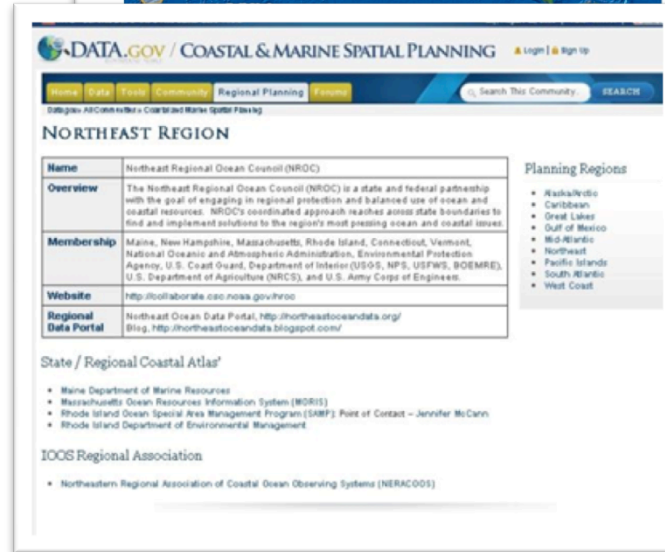


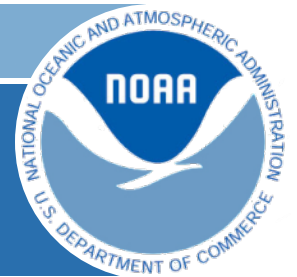
- Data standards, guidelines, and best practices
- Regional implementation examples
- Technical points of contact
- Communication forum



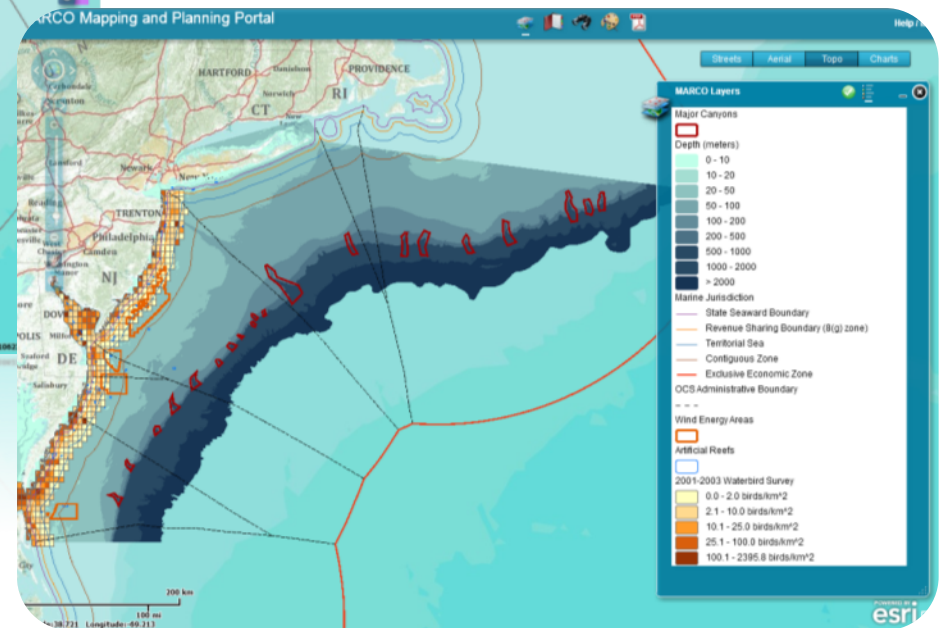
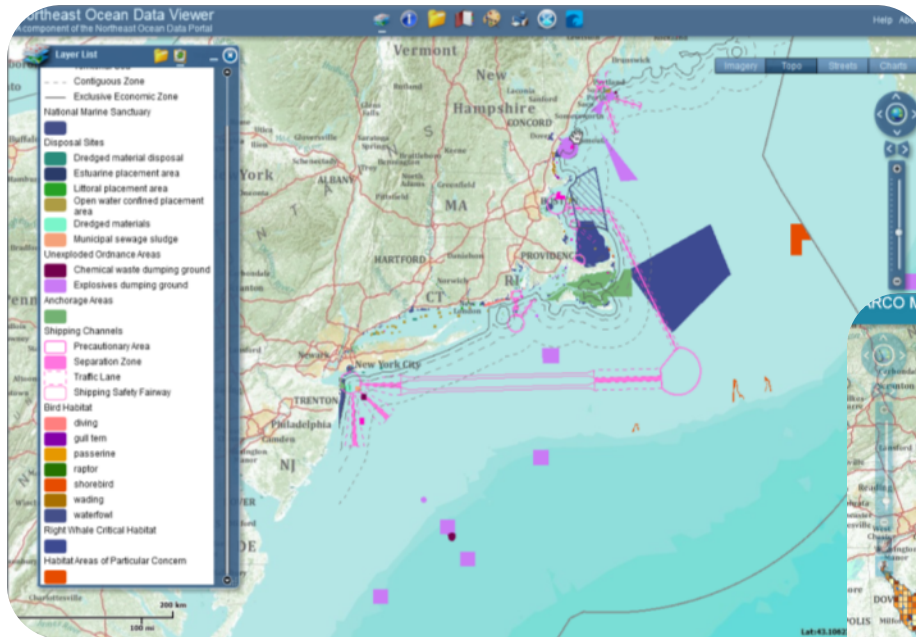
# NIMS Demonstration - Regional

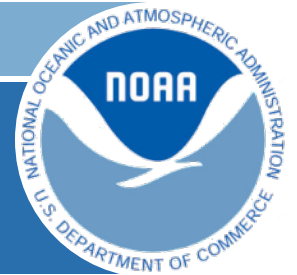
- Helping to foster a community practitioners who are developing regional level information systems to support regional CMSP strategic plans





# Regional Data Portals





# Wind Energy Siting Multipurpose Marine Cadastre (MMC)

**Choose Task**

- Filter Lease Blocks
- Make Report and Perform Analysis

Depth And Distance	Boundaries and Dumping Grounds	Wind and Geology
Min/Max Depth (in feet):	0ft 25ft 50ft 75ft 100ft 125ft 150ft 175ft 200ft 225ft 250ft	
Min/Max Nautical Miles from shore:	0M 5M 10M 15M 20M 25M 30M 35M 40M 45M 50M	
Min Nautical Miles from shipping lanes:	0.25 0.5 0.75 1 2 3 4 5 6	

**Other Data Of Interest**

Habitat Areas of Particular Concern [Show](#)

Critical Habitat Areas [Show](#)

**Report On Selected Lease Blocks**

Number Selected: 9

**Shallowest Depth**  
Minimum: 80 feet Average: 106.67 feet

**Distance From Shore**  
Minimum: 13.1 M Maximum: 59.07 M Average: 16.55 M

**Distance from Shipping Lanes**  
Minimum: 8.38 M Maximum: 45.24 M Average: 11.78 M

**WSE Wind Speed (30m (90 meter high))**  
Minimum: 8.38 m/s Maximum: 9.63 m/s Average: 9.44 m/s

**Types of Sediment**

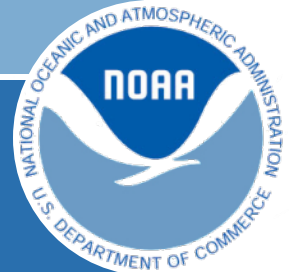
**Habitat Areas of Particular Concern**

No Habitat Areas of Particular Concern found in selected lease blocks.

**Critical Habitat Areas**

No Critical Habitat Areas found in selected lease blocks.

POWERED BY



## Upcoming Activities

- Release of prototype CMSP National Information Management System (NIMS) - late 2011
- Migration of Geospatial One-Stop to Data.gov (NIMS hosting environment) - late 2011
- Release of Strategic Action Plans (SAP) for each of the nine National Ocean Policy Priority Objectives - early 2012
- Continuing development of regional information systems and integration with the CMSP NIMS - ongoing