

The Multipurpose Marine Cadastre

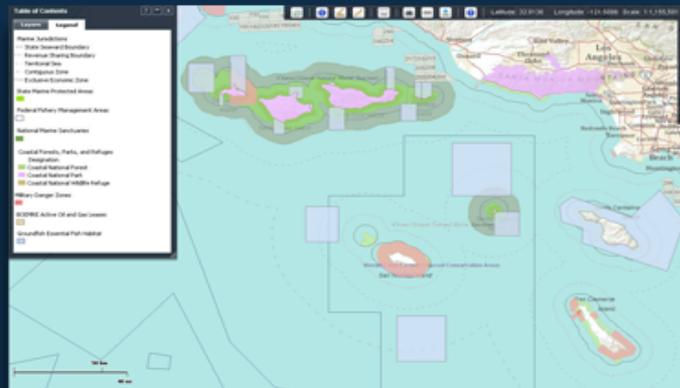
**A Tool for Planning & Decision Making
in the Marine Environment**

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Coastal Services Center**



MMC Viewer and Data Registry

The Multipurpose Marine Cadastre (MMC) is an integrated marine information system that provides authoritative and regularly updated ocean information, including offshore boundaries, infrastructure, human use, energy potential, and other data sets. The MMC is especially useful to those looking to assess suitability for ocean uses, such as energy siting. Data can be viewed in the national viewer or downloaded from its original source.

[Launch the Viewer](#)
[Access the Data](#)

Highlights

MARCO Uses the Multipurpose Marine Cadastre

Click on the Mid-Atlantic region of the In Practice map to see how the Mid-Atlantic Regional Council on the Ocean (MARCO) has used the Multipurpose Marine Cadastre (MMC), along with its planning portal, to ...

Offshore Wind Energy Data Now Available

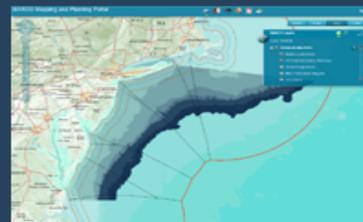
The Department of Interior's Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) officially released Wind Energy Areas (WEA's) for New Jersey, Delaware, Maryland, and Virginia. A link to view these data is listed ...

[Read More](#)

Map Gallery


[View and create custom maps](#)

Regional Resources


[Visit regional portals and atlases](#)

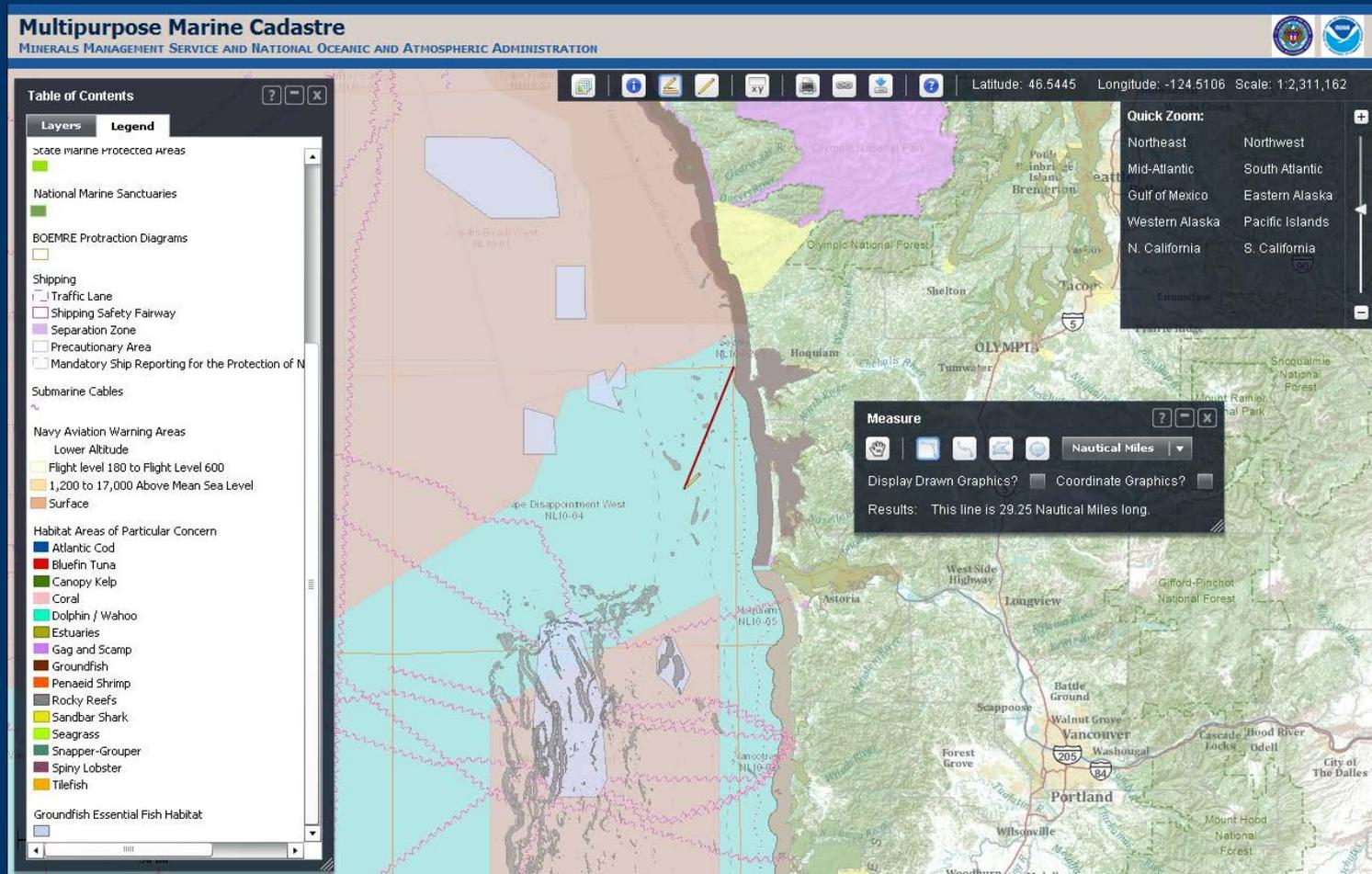
Need to Know

- [How to use the map gallery](#)
- [How to view MMC data services in ArcMap](#)
- [Tips and tricks for using the national viewer](#)

[Get other technical support](#)

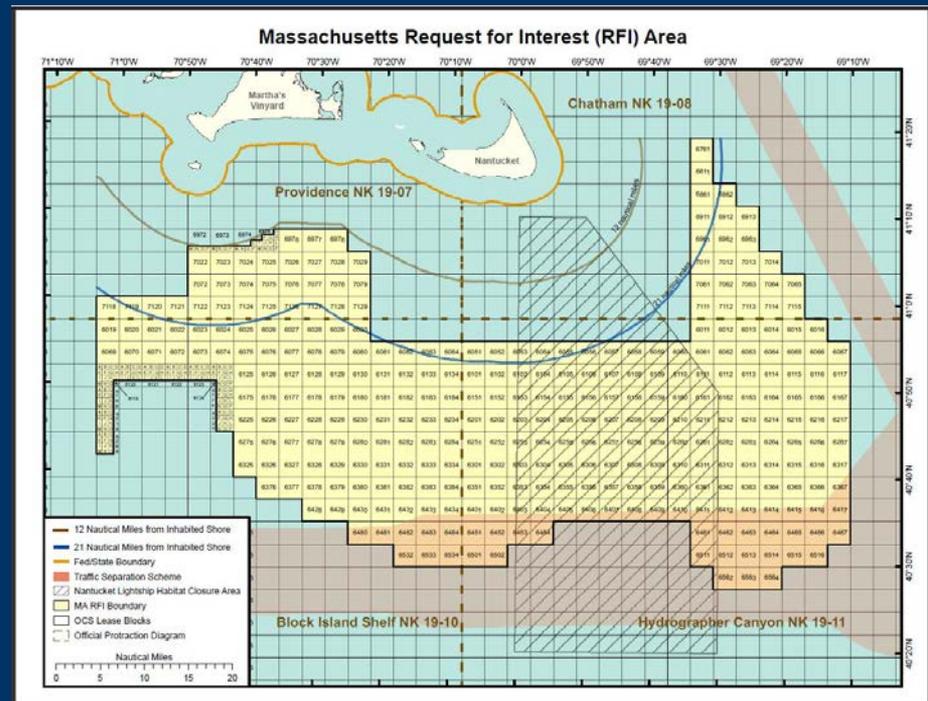
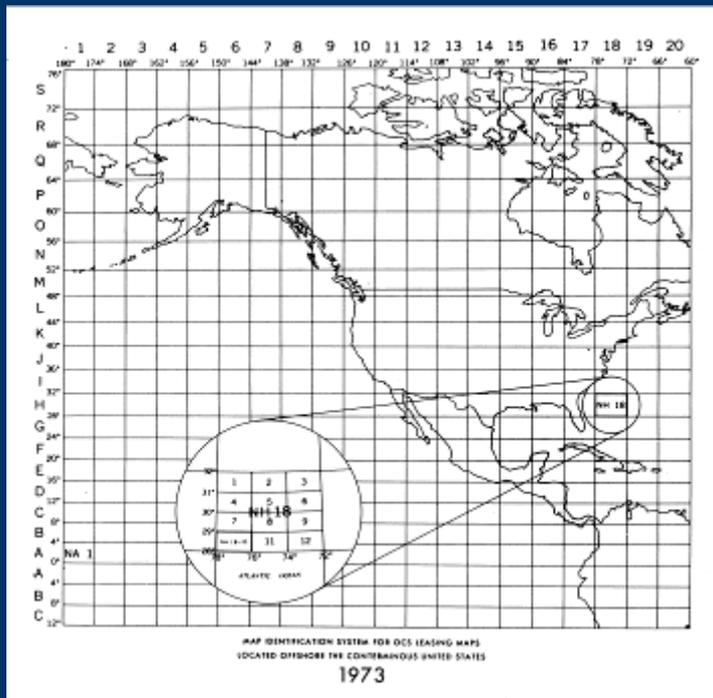
Multipurpose Marine Cadastre

A marine information system for the outer continental shelf and state waters that provides a data framework to support decision making.



What is a Marine Cadastre?

“A marine cadastre is a system to enable the boundaries of maritime rights and interests to be recorded, spatially managed and physically defined in relationship to the boundaries of other neighboring or underlying rights and interests .”
(Robertson et al., 1999)



Multipurpose Marine Cadastre

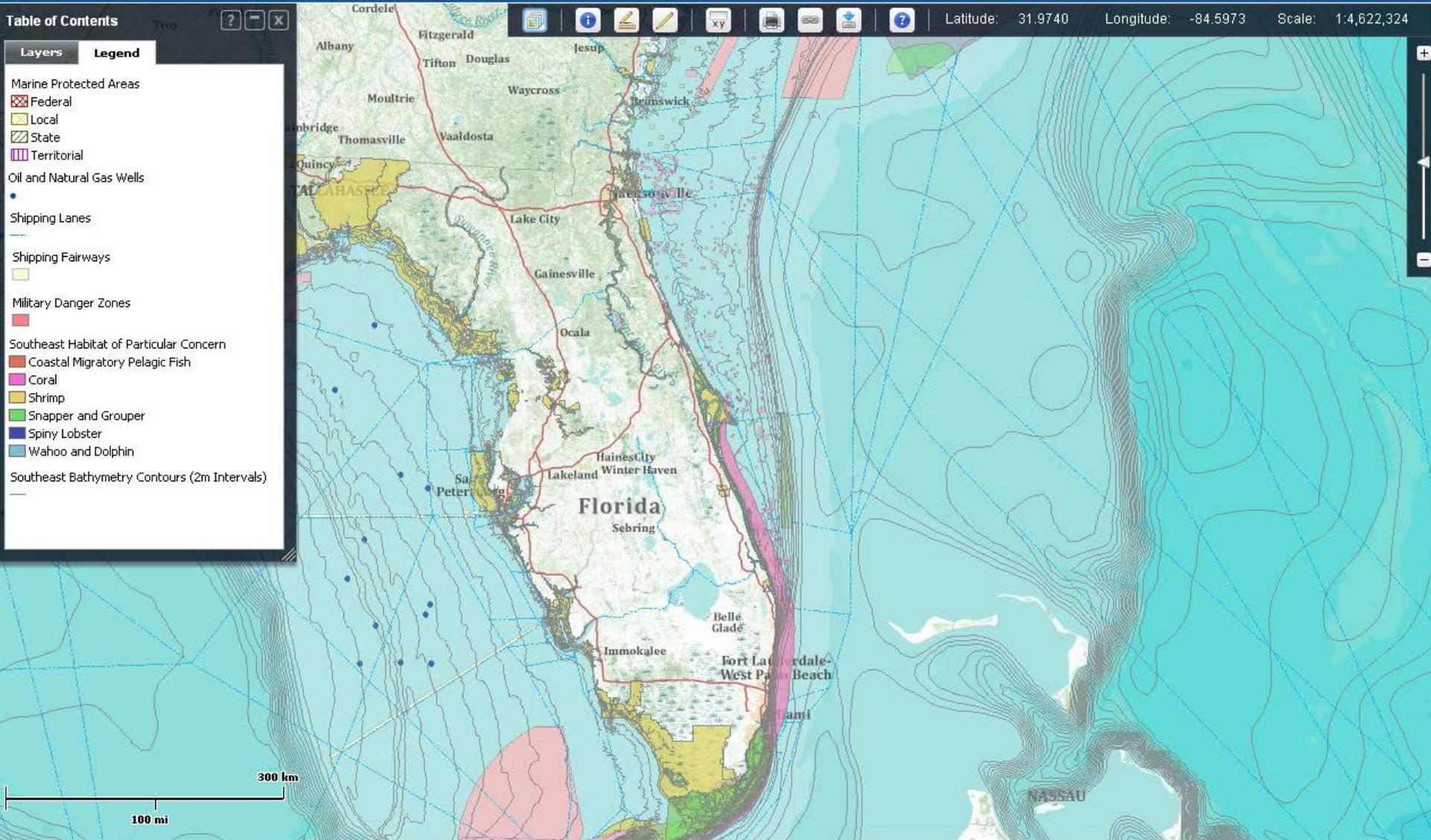
MINERALS MANAGEMENT SERVICE AND NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



Table of Contents

Layers

- Marine Protected Areas
 - Federal
 - Local
 - State
 - Territorial
- Oil and Natural Gas Wells
- Shipping Lanes
- Shipping Fairways
- Military Danger Zones
- Southeast Habitat of Particular Concern
 - Coastal Migratory Pelagic Fish
 - Coral
 - Shrimp
 - Snapper and Grouper
 - Spiny Lobster
 - Wahoo and Dolphin
- Southeast Bathymetry Contours (2m Intervals)





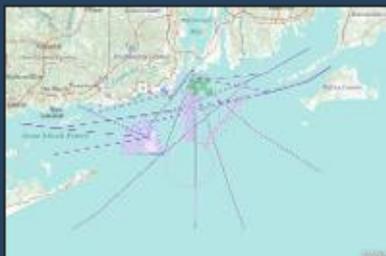
Map Gallery

The gallery contains custom maps displaying a variety of marine data. Click on the links to view, modify, or customize maps from the gallery.



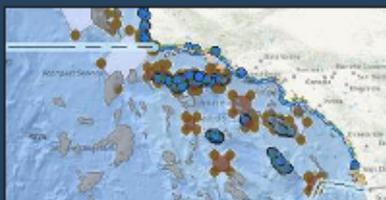
Whale Occurrences and Navigation Channels

This map depicts whale occurrences and navigation channels in the North Atlantic.

[Details](#)[Open Map](#)

Recreational Uses in Rhode Island

This map depicts offshore human uses and navigation areas near Rhode Island.

[Details](#)[Open Map](#)

Marine Habitat and Ocean Uses in California

This map displays marine habitat data and aquaculture activities in California.

[Details](#)[Open Map](#)

MMC Components

Authoritative Spatial Data

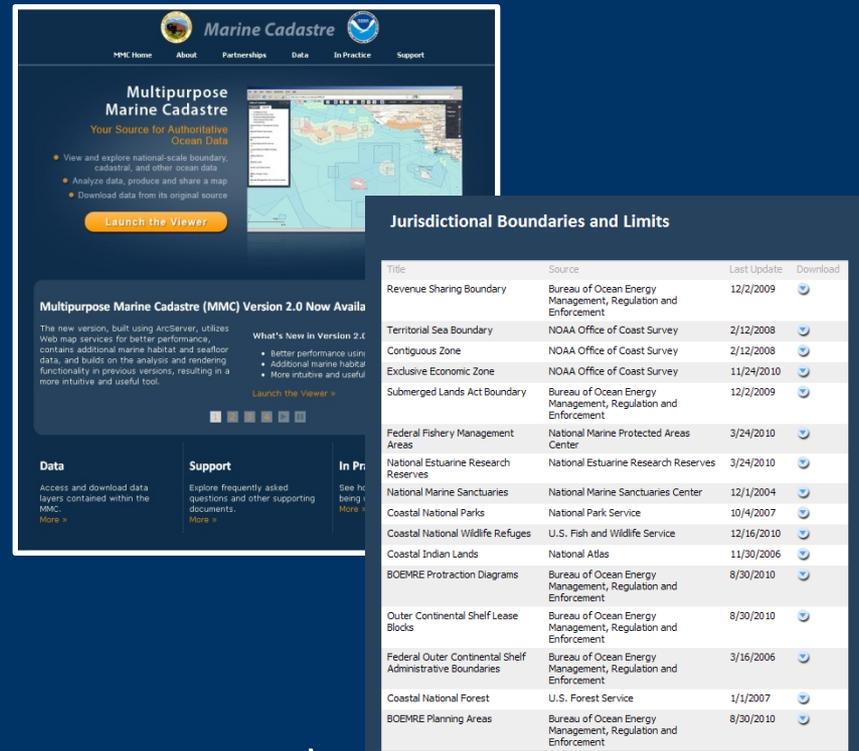
- Access to authoritative federal data resources
- Development of framework base layers
 - marine jurisdictions
 - shipping
 - regulated areas

Web Map Viewer

- Data visualization
- Map generation
- Plotting
- Measuring

Technical support/consultation

- Code library, best practices, one –on–one support



The screenshot displays the Marine Cadastre website interface. The main heading is "Multipurpose Marine Cadastre" with the subtitle "Your Source for Authoritative Ocean Data". Below this, there are three bullet points: "View and explore national-scale boundary, cadastral, and other ocean data", "Analyze data, produce and share a map", and "Download data from its original source". A "Launch the Viewer" button is prominently displayed. To the right, a map viewer is visible, showing a map of the United States with various marine boundaries overlaid.

Below the main heading, there is a section titled "Multipurpose Marine Cadastre (MMC) Version 2.0 Now Available". This section includes a brief description of the new version and a "What's New in Version 2.0" section with three bullet points: "better performance using Web map services for better performance", "Additional marine habitat data, and builds on the analysis and rendering functionality in previous versions, resulting in a more intuitive and useful tool.", and "More intuitive and useful".

At the bottom of the page, there are three columns of links: "Data" (Access and download data layers contained within the MMC. More >), "Support" (Explore frequently asked questions and other supporting documents. More >), and "In Practice" (See how we're being used. More >).

On the right side of the screenshot, there is a table titled "Jurisdictional Boundaries and Limits". The table has four columns: Title, Source, Last Update, and Download. The data is as follows:

Title	Source	Last Update	Download
Revenue Sharing Boundary	Bureau of Ocean Energy Management, Regulation and Enforcement	12/2/2009	Download
Territorial Sea Boundary	NOAA Office of Coast Survey	2/12/2008	Download
Contiguous Zone	NOAA Office of Coast Survey	2/12/2008	Download
Exclusive Economic Zone	NOAA Office of Coast Survey	11/24/2010	Download
Submerged Lands Act Boundary	Bureau of Ocean Energy Management, Regulation and Enforcement	12/2/2009	Download
Federal Fishery Management Areas	National Marine Protected Areas Center	3/24/2010	Download
National Estuarine Research Reserves	National Estuarine Research Reserves	3/24/2010	Download
National Marine Sanctuaries	National Marine Sanctuaries Center	12/1/2004	Download
Coastal National Parks	National Park Service	10/4/2007	Download
Coastal National Wildlife Refuges	U.S. Fish and Wildlife Service	12/16/2010	Download
Coastal Indian Lands	National Atlas	11/30/2006	Download
BOEMRE Protraction Diagrams	Bureau of Ocean Energy Management, Regulation and Enforcement	8/30/2010	Download
Outer Continental Shelf Lease Blocks	Bureau of Ocean Energy Management, Regulation and Enforcement	8/30/2010	Download
Federal Outer Continental Shelf Administrative Boundaries	Bureau of Ocean Energy Management, Regulation and Enforcement	3/16/2006	Download
Coastal National Forest	U.S. Forest Service	1/1/2007	Download
BOEMRE Planning Areas	Bureau of Ocean Energy Management, Regulation and Enforcement	8/30/2010	Download



Why is the Multipurpose Marine Cadastre Valuable?

- Improves coordination and decision making
- Venue to resolve and modernize boundaries
- Venue for new data
- Relevant to all ocean planning issues
- Reduces data costs for users

Who's Using the Multipurpose Marine Cadastre?

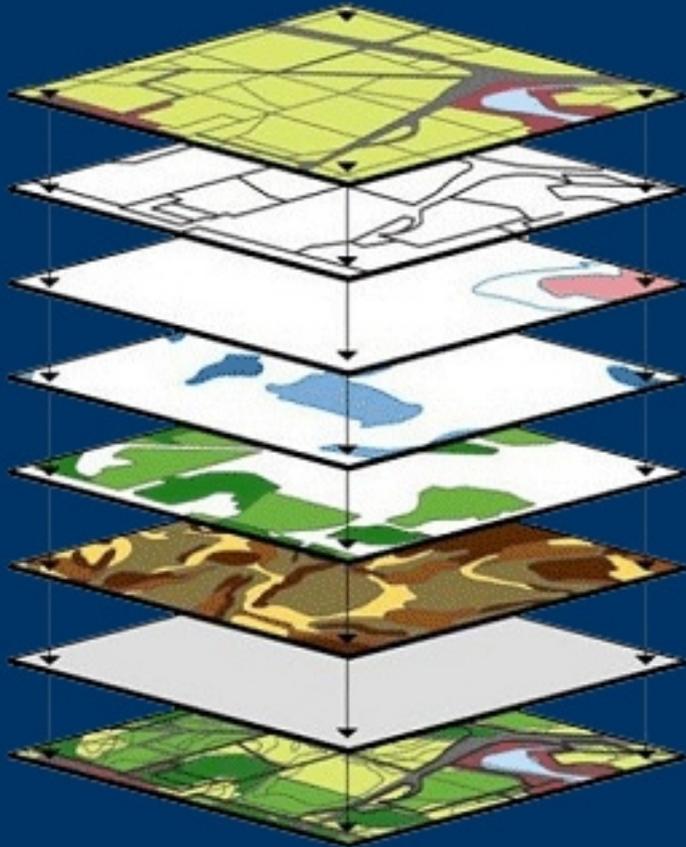
- Bureau of Ocean Energy Management Regulation and Enforcement
- Regional Ocean Councils – NROC, MARCO
- NOAA – Fisheries, ERMA
- Energy Industry
- Policy Makers

Data Providers

- Bureau of Ocean Energy Management , Regulation and Enforcement (BOEMRE)
- NOAA Office of Coast Survey
- NOAA National Marine Sanctuaries
- NOAA Marine Protected Areas
- NOAA Fisheries
- U.S. Fish and Wildlife Service
- National Park Service
- Department of Defense (DoD)
- Coast Guard
- Department of Energy
- The Nature Conservancy – (pending)



Multipurpose Marine Cadastre Data Themes



Jurisdictional Boundaries

Federal Agency Regions

Federal Georegulations

Navigation & Marine Infrastructure

Marine Habitat & Biodiversity*

Human Uses*

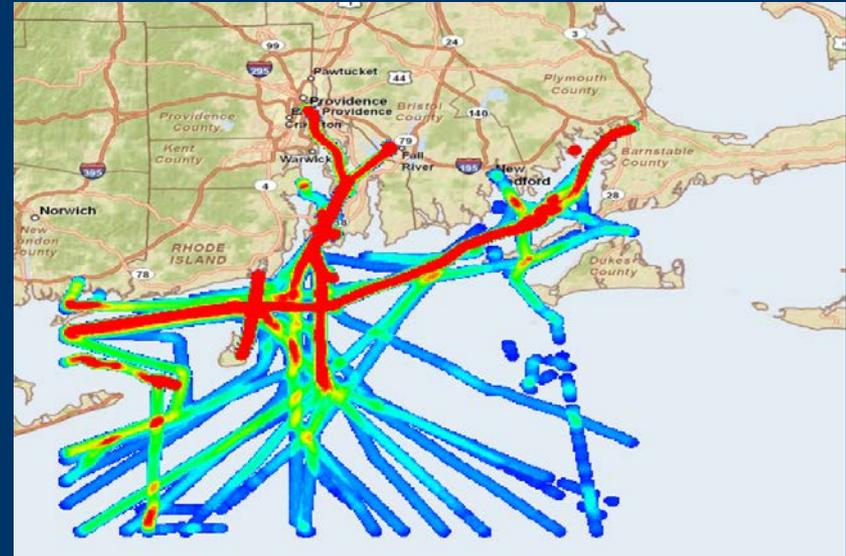
Physical and Oceanographic

Basemaps

* Denotes significant gaps in data

Data We're Working On

- Marine Mammal Data
- Turtle Data
- Avian Data
- Navy/NGA Areas
- Raster Nautical Chart background
- Selected State planning data
- AIS tracks and hot/cold maps
- Hurricane and extra-tropical storms
- IOOS data collector locations
- Environmental Studies Footprints with links to studies.
- TNC NAMERA – selected layers



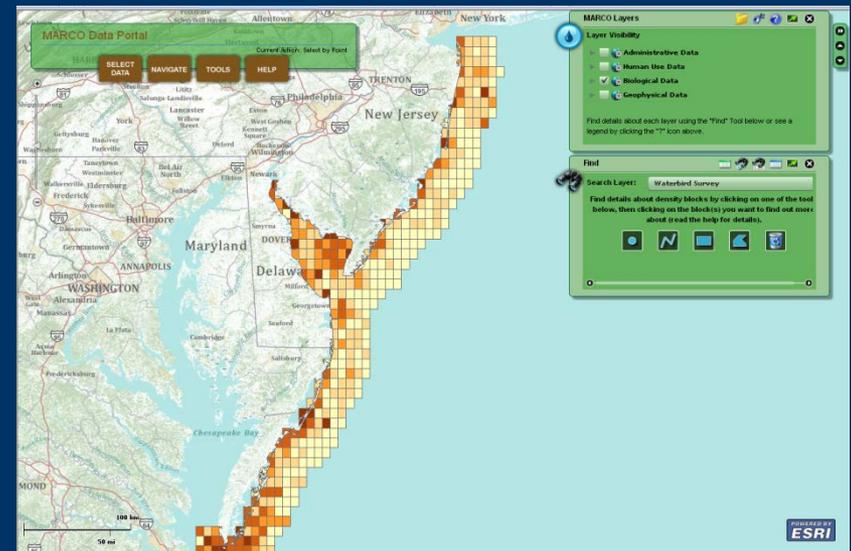
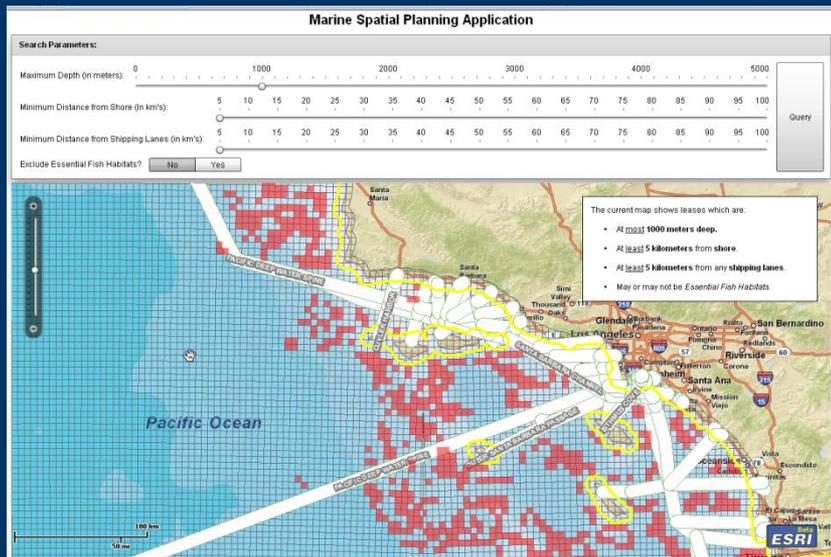
Improvements for the Near Future

- Enhanced and new data sets
- Improve current tools, and provide new tools based on user feedback (reporting, select by, add WMS, etc)
- Links to data not available on the viewer (too complex for the viewer)
- Links to other similar portals
- Community of practice (standards, how to's, etc)
- Links to other Decision Support Tools
- AIS converter and specialized output tools (stand alone for ArcMap users)
- Special apps – provided by ESRI

Looking Forward...

ESRI – Developing an online decision support tool for assessing site suitability in the marine environment

Going Regional - Support the development of regional CMSP. 9 planning bodies.
- Data, Tools, Templates, and Tech Support



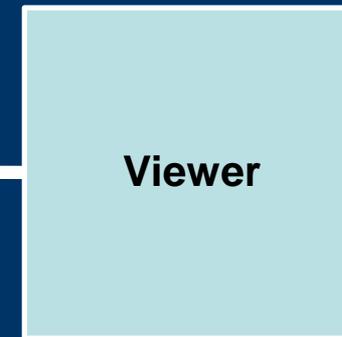
MMC Summary

The screenshot shows the Marine Cadastre website with the following content:

- Navigation:** MMC Home, About, Partnerships, Data, In Practice, Support.
- Header:** Marine Cadastre logo and NOAA logo.
- Main Content:**
 - Multipurpose Marine Cadastre**
 - Sub-headline: *Your Source for Authoritative Ocean Data*
 - List:
 - View and explore national-scale boundary, cadastral, and other ocean data
 - Analyze data, produce and share a map
 - Download data from its original source
 - Button: **Launch the Viewer**
 - Multipurpose Marine Cadastre (MMC) Version 2.0 Now Available**
 - Text: "The new version, built using ArcServer, utilizes Web map services for better performance, contains additional marine habitat and seafloor data, and builds on the analysis and rendering functionality in previous versions, resulting in a more intuitive and useful tool."
 - Section: **What's New in Version 2.0?**
 - Better performance using ArcServer and Flex
 - Additional marine habitat and seafloor data
 - More intuitive and useful tool design
 - Button: **Launch the Viewer »**
- Footer:**
 - Data:** Access and download data layers contained within the MMC. [More »](#)
 - Support:** Explore frequently asked questions and other supporting documents. [More »](#)
 - In Practice:** See how the MMC is currently being used. [More »](#)



- Web Portal
- Web Services



- Visualize data
- Make and share maps
- Plot points



- Best Practices
- Templates and code
- Consultation

Thank You

MarineCadastre.gov

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