

Presentation Outline

1. Legislative Atlas



2. Multipurpose Marine Cadastre



Part 1: Legislative Atlas



Background – Legislative Atlas

- **Ocean Planning and Information System (OPIS)**
 - Developed in partnership with the Office of Ocean and Coastal Resource Management (OCRM)
 - Ocean-related data and information for the Southeast
- **U.S. Commission on Ocean Policy (2004)**
 - Recommended regional ocean information programs for the following purposes:
 - Research
 - Data collection
 - Information product development
 - Outreach
- **Legislative Atlas Web site**
 - Web-based mapping and research tools for regions to help make informed decisions on regional and coastal issues



What Is the Legislative Atlas?

The screenshot displays the NOAA Coastal Services Center website. At the top, the NOAA logo and the text "NOAA Coastal Services Center NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION" are visible. A search bar is located to the right. Below the header is a navigation menu with links for Home, About, Data, Tools, Training, How-To Guides, Publications, Partnerships, and Technical Assistance. The main content area is titled "Digital Coast: Legislative Atlas" and features a map of the United States with red-shaded coastal areas. To the right of the map are three sections: "View the Atlas" (explaining that users can select an area on a map to visualize laws), "Search Legislation" (with a search bar and a dropdown menu), and "Download the Atlas" (explaining that data layers are available in ESRI shapefile or Google Earth KMZ format). Below the map are two text boxes: "The Legislative Process" and "About Legislative Atlas". At the bottom of the page, contact information for the NOAA Coastal Services Center and links to the United States Department of Commerce, National Oceanic and Atmospheric Administration, and National Ocean Service are provided.

Currently includes...

- Federal legislation for Atlantic, Pacific, Gulf coasts and Hawaii
- State legislation for Gulf of Mexico, California, Hawaii, Maine, Mass., and New Hampshire
- Spatial data depicting coastal and marine regulatory framework at federal and state levels
- Web-based mapping and information resource



The Legislative Atlas Team

- **NOAA Coastal Services Center**
 - Web site and map development
 - Development of federal georegulations
 - State coordination and outreach through regional staff

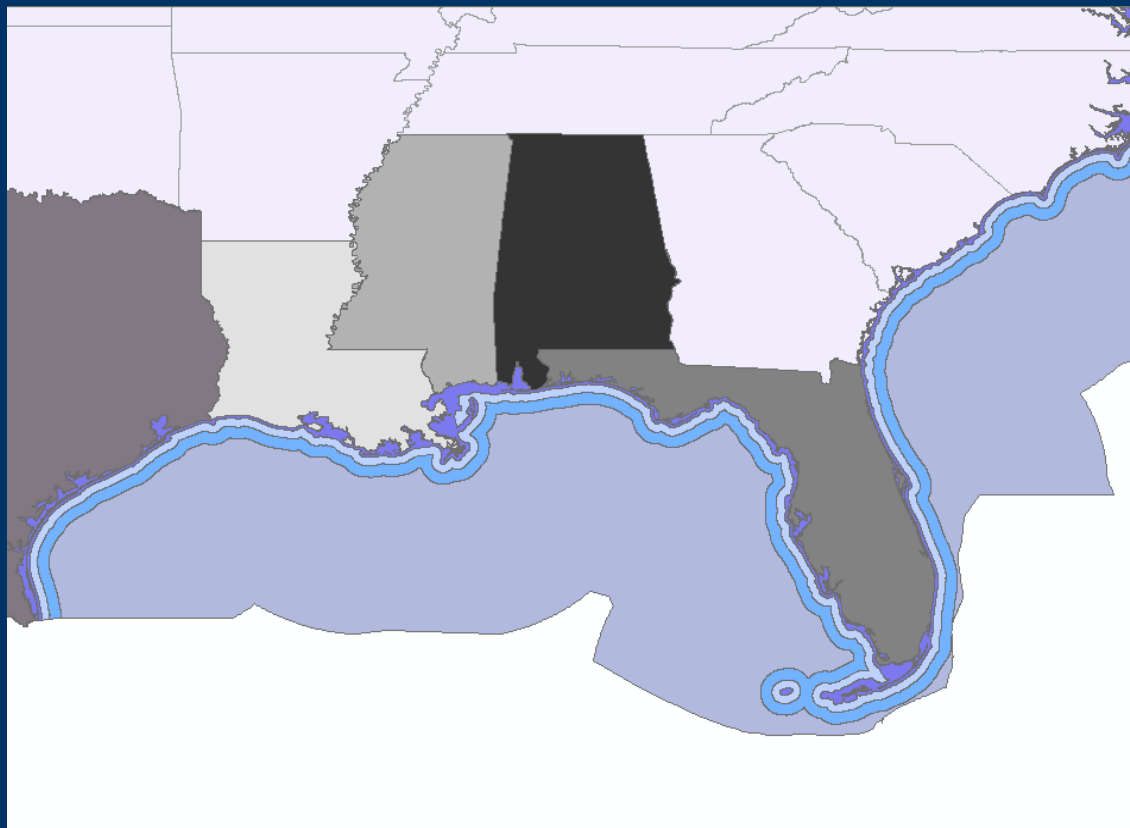
- **PhotoScience, Inc.**
 - Development of state-level georegulations

- **National Sea Grant Law Center**
 - Development of legislative summaries



Georegulation Development

Georegulation – A principle, rule, or law and the geographic representation of the region(s) of applicability on the earth



**Marine Plastics Pollution Research and
Control Act**



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Digital Coast: Legislative Atlas Web Site

Searchable Database of Legislation

- Ability to search by regions, issue, keyword, or agency
- Returns brief legislative summary
- Contains links to full text

You may search the NOAA / Coastal Service Center's Digital Coast legal database for laws matching the following criteria:

State or Region :

Agency Involved :

of the key terms : (may be one or more words or numbers separated by spaces)

499 matching laws were retrieved.

Law Name	State	Region	Agencies
Abandoned Shipwreck Act		National	U.S. National Park Service
Access to Public Waters	NH	Northeast	New Hampshire Governor and Executive Council
Acid Rain Control Act	NH	Northeast	New Hampshire Department of Environmental Services
Adopting Coastal Wetlands Orders	MA	Northeast	Massachusetts Department of Environmental Protection
Air Pollution Control Act	NH	Northeast	New Hampshire Department of Environmental Services
Alabama Fishing Laws	AL	Gulf of Mexico	Alabama Department of Conservation and Natural Resources
Alabama Gulf States Marine Fisheries Compact	AL	Gulf of Mexico	Gulf States Marine Fisheries Commission
Alabama Marine Mammal Protection Act of 1976	AL	Gulf of Mexico	Alabama Department of Conservation and Natural Resources
Alabama State Port Authority	AL	Gulf of Mexico	Alabama State Port Authority
Alabama Water Pollution Control Act	AL	Gulf of Mexico	Alabama Department of Environmental Management
Alabama Water Resources Act	AL	Gulf of Mexico	Alabama Department of Environmental Management
Aquaculture General Provisions	CA	West Coast	California Department of Fish and Game
Aquaculture Law	ME	Northeast	Maine Department of Marine Resources
Aquaculture Ordinance	MS	Gulf of Mexico	Mississippi Department of Marine Resources
Aquatic Nuisance Control Program	MA	Northeast	Massachusetts Department of Conservation and Recreation
Artificial Light on Shoreline and Ocean Waters	HI	Hawaii	Hawaii Coastal Zone Management Program
Authority to Lease Coastal Land for Estuarine Preserves	TX	Gulf of Mexico	Texas Parks and Wildlife Department
		Gulf of	Alabama Department of Conservation and Natural Resources

Done



Digital Coast: Legislative Atlas Web Site

Coastal Zone Management Act

State:

Region: National

Agencies: NOAA Office of Ocean and Coastal Resource Mgmt

**Detailed
Summary:** Coastal Zone Management Act

State: Federal

Code:

Region: National

Code:

Issues: Coastal Zone Management

Agencies: National Oceanic and Atmospheric Administration

**Detailed
Summary:**



[Coastal Zone Management Act \(16 U.S.C. §§ 1451 et seq.\)](#)

The Coastal Zone Management Act (CZMA) strives to preserve and protect coastal resources. Through the CZMA, states are encouraged to develop coastal zone management programs (CZMPs) to allow economic growth that is compatible with the protection of natural resources, the reduction of coastal hazards, the improvement of water quality, and sensible coastal development. The CZMA provides financial and technical incentives for coastal states to manage their coastal zones in a manner consistent with CZMA standards and goals.

State coastal zones include the coastal waters and adjacent shorelands that extend inland to the extent necessary to control activities that have a direct, significant impact

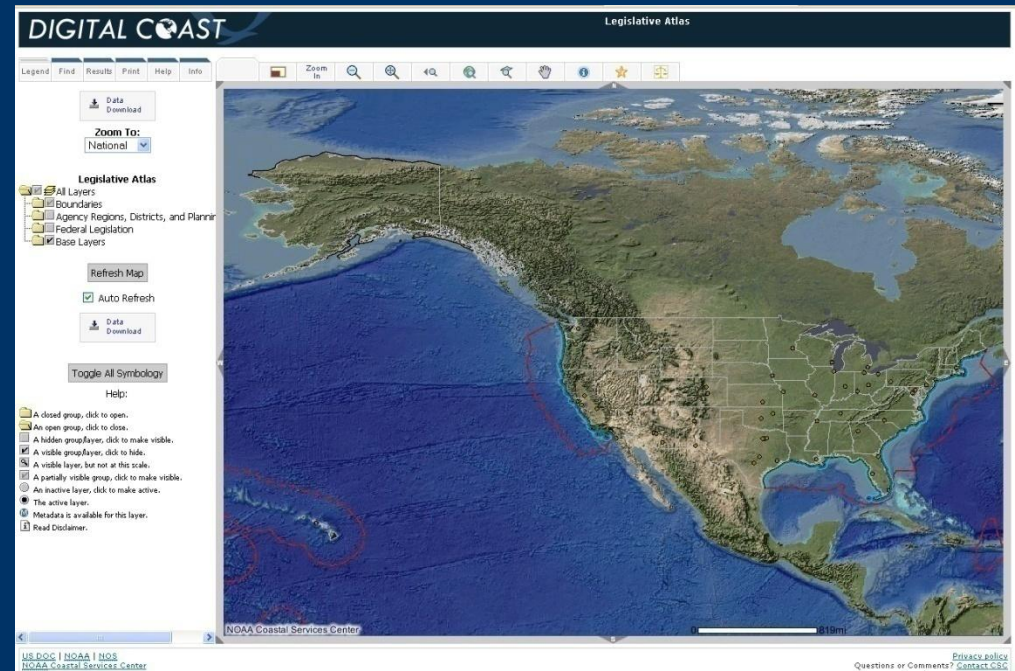


NOAA Coastal Services Center
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Digital Coast: Legislative Atlas Web Site

Mapping Application

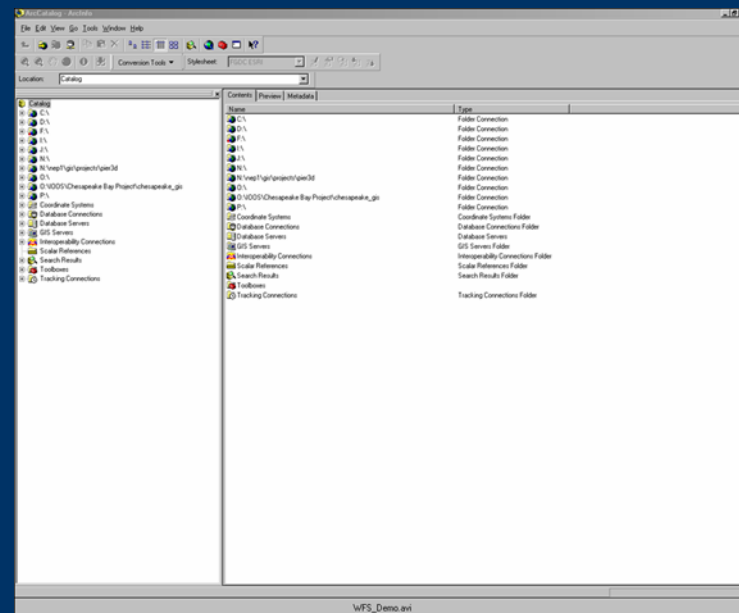
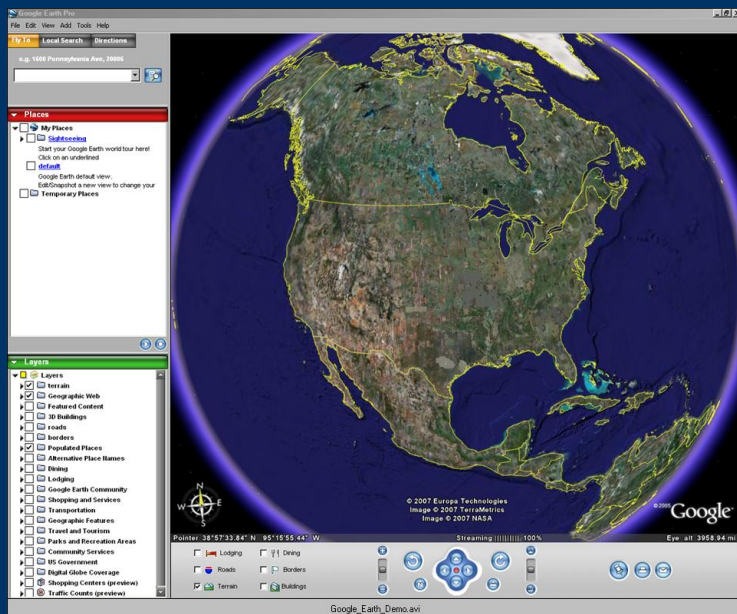
- View agency jurisdictions and federal legislation
- View state legislation for the Gulf, California, Hawaii, Maine, Mass, and New Hampshire
- Ability to identify laws and jurisdictions and link back to legislative summaries



Digital Coast: Legislative Atlas Web Site

Spatial Data Download

- Most data sets available in ESRI Shapefile, Google Earth Keyhole Markup Language (KML) formats
- Connect directly to data via ArcIMS, Web Feature Service (WFS)



Part 2: Multipurpose Marine Cadastre



Multipurpose Marine Cadastre

History

- **Energy Policy Act of 2005**
 - Section 388 – Alternative Energy Related Uses on the Outer Continental Shelf (OCS)**
 - Develop an OCS mapping initiative**
- **Marine Boundary Working Group developed an implementation plan called the multipurpose marine cadastre**
- **Multi-year, interagency project**



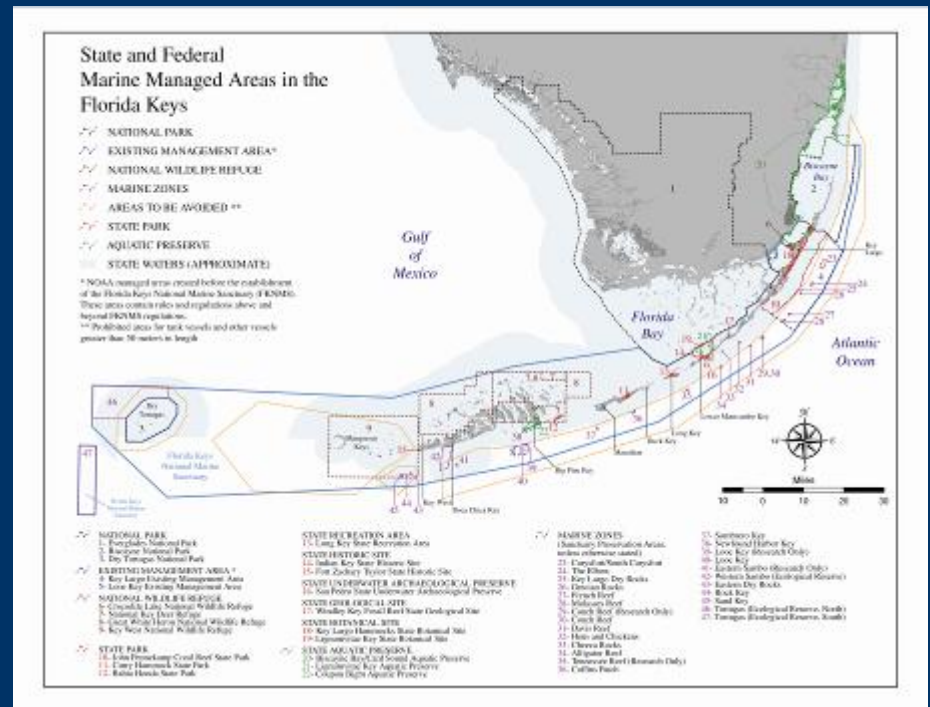
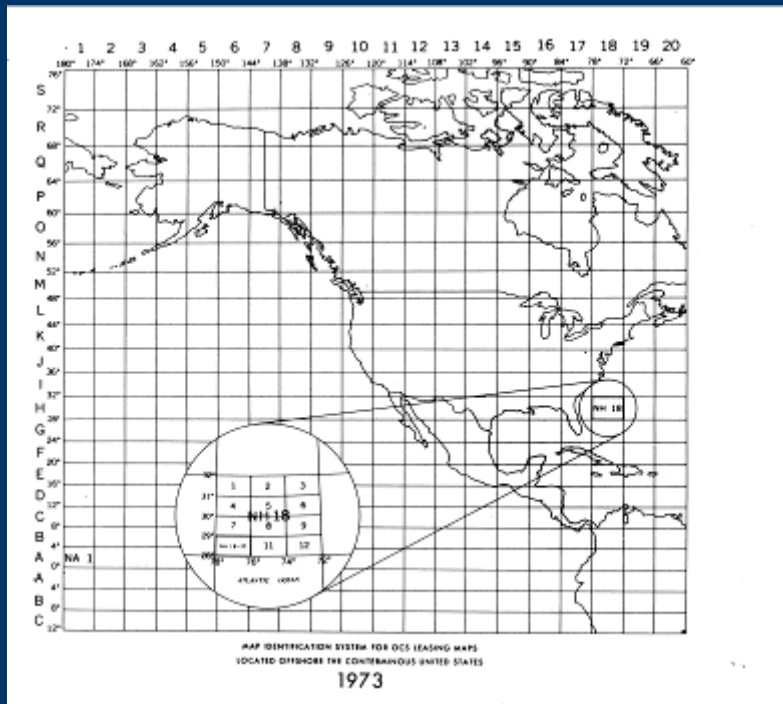
Multipurpose Marine Cadastre

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

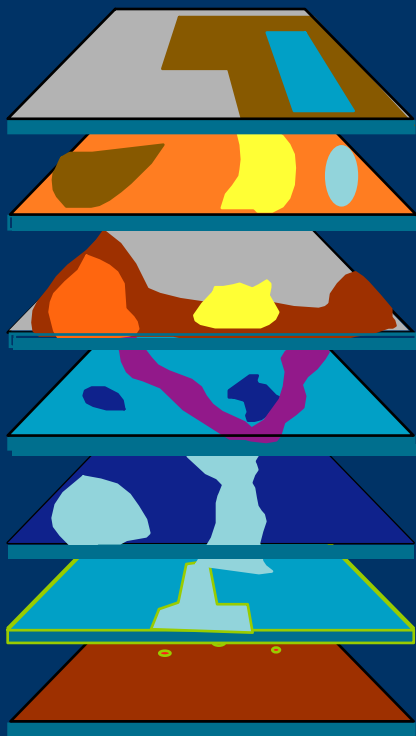


What is a Marine Cadastre?

“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 Data Themes



Marine Cadastre

Georegulations

Marine Infrastructure

Geology and Seafloor

Marine Habitat and Biodiversity

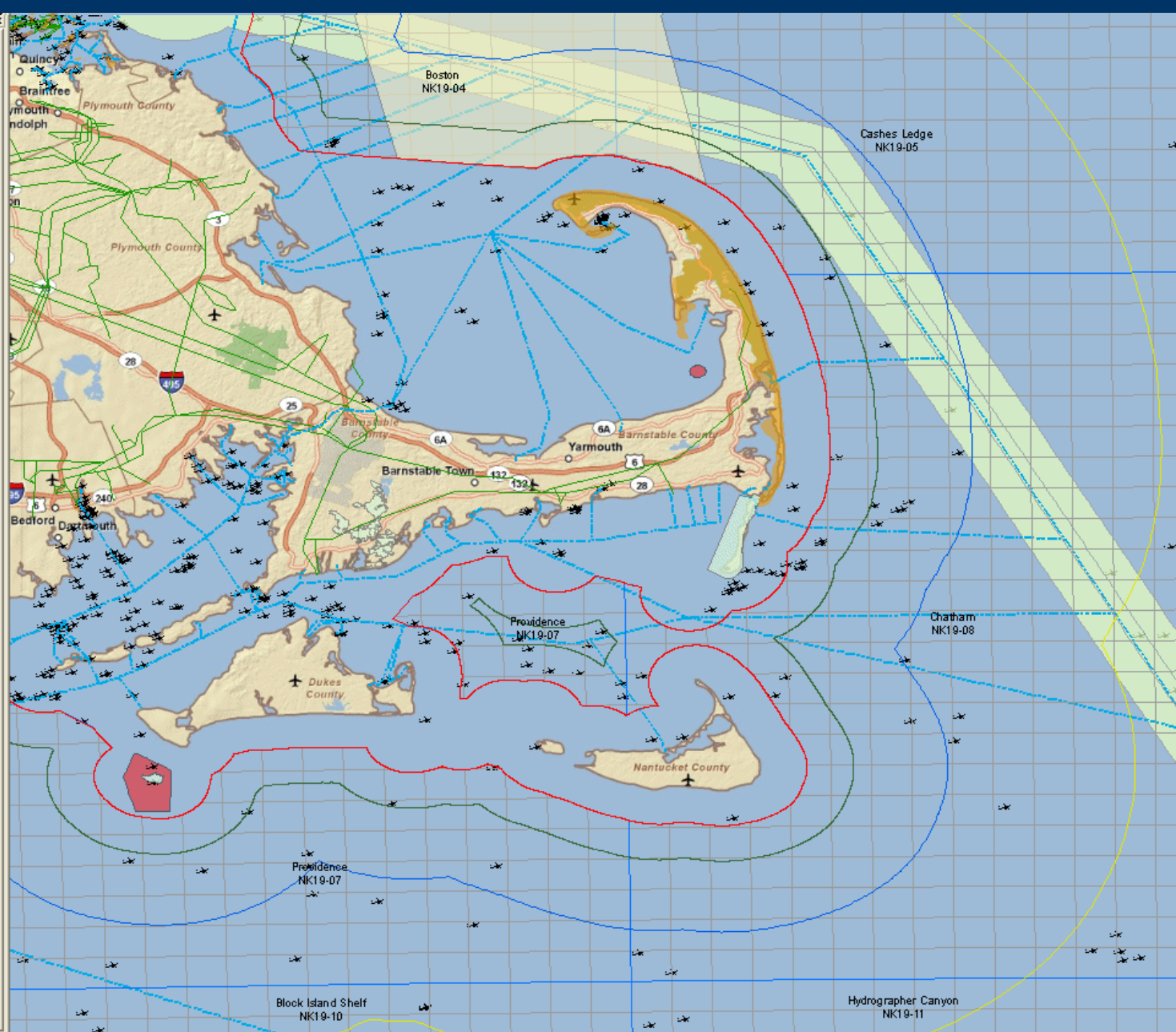
Human Uses

Base Maps



Layers

- JURISDICTIONAL BOUNDARIES AND LIMITS
- FEDERAL GEOREGULATIONS
- STATE GEOREGULATIONS
- NAVIGATION AND MARINE INFRASTRUCTURE
- GEOLOGY AND SEAFLOOR DATA
- MARINE HABITAT AND BIODIVERSITY
- PROPOSED ENERGY PROJECTS
- BASE MAPS

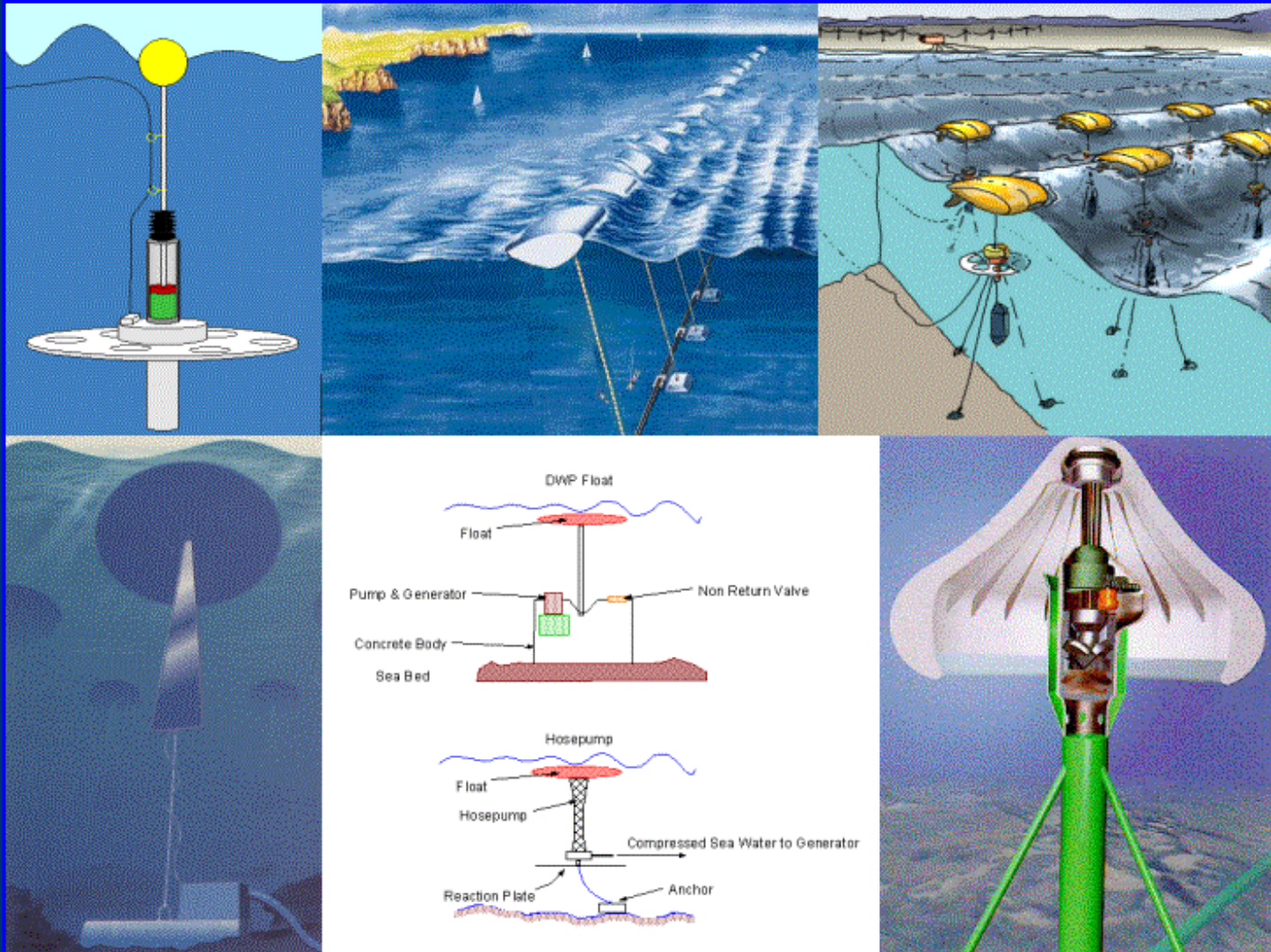


So, Things Like:



Offshore Wind Farms





Alternative forms of wave energy



Why Is this Project Important?

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



MMC - Data Access and Management

Data is managed and maintained by the authoritative source

The Center harvests on a periodic basis to keep the viewers up to date

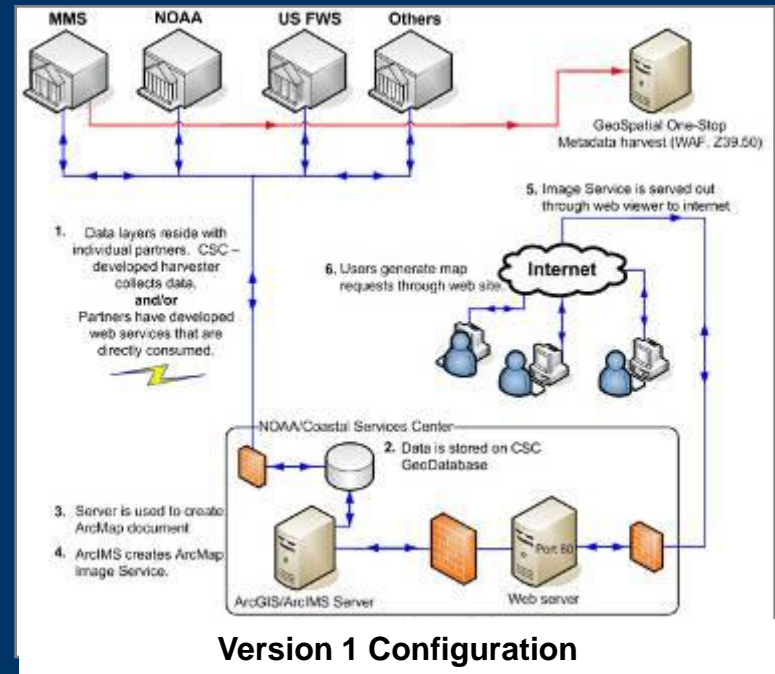
Access is provided via the Marine Boundary Working Group data portal

Working on a series of data bundles

Core marine cadastre

Marine Infrastructure

Georegulations



MMC - Viewers

Web-based and client-side

ArcIMS

ArcReader

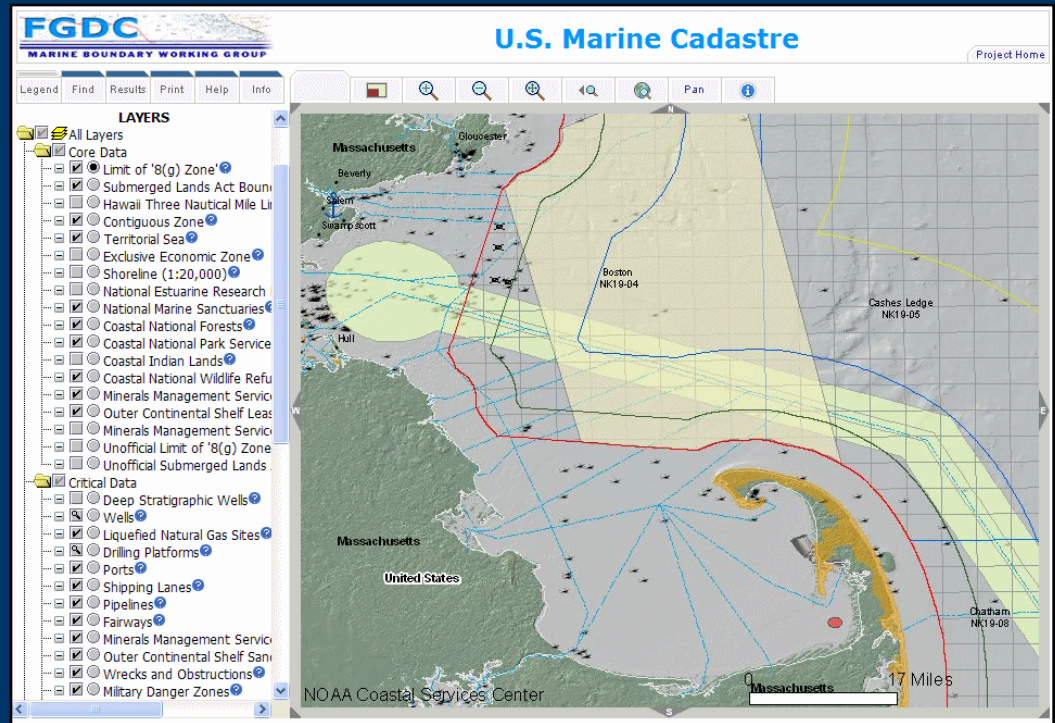
Google Earth

Provides access to data

Map-making functionality

Used for decision support

Driven by partner needs



MMC – Partners and Providers

Current Partnerships

- Minerals Management Service (lead)
- NOAA Coastal Services Center (technical lead)
- NOAA Office of Coast Survey
- NOAA National Marine Sanctuaries
- NOAA Marine Protected Areas
- NOAA Fisheries
- U.S. Fish and Wildlife Service
- National Park Service
- The Nature Conservancy
- California Coastal Conservancy

Potential Partnership Opportunities

- Department of Defense (DoD)
- Coast Guard
- Federal Energy Regulatory Commission
- Massachusetts Coastal Zone Mgmt.
- Rhode Island CRMC
- Department of Energy
- South Carolina OCRM
- Northeast Regional Ocean Council
- Other States



Case Studies

Criteria:

- Meets customer needs
- Meets objectives of MSP
- Builds collective capacity
- Available resources

How we engage depends on level of partner capacity



Case Studies

Partners:

Minerals Management Service and NOAA CSC

Issue:

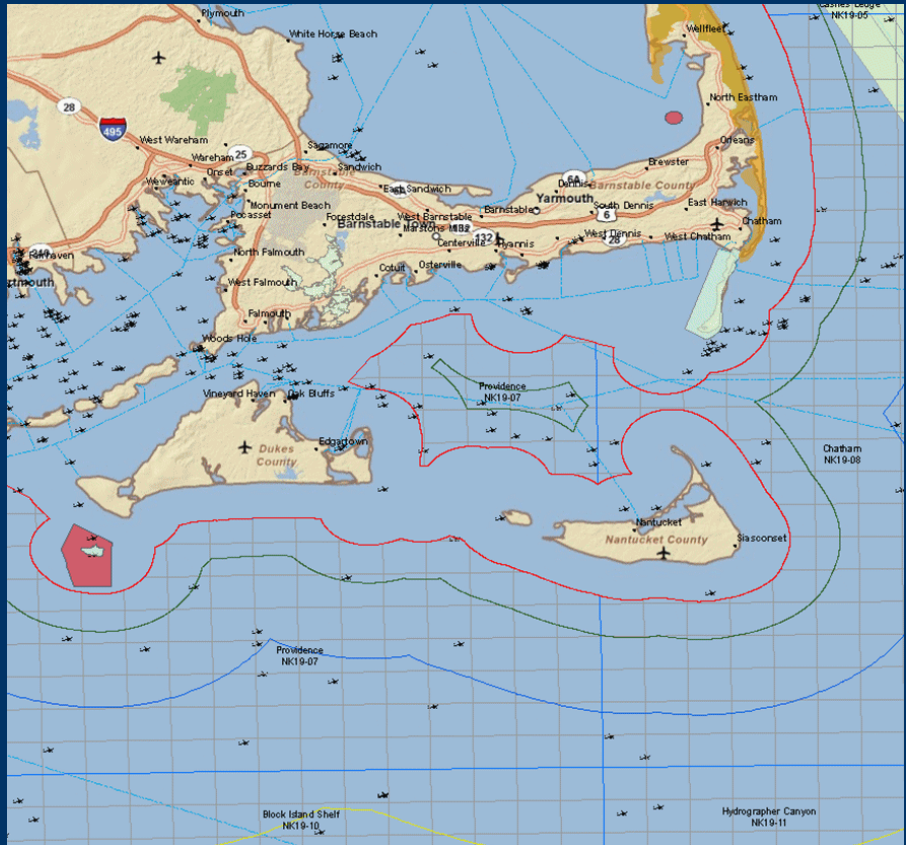
Alternative Energy Development on the OCS

Task:

Develop mapping applications to support energy planning and regulations

Status:

Ongoing effort



Case Studies

Partner:

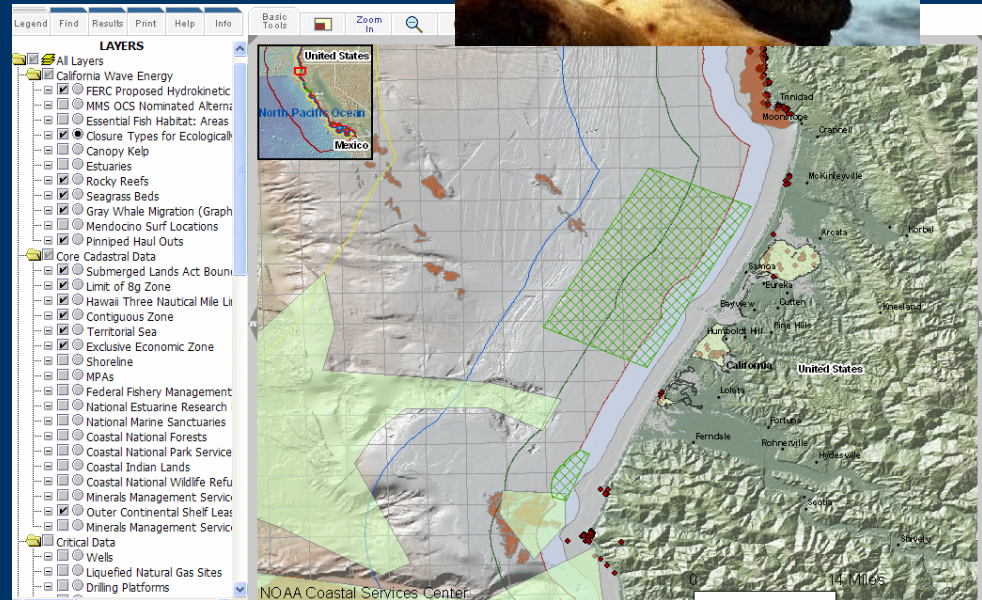
NOAA NMFS Habitat
Conservation Division

Issues:

Map hydrokinetic
projects and critical
habitat data; system to
support permit review

Status:

Ongoing; figuring out
best way to collaborate

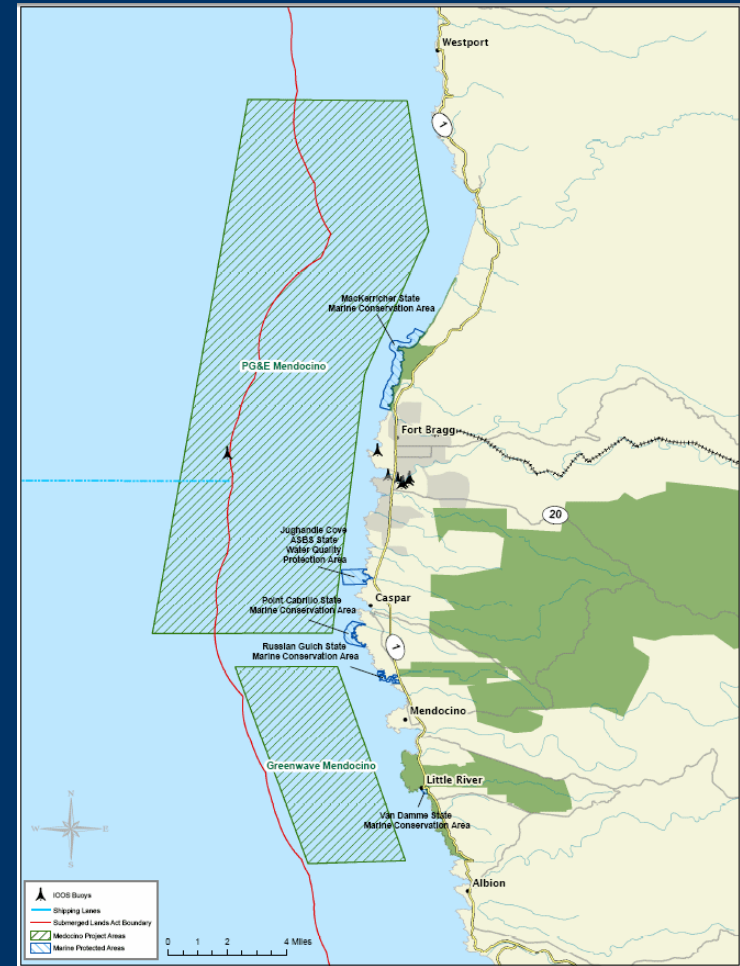


Other Uses

TNC – investigating MMS' block system as a standardized mapping unit for ecoregional assessment data

California Coastal Conservancy – using data and maps for wave energy studies

Providing web map services for state ocean planning



In Summary...

- **MMC is issue driven**
- **Gaining momentum through case studies and partnerships**
- **Scalable and transferrable**
- **Products and support include:**
 - **Authoritative marine boundary and supporting data**
 - **Stand-alone and customizable data viewers**
 - **Templates for developing map viewers**
 - **Support on a case-by-case basis**



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URLs:

<http://www.csc.noaa.gov/mmc>

<http://csc-s-maps.q.csc.noaa.gov/legislative-atlas/index.html>



MMC - Data Themes

Core Cadastral Data:

Limit of 8(g) Zone
Submerged Lands Act
Contiguous Zone
Territorial Sea
Exclusive Economic Zone
Shoreline
National Estuarine Research Reserves
National Marine Sanctuaries
National Forests
National Park Service
Indian Lands
National Wildlife Refuge
MMS Protraction Diagrams
Outer Continental Lease Blocks

Supporting Data:

Coastline or Shoreline
Sand Borrow Sites
Pipelines
Fiber Optic Cables
Artificial Reef Sites
Shipping Fairways
Anchorage Areas
Military Restricted Areas
Platform Locations
Bathymetry
Wind, Wave, and Tidal Energy Sites
Archeological Sites
Aquaculture Sites
MMS Leases
Liquid Natural Gas (LNG) Sites
Benthic Data

