



Apr 26th, 11:30 AM - 1:00 PM

OceanReports Tool Brings Ocean and Coastal Planning Data to Your Fingertips

Thomas Moore

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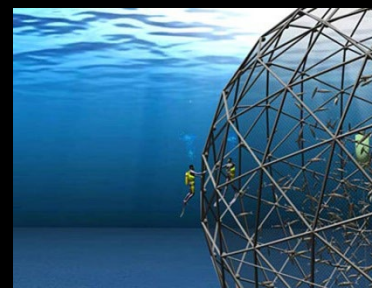


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OceanReports Tool Brings Ocean and Coastal Planning Data to Your Fingertips

April 26, 2022

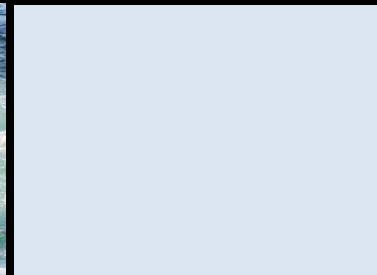
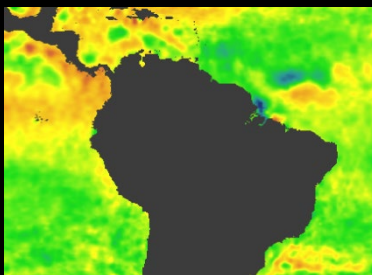
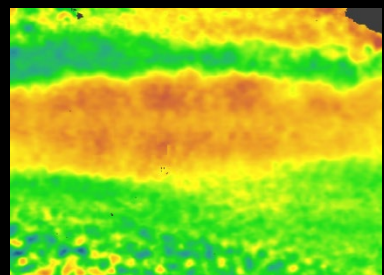
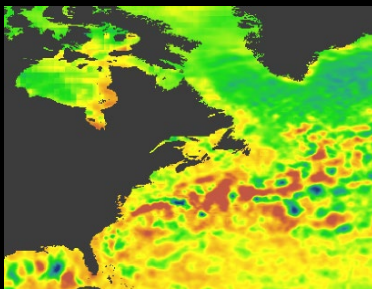
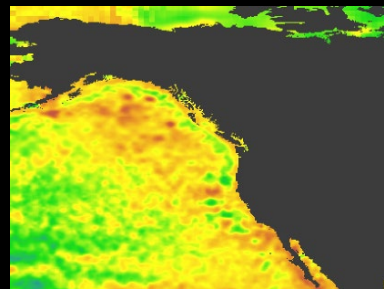
T.J. Moore, GISP
CSS Inc. on contract to NOAA Office for Coastal Management
Seattle, WA

OceanReports

-- a MarineCadastre.gov Application --
NOAA Office for Coastal Management
NOAA National Centers for Coastal Ocean Science
Bureau of Ocean Energy Management



**2022
Salish Sea
Ecosystem
Conference**



Digital Coast

The screenshot shows the homepage of the Digital Coast website. At the top, there is a navigation bar with the NOAA logo, the text "Office for Coastal Management DIGITALCOAST", and a menu with links for "ABOUT", "DATA", "TOOLS", "TRAINING", "TOPICS", and "STORIES", along with a search icon. The main heading is "More Than Just Data", followed by the subtext "Dive into the Digital Coast to Get the Data, Tools, and Training Communities Need to Address Coastal Issues." Below this is a row of four icons: a bar chart for "Data", a wrench for "Tools", a computer monitor for "Training", and a globe for "Stories". The lower section features a "What Is the Digital Coast?" section with introductory text and a "TOP PRODUCTS" sidebar listing items like "Sea Level Rise Viewer", "Lidar and Elevation Data", "Historical Hurricane Tracks", "Risk Communication", and "Land Cover Atlas".

coast.noaa.gov/digitalcoast

Marine Cadastre

The image shows a composite of the MarineCadastre.gov website and the AccessAIS tool interface. The website header includes the URL 'marinecadastre.gov' and navigation links for 'Data', 'Maps', 'Uses', 'Tools', 'News', and 'About'. The main content area features the title 'An Ocean of Information' and a sub-headline: 'A joint BOEM and NOAA initiative providing authoritative data to meet the needs of the offshore energy and marine planning communities.' Below this is an illustration of a fishing boat with a net. A 'Features' section includes a thumbnail for 'January to June 2020 AIS Data' and a video titled 'Video: OceanReports Uses'. The AccessAIS tool interface is overlaid on the right, showing a map of the United States with a blue AIS data overlay. A legend on the left lists layers: 'U.S. Exclusive Economic Zone', 'BOEM Lease Blocks', '2021 Vessel Transit Counts (coming soon)', '2020', '2019', '2018', '2017', '2016', and 'NOAA Basler Charts'. The tool also includes a 'Legend' section and a 'Layers' button.

marinecadastre.gov

Imagine if...

You could pull up a map and in seconds obtain a custom spatial analysis for any U.S. ocean space, useful for all ocean industries...

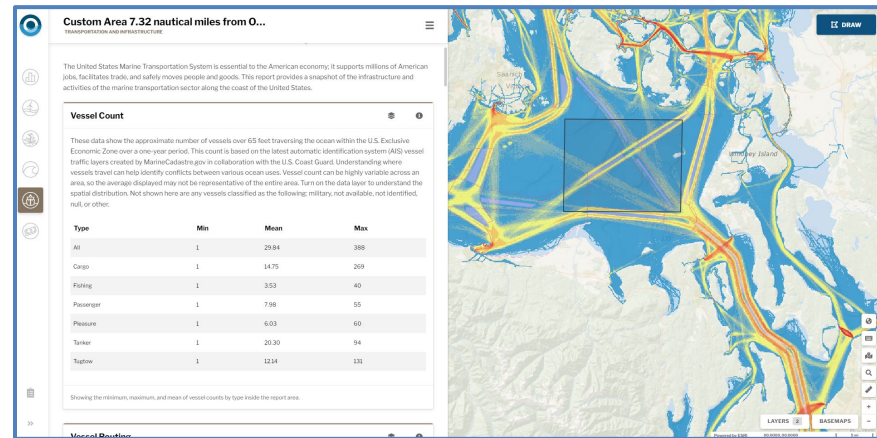
And do it over and over....

marinecadastre.gov/oceanreports






OceanReports Quick Facts

- Web-based tool that provides instantaneous spatial analyses and reports for the entire EEZ
- Provides easy-to-interpret infographic-charts, graphs, graphics for complex data
- Integrates over 80 data sets from MarineCadastre.gov
- Designed for all within the ocean planning community
- “It’s like the Zillow of the ocean.”



6 Chapters, 80+ layers, 68 infographics

Chapter Theme	Symbol	Infographic Reports Available		
General Information		Report Area Depth/Elevation Populated Places Federal/State/County Jurisdictions	Congressional and Legislative Districts Federal Statutes Tribal Lands	
Energy & Minerals		Offshore Wind Potential Offshore Wind Planning Areas Offshore Wind Energy Leases OCS Revenue Sharing Areas Oil and Gas Potential	Oil and Gas Planning Areas Oil and Gas Leases Energy Facilities OCS Blocks with Sand Resources	Beach Nourishment Projects Surficial Sediment Texture Ocean Disposal Sites Federal Sand and Gravel Leases
Transportation & Infrastructure		AIS Vessel Count Vessel Routing N. Atlantic Right Whale Management Areas Anchorage Areas Pilot Boarding Areas	Ports Coastal Maintained Channels Danger Zones/Restricted Areas Unexploded Ordnances Formerly Used Defense Sites	Wrecks/Obstructions Cables and Pipelines Wastewater Outfalls Aquaculture Oil Lightering Zones Deepwater Ports Oil/Gas Platforms Oil/Gas Wells
Natural Resources		Endangered Species ESA-Critical Habitat Designations Habitat Areas of Particular Concern Managed Highly Migratory Species Audubon Important Bird Areas	Protected Areas Artificial Reefs Shallow Corals Deep-sea Sponge/Coral Obs. Deep-sea Coral Habitat Suitability	Historical Lighthouses Cetacean Biologically Important Areas
Oceanographic & Biophysical		Wave Height, Period and Direction Wind Speed and Direction Current Speed and Direction at Depths Sea Surface Height Water Temp/Salinity	Nitrates Phosphates Silicates Aragonite Light Attenuation KD PAR	Light Attenuation KD 490 Chlorophyll a Concentration
Economics & Commerce		Ocean Job Contributions GDP of Ocean Economy Contributions by Sector	Census Statistics Fishing Economic Value (North and Mid Atlantic)	Commercial Fish Landings

OceanReports Users

- Ocean industries
- GIS and environmental consultants
- Coastal managers/regulators
- Coastal planners
- Educators
- The public



Planning and
Analysis

Leasing

Site
Assessment

Construction and
Operation

What's the Big Deal?

- Increased transparency
- Industry and environmental NGOs are better informed
- Coastal managers time saved (tax dollars)
- Consultants will save time and money
- Decreased number of permitting false starts
- Increased regulatory efficiency



How Did We Do It?

- Envisioned a tool that would facilitate Marine Spatial Planning (MSP)
- Assembled a multidisciplinary team
- Optimized data from MarineCadastre.gov
- Added biophysical and oceanographic data
- Developed rules for each data layer
- Developed infographics for each layer
- Designed with predecisional tasks in mind



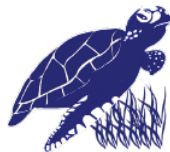
MILITARY



NAVIGATION



COMMERCIAL



BIOLOGICAL



OCEANOGRAPHIC

Demo Time!

The screenshot shows a web browser window displaying the OceanReports application. The browser's address bar shows the URL: <https://www.marinecadastre.gov/oceanreports/@-10737743.881037742.4753280.983019757/4>. The browser's tab bar includes several open tabs: 'Apps', 'National Oceanic a...', 'LastPass - Sign In', 'webTA | Log In', 'Track-It! Self Servic...', 'National AquaMap...', 'Marine Cadastre | O...', and 'default'.

The application header features the 'OceanReports' logo with the tagline 'A BOEM/NOAA PARTNERSHIP'. The main content area is titled 'Know what's happening in your ocean area' and includes a descriptive paragraph: 'Draw a custom area anywhere in U.S. waters or pick from a predefined list of locations to get instant custom reports. Reports include descriptive infographics and supporting data that can be used for offshore planning, permitting, environmental review, public relations, and more. New features allow printing by industry, sharing, and adding custom coordinates.'

Under the heading 'Report Topics Include', there are two columns of topics:

- General Information
- Energy and Minerals
- Natural Resources and Conservation
- Oceanographic and Biophysical
- Transportation and Infrastructure
- Economics and Commerce

At the bottom of the main content area, there are two buttons: 'DRAW CUSTOM AREA' and 'VIEW QUICK REPORTS'.

On the right side of the browser window, a demo report is displayed. The report title is 'GENERAL INFORMATION Custom Area near Bald Head Island, NC'. It contains three sections:

- Report Area:** A table showing area measurements:

677 Miles ²	511 Nautical Miles ²	1,753 Kilometers ²
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- Federal, State and County Jurisdictions:** A donut chart showing the distribution of jurisdiction:

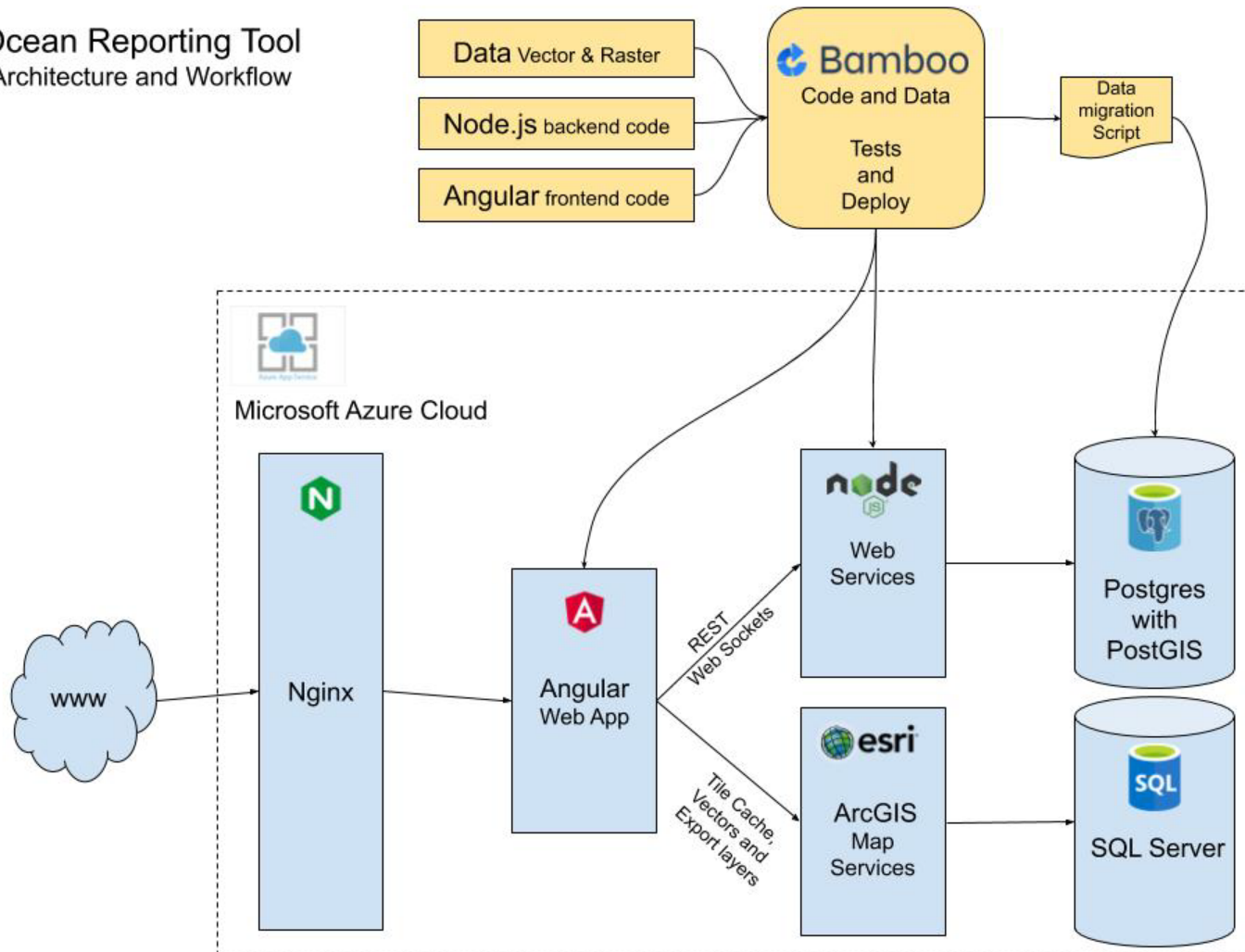
Federal (70.5%)	North Carolina (29.5%)
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- Populated Places:** A table listing nearby cities:

Cities	Population (2010)	Distance in Miles
Bald Head Island, NC	158	3.55

The footer of the page contains the following text: 'United States Department of Commerce National Oceanic and Atmospheric Administration National Ocean Service Website owner: Office for Coastal Management'. On the far right, it says 'Last Modified: 4/24/19 Contact Us Privacy Policy Disclaimer USA.gov'.

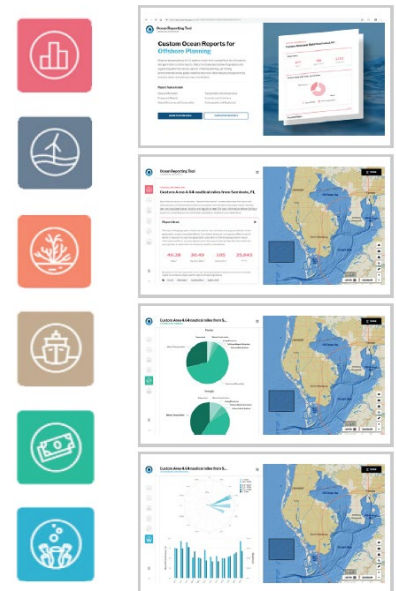
Systems Architecture

Ocean Reporting Tool
Architecture and Workflow



Next steps

- Evaluation and enhancements report as part of the Presidential Memo on Ocean Exploration
- Enhancements based on current user feedback
 - New Data: Ocean Observation Platforms, Submarine Cables, Wastewater Outfalls
 - Upload/submit custom shapes
 - Direct linkages to regional and state portals
- Continued outreach to make sure it's used!

The logo for OceanReports features a stylized blue circular icon on the left, composed of concentric circles and a central dot, resembling a globe or a data point. To the right of this icon, the word "OceanReports" is written in a bold, blue, sans-serif font.

Questions?



marinecadastre.gov/oceanreports/

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