

Implementation of the Geoportal Extension for NOAA's Regional Collaboration Efforts



Gabe Sataloff
NOAA Coastal Service Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Presentation Overview

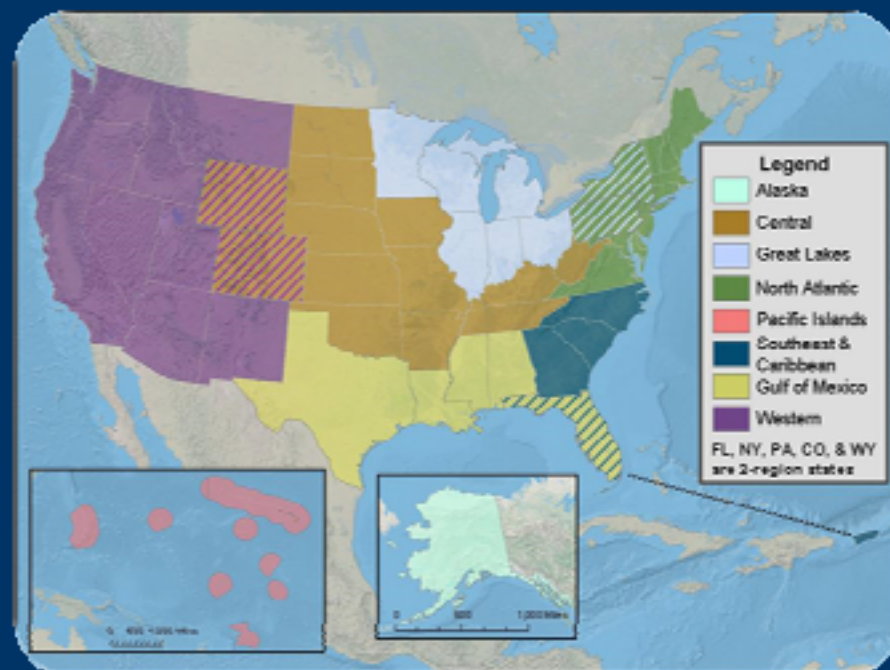
- NOAA Regional Teams
- Project Objectives
- Project
 - Technology and Standards
 - Data Holdings
 - Workflow
 - Site Design and Features
- Partnerships
- Conclusions
- Future Goals



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

NOAA Regional Teams

- Purpose is to improve NOAA's productivity and value to customers
- Identify and apply full range of capabilities to design geographically specific solutions for customers



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Partnership with SECART to:



- Enhance NOAA geospatial data use
- Expand NOAA services
- Improve communications and efficiency
- Increase NOAA visibility and transparency



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Project Objectives

- Identify COTS data discovery and delivery system
- Collect priority data and metadata
- Stand up the system architecture
- Create data/metadata workflow processes
- Develop pilot



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Technologies and Standards

- ESRI GIS Portal Toolkit 9.3.1
 - Metadata discovery, rest-based interfaces, “portable”
- Microsoft SQL Server 2008
 - Standalone database
- Metadata Requirements
- OGC and W3C Standards

Data Holdings

- **Satellites (NESDIS)**

- NCDC
- NCDDC
- NGDC

- **Fisheries (NMFS)**

- OHP
- SERO

- **Research (OAR)**

- AOML

- **Weather (NWS)**

- SE Region

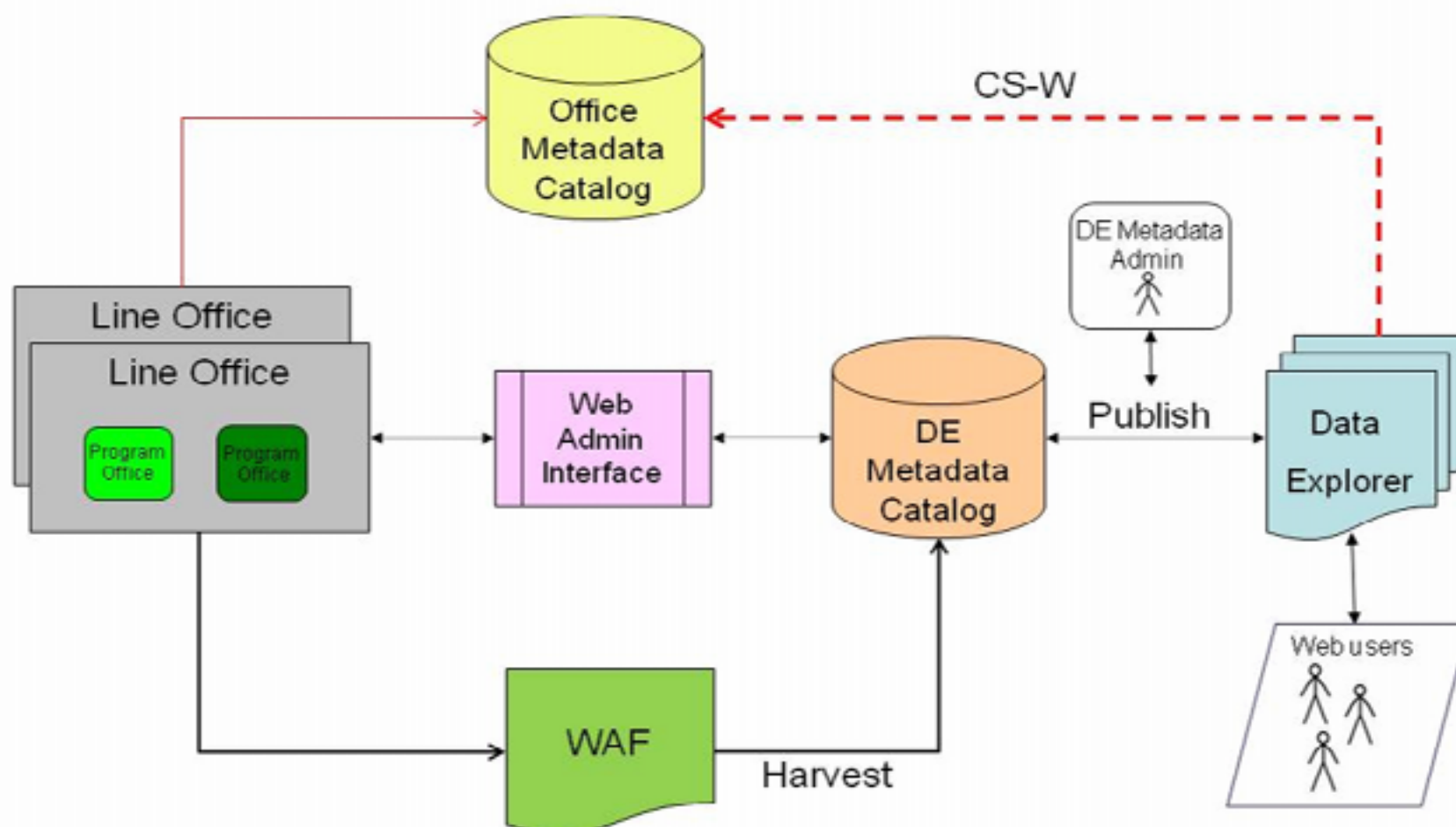
- **Oceans (NOS)**

- CCMA
- CSC
- NCCOS
- NGS
- NMSP
- OCRM
- OCS
- SP



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Metadata Workflow Process





NOAA

SOUTHEAST AND CARIBBEAN DATA EXPLORER

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

[Login](#) [Help](#) [About](#) [Feedback](#)



[HOME](#)

[SEARCH](#)

[TOPIC SEARCH](#)

Find Data

[Search](#)

[Advanced Search »](#)

Search by Topic



- » [Login](#)
- » [Feedback](#)
- » [About](#)
- » [Register](#)
- » [Help](#)
- » [Links](#)

Welcome to the Data Explorer

The Southeast and Caribbean Data Explorer provides public access to NOAA geospatial data within the land areas of North Carolina, South Carolina, Georgia, Florida, Puerto Rico, and the US Virgin Islands, and the marine environment directly adjacent to these lands. This one-stop shop for NOAA geospatial data within the region can be searched by keyword, topic, or location. All data is free of charge, and can be downloaded via email and directly integrated into ArcGIS Desktop and other GIS compatible programs.

Feature of the Day

Title: [2006 Volusia County, Florida Lidar](#)

Abstract: This dataset is the lidar data for Volusia County, Florida, approximately 1,432 square miles, acquired in early March of 2006 ...[Read More](#)

This Geoportal was built using the ArcGIS Server Geoportal Extension 9.0.1. Please read the [Disclaimer](#) and [Privacy](#) or [Contact Us](#).



NOAA Coastal Service Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY



NOAA

SOUTHEAST AND CARIBBEAN
DATA EXPLORER
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

[Login](#) [Help](#) [About](#) [Feedback](#)



[HOME](#)

[SEARCH](#)

[TOPIC SEARCH](#)

habitat

[Search](#)

Results 1-10 of 19 record(s) [1](#) [2](#) [Last](#)

[Search](#)

[Addition](#)

[Clear](#)

Where

☒ Any

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

☐

Search In :

- ☒ This Site
- ☐ Arcgis Online
- ☐ NOAA National Climatic Data Center

Search the local Geoportal Extension site

[OK](#)

[Cancel](#)

[of Ocean Exploration](#)

[gr_turtle_ch_po](#)

[GSturg_Crit_Hab_Units_8-14_Rev](#)

[Dive Activities from Cruise Information Management System \(CIMS\)
for Estuary to the Abyss 2004: Exploring Along the Latitude 31-30
Transect - Office of Ocean Exploration](#)



NOAA Coastal Service Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Identification Information Title: Originator: Publication Place: Publisher: Publication Date: Website URL: Resource(Server) URL: Abstract:	 Point of Contact Organization: National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Centers for Coastal Ocean Science (NCCOS), Center for Coastal Monitoring and Assessment (CCMA), Biogeography Program Contact Position: Biogeography Team Leader, Mapping Manager Address Type: mailing and physical address Address: 1305 East West Highway, N/SC1-1 City: Silver Spring State: MD Postal Code: 20910 Telephone: 301-713-3028 Fax: 301-713-4384 Email: matt.kendall@noaa.gov	Distribution Information Resource Description: Live Data and Maps Distribution Liability: Not for navigation Organization: National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Centers for Coastal Ocean Science (NCCOS), Center for Coastal Monitoring and Assessment (CCMA), Biogeography Program Contact Position: Biogeography Team Leader, Mapping Manager Address Type: mailing and physical address Address: 1305 East West Highway, N/SC1-1 City: Silver Spring State: MD Postal Code: 20910 Telephone: 301-713-3028 Fax: 301-713-4384 Email: matt.kendall@noaa.gov
Time Period Currentness: ground West Bounding Lat East Bounding Lat North Bounding Lat South Bounding Lat	Theme Keywords Theme Reference: None Theme Topics: Biology and Ecology Keywords Theme Reference: SECART Data Explorer Theme: Coasts; Corals; EARTH Keywords: monitoring and assessment	Metadata Reference Information Metadata Creation Date: 2009-06-19 Organization: National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Centers for Coastal Ocean Science (NCCOS), Center for Coastal Monitoring and Assessment (CCMA), Biogeography Program Person: Biogeography Team Leader, Mapping Manager Address Type: mailing and physical address Address: 1305 East West Highway, N/SC1-1 City: Silver Spring State: MD Postal Code: 20910 Telephone: 301-713-3028 Fax: 301-713-4384 Email: matt.kendall@noaa.gov Metadata Standard Name: FGDC Content Standards for Digital Geospatial Metadata Standard Version: FGDC-STD-001-1998



NOAA Coastal Service Center
 LINKING PEOPLE, INFORMATION, AND TECHNOLOGY



NOAA

SOUTHEAST AND CARIBBEAN DATA EXPLORER

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

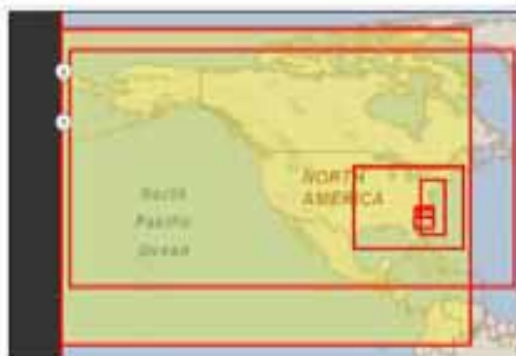
[Login](#) [Help](#) [About](#) [Feedback](#)



[HOME](#) [SEARCH](#) [TOPIC SEARCH](#)

» Search by NOAA Topic

- Oceans
- Coasts
- Weather
- Climate
- Satellites
- Fisheries
- Research
- Charts



Results 1-10 of 29 record(s) | [1](#) [2](#) [3](#) [4](#) [5](#) [Last](#)

☐ Expand results [Zoom To Results](#) [Zoom To Searched Area](#)

[Ports for the United States, Canada, and Mexico](#)

[Building a Resilient Coast—Perspectives on Climate Change in Maine](#)

[EAST COAST GLORIA: GLORIA Side-scan Sonar Mosaic for the US Atlantic East Coast](#)

[Sea Level Rise Brings Ocean Onshore](#)

[NOAA's newCOAST Web Portal](#)

An estuary, as well as the people who live within its boundaries, is affected daily by changes in weather, oceanographic, and river conditions. The physical changes within many estuaries are monitored in real-time by NOAA and other federal, state, and ed...

[Website](#) [Details](#) [Metadata](#) [Zoom To](#)

[Ship Track for Islands in the Stream 2002 - Exploration of Outer Shelf and Slope Habitats off the Coast of North Carolina - Office of Ocean Exploration](#)

[Ship Sensor Observations for Islands in the Stream 2002 - Exploration of Outer Shelf and Slope Habitats off the Coast of North Carolina - Office of Ocean Exploration](#)

[Coastal Vulnerability to Sea-Level Rise: A Preliminary Database for the U.S. Atlantic, Pacific, and Gulf Coasts](#)

[Dive Data from Expedition Information System \(EIS\) for Islands in the Stream 2002 - Exploration of Outer Shelf and Slope Habitats off the Coast of North Carolina - Office of Ocean Exploration](#)

[Submersible Data \(Dive Waypoints\) for Islands in the Stream 2002 - Exploration of Outer Shelf and Slope Habitats off the Coast of North Carolina - Office of Ocean Exploration](#)

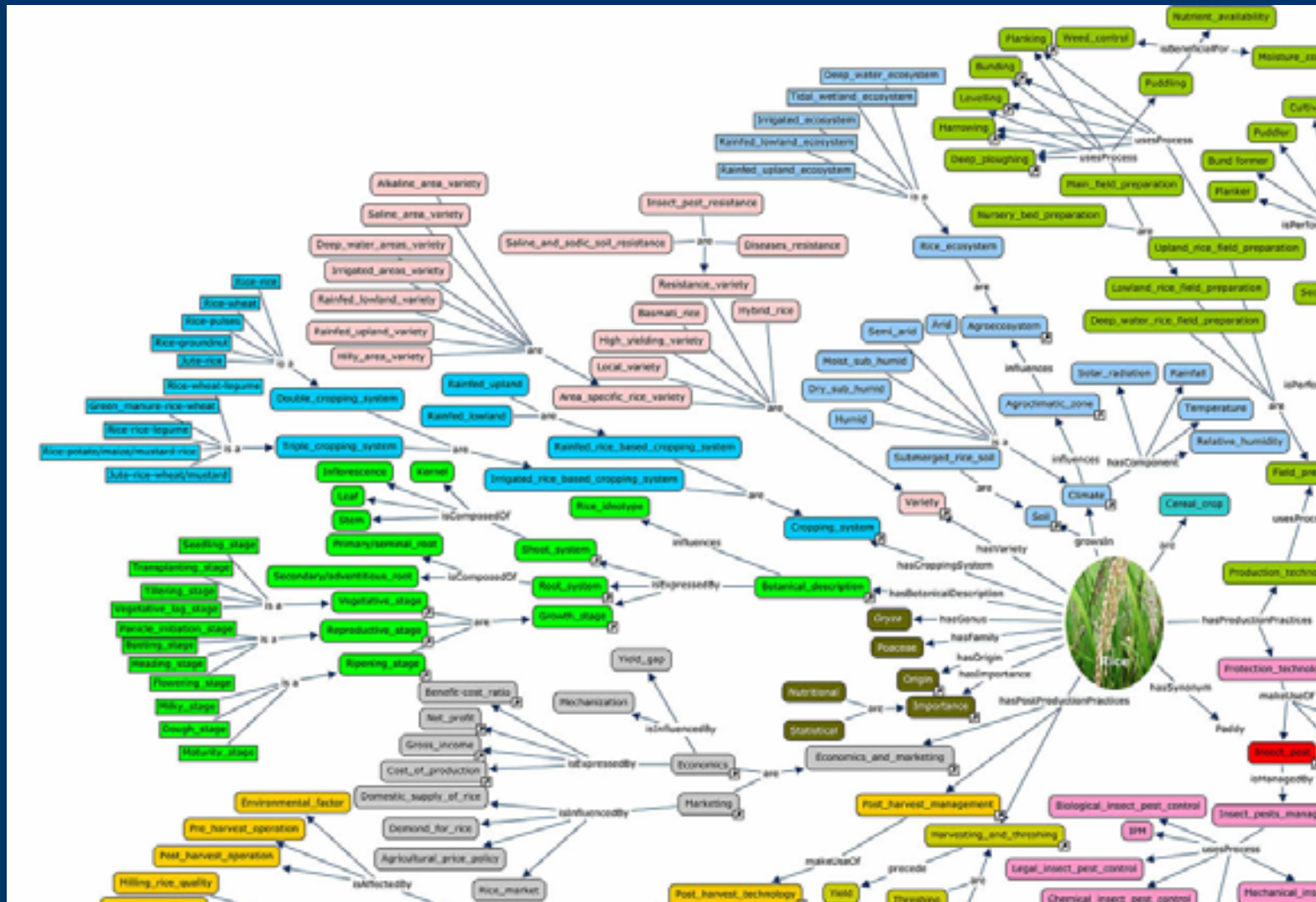
See results through REST API: [GEORSS](#) [ATOM](#) [HTML](#) [FRAGMENT](#) [KML](#)

This Geoportal was built using the ArcGIS Server Geoportal Extension 3.3.1. Please read the [Disclaimer](#) and [Privacy](#) or [Contact Us](#).



NOAA Coastal Service Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

What is Ontology?





NOAA

SOUTHEAST AND CARIBBEAN DATA EXPLORER

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

[Logout](#) [Help](#) [About](#) [Feedback](#)[HOME](#)[SEARCH](#)[TOPIC SEARCH](#)[ADMINISTRATION](#)[REPOSITORIES](#)[Manage](#) [Create](#) [Upload](#)

2 record(s) were deleted.

Document title:

Document UUID:

Document owner:

Approval status: Publication method:

Update date between: and (yyyy-mm-dd)

For selected records:

Results 1-50 of 168 record(s) [1](#) [2](#) [3](#) [4](#) [5](#)

☐	Action	Title	UUID	Owner	Status	Method	Date
☐		Web Map Service nosdataexplorer_vms	{243CA643-C2A5-4E1A-9971-3C3DBF35A604}	arcgismanager	Approved	Upload	2009-12-29
☐		Gulf of Mexico Hypoxia Watch CTD Station Locations for June and July SEAMAP Cruises of 2002 - 2008	{DEF0519E-AAF4-4FE9-AEF7-9A8271897590}	arcgismanager	Posted	Upload	2009-11-23
☐		Gulf of Mexico Hypoxia Watch Bottom Dissolved Oxygen Contours for June and July SEAMAP Cruises of 2002 - 2008	{8C73A262-9F3C-4386-9A85-EBFC09B6236E}	arcgismanager	Posted	Upload	2009-11-23
☐		Benthic Habitats and Bottom Types of Southwest Florida	{071F4A24-BCDE-43DB-8CAD-85938595E06D}	arcgismanager	Approved	Upload	2009-11-23



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Expected User Groups

- **NOAA and federal partners**
- **Coastal Managers and GIS Users within region**
 - Hazards response and mitigation
 - Web-based
 - Mobile applications
- **Scientific Community**
 - Authoritative Source Data
- **Neo-geographers**
 - Rest-based interface



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Partnerships

- **NOAA Partnerships**
 - National Climatic Data Center
 - National Weather Service
 - NOAA Climate Services Portal
 - NOS Data Explorer
 - Office of Response and Restoration
- **Non-NOAA Partnerships**
 - EPA
 - Geospatial One-Stop

Pilot Conclusions

- ESRI GPT 9.3.1
 - Value out of the box
- System architecture & IT Security
 - Compliant with NOAA
- Buy-in from NOAA regional offices
 - Metadata
- Standards-based approach
 - CS-W
 - Ontology

Future Goals

- Observational Datasets
 - Metadata records
- Interactive Map
- Grow the metadata network
- Federated Search Capabilities
- Migrate to other NOAA regions



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Acknowledgements and SECART Partners

- **NOAA High Performance Computing and Communications**
- **National Ocean Services**
 - Coastal Services Center
- **National Environmental, Satellite, Data, and Information Services**
 - National Climatic Data Center
 - National Coastal Data Development Center
- **National Marine Fisheries Service**
 - Southeast Regional Office
- **Office of Oceanic and Atmospheric Research**
 - Atlantic Oceanographic and Meteorological Lab
- **National Weather Service**
 - Weather Forecast Office-Raleigh



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY