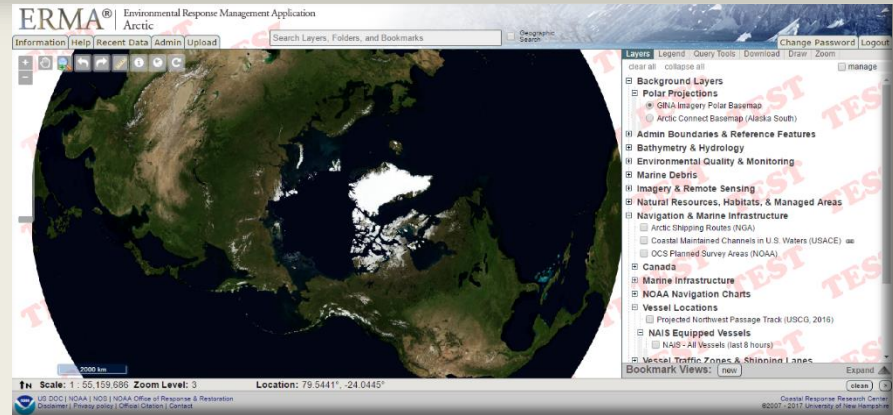
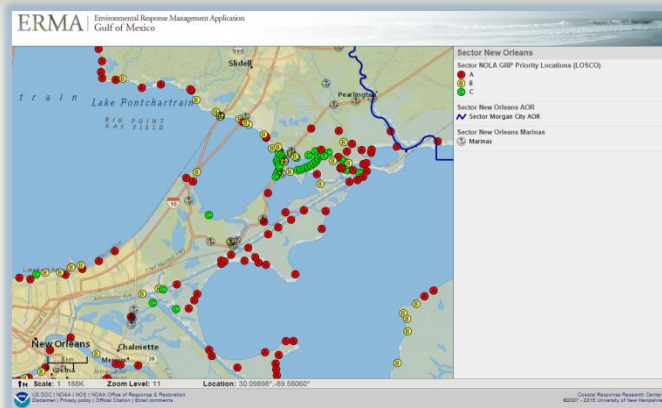


NOAA | National Ocean Service  
Office of **Response and Restoration**



# Environmental Response Management Application (ERMA®)

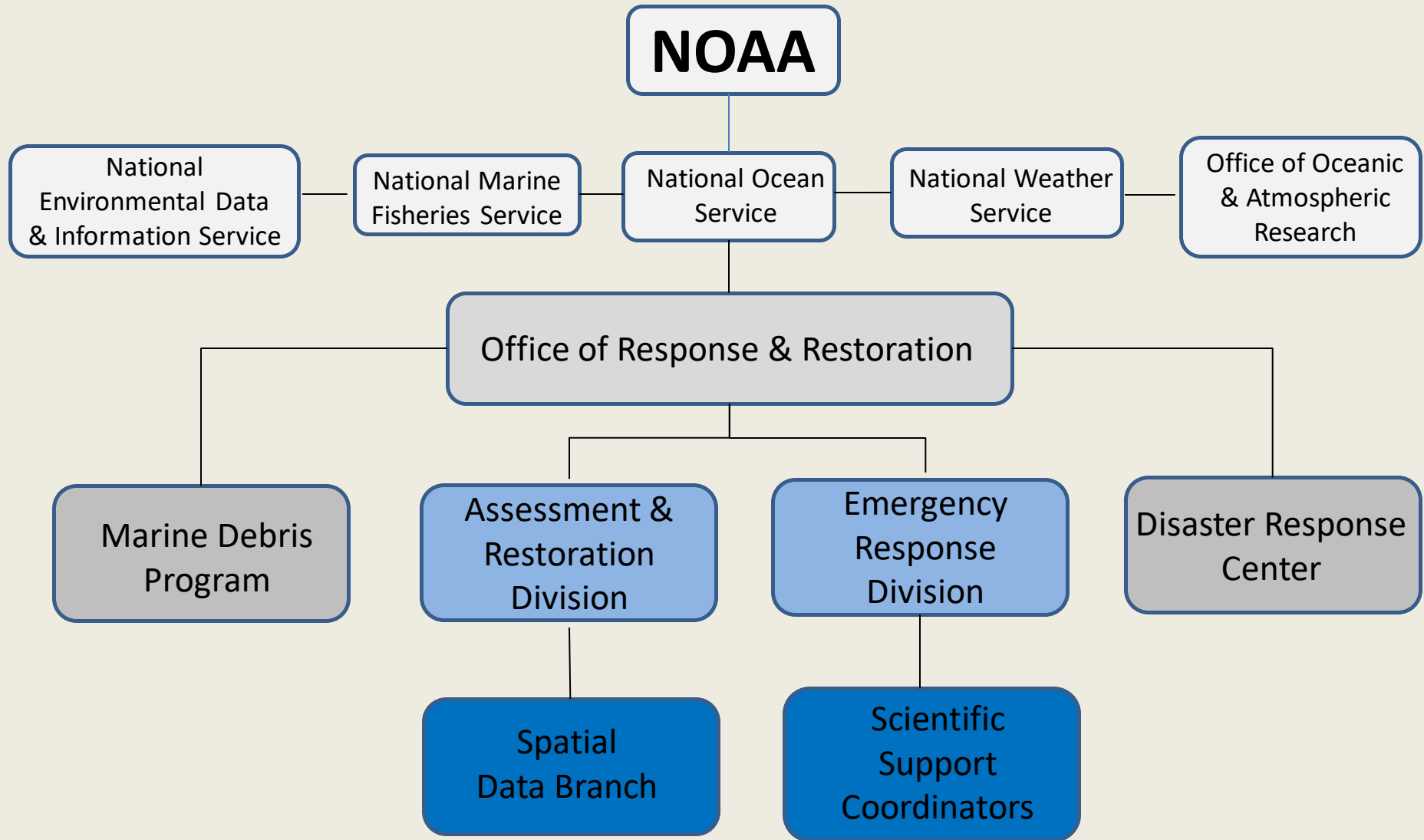
*NOAA Office of Response & Restoration  
CRRT Meeting  
August 8<sup>th</sup>, 2017*

# Overview

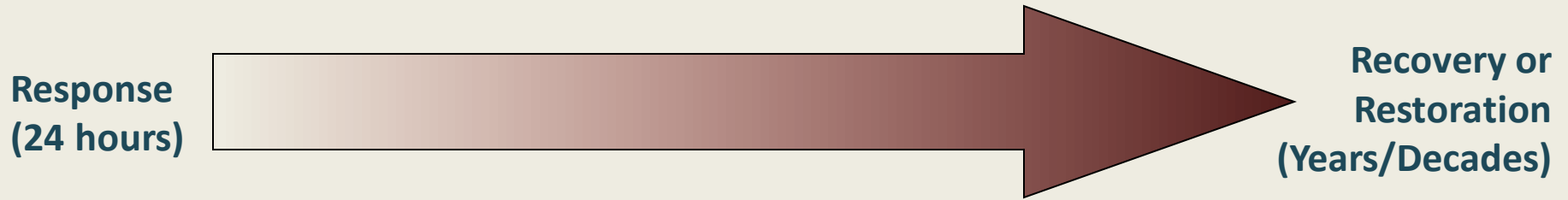
- ERMA Overview
- ERMA Data
- ERMA Tools
- Questions (anytime!)

# ERMA Background

- [erma.noaa.gov](http://erma.noaa.gov)
- [erma.noaa.gov/caribbean](http://erma.noaa.gov/caribbean)



# Continuum of “Response” Framework for The Office of Response & Restoration



Response

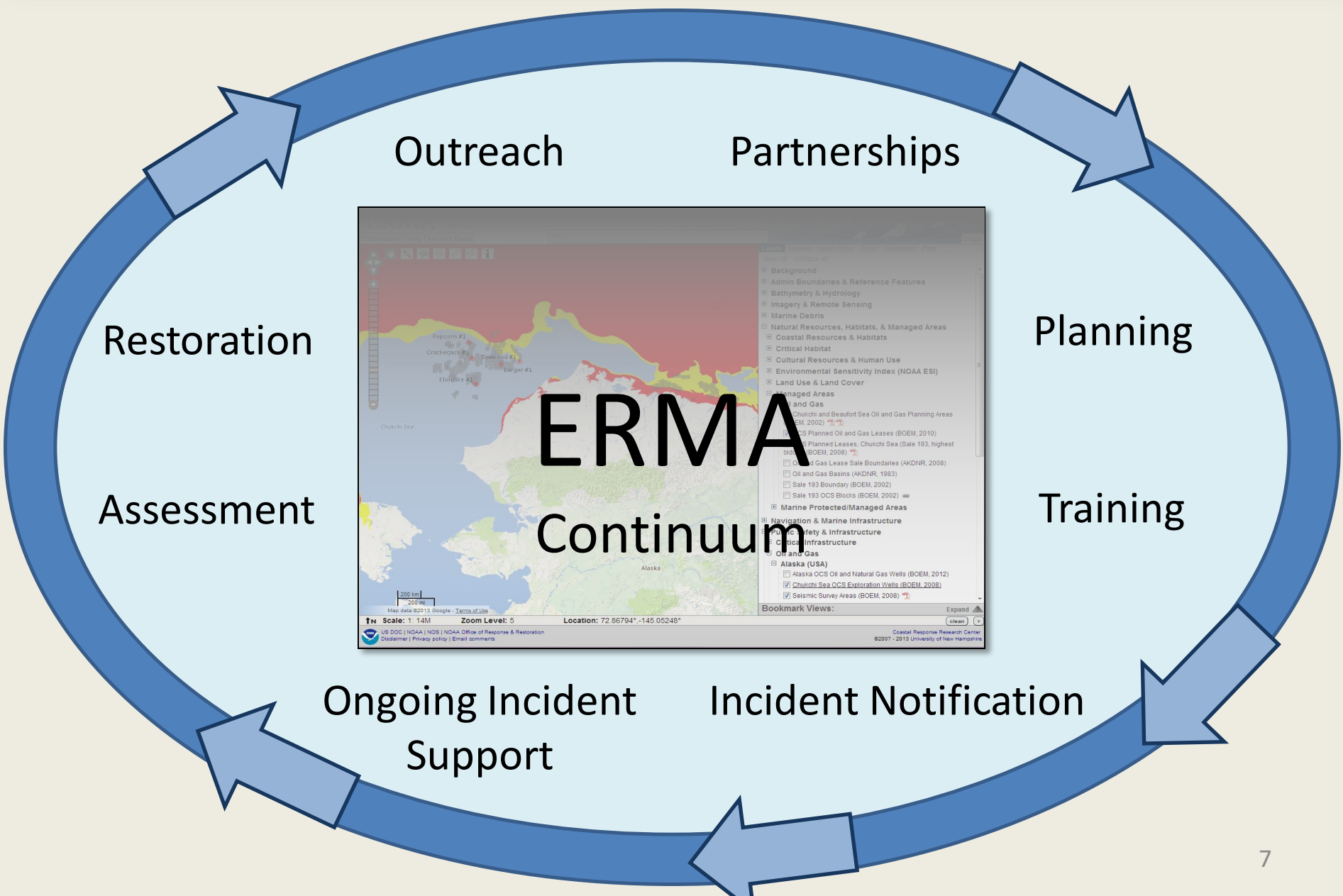
Assessment

Restoration

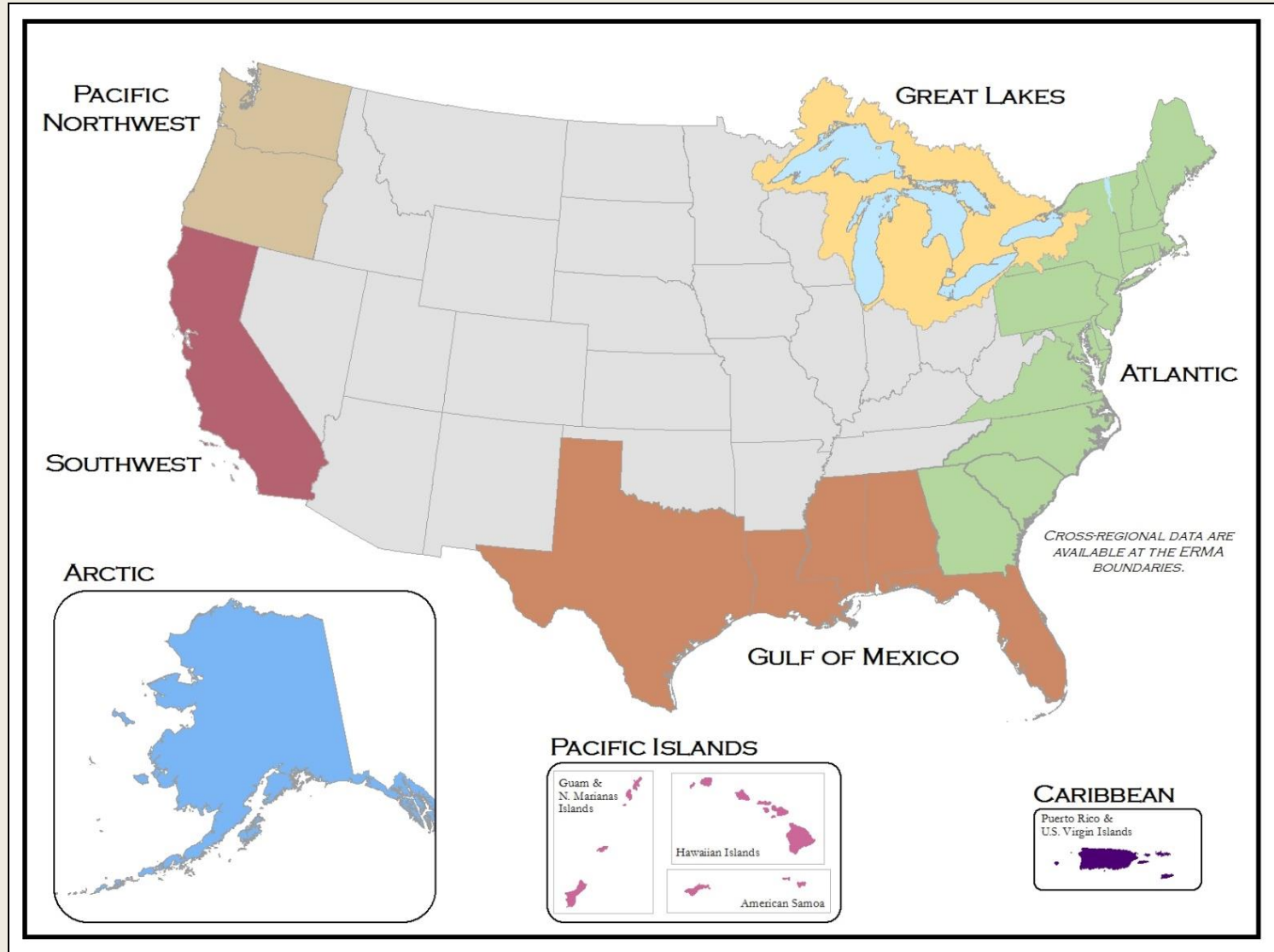


## What is ERMA?

- Customizable web based mapping application that provides centralized access and visualization of integrated data.
  - Creating and building upon relationships, partners, and data standards
  - Tiered system security that protects data.
    - Progressive disclosure
  - Scalability
  - Distributed contributions
  - Standardized user interface
  - Access via any modern web browser.



# Where is ERMA?





# NOAA IM & ERMA Incident Support

Requested through the NOAA SSC or RRC

- Small Case: Remote Support
- Large Event: On-Scene Support → PRFA
  - Immediate Field Data QA/QC & Daylight Data Gaps
  - Ensures Highest Quality Data for Unified Command
  - Situational Awareness to Off-Site Leadership & Partners
  - Ensures Federal Retention of Response Data

## How is ERMA Data Updated?

- GIS Data (shapefiles, real-time map services)
  - NOAA Spatial Data Branch Regional Data Managers
  - Trained Regional Partners
    - State (California OSPR)
    - Universities (University of Washington)
    - U.S Coast Guard Academy
- Map Drawings
  - Trained Advanced Users
    - USCG Sector Guam
    - USCG District 9/Great Lakes

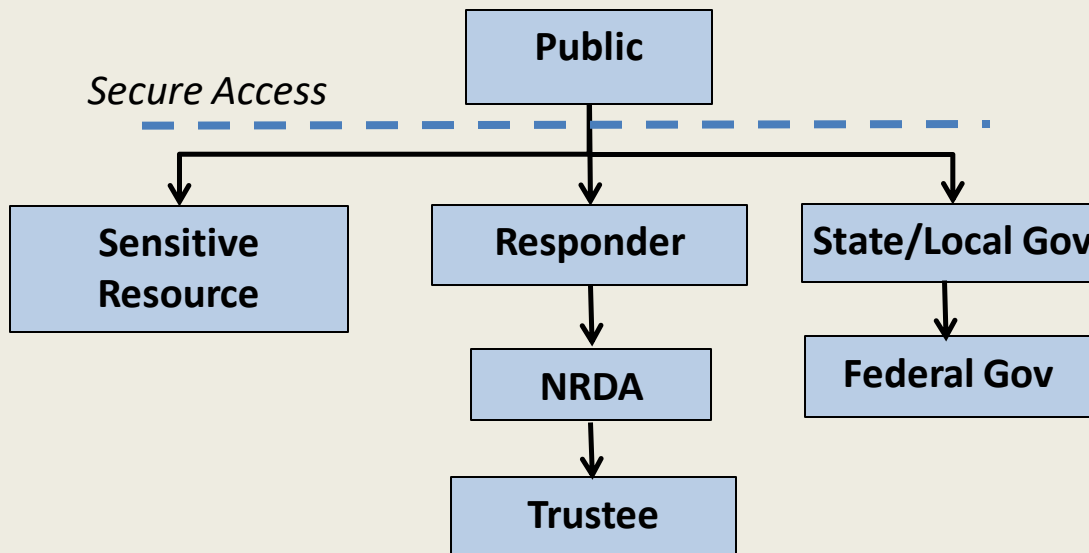
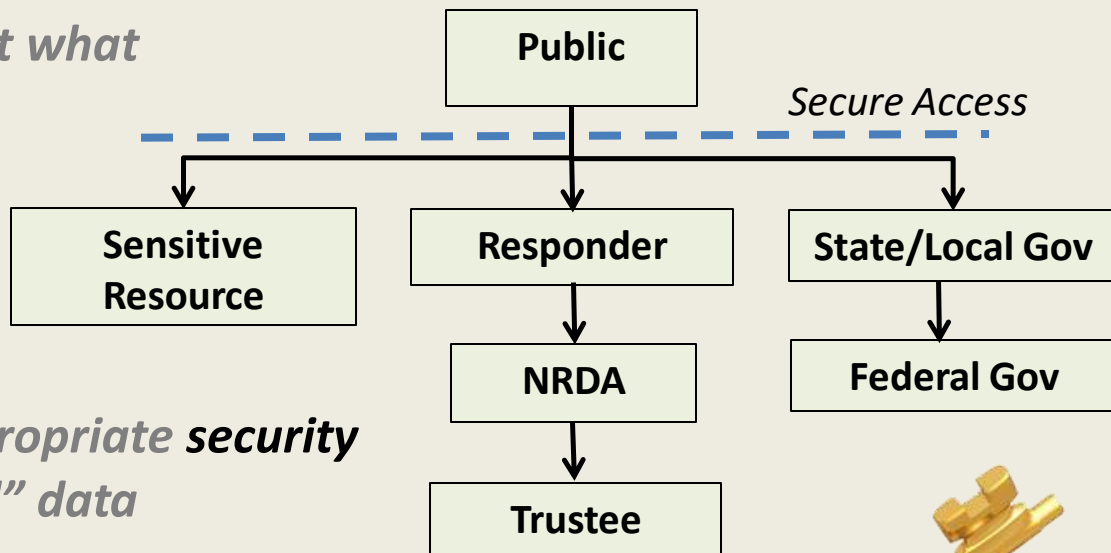


# ERMA Layer Security

*User and Layer security will limit what any given user will see in ERMA*



*Only users with the appropriate security level can see "protected" data*



## ERMA Account Access

- Public accounts
  - Publically available data (no login required)
- Restricted accounts for planning & response
  - Username/password required
    - Verified by NOAA
    - Various levels of access
      - Active incidents
      - Sensitive datasets
      - NRDA/Trustees
      - Drills
  - Password reset 90 days; Inactive accounts 6 months
- Data available only to appropriate users and use



# ERMA Security

## NOAA security assessment and guidelines

- Federal, secured Amazon Cloud environment
  - Full server redundancy
  - Cloud on 24/7
  - Ability to expand as needed
- Data sharing security
  - Account privileges
  - Event Specific
  - Restrict download
  - Token access for map services



# Account Request

**ERMA®** Environmental Response Management Application  
Atlantic

Information Help Recent Data Search Layers, Folders, and Bookmarks Geographic Search

**Login**

username

password

[request account](#) [recover username/password](#)

You are accessing a U.S. Government information system. This system and the information displayed within is provided for U.S. Government-authorized use only. Unauthorized or improper use of this system is prohibited and may result in civil and criminal penalties, or administrative disciplinary action. By using this information system, you understand and consent to the following:

You have no reasonable expectation of privacy when you use this information system; this includes any communications or data transiting or stored on this information system. The communications and data

I agree to the terms of use outlined above.

cancel ok

Layers Legend Query Tools Zoom Download Print

- Background Layers
- Admin Boundaries & Reference Features
- Bathymetry & Hydrology
- Environmental Quality & Monitoring
- Marine Debris
- Imagery & Remote Sensing
- Natural Resources, Habitats, & Managed Areas
- Navigation & Marine Infrastructure
- Public Safety & Infrastructure
- Response Planning
- Restoration
- Weather, Oceanography, & Natural Hazards
- Incidents & Drills

Bookmark Views: Expand

Scale: 1 : 5M Zoom Level: 6 Location: 40.64698°,-65.00400°

### Request an ERMA Account

**First Name**  required

**Middle Name**

**Last Name**  required

**Phone**  required

**Email Address**  required Work email address required (not personal)

**Affiliation**  required

**Agency Represented**  required Major government agency or company represented.

**contractor information**

**Contractor**  Yes  No required

**Company (if yes above)**

**NOAA OR&R Sponsor\***  required

**Incident Command Post (if applicable)**

**Office Location (City, State)**  required

**Notes**

ERMA® Environment Atlantic

Information Help Recent Data

Scale: 1 : 5M

US DOC | NOAA | NOS | NOAA Office of Response and Restoration  
Disclaimer | Privacy policy | Official Citation

Zoom Download Print

Reference Features

Monitoring

Structures

Coastal Response Research Center  
©2007 - 2017 University of New Hampshire

\* NOAA Office of Response & Restoration representative that suggested access to the site.

# ERMA Layout and Data



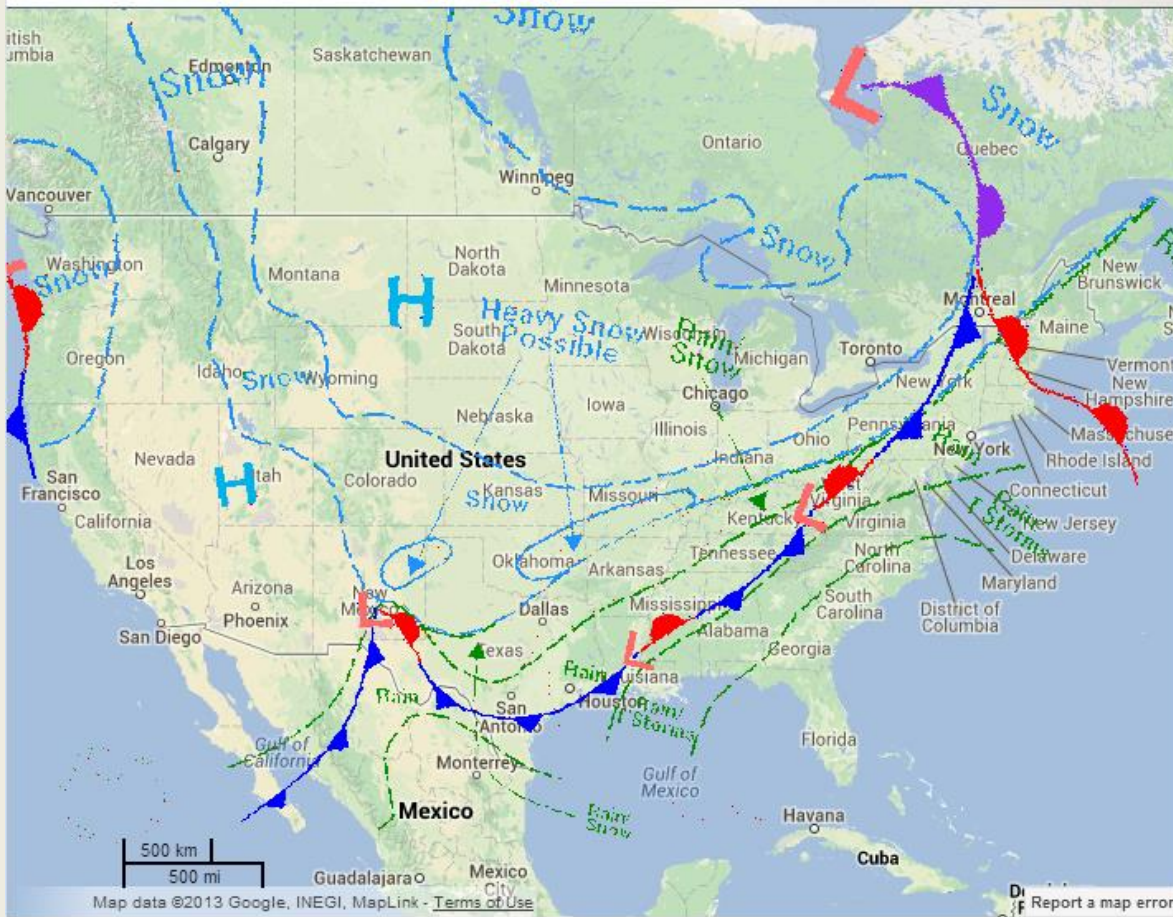
# ERMA Layout & Tools

The screenshot displays the ERMA (Emergency Response and Monitoring Application) web interface. The main map shows the Northeastern United States, including parts of Maine, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, and South Carolina. Major cities like Toronto, Buffalo, New York, Philadelphia, and Washington, D.C. are labeled. The interface includes several key components:

- Top Navigation:** "ERMA" logo, "Info/Admin Tabs", "Search", and "Login/out" buttons.
- Map Toolbar:** Located on the left side, containing navigation and map manipulation tools.
- Map Controls:** A vertical scale and zoom controls on the left side of the map.
- Map Key:** A scale bar and location information at the bottom left.
- Layers Panel:** On the right side, listing various data layers such as "Background Layers", "Admin Boundaries & Refer...", "Bathymetry & Hydrology", "Environmental Quality & Monitoring", "Marine Debris", "Imagery & Remote Sensing", "Natural Resources, Habitats, & Managed Areas", "Coastal Resources & Habitats", "Critical Habitat", "Cultural Resources & Human Use", "Essential Fish Habitat (NOAA EFH)", "Environmental Vulnerability Index (Maine DEP)", and "Environmental Sensitivity Index (NOAA ESI)".
- Table of Contents:** A sub-panel within the Layers panel listing specific map products like "Seamless ESI PDF Maps for the Hudson River - 2006 (NOAA)", "Seamless ESI PDF Maps for the Hudson River - 2009 (NOAA)", "Seamless ESI PDF Maps for the Hudson River - 2014 (NOAA)", "Seamless ESI PDF Maps for the Hudson River - 2007 (NOAA)", "Seamless ESI PDF Maps for the Hudson River - 2005 (NOAA)", "Seamless ESI PDF Maps for South Florida - 2007 (NOAA)", "ESI PDF Overlay, NC", "ESI PDF Overlay, SC", and "ESI PDF Overlay, GA".
- Shortcut Menu:** A context menu overlaid on the Layers panel with options like "view metadata", "zoom to extent", "bring to front", "send to back", and "view data".
- Bookmark Panel:** A panel at the bottom right showing "Bookmark Views: new" and "clean" buttons.
- Display Controls:** A panel at the bottom right for managing the map's appearance.
- Map Information:** At the bottom, it shows "Scale: 1:5M", "Zoom Level: 6", and "Location: 45.44249°,-83.63681°".

# Current Weather Conditions

ERMA | Environmental Response Management Application  
Atlantic



## Weather, Oceanography, & Natural Hazards

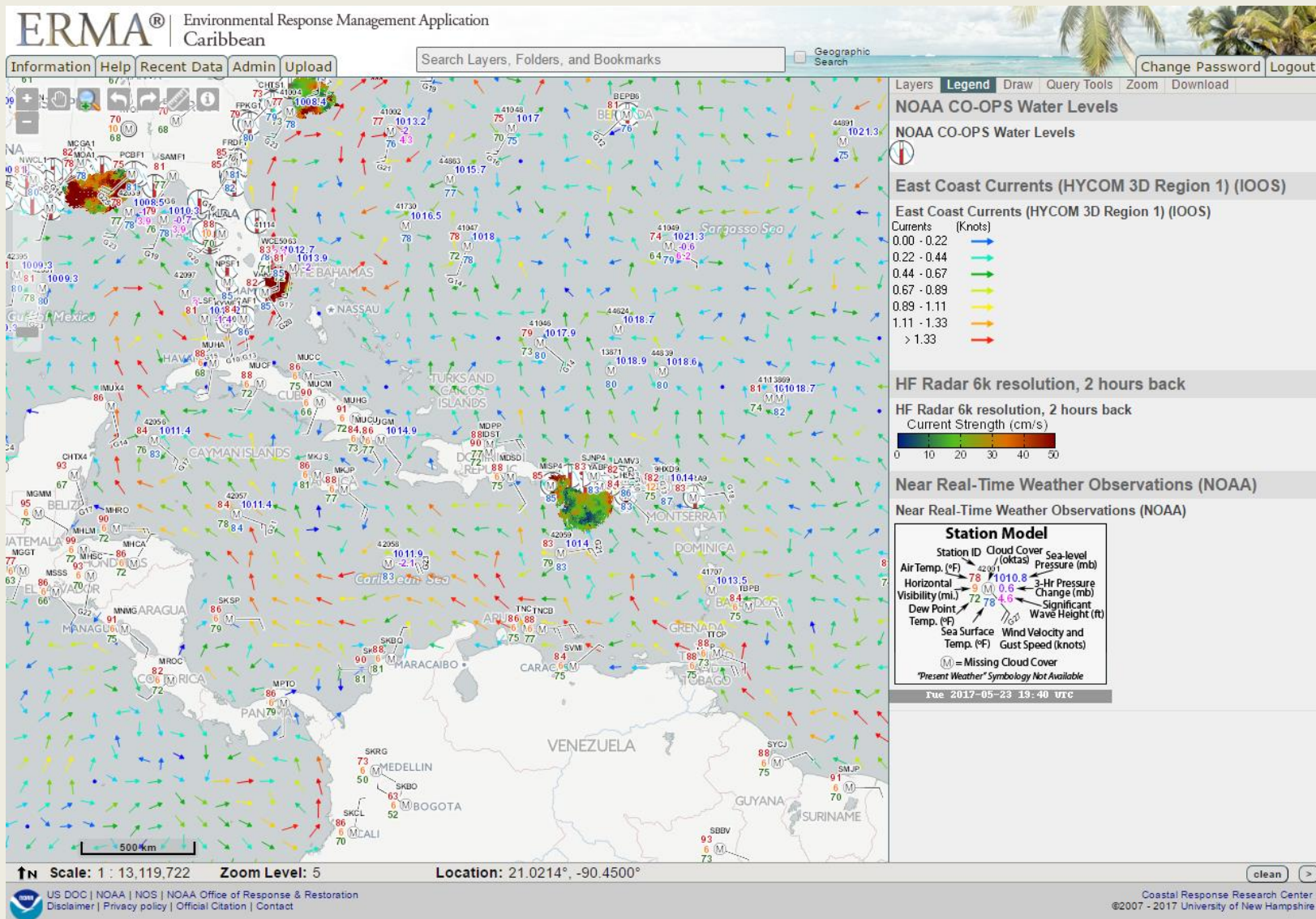
### NWS National Weather Forecast Chart

	Cold Front - a zone separating two air masses, of which the cooler, denser mass is advancing and replacing the warmer.
	Warm Front - a transition zone between a mass of warm air and the cold air it is replacing.
	Stationary Front - a front between warm and cold air masses that is moving very slowly or not at all.
	Occluded Front - a composite of two fronts, formed as a cold front overtakes a warm or quasi-stationary front. Two types of occlusions can form depending on the relative coolness of the air behind the cold front to the air ahead of the warm or stationary front. A cold occlusion results when the coldest air is behind the cold front and a warm occlusion results when the coldest air is ahead of the warm front.
	Trough - an elongated area of relatively low atmospheric pressure, the opposite of a ridge. On HPC's surface analyses, this feature is also used to depict outflow boundaries.
	Squall Line - a line of active thunderstorms, either continuous or with breaks, including contiguous precipitation areas resulting from the existence of the thunderstorms.
	Dry Line - a boundary separating moist and dry air masses. It typically lies north-south across the central and southern high Plains states during the spring and early summer, where it separates moist air from the Gulf of Mexico (to the east) and dry desert air from the southwestern states (to the west).

Scale: 1: 28M    Zoom Level: 4    Location: 30.62020°, -85.83852°

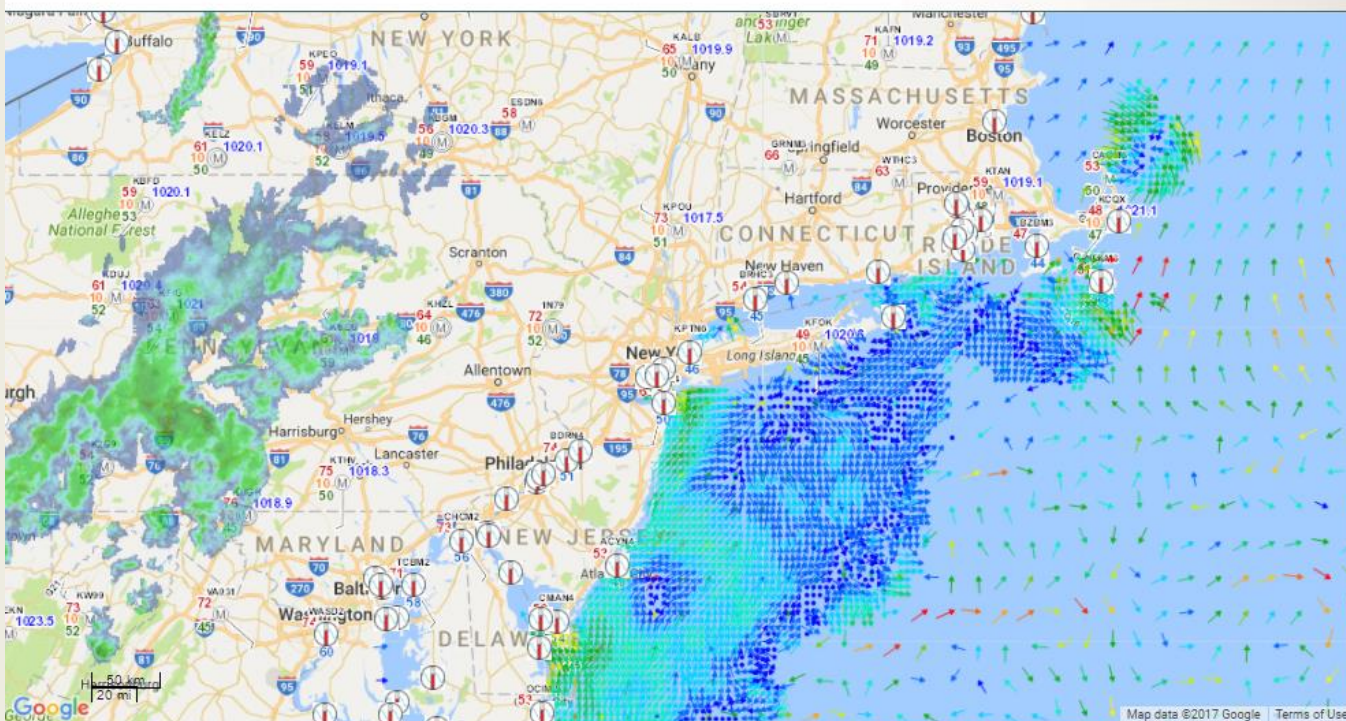


# Current Near Real Time Weather



# Current Near Real Time Weather

ERMA® Environmental Response Management Application  
Atlantic



## Near Real-Time Weather Observations (NOAA)

### Station Model



wed 2017-04-12 01:40 UTC

## Currents

### East Coast Currents (HYCOM 3D Region 1) (IOOS)



## HF Radar

### East Coast HF Radar (USEGC) (IOOS)



Scale: 1 : 3M    Zoom Level: 7    Location: 38.38654°,-71.36440°

# Response Imagery

**ERMA** | Environmental Response Management Application  
Atlantic

Information | Help | Recent Data | Admin | Upload | Find | Logout

Layers | Legend | Query Tools | AOI | Labels | Zoom | Download | Print

clear all collapse all  manage

- Public Safety & Infrastructure
- Response Planning
- Restoration
- Weather, Oceanography, & Natural Hazards
- Hurricane and Post Tropical Storm Sandy
  - Imagery & Remote Sensing
    - NOAA NGS Aerial Imagery
      - NOAA Aerial Imagery 11/06/2012 [GO](#)
      - NOAA Aerial Imagery 11/05/2012 [GO](#)
      - NOAA Aerial Imagery 11/04/2012 [GO](#)
      - NOAA Aerial Imagery 11/03/2012 [GO](#)
      - NOAA Aerial Imagery 11/02/2012 [GO](#)
      - NOAA Aerial Imagery 11/01/2012 [GO](#)
      - NOAA Aerial Imagery 10/31/2012 [GO](#)
    - NCDOT Aerial Images 10/31/12
    - Collected Civil Air Patrol (CAP) Images (Zoom Dependent)
    - Google Aerial Imagery 11/04/2012 (Flight 1)
    - Imagery Observed Point Damages (Zoom Dependent)
  - Weather Predictions & Coastal Monitoring
  - Historic Incidents & Drills
  - ERMA Tools

Bookmark Views:

Scale: 1: 846    Zoom Level: 19    Location: 39.95969°,-74.06726°

Imagery ©2013, DigitalGlobe - Terms of Use

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Disclaimer | Privacy policy | Email comments

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# Response Imagery

**ERMA** | Environmental Response Management Application  
Atlantic

Information | Help | Recent Data | Admin | Upload | Find | Logout

Layers | Legend | Query Tools | AOI | Labels | Zoom | Download | Print

clear all collapse all  manage

- Public Safety & Infrastructure
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      - NOAA Aerial Imagery 11/05/2012 [GO](#)
      - NOAA Aerial Imagery 11/04/2012 [GO](#)
      - NOAA Aerial Imagery 11/03/2012 [GO](#)
      - NOAA Aerial Imagery 11/02/2012 [GO](#)
      - NOAA Aerial Imagery 11/01/2012 [GO](#)
      - NOAA Aerial Imagery 10/31/2012 [GO](#)
    - NCDOT Aerial Images 10/31/12
    - Collected Civil Air Patrol (CAP) Images (Zoom Dependent)
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    - Imagery Observed Point Damages (Zoom Dependent)
  - Weather Predictions & Coastal Monitoring
  - Historic Incidents & Drills
  - ERMA Tools

Bookmark Views:

Scale: 1: 846 | Zoom Level: 19 | Location: 39.95981°,-74.06725°

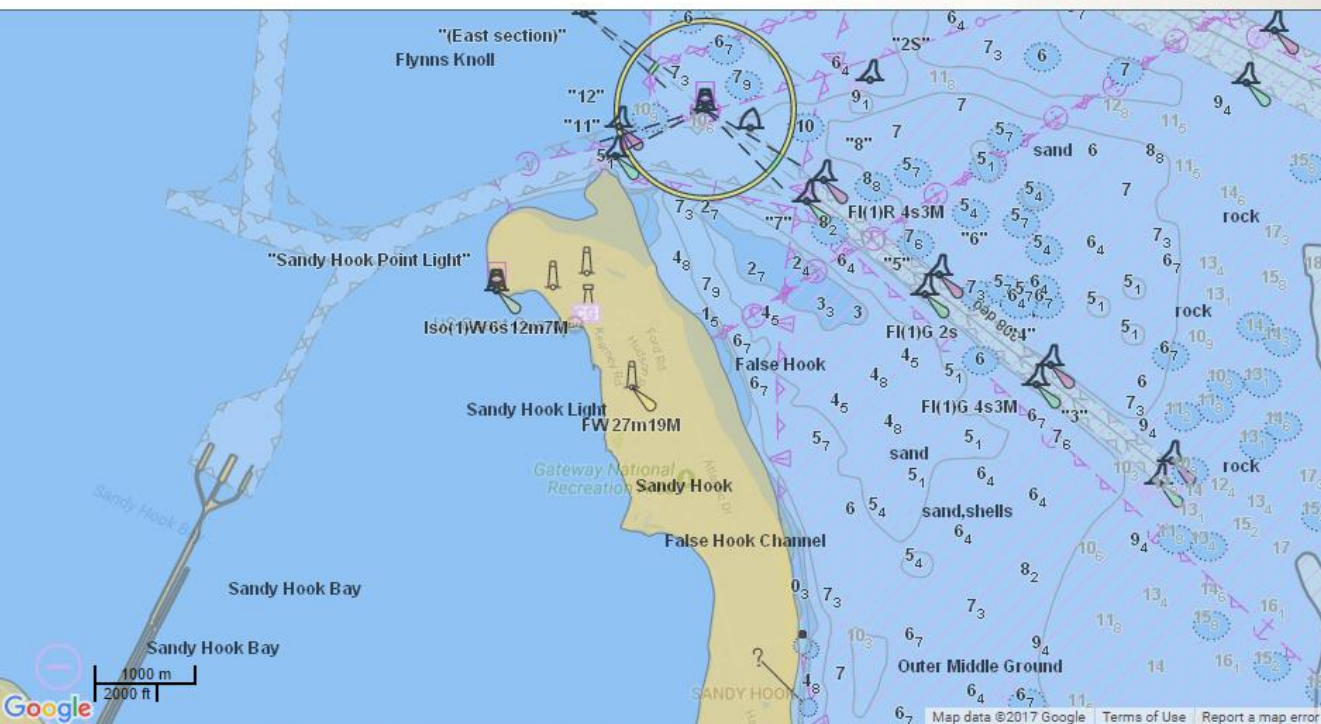
Imagery ©2013, DigitalGlobe - [Terms of Use](#) | Report a map error

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Disclaimer | Privacy policy | Email comments

Coastal Response Research Center  
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# Navigational Charts (ENCs)

ERMA® Environmental Response Management Application  
Atlantic



NOAA Navigation Charts  
Electronic Navigational Charts (ENC) (NOAA)

Scale: 1 : 41K    Zoom Level: 13    Location: 40.48081°,-73.91769°

# Navigational Charts (RNCs)

ERMA® Environmental Response Management Application  
Atlantic



NOAA Navigation Charts

Raster Navigational Charts (RNC) (NOAA)

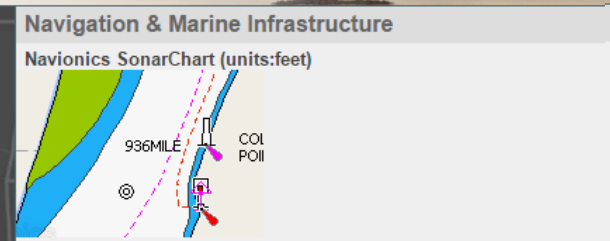
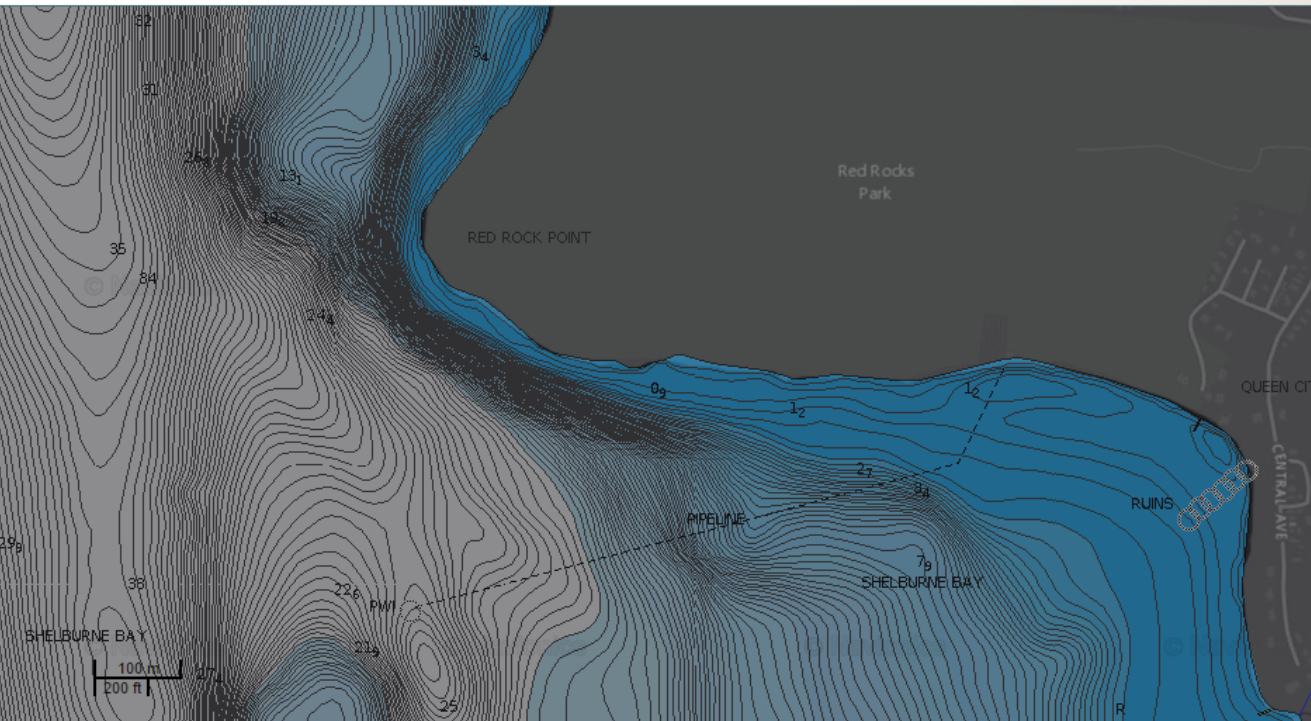


Scale: 1 : 330K    Zoom Level: 10    Location: 40.61060°, -73.34417°



# Other Navigational Charts (Navionics)

ERMA® | Environmental Response Management Application  
Atlantic



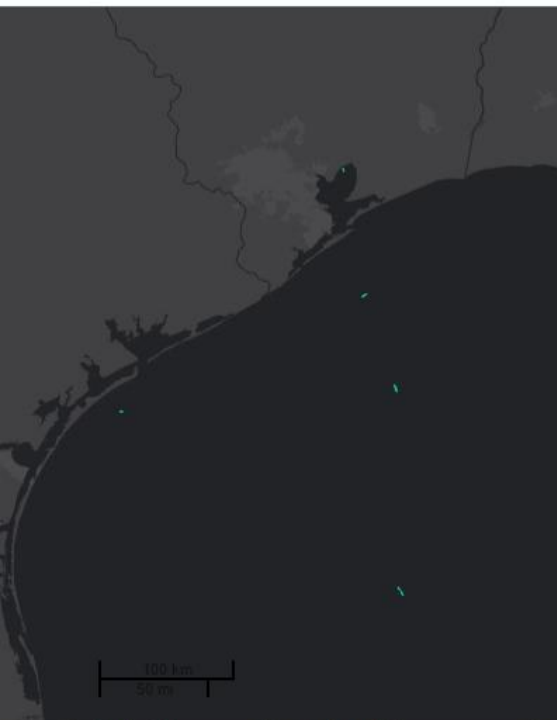
↑N Scale: 1 : 4842 Zoom Level: 16 Location: 44.43942°, -73.21980°

# Satell

## NESDIS Marine Pollution Surveillance Reports

- April 2017
- March 2017
- February 2017
- January 2017
- December 2016
- November 2016
- October 2016
- September 2016
- August 2016
- July 2016
- June 2016
- May 2016
- April 2016
- March 2016
- February 2016
- January 2016
- December 2015
- November 2015
- October 2015
- September 2015
- August 2015
- July 2015
- June 2015
- May 2015
- April 2015
- March 2015
- January 2015
- 2014
- 2013

ERMA® Environmental Response Management  
Gulf of Mexico



Scale: 1 : 3M Zoom Level: 7

# toring



## April 2017

SDIS Suspected Oil 10-April-2017 (0742 CDT)  
■ Possible Oil  
■ Possible Thicker Oil

SDIS Suspected Oil 09-April-2017 (1134 CDT)  
■ Possible Oil  
■ Possible Thicker Oil

SDIS Suspected Oil 08-April-2017 (1138 CDT)  
■ Possible Oil  
■ Possible Thicker Oil

SDIS Suspected Oil 08-April-2017 (1138 CDT) B  
■ Possible Oil  
■ Possible Thicker Oil

SDIS Suspected Oil 08-April-2017 (1138 CDT) C  
■ Possible Oil  
■ Possible Thicker Oil

SDIS Suspected Oil 08-April-2017 (1138 CDT) D  
■ Possible Oil  
■ Possible Thicker Oil

SDIS Suspected Oil 04-April-2017 (1901 CDT)  
■ Possible Oil  
■ Possible Thicker Oil

## February 2017

# Satellite Tracking & Monitoring

ERMA® Environmental Response Management Application  
Gulf of Mexico



## September 2016

NESDIS Suspected Oil 22-September-2016 (1629 CDT)

- Possible Oil
- Possible Thicker Oil

NESDIS Suspected Oil 29-September-2016 (1650 CDT)

- Possible Oil
- Possible Thick Oil

## Platforms & Wells

Platform Saratoga (Taylor Energy)

- Taylor Energy

Scale: 1 : 379K    Zoom Level: 10    Location: 29.08343°, -88.35850°

# MARINE POLLUTION SURVEILLANCE REPORT



Analysis Provided by: The National Oceanic and Atmospheric Administration/National Environmental Satellite, Data and Information Service (NOAA/NESDIS)

REPORT DATE: APRIL 10, 2017  
 REPORT TIME: 1345Z (0945 EDT)  
 ANALYST: BOLL

DATA SOURCE: RADARSAT-2  
 MODE: ScanSAR Wide VV  
 RESOLUTION: 100 meter (wide)  
 IMAGE DATE/TIME: 4/10/2017 1053Z (0653 EDT)

### Legend

- Possible Oil
- Possible Thicker Oil
- Coimbra Tanker Shipwreck; [ 40°24'4" N / 72°22'14" W ]
- 2.7 km<sup>2</sup> Area of Possible Oil
- False-Positive (not oil)

**CONFIDENCE: High**

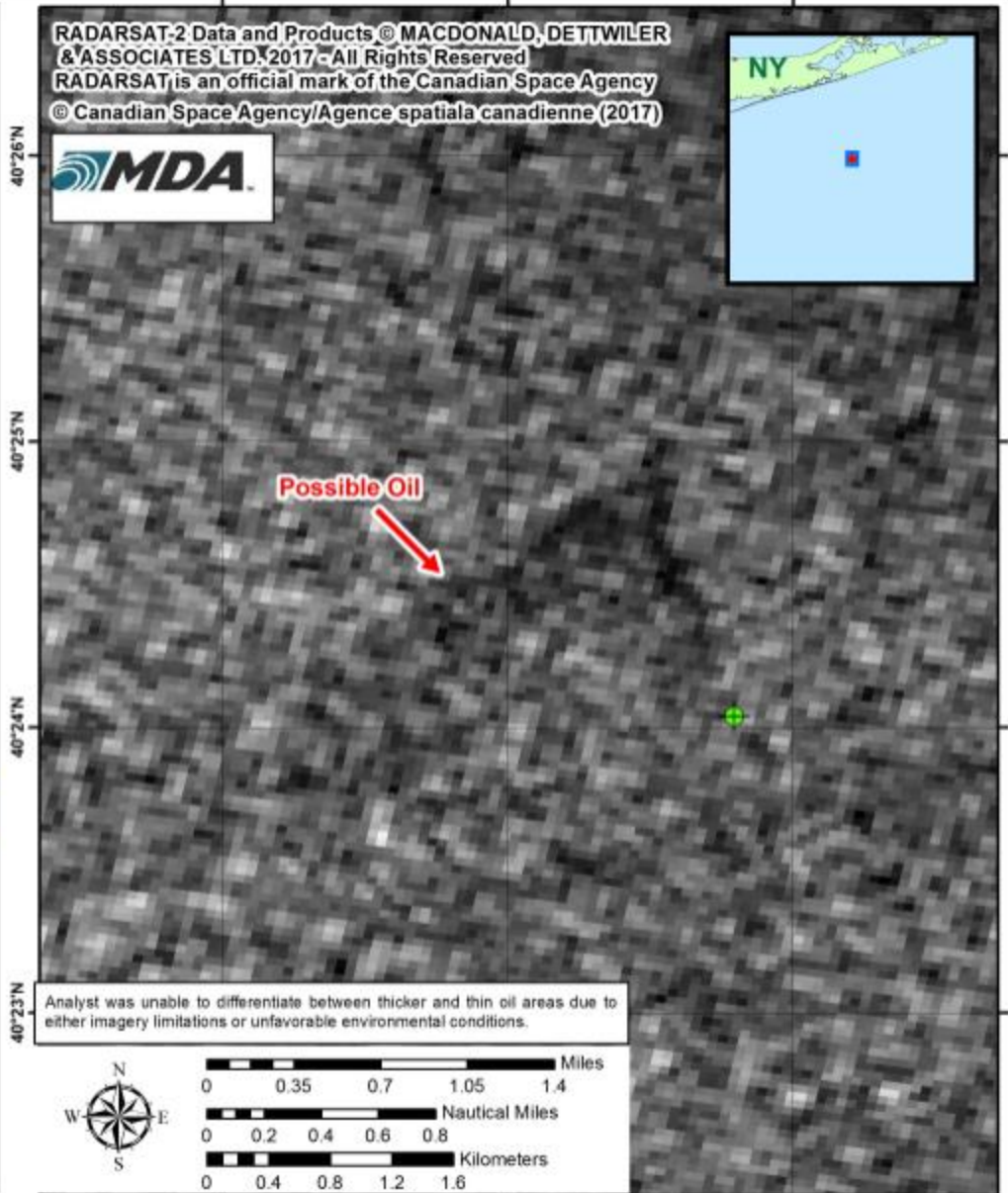
### REMARKS:

Satellite analysis indicated a possible oil anomaly emanating from the known repeat leak source the sunken Coimbra Tanker off the coast of Long Island, NY. The anomaly was 1.7 NM in length and 0.5 NM in width.

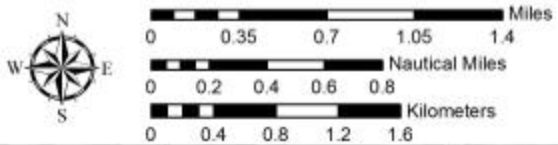
Measured winds in the area were 10 knots and from the South. Modeled ocean currents were under 0.75 knots with variable directionality.

Confidence was High given the anomaly was connected to a point source, displayed a contrast to its surroundings, and appeared out of place.

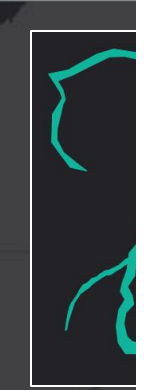
RADARSAT-2 Data and Products © MACDONALD, DETTWILER & ASSOCIATES LTD. 2017. All Rights Reserved  
 RADARSAT is an official mark of the Canadian Space Agency  
 © Canadian Space Agency/Agence spatiale canadienne (2017)



Analyst was unable to differentiate between thicker and thin oil areas due to either imagery limitations or unfavorable environmental conditions.



ERM



Threats

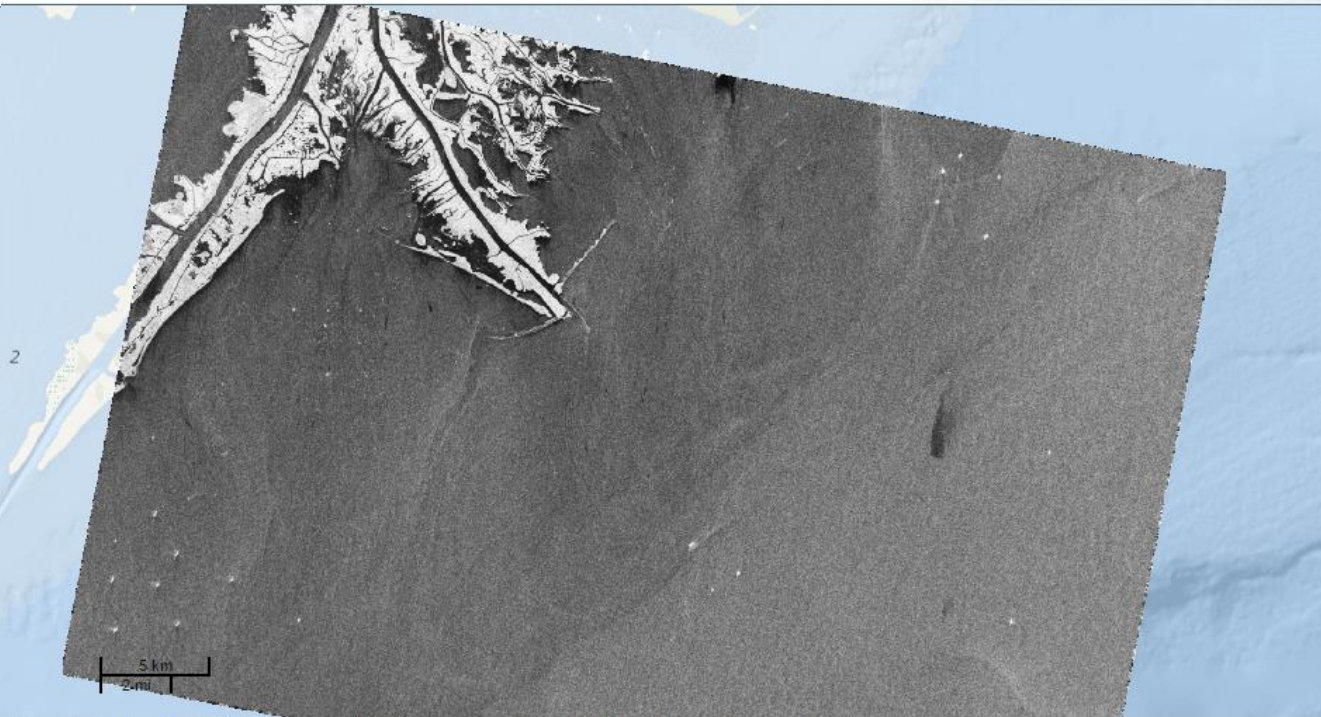
Scale: 1



Research Center  
 of New Hampshire

# Remote Sensing Advances

ERMA® | Environmental Response Management Application  
Gulf of Mexico

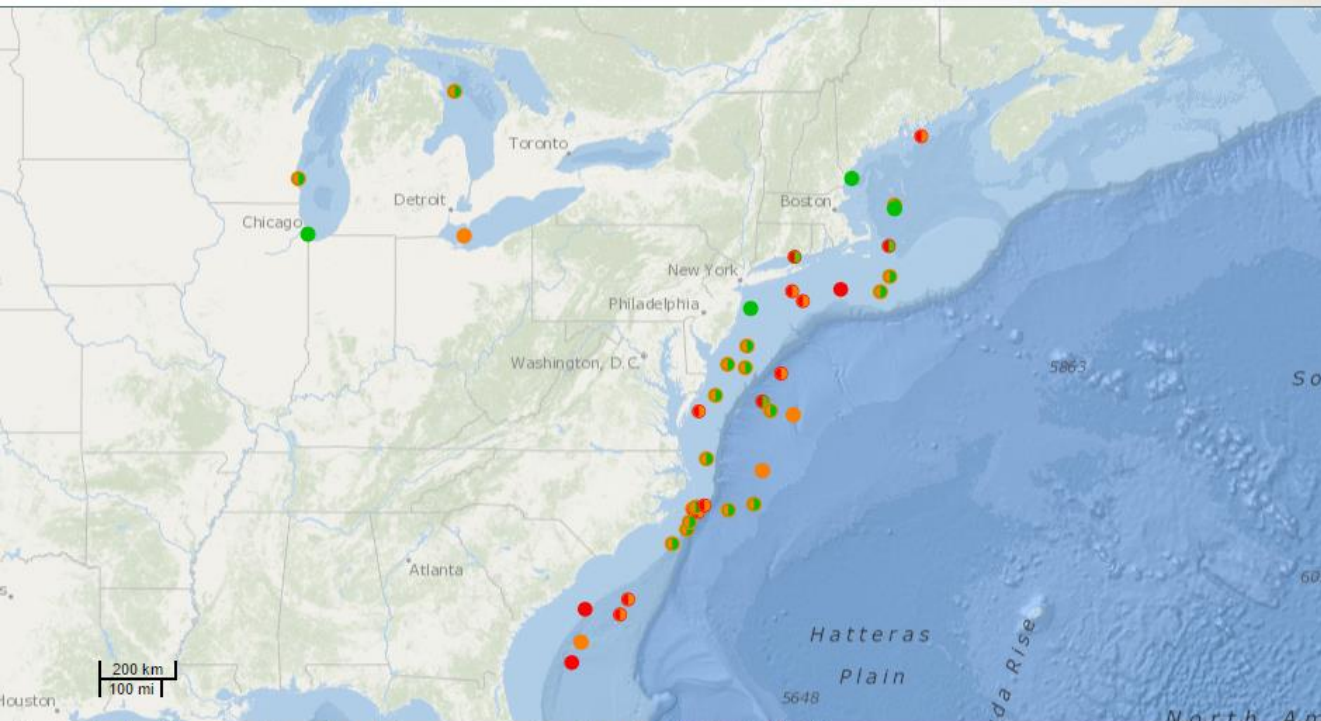


2016 NESDIS/MDA  
RS2 Greyscale 2016-11-15

↑N Scale: 1 : 190K Zoom Level: 11 Location: 28.96285°, -88.77836°

# NOAA RULET

ERMA® Environmental Response Management Application  
Atlantic



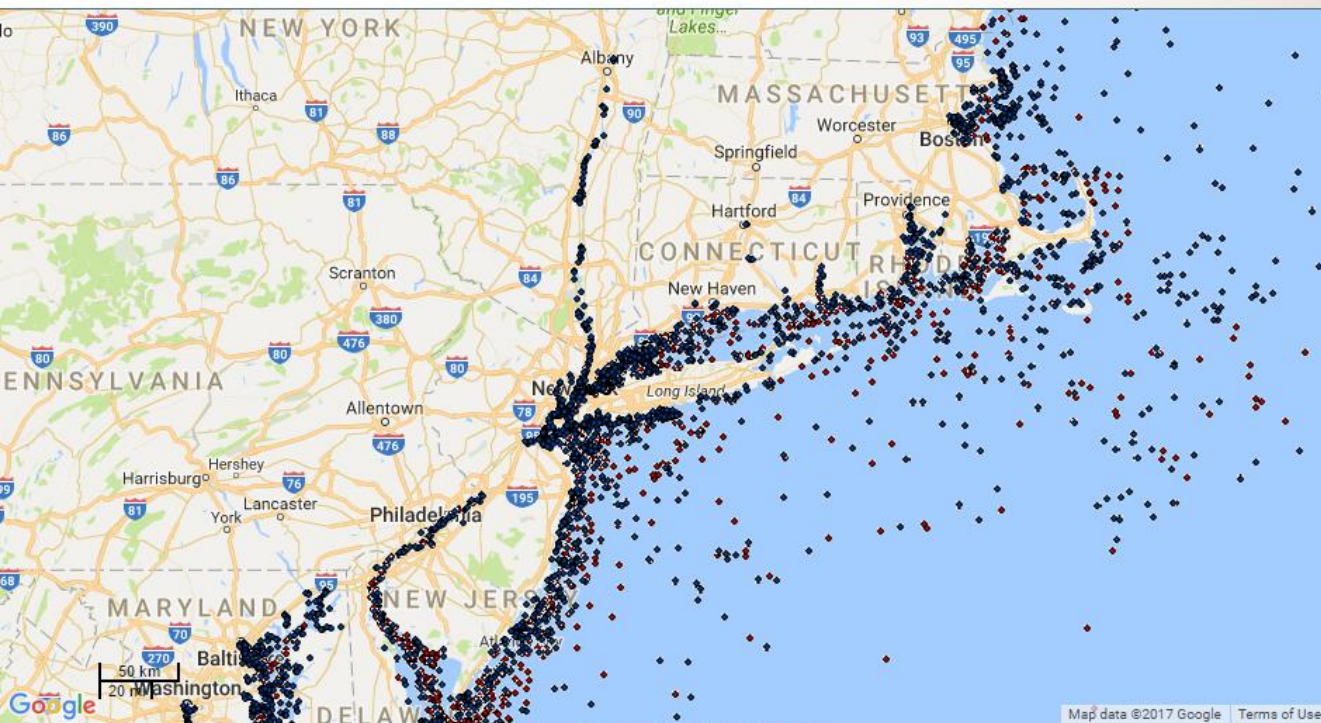
**Wrecks and Obstructions**  
Remediation of Underwater Legacy Environmental Threats (RULET) (NOAA)  
**RULET July 2012 Final Scores**  
Worst case discharge / most probable discharge score

- High / High
- High / Medium
- High / Low
- Medium / Medium
- Medium / Low
- Low / Low

Scale: 1 : 11M    Zoom Level: 5    Location: 40.67081°,-69.51627°

# Abandoned & Derelict vessels (ADV)

ERMA® Environmental Response Management Application  
Atlantic



**Wrecks and Obstructions**

**AWOIS Obstructions**

- Obstruction
- Obstruction - Covers/uncovers (awash)
- Obstruction - Submerged
- Obstruction - Visible at high water
- \* Rock - Awash
- \* Rock - Covered at low water
- ▲ Not Charted
- × Unknown

**AWOIS Wrecks**

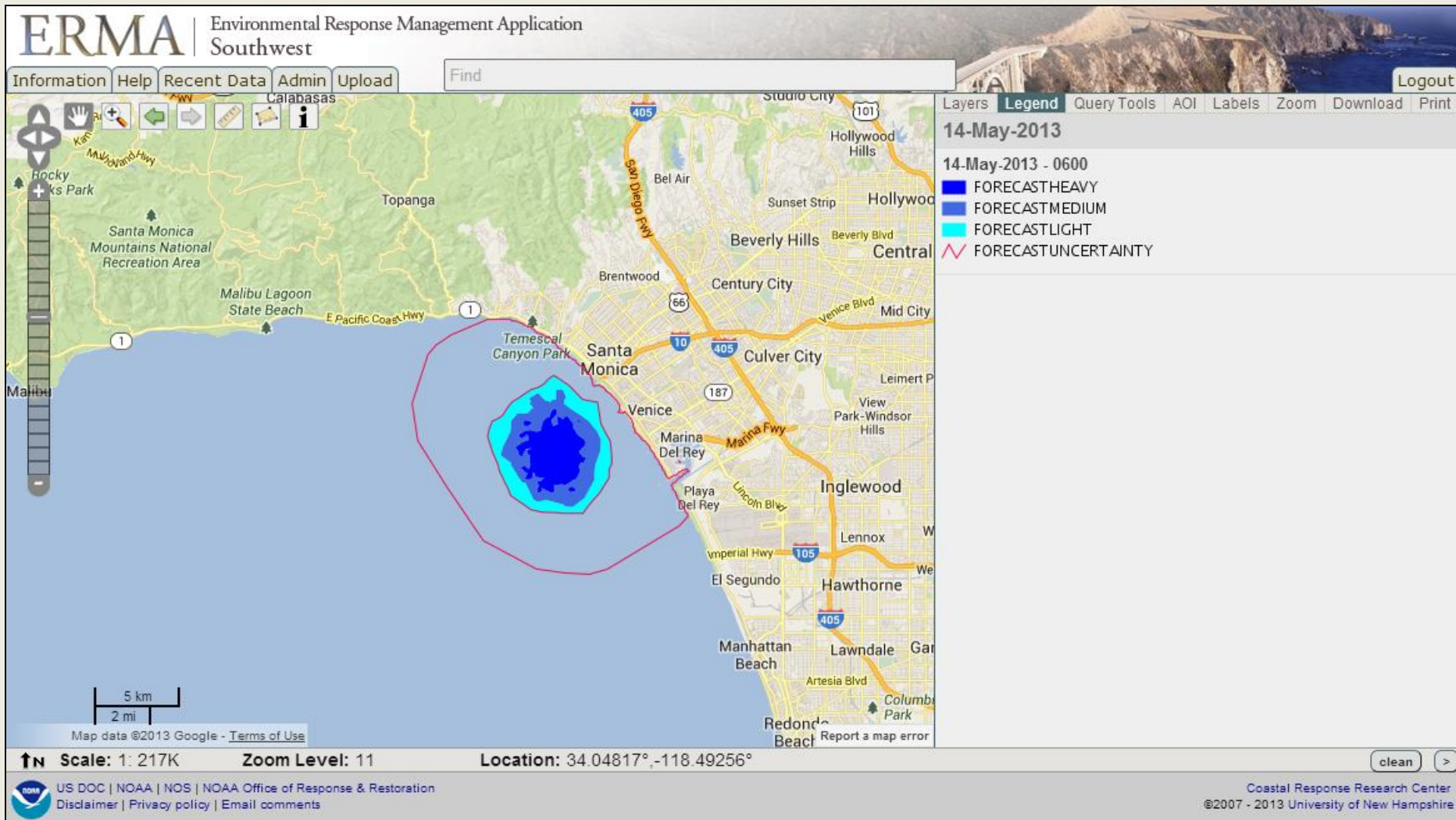
- Wreck
- ++ Wreck - Submerged, nondangerous
- ⊕ Wreck - Submerged, dangerous to surface navigation
- ⚓ Wreck - Visible
- ▲ Not Charted
- × Unknown

**ENC Wrecks (NOAA)**

- 

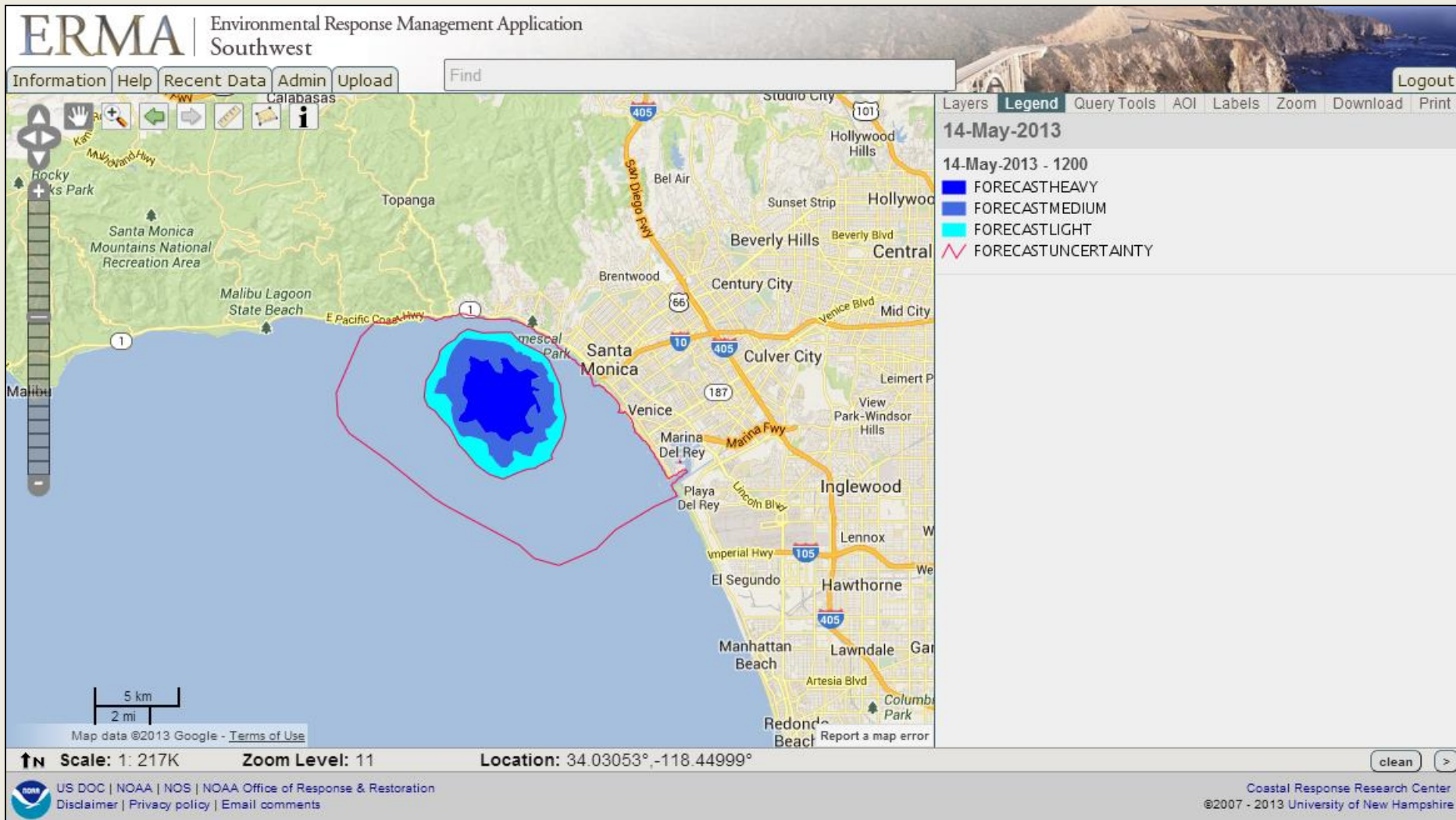
Scale: 1 : 3M Zoom Level: 7 Location: 42.75891°,-68.24752°

# Trajectory Models

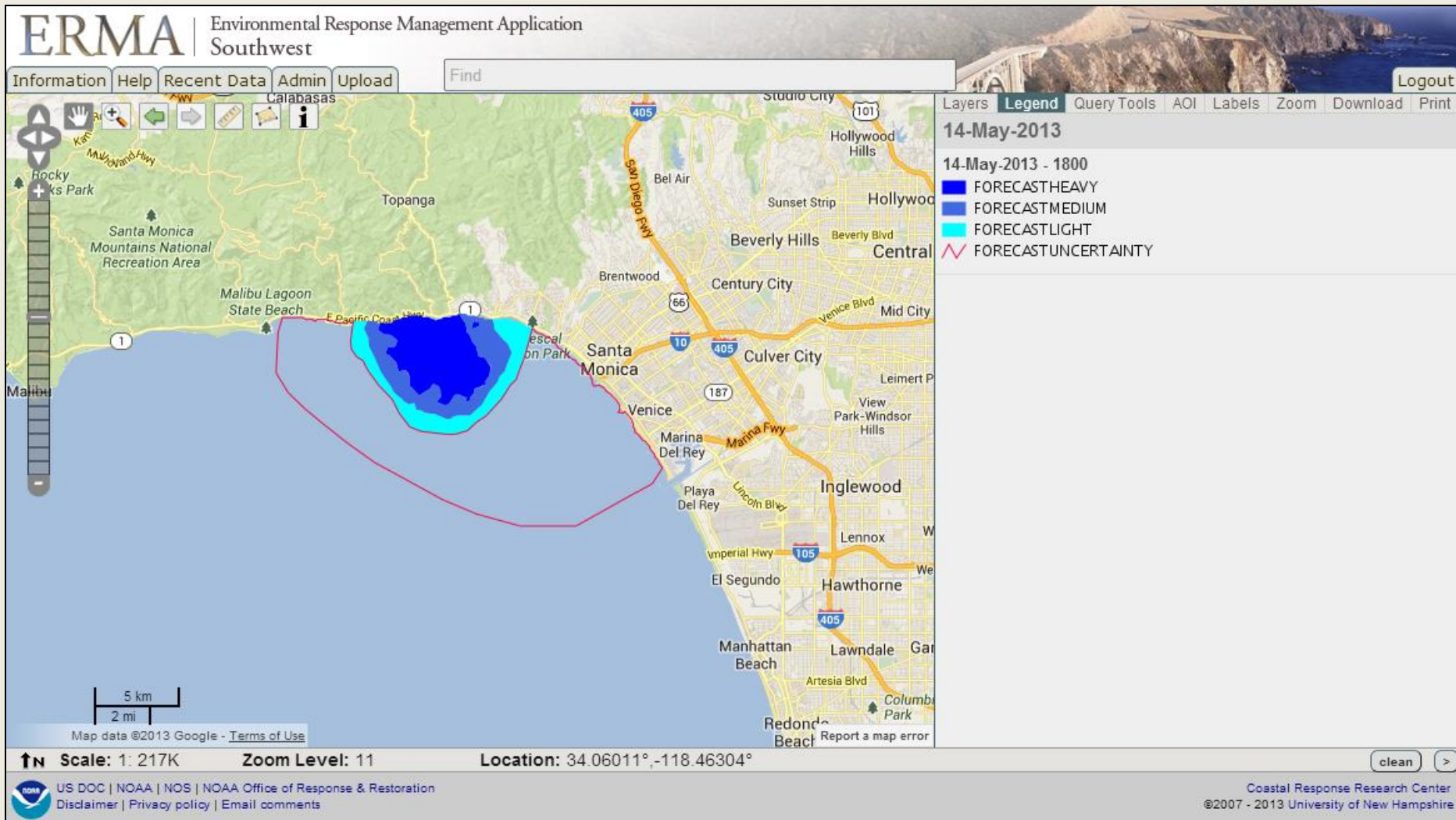




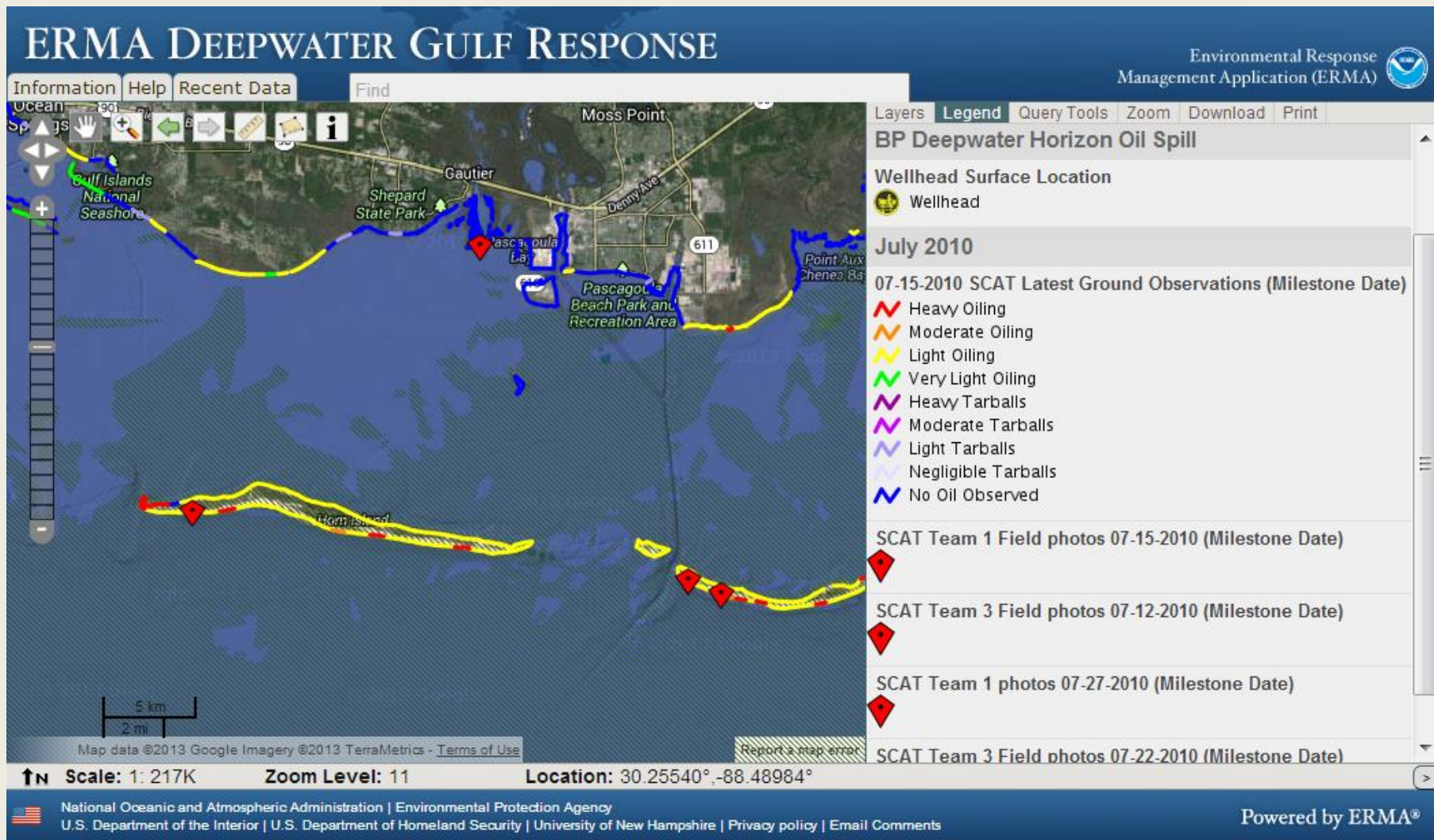
# Trajectory Models



# Trajectory Models



# Shoreline Assessment & Photo Documentation



# Shoreline Assessment & Photo Documentation

ERMA DEEPWATER GULF RESPONSE
Environmental Response Management Application (ERMA)

Information Help Recent Data Find
Layers Legend Query Tools Zoom Download Print

**SCAT Team 1 photos 07-27-2010 at 30.2038...**

Petitbois Island, MS: Buried layer of oil. Left image shows burial further inland by wind action; right image shows burial by wave action (Gulf is below image).

**BP Deepwater Horizon Oil Spill**

Wellhead Surface Location

- Wellhead

**July 2010**

- 15-2010 SCAT Latest Ground Observations (Milestone Date)
- Heavy Oiling
- Moderate Oiling
- Light Oiling
- Very Light Oiling
- Heavy Tarballs
- Moderate Tarballs
- Light Tarballs
- Negligible Tarballs
- No Oil Observed

**SCAT Team 1 Field photos 07-15-2010 (Milestone Date)**

**SCAT Team 3 Field photos 07-12-2010 (Milestone Date)**

**SCAT Team 1 photos 07-27-2010 (Milestone Date)**

**SCAT Team 3 Field photos 07-22-2010 (Milestone Date)**

Map data ©2013 Google Imagery ©2013 TerraMetrics - [Terms of Use](#) [Report a map error](#)

**Scale: 1: 217K    Zoom Level: 11    Location: 30.39232°, -88.48641°**

National Oceanic and Atmospheric Administration | Environmental Protection Agency  
 U.S. Department of the Interior | U.S. Department of Homeland Security | University of New Hampshire | [Privacy policy](#) | [Email Comments](#)
Powered by ERMA®

# Shoreline Assessment & Photo Documentation

ERMA Desktop Application

Information Help Records

Ocean

SCAT Team 1 Mobile Sector  
Petitbois Island, MS

Gulf Islands National Seashore

Scale: 1: 217K

N 30°12'14"  
W 088°29'09"

07/27/2010

Milestones (Milestone Date)
(Milestone Date)
(Milestone Date)
(Milestone Date)
(Milestone Date)

Powered by ERMA®

National Oceanic and Atmospheric Administration  
U.S. Department of the Interior | U.S. Department of Homeland Security | University of New Hampshire | Privacy policy | Email Comments

# Response and Research Ship Tracking

ERMA® Environmental Response Management Application  
Atlantic



**NAIS Equipped Vessels**

NAIS - All Vessels (last 8 hours)

- General
- Response
- Research
- Skimmer
- Government
- Source Operations

Scale: 1 : 3M    Zoom Level: 7    Location: 41.18515°, -69.32585°

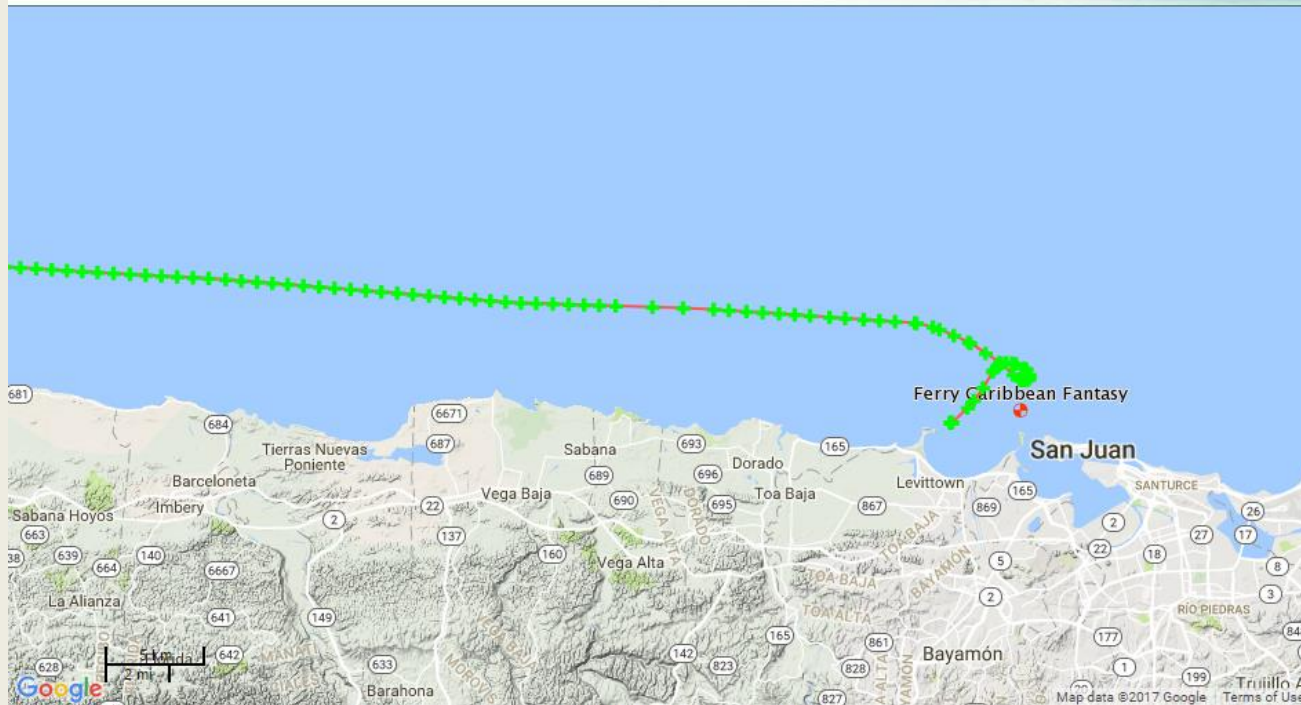
# Response and Research Ship Tracking

ERMA® Environmental Response Management Application  
Caribbean



**Ferry Caribbean Fantasy**

- Ferry Caribbean Fantasy, San Juan, PR (2016-0817)
- Ferry Caribbean Fantasy, San Juan, PR (2016-0817)
- Caribbean Fantasy AIS Track Location For 8-17-16
- Caribbean Fantasy AIS Track Location For 8-17-16
- Caribbean Fantasy AIS Point Locations For 8-17-16
- Vessel AIS Point Locations For 8-17-16



Scale: 1 : 206K    Zoom Level: 11    Location: 18.52484°, -66.09434°

# Field Personnel Tracking

ERMA | Environmental Response Management Application  
Gulf of Mexico

Information Help Admin Upload Find Logout

Layers Legend Query Tools AOI Labels Zoom Download Print

### Deepwater Horizon MC 252 Incident

- Points + Labels + Tracks  
● All SPOT Teams
- Points + Labels + Tracks  
● Bird SPOT Teams
- Points + Labels + Tracks  
● Marsh SPOT Teams
- Points + Labels + Tracks  
● Rapid\_Marsh SPOT Teams
- Points + Labels + Tracks  
● Submerged SPOT Teams
- Points + Labels + Tracks  
● Mussel Watch SPOT Teams
- Points + Labels + Tracks  
● Oyster SPOT Teams
- Points + Labels + Tracks  
● WQS SPOT Teams
- Points + Labels + Tracks  
● Fish SPOT Teams

Scale: 1: 867K Zoom Level: 9 Location: 29.29359°,-87.71210°

US DOC | NOAA | NOS | NOAA Office of Response & Restoration  
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Coastal Response Research Center  
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# RMP Facilities

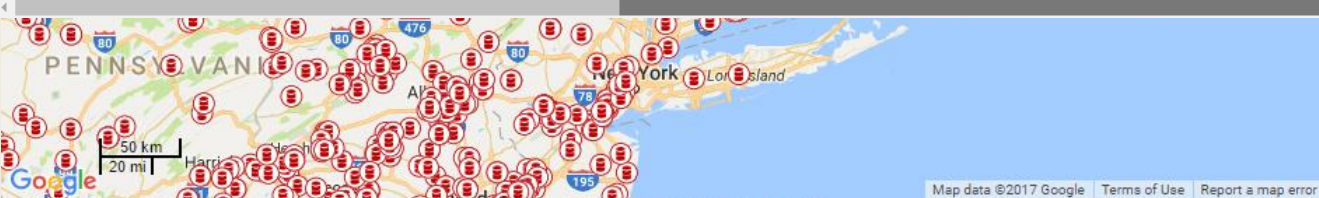
ERMA® | Environmental Response Management Application  
Atlantic

ID location (lat,lon): 41.06577,-74.66496

[Add Selected Features To Query Tab \(Polygons Only\)](#)

Risk Management Plan Facilities (EPA) (RMP as of 01-01-2017)

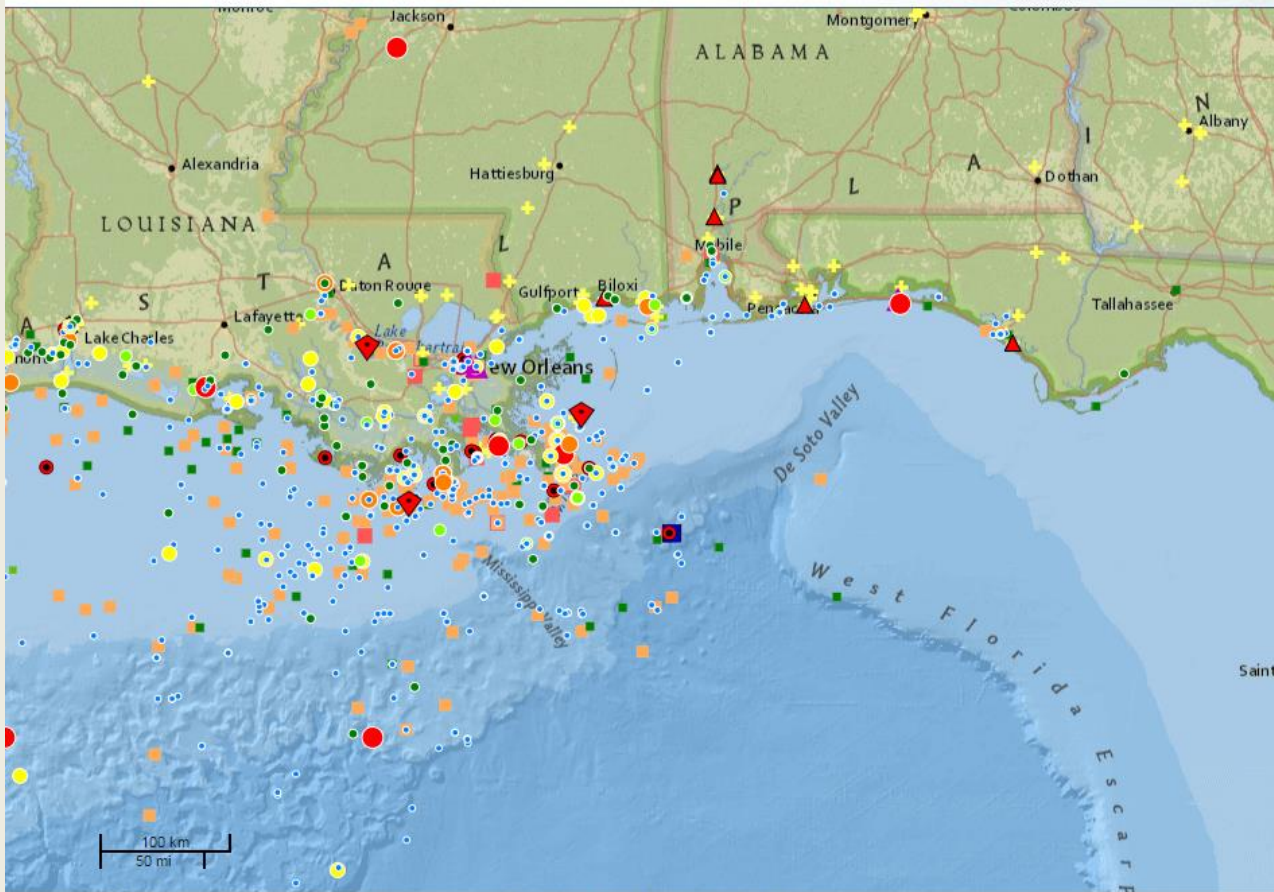
gid	epafacilit	facilityid	name	street	street2	city	state	zip	lat	long	url	facphone	emergpocph	emergpocpi	phone24	operatorma	chemicalna	quantity
558	100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871	41.0633330000	-74.6655560000		0.000000000000	9733837869.00		9733837869.00	Case Schipper	Isobutane [Propane, 2-methyl]	469900.000000
559	100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871	41.0633330000	-74.6655560000		0.000000000000	9733837869.00		9733837869.00	Case Schipper	Methyl ether [Methane, oxybis-]	90000.000000
560	100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871	41.0633330000	-74.6655560000		0.000000000000	9733837869.00		9733837869.00	Case Schipper	Difluoroethane [Ethane, 1,1-difluoro-]	600000.000000
561	100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871	41.0633330000	-74.6655560000		0.000000000000	9733837869.00		9733837869.00	Case Schipper	Propane	423400.000000
562	100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871	41.0633330000	-74.6655560000		0.000000000000	9733837869.00		9733837869.00	Case Schipper	Butane	340480.000000



Scale: 1 : 3M Zoom Level: 7 Location: 43.06549°,-69.02784°

# Regional Spill Response History

ERMA | Environmental Response Management Application  
Gulf of Mexico



## NOAA OR&R Activities

OR&R Activities in the Southeast Region by ERD Activity, Jan. 1, 2009 - Apr. 25, 2013

- Notification
- Phone Support
- Products Generated
- On Scene Support
- No ERD Activity (ARD, Marine Debris, Special Project)

## DARRP Case Locations

- ▲ Hazardous Waste Site
- Oil Spill Case
- Hazardous Materials Release
- Special Project
- Ship Grounding

## USCG Sectors Galveston, New Orleans, & Mobile MISLE Pollution Reports

- MISLE Pollution Substances Spilled in 2013 (USCG)
- ▲ Units in Pounds (Solids Only) or Cubic Meters (Gases Only)
  - > 0-10 Gallons (Liquids Only)
  - > 10-50 Gallons (Liquids Only)
  - > 50-100 gallons (Liquids Only)
  - > 100-1000 Gallons (Liquids Only)
  - > 1000-5000 Gallons (Liquids Only)
  - > 5000 Gallons (Liquids Only)

## ResponseLink Hotlines

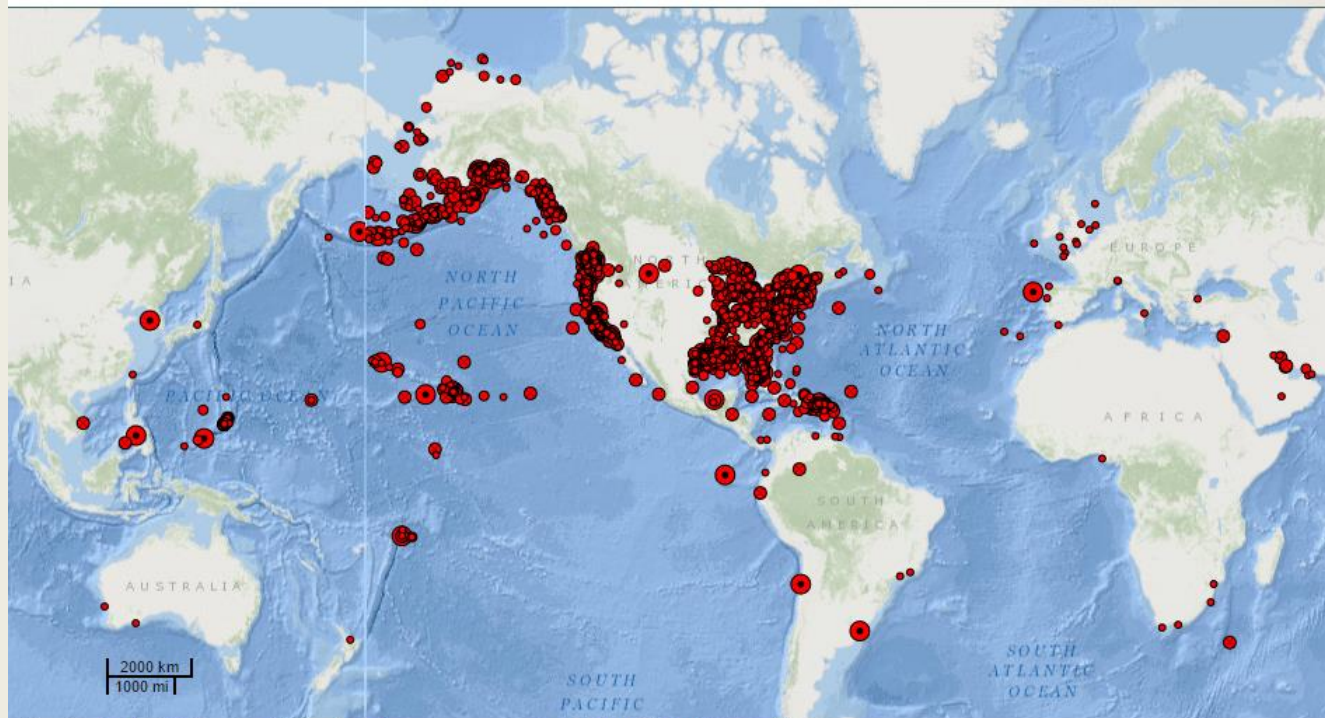
NOAA ORR Incident News



Scale: 1 : 3M    Zoom Level: 7    Location: 29.88015°,-88.56207°

# Regional Spill Response History

ERMA® Environmental Response Management Application  
Atlantic



## ResponseLink Hotlines

All Response Link Incidents (Historical & Active)

- Notification
- Phone Support
- Products Generated
- On-Scene Support

Scale: 1 : 98M    Zoom Level: 2    Location: 71.55019°, 62.44061°

# Area Contingency Plan Data

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Gulf of Mexico

Information Help Recent Data Admin Upload Find Logout

Layers Legend Query Tools AOI Labels Zoom Download Print

**Identify**

Shoreline Classification Detailed (line), TX (TGLO) (Zoom Dependent)

ESI\_lyr

OBJECTID	Shape	LENGTH	ESI	ESI2	ESICRIT	FNODE	TNODE	LPOLY	RPOLY	ESI_BEG	ESI_BEG_ID	Shape.len
11492	Polyline	7099.264335	10A	10A	10A	0	0	0	0	11506	11507	2452.960191

Texas GRP Site Strategies (TGLO) (Zoom Dependent)

Geographic Response Plan

OBJECTID	Name	link	URL	X_COORD	Y_COORD	SHA
508	48.15	portaran_48.15.pdf	<a href="http://gisweb.glo.texas.gov/atlas/atlas/siteplans/corpus/portaran_48.15.pdf">http://gisweb.glo.texas.gov/atlas/atlas/siteplans/corpus/portaran_48.15.pdf</a>	0	0	Polycr clay

- 2B Exposed scarps and steep slopes in clay
- 3A Fine to medium-grained sand
- 3B Scarps & steep slopes in sand  
Eroding scarps in unconsolidated sediments  
Exposed, eroding banks in unconsolidated sediments
- 3C Tundra cliffs
- 4 Coarse-grained sand beaches  
Sand beaches  
Sandy bars & gently sloping banks
- 5 Mixed sand & gravel beaches  
Mixed sand & gravel bars & gently sloping banks
- 6A Gravel beaches  
Gravel beaches (granules & pebbles) - SE Alaska only

Scale: 1: 14K    Zoom Level: 15    Location: 27.85940°,-97.05410°

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# ERMA

Information Help Re

Ident  
Shorel  
ESL\_ljr  
OBJEC  
11492  
Texas  
Geograph  
OBJEC  
508

Scale: 1: 14K

1. Incident Name		2. Operational Period (Date/Time)		Assignment List ICS 204-OS	
3. Branch			4. Division/Group		
5. Operations Personnel		Name		Affiliation	
Operations Section Chief				Contact #(s)	
Branch Director					
Division/Group Supervisor					
6. Resources Assigned This Period <span style="float: right;">*"X" indicates 204a attachment with special instructions</span>					
Resource Identifier	Leader	Contact Info #	# or Persons	Reporting Info/Notes/Remarks	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
7. Assignments					
Boom natural pass to prevent migration of oil from Lydia Ann Channel to the interior of Harbor Island Northeast. Provide daily boom maintenance during tide, wind and other climatological changes.					
<b>Safety Note:</b> Responders should note the adjacent Lydia Ann channel is highly trafficked. Often large shrimp boats, barges and other vessels throw high energy wakes in this area.					
8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County	
48.15	Port Aransas	11312-11314	48, Port Aransas	Aransas	
13. Site Information			14. Latitude		
Location is on Harbor Island Northeast, on the west bank along Lydia Ann Channel. This is a natural pass/slough along and between Lydia Ann Channel and the interior of Harbor Island Northeast. Site encompasses fringe marsh including Smooth Cordgrass and Black Mangrove.			27°51'34.73"		
15. Longitude			16. Closest Boat Ramp		
97°03'24.74"			Port Aransas City Marina		
17. Distance From Ramp			18. Boat Type		
0.9 NM			Shallow Draft work boats		
19. Directions From Sector Corpus Christi			20. Closest Airport		
Take Hwy 35 north through Gregory-south on Hwy 361 to Aransas Pass, east on 361 approx. 5 miles to Port Aransas, TX. Boat access only.			Mustang Beach Airport, Port A.		
21. Closest Helispot			24. Width of Inlet		
			360 ft.		
22. Trustee/Contact Numbers			25. Water depth		
USCG 361-888-3162			1-2 ft.		
USCG Duty 361-533-7166			26. Current		
TGLO 361-825-3300			27. # of Personnel		
TCEQ 361-825-3100			2-4		
RCC 361-242-3113					
TPWD 281-842-8100 (24 hr)					
NRDA 512-426-7291					
USFWS 361-994-9005					
23. Resources at Risk					
Atlas Priority:					
High - high quality seagrass, birds					
Environmental:					
High - salt and brackish marshes					
Economic:					
High					
28. Booming Strategy Recommendation					
Exclusion booming of natural pass/slough are along and between the Lydia Ann Channel and the interior of Harbor Island Northeast. Pass/slough is approx. 360' in width.					
29. Prepared By:		30. Reviewed by (PSC):		31. Reviewed by (OSC):	
Assignment List		ICS 204 OS (Geographic Response Plan)		Project Updated:	

\*Response strategies may need to be modified to account for changes due to seasonality, weather conditions, spill characteristics, tides and any other pertinent considerations.\*

ita

Logout  
Labels Zoom Download Print

Shape.len  
2452.960191

ID	Y	COORD	SHA
0			Polycr clay

slopes in clay  
nd  
nd  
dated sediments  
unconsolidated sediments

es  
banks  
s  
gently sloping banks

pebbles) - SE Alaska only

clean >

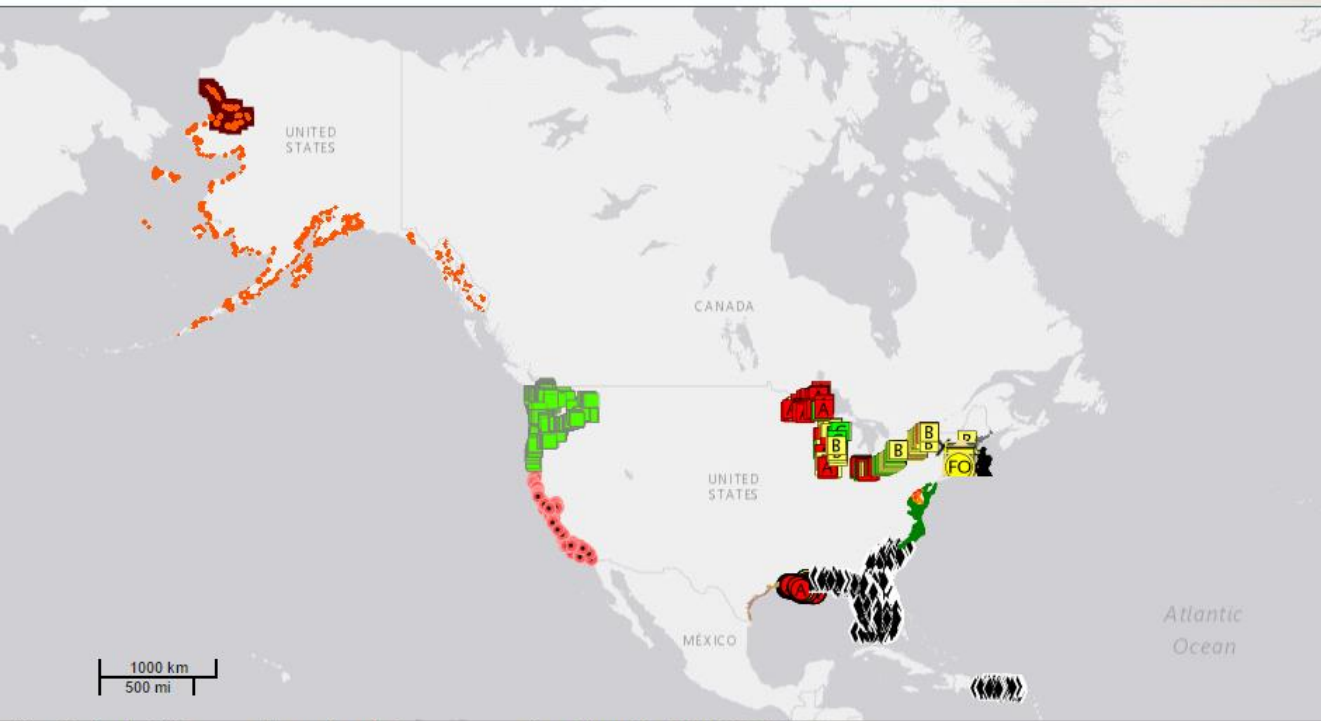
## Inland & Coastal GRP Efforts

- EPA & NYSDEC: Inland rail GRP data ingest and distribution through ERMA.
  - Update base data to support GRP strategies.
- BSEE: Inventory, ingest, and deliver current GRP data via ERMA.

ERMA provides centralized access to GRPs for viewing and consumption by download, map services, or directing to authoritative source.

# Coastal GRP Effort in ERMA

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Atlantic



## MSU Toledo

DRAFT-Priority Sites (last update 27-June-2016)

- A - Highest Protection Priority

## Sector Lake Michigan

DRAFT - Priority Strategy Sites (updated 14-Mar-2017)

- A - Highest Protection Priority
- B - Protect after A Areas
- C - Protect after B Areas

## MSU Duluth

DRAFT-Priority Sites (last updated 27-June-2016)

- A - Highest Protection Priority
- B - Protect after A Areas
- C - Protect after B Areas

## Sector Detroit

DRAFT - Priority Strategy Sites (updated 14-Mar-2017)

- A - Highest Protection Priority
- B - Protect after A Areas
- C - Protect after B Areas

## Sector Buffalo

DRAFT-Priority Sites (last updated 6-May-2016)

- A - Highest Protection Priority
- B - Protect after A Areas
- C - Protect after B Areas

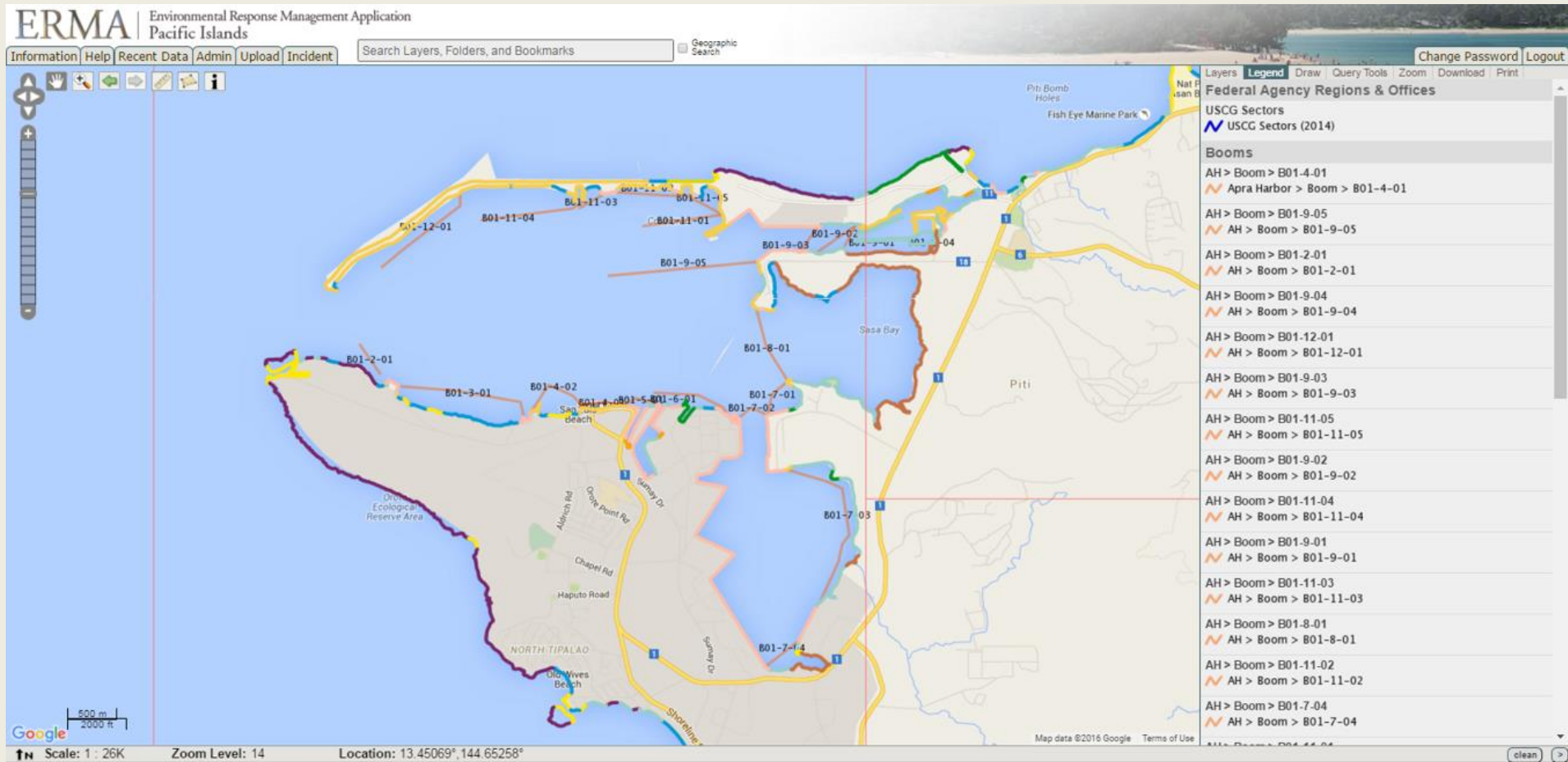
Scale: 1 : 35M    Zoom Level: 3    Location: 30.13607°,-39.52582°

# Coastal GRP Effort in ERMA

USCG District	USCG Sector	In ERMA	Date (Creation/Update)
One	Northern New England	Yes	2014
	Boston	Yes	2016
	Southeastern New England	Yes	2016
	New Haven/New London CT	In Process	TBD
	New York	In Process	TBD
	Long Island Sound	In Process	TBD
Five	Maryland NCR	Yes	2016
	Delaware Bay	Yes	2016
	Hampton Roads	Yes	2011
	North Carolina	Yes	2016
Seven	Charleston	Yes	2015
	Jacksonville	Yes	2011
	Key West	Yes	2011
	Miami	Yes	2011
	San Juan	Yes	2011
	St. Petersburg	Yes	2011
Eight	Mobile	Yes	2011
	New Orleans	Yes	2015
	Corpus Christi	In Process	TBD
	Houston/Galveston	In Process	TBD
	Lower Mississippi River	---	NA
	Ohio Valley	---	NA
Nine	Upper Mississippi River	---	NA
	Buffalo	Yes	2016
	Detroit	Yes	2016
	Lake Michigan	Yes	2016
	Sault Sainte Marie	Yes	2016
Eleven	Humboldt Bay	Yes	2013
	San Francisco	Yes	2013
	Los Angeles/Long Beach	Yes	2013
	San Diego	Yes	2013
Thirteen	Puget Sound	Yes	2016
	Columbia River	Yes	2016
	North Bend	Yes	2016
Fourteen	Honolulu	---	NA
	Guam	Yes	2016
Seventeen	Anchorage	Yes	2014
	Juneau	Yes	2014



# GRP Development



# ERMA Tools

# Finding Data

**ERMA** | Environmental Response Management Application  
Atlantic

Information | Help | Recent Data | Admin | Upload | Incident

Scale: 1 : 5M | Zoom Level: 6 | Location: 45.44249°, -83.63681°

**Search:** Bird

- activate layer - Bird Habitat (NOAA ESI)
- activate layer - Bird Habitat, North Carolina (NOAA)
- activate layer - Bird Habitat, NY-NJ-CT-RI (NOAA)
- activate layer - Bird Habitat, South Carolina (NOAA)
- activate layer - Bird Habitat, VA (NOAA)
- activate layer - Bird Nests, Delaware Bay (NOAA)**
- activate layer - Bird Nests, DE - NJ - PA (ESI)
- activate layer - Bird Nests, MD (NOAA)
- activate layer - Bird Nests, NY-NJ-CT-RI (NOAA)
- activate layer - Bird Nests, VA (NOAA)
- activate layer - Delaware River Keepers Obsv Oiled Birds 24-Apr-12 at 1400hrs
- activate layer - New York Bird Conservation Point Locations (NYDEC)
- activate layer - New York Important Bird Areas (NYDEC)
- activate layer - New York Important Bird Point Locations (NYDEC)
- activate layer - New York Kings Bay Important Bird Area (NYDEC)
- activate layer - Oiled Bird Observation as of 1-17-14, 0700
- activate layer - south florida birds esi

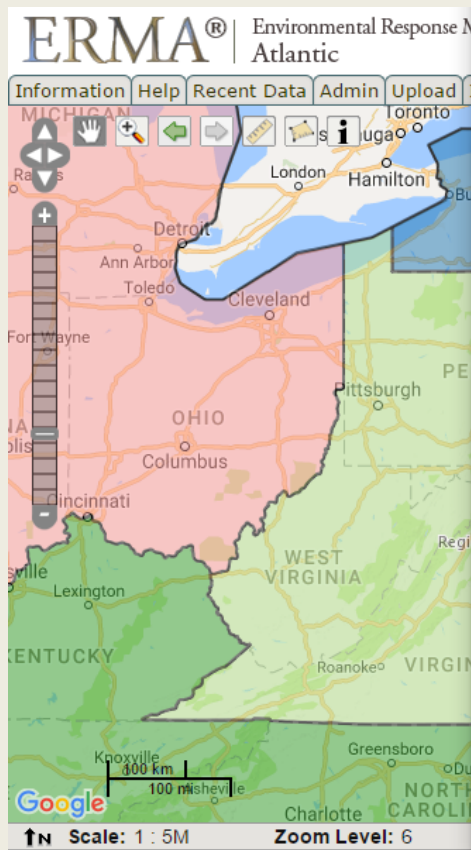
**Layers Panel:**

- Background Layers
- Admin Boundaries & Reference Features
- Bathymetry & Hydrology
- Environmental Quality & Monitoring
- Marine Debris
- Imagery & Remote Sensing
- Natural Resources, Habitats, & Managed Areas
  - Coastal Resources & Habitats
  - Critical Habitat
  - Cultural Resources & Human Use
  - Essential Fish Habitat (NOAA EFH)
  - Environmental Vulnerability Index (Maine DEP)
  - Environmental Sensitivity Index (NOAA ESI)
    - ESI PDF Map Links
    - Seamless ESI PDF Maps for RI/NY/CT/NJ - 2001 (NOAA)
    - Seamless ESI PDF Maps for the Hudson River - 2006 (NOAA)
    - Seamless ESI PDF Maps for Long Island - 2009 (NOAA)
    - Seamless ESI PDF Maps for Delaware Bay - 2014 (NOAA)
    - Seamless ESI PDF Maps for Maryland - 2007 (NOAA)
    - Seamless ESI PDF Maps for Virginia - 2005 (NOAA)

**Bookmark Views:** new

- My Views
  - ESI Example
  - Florida GRP
  - NESDIS Examples
- Shared Views
  - Biological Assessment
    - default
  - Green Canyon Incident
    - Gulf of Mexico Area of Interest Weather (real-time)
    - Gulf of Mexico ESIs
    - Gulf of Mexico GAPS Analysis & Longterm Monitoring

# Metadata



Parent Folder: Admin Boundaries & Reference Features>Federal Agency Regions & Offices  
 Layer Name: EPA Region Boundaries  
 Layer Sensitivity: Public  
 Sites: All

Full Metadata: [metadata](#)  
 ERMA WMS Capabilities: <https://erma.noaa.gov/maps/wms/17884?request=getCapabilities&service=WMS>

Last Modified: 2016-12-09 19:09:20-05  
 Last Modified By: Bodnar, Jill (NOAA/ORR, Genwest)  
 Shapefile: Environmental\_Protection\_Agency\_EPA\_Regions  
 Date Uploaded: 8/25/2016 1:43 pm  
 Uploaded By: Eckhardt, Nicolas (NOAA)  
 Geometry: POLYGON

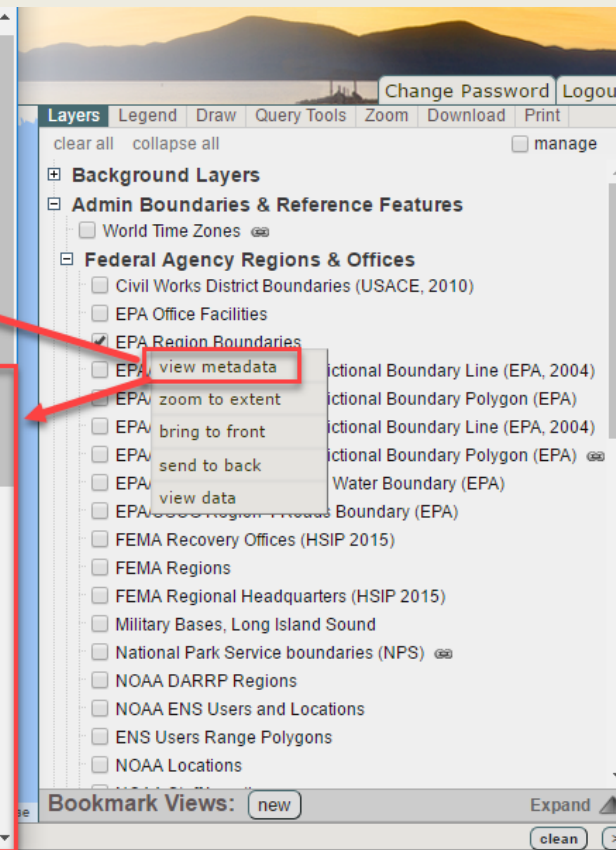
**Additional Information:**

**Abstract:** This dataset represents delineated EPA Region boundaries. EPA has ten regional offices across the country, each of which is responsible for several states and in some cases, territories or special environmental programs. This Shared Enterprise Geodata and Services (SEGS) dataset was created by U.S. EPA using 2011 TIGER/Line state boundaries from the U.S. Census Bureau. The core mission of SEGS is to provide a single point of ownership for geospatial datasets that are national in extent and of general use to all EPA users and to make those datasets available through channels that best meet user needs.

**Purpose:** This dataset represents delineated EPA Region boundaries.

**Description:** This dataset represents delineated EPA Region boundaries. EPA has ten regional offices across the country, each of which is responsible for several states and in some cases, territories or special environmental programs.

This Shared Enterprise Geodata and Services (SEGS) dataset was created by U.S. EPA using 2011 TIGER/Line state boundaries from the U.S. Census Bureau. The core mission of SEGS is to provide a single point of ownership for geospatial datasets that are national in extent and of general use to all EPA users and to make those datasets available through channels that best meet user needs.



# Data Queries in ERMA

**ERMA | Environmental Response Management Application**  
Pacific Northwest

Information Help Recent Data Search Layers, Folders, and Bookmarks Geographic Search Layers Legend Query Tools Zoom Download Print Login

**Query Tools**  
Step 1: Create and Edit Shapes:  
Create shapes by selecting the Create Polygon button. Draw it on the map by left clicking your mouse. double click OR press any key to end drawing.  
Create Polygon Delete Selected Delete All

Step 2: Select a Query Tool:  
Please select at least one shape to run the query tools. Select with left mouse click, multiple selects hold down shift, remove select hold down control. (Blue polygons are selected, yellow are unselected.)  
ERMA Layer Query by Polygon tool

**Query Layers by Polygon Results**  
Results Summary Layer 11371 Layer 11399  
Priority Oregon Fish Passage Barriers, (ODFW 2013) (Metadata)

**Query Layers by Polygon Results**  
Results Summary Layer 11371 Layer 11399  
Priority Oregon Fish Passage Barriers, (ODFW 2013) (Metadata)

You may drag column headings to reorder them, or click on the arrows (↕) to sort by a column.  
Showing 1 to 21 of 21 records Show 100 entries Search all columns: First Previous 1 Next Last

86/89 Columns Shown  
2 Filters Enabled  
fbprevidt (reset) Selected Range: 2009-06-17 - 2012-04-10 Apply  
fbpsiteid (reset) Selected Range: 4175 - 29416 Apply


objectid	fbpbfid	fbpsiteid	fbprevidt	fbpofid	fbponum	fbpsiteid	fbplocmd	fbplocaccu	fbplocdt	fbpbftry	fbpbftrnm	fbpbfmvd	fbpbfmtr	fbpbfpssta
13	4533	4533	2012-04-10	842	ODFW	842	FieldQuad	150	19990900	Culvert	Beaver Creek Fishways at Troutdale Rd & Stark St		unknown	Partial
18	4558	4558	2012-04-10	840	ODFW	840	DigDerive	40	20081210	Culvert	Beaver Creek Fishways at Troutdale Rd & Stark St		unknown	Partial
47	7587	7587	2012-04-10	943	ODFW	943	DigDerive	40	19990900	Culvert	Unnamed culvert		unknown	Partial
70	10122	10122	2011-12-08	55130	ODFW	55130	Unknown	9999	00000000	Unknown	Unnamed barrier		no	UnkAnad
87	11728	11728	2009-06-17	1006	ODFW	1006	FieldQuad	150	19990900	Culvert	Unnamed culvert		unknown	Partial
97	4175	4175	2012-04-10	50915	ODFW	50915	Unknown	9999	00000000	Dam	Unnamed dam		no	Partial

Scale: 1:433K Zoom Level: 10  
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# Environmental Sensitivity Index Query Tool

https://www.erma.unh.edu/northwest/erma\_esi.html - Google Chrome

https://www.erma.unh.edu/northwest/erma\_esi.html



Environmental Sensitivity Index: Resources at Risk

Background and Instructions

Species listed in **Red** are either listed as Threatened (T) or Endangered (E) by the State (S) or Federal government (F)

**Notes:** Click on column headers to sort rows; hover or click on species link to get more information.

Summary Results

AOI total area: 84447 acres

**Puget Sound Bird Habitat**

**9 unique species:** Caspian tern, Cormorant, Gulls, Harlequin duck, Pacific loon, Pigeon guillemot, Rhinoceros auklet, Scoters, Waterfowl

**Puget Sound Fish Habitat**

Selected 1 features

**Puget Sound Shoreline Classification (lines)**


**Summary Length (miles) by type:**

- 5: Mixed sand and gravel beaches: 34
- 7: Exposed tidal flats: 15
- 6A: Gravel beaches: 4
- 6B: Gravel beaches and riprap: 3
- 8C: Sheltered riprap: 2
- 4: Coarse-grained sand beaches: 1
- 9A: Sheltered tidal flats: 1
- 1B: Exposed, solid man-made structures: 0.5
- 10A: Salt and brackish-water marshes: 0.1

**Puget Sound Shoreline Classification (poly)**

**Summary Area (acres) by type:**

- 7: Exposed tidal flats: 890184
- 9A: Sheltered tidal flats: 69903



Layers Legend Query Tools AOI Labels Zoom Download Print Logout

**ESI Table Tool**

Puget Sound ESI	
Biological	Other
<input checked="" type="checkbox"/> Bird Habitat	<input checked="" type="checkbox"/> Shoreline Classification (lines)
<input checked="" type="checkbox"/> Fish Lines	<input checked="" type="checkbox"/> Shoreline Classification (poly)
<input checked="" type="checkbox"/> Fish Habitat	<input type="checkbox"/> ESI Index Grid
<input type="checkbox"/> Vegetation Habitat Lines	<input type="checkbox"/> Management Areas
<input type="checkbox"/> Vegetation Habitats	<input type="checkbox"/> Socioeconomic (line)
<input type="checkbox"/> Invertebrates	<input type="checkbox"/> Socioeconomic (point)
<input type="checkbox"/> Marine Mammal Points	
<input type="checkbox"/> Nests	

Months of Interest

J  F  M  A  M  J  J  A  S  O  N  D

Report Area Intersection Summary

# F&WS IPaC Query Tool

IPaC Information for Planning and Conservation

U.S. Fish & Wildlife Service

My project Antrim a

OVERVIEW RESOURCES DES

This project potentially

IPaC Informati

OVERVIEW RES



Endangered

Endangere

Proposed, candidate, Program of the U.S. F

The list of species bel location:

Birds



Kirtla  
Enda



Pipin  
Enda



Red t  
Thre

U.S. Fish & Wildlife Service

## IPaC Trust Resources Report



### LOCATION

Antrim and Charlevoix counties,  
Michigan

### IPAC LINK

<https://ecos.fws.gov/ipac/project/HTTQQ-VWT7F-F25IJ-V3YWB-KIZLCM>



## U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

**East Lansing Ecological Services Field Office**

2651 Coolidge Road Suite 101

East Lansing, MI 48823-6360

(517) 351-2555

# New ERMA Tools – Select Records

## Risk Management Plan Facilities (EPA) (RMP as of 01-01-2017) (Metadata)

You may drag column headings to reorder them, or click on the arrows (↕) to sort by a column.

Showing 1 to 100 of 543 records

Show 100 entries

Search all columns:

16/19 Columns Shown

Enable advanced filters

Add to Map

First Previous 1 2 3 4 5 Next Last

epafacilit	facilityid	name	street	street2	city	state	zip	url	facphone	emergpocph	emergpocpi
100000211914	1000015256	Ultra Dairy, LLC	6750 West Benedict Road		East Syracuse	NY	13057		0	3154348807	110
100000119999	1000020237	Aguadilla Nueva Filtration Plant	Carr. 459, Km 0.3		Aguadilla	PR	603	acueductospr.com	7878913796	7874064727	
100000119999	1000020237	Aguadilla Nueva Filtration Plant	Carr. 459, Km 0.3		Aguadilla	PR	603	acueductospr.com	7878913796	7874064727	
100000208027	1000021399	Slack Chemical Co., Inc	21 Grande Blvd.		Saratoga Springs	NY	12866	www.slackchem.com	8004790439	5184234316	
100000179228	1000022342	Upstate Niagara Cooperative, Inc.	1730 Dale Road		Buffalo	NY	14225	www.upstatefarms.com	7168922121	7168923156	
100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871		0	9733837869	
100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871		0	9733837869	
100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871		0	9733837869	
100000135524	1000022659	Diversified CPC International, Inc.	189 Houses Corner Rd		Sparta	NJ	7871		0	9733837869	



# View Data Table

Information

Gid	Epreion	Shape Leng	Shape Area
8	Region 1	33.1062409269	20.9704685964
9	Region 10	298.864966082	389.031090040
1	Region 2	40.5184949742	19.3073347963
2	Region 3	32.8372888460	34.5595080424
3	Region 4	78.6437752010	99.1211322394
4	Region 5	70.7642753460	112.219890056
5	Region 6	81.3295536077	141.339985022
6	Region 7	51.4167678848	78.0912302395
7	Region 8	83.6608796568	168.483083619
10	Region 9	91.0052400122	105.086826291

Showing 10 of 10 Rows

Add Selected Features To Query Tab (Polygons Only)

Displaying 4 of 4 Fields

gid x epreion x shape\_leng x shape\_area x

Click in the box to select additional fields to display, click on the x next to a displayed field to suppress its display. Once displayed, you may drag the table

Change Password | Log Out

Layers | Legend | Draw | Query Tools | Zoom | Download | Print

clear all collapse all manage

Background Layers

Admin Boundaries & Reference Features

- World Time Zones

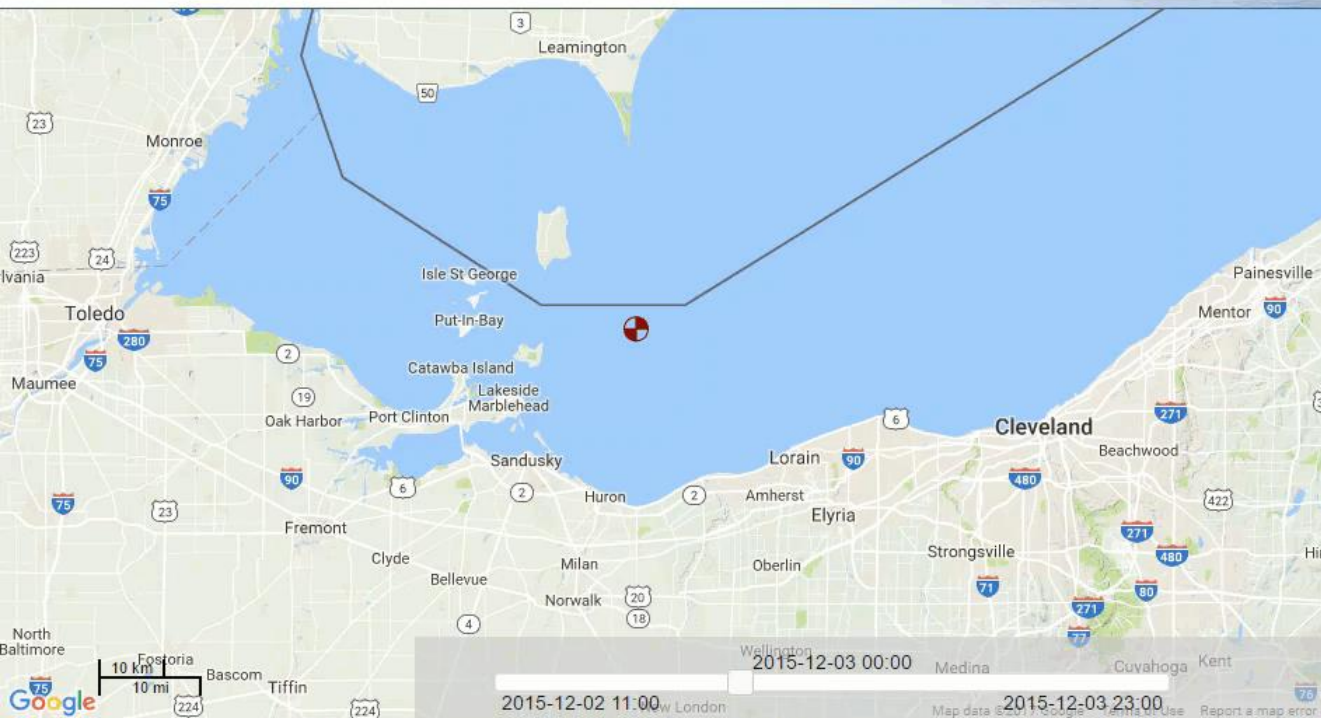
Federal Agency Regions & Offices

- Civil Works District Boundaries (USACE, 2010)
- EPA Office Facilities
- EPA Region Boundaries
  - EPA/USC view metadata
  - EPA/USC zoom to extent
  - EPA/USC bring to front
  - EPA/USC send to back
  - EPA/USC view data
  - EPA/USC
- National Boundary Line (EPA, 2004)
- National Boundary Polygon (EPA)
- National Boundary Line (EPA, 2004)
- National Boundary Polygon (EPA)
- Water Boundary (EPA)
- EPA/USC
- EPA/USC
- FEMA Recovery Offices (HSIP 2015)
- FEMA Regions
- FEMA Regional Headquarters (HSIP 2015)
- Military Bases, Long Island Sound
- National Park Service boundaries (NPS)
- NOAA DARRP Regions
- NOAA ENS Users and Locations
- ENS Users Range Polygons
- NOAA Locations

Bookmark Views: new Expand clean

# New ERMA Tools: Time Slider (Internal Data)

ERMA® Environmental Response Management Application  
Great Lakes



Potential Surface Trajectories created 12/01/15

Argo Potential Surface Trajectories, 0-36 hrs starting 12/02

- Dec 2
- Dec 3
- Dec 4

Tank Barge Argo, Lake Erie (16-Oct-2015)

Tank Barge Argo, Western Lake Erie, OH (NOAA)

⊕ Tank Barge Argo, Western Lake Erie, OH

Scale: 1 : 649K Zoom Level: 9 Location: 41.84464°,-81.14494°

# New ERMA Tools – Time Slider (External Data)

The screenshot displays the ERMA Atlantic web application interface. At the top, the title "ERMA® Environmental Response Management Application Atlantic" is visible. Below the title is a navigation menu with options: Information, Help, Recent Data, Admin, Upload, Incident. A search bar labeled "Search Layers, Folders, and Bookmarks" is present, along with a "Geographic Search" checkbox. On the right side of the top navigation, there are links for "Change Password" and "Logout".

The main map area shows a geographic view of the New York and New Jersey coastal region, including the Raritan River, Jersey City, New York, and Staten Island. A green rectangular box highlights a specific area on the map. A "Search ERMA" input field is located above the map. The map displays surface water currents and water level data, with a color scale legend on the right. The legend is titled "New York and New Jersey Operational Forecast System (NYOFS) Surface Water Currents w/Water Level (NOAA)" and shows two scales: one for water level in feet (ft) ranging from -14 to 12, and another for water level in meters (m) ranging from -4 to 3. The current time displayed is "Thu 2017-04-13 18:00 UTC".

At the bottom of the map, there is a time slider control. The slider is currently set to "2017-04-12 02:00". The slider range is from "2017-04-11 14:00" to "2017-04-13 14:00". Navigation buttons for the slider include "Previous", "Play/Pause", "Next", "Home", and "Help".

At the bottom left, there is a scale bar showing "10 km" and "5 mi", and a north arrow. The "Scale" is "1 : 329K" and the "Zoom Level" is "10". The "Location" is "40.76847°, -74.17945°".

At the bottom right, there is a "clean" button and a right arrow button. The footer contains the text: "US DOC | NOAA | NOS | NOAA Office of Response & Restoration Disclaimer | Privacy policy | Official Citation | Contact" and "Coastal Response Research Center ©2007 - 2017 University of New Hampshire".

# New ERMA Tools – Webcams

**ERMA<sup>®</sup>** Environmental Response Management Application  
Atlantic

Information Help Recent Data Admin Upload Incident Search Layers, Folders, and Bookmarks Geographic Search Change Password Logout

Layers Legend Draw Query Tools Zoom Download Print manage

- Blank
- Admin Boundaries & Reference Features
- Bathymetry & Hydrology
- Environmental Quality & Monitoring
- Marine Debris
- Imagery & Remote Sensing
  - GOES Imagery
  - NESDIS Marine Pollution Surveillance Reports
  - New York Harbor Web Cams
    - Sector NY Webcams, Arthur Kill Views (USCG)
    - Sector NY Webcams, Kill Van Kull Views (USCG)
    - Sector NY Webcams, Lower Bay Views (USCG)
    - Sector NY Webcams, East River Views (USCG)
    - Sector NY Webcams, Upper Bay Views (USCG)
    - Sector NY Webcams, Manhattan Views (USCG)
    - ESI Imagery - Northeast States (NOAA)
    - RGB Aerial Imagery (NOAA)
    - CIR Aerial Imagery (NOAA)
    - RGBN Aerial Imagery (NOAA)
    - USGS Orthoimagery 1 Foot Scale
    - NAIP 2009 Vermont Imagery (VCGI)
    - Connecticut 2012 Ortho Imagery

Scale: 1 : 329K Zoom Level: 10 Location: 40.63030°,-74.20916°

# New ERMA Tools – Draw

**ERMA®** Environmental Response Management Application  
Atlantic

Information Help Recent Data Admin Upload Incident Search Layers, Folders, and Bookmarks Geographic Search Change Password Logout

Layers Legend Draw Query Tools Zoom Download Print

View Existing Drawings New Drawing

My Drawings + Shared Drawings ▾

Show only drawings in the atlantic region

Search - \* and ? wildcards may be used

Displaying 6 drawings

Share...	Name	Region
<input checked="" type="checkbox"/>	TS Colin Tuesday June 7 AOI	atlantic
<input checked="" type="checkbox"/>	GRP01-Cleveland Lakefront (Bound...	greatlak...
<input checked="" type="checkbox"/>	GRP01-PS-001	greatlak...
<input checked="" type="checkbox"/>	GRP01-BR-001	greatlak...
<input checked="" type="checkbox"/>	GRP01-Staging Areas	greatlak...

Scale: 1 : 5M Zoom Level: 6 Location: 41.99938°,-71.28779°

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# GRP Drawings

**Create New Drawing** Cancel View Drawings


**Step 1: Name & Describe your drawing**  
 Name:   
 Description:

**Step 2: Choose the type of drawing**

**Step 3: Choose a drawing profile**

**Step 4: Label, name attributes, and enter attributes**  
Hide Field Names Show Label Settings

**Attribute Fields**

Attribute Name (pre-set)   
 Attribute Name (pre-set)   
 Attribute Name (pre-set)   
 Attribute Name (pre-set)   
 Attribute Name (pre-set)   
 Attribute Name (pre-set)   
 Attribute Name (pre-set)   
 Attribute Name (pre-set)  (auto)   
 Attribute Name (pre-set)  (auto)   
 Add Attribute

**Drawing Color**  
   
 Size:

**Step 5: Create (or modify) a drawing feature**  
 Choose a tool and click on the map, or enter latitude and longitude values to create points. Each feature can contain multiple points.

Latitude:  Longitude:

Click on a row to edit a feature.  Display all on map

Label	
1 Demo	

**Step 6: Label and set attribute values**

# New ERMA Tools – Draw

ERMA® Environmental Response Management Application  
Atlantic

Information Help Recent Data Admin Upload Incident Search Layers, Folders, and Bookmarks Geographic Search Change Password Logout

Layers Legend Draw Query Tools Zoom Download Print

Search - \* and ? wildcards may be used

Displaying 222 drawings

Share...	Name	Region
<input checked="" type="checkbox"/>	Beach Protection	atlantic
<input type="checkbox"/>	print test	gulfof...
<input checked="" type="checkbox"/>	DiveEX Side Scan Sonar	pacific
<input checked="" type="checkbox"/>	Center Line	pacific
<input checked="" type="checkbox"/>	Golden Gardens - SDB Sampling Event	northwest

zoom to extent edit copy delete unshare add to layers tab

Name	Beach Protection
Creator	Jill Bodnar
Description	Area of high priority
Profile Name	Drawing
Create Date	Feb 21, 2017 1:13:02 PM
Layers	33345

Scale: 1 : 172K Zoom Level: 11 Location: 37.62616°,-76.14121°

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# Interoperability and Data Sharing

- Data sharing plans
- Data download
- Attachments
- Map services
- Redirect to authoritative source
- Secure map services
- Third party applications
  - API
  - DIVER



# Data Download (If allowed)

The screenshot displays the ERMA Atlantic web application. At the top, the title "ERMA® Environmental Response Management Application Atlantic" is visible. Below the title is a navigation menu with options: Information, Help, Recent Data, Admin, Upload, Incident, and a search bar for "Search Layers, Folders, and Bookmarks". A "Geographic Search" checkbox is also present. The main area is a map of the New England coast, showing major cities like Hartford, New Britain, Middletown, and New Haven, along with various highways. A red box highlights the "Download" button in the top right corner of the map area. To the right of the map is a panel with the following text:

Layers Legend Draw Query Tools **Download** Print Zoom

Not all ERMA data are available for download. Many sources are outside links to data that are not in our database and others may not be releasable. In all cases, ERMA data downloads are non-authoritative and we recommend that data be downloaded from the original source. Whenever possible, links to the original data are available in the full metadata record.

**The following layers are not able to be downloaded at this time.**

- Esri: Esri National Geographic
- Google: Google Terrain

**Download the following layers:**

- Coastal Resources & Habitats: Significant Coastal Fish and Wildlife Boundaries

[Download Shape Files](#)

At the bottom of the map, there is a scale bar (Scale: 1 : 652K), zoom level (Zoom Level: 9), and location coordinates (Location: 41.36936°, -72.42018°). The bottom of the page contains the NOAA logo and text: "US DOC | NOAA | NOS | NOAA Office of Response & Restoration", along with links for "Disclaimer | Privacy policy | Official Citation | Contact". On the right side of the bottom, it says "Coastal Response Research Center ©2007 - 2017 University of New Hampshire".

# Map Services (Unrestricted)

ERMA® Environmental Response Management Application  
Atlantic

Information Help Recent Data Admin Upload Incident Search Layers, Folders, and Bookmarks Geographic Search Change Password Logout

ERMA: - Google Chrome  
Secure | [https://erma.noaa.gov/ERMA/metadata?sitename=atlantic&layer\\_id=33470](https://erma.noaa.gov/ERMA/metadata?sitename=atlantic&layer_id=33470)

**Parent Folder:** Natural Resources, Habitats, & Managed Areas>Environmental Sensitivity Index (NOAA ESI)>Long Island Sound (NOAA ESI 2016)  
**Layer Name:** Shoreline Classification (lines), Long Island Sound (NOAA)  
**Layer Sensitivity:** Public

**ERMA WMS Capabilities:** <https://erma.noaa.gov/maps/wms-p/33470?request=getCapabilities&service=WMS>

**Last Modified:** 2017-02-22 08:09:26-05  
**Last Modified By:** Wright, Robb (NOAA/NOS/OR&R)  
**Layer Extent:** -180.0,-89.99999,180.0,89.99999  
**Server Last Checked Up:** 2017-04-10 11:11:55-04  
**Server Last Checked Down:** 2016-11-30 14:01:17-05  
**Service Last Checked Up:** 2017-04-07 20:30:41-04

Layers Legend Draw Query Tools Download Print Zoom  
clear all collapse all manage

- Essential Fish Habitat (NOAA EFH)
- Environmental Sensitivity Index (NOAA ESI)
  - Seamless ESI PDF Maps for RI/NY/CT/NJ - 2001 (NOAA)
  - Seamless ESI PDF Maps for Delaware Bay - 2014 (NOAA)
- Chesapeake Bay (NOAA ESI 2016)
- Connecticut, Rhode Island, New York, New Jersey (NOAA ESI 2001)
- Delaware Bay (NOAA ESI 2014)
- Georgia (NOAA ESI 2015)
- Long Island Sound (NOAA ESI 2016)
  - Benthic Habitats, Long Island Sound (NOAA)
  - Bird Habitat, Long Island Sound (NOAA)
  - ESI Area of Interest, Long Island Sound (NOAA)
  - Shoreline Classification (lines), Long Island Sound (NOAA)
  - Shoreline Classification (poly), Long Island Sound (NOAA)
  - Fish Habitat, Long Island Sound (NOAA)
  - Vegetation Habitats, Long Island Sound (NOAA)
  - Hydrology Lines, Long Island Sound (NOAA)
  - Hydrology, Long Island Sound (NOAA)
  - ESI Bio Index Grid, Long Island Sound (NOAA)
  - ESI Human Use Index Grid, Long Island Sound (NOAA)
  - Invertebrates, Long Island Sound (NOAA)

Bookmark Views: new Expand  
clean

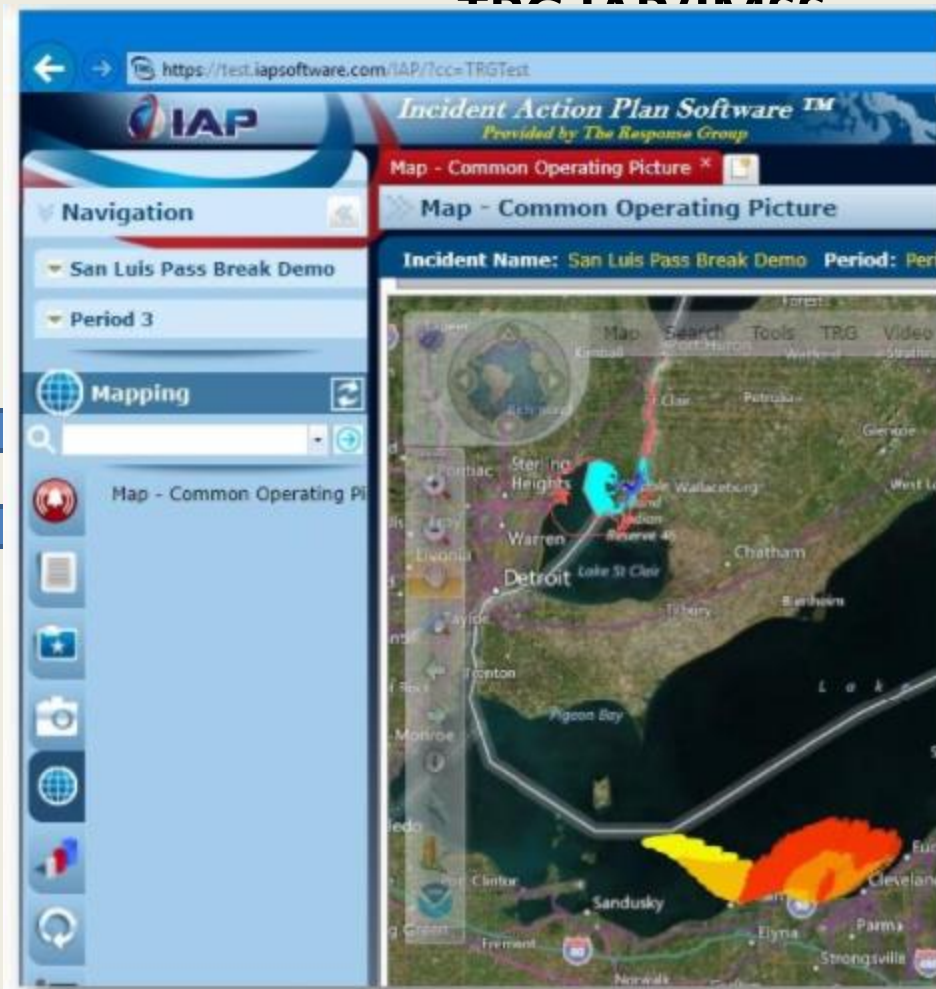
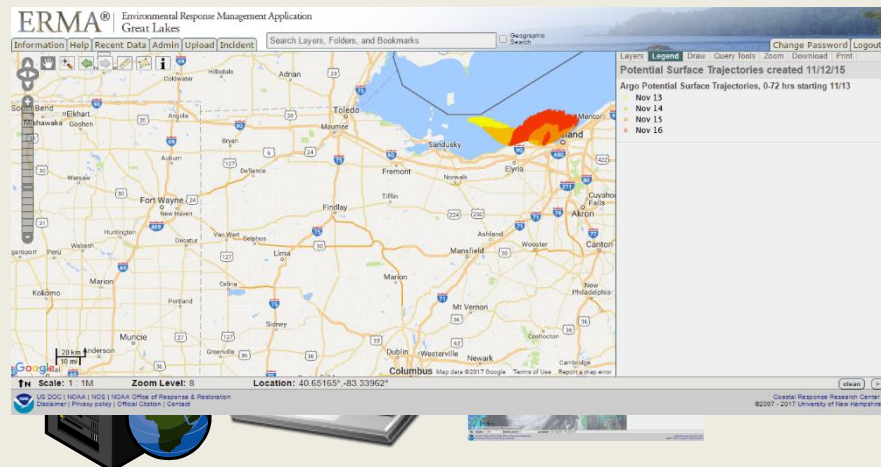
Scale: 1 : 652K Zoom Level: 9 Location: 40.92469°,-72.46687°

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# ERMA COP Interoperability & Standards

TRG IAP/IMC



**NEW Feature:**  
**Secure Electronic Data Sharing**

**TRG Viewer, NDOW,  
Shell, ArcGIS Online**

## FY 18 Plans

- Increase stats collections
- Local data upload
- Formatting attributes
- Automate archiving
- Table of contents geo-filter

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