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# Gulf of Mexico Marine Debris Mapping Project

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NOAA

Office of Coast Survey

*Briefing to RRT Conference, Nashville, Tennessee*



# Overview- Marine Surveying and Response Has Many Parallels to Coastal and Land Based Response

## The Tools of Surveying and Assessment and Removal Oversight Vary to Meet the Environment

# What is This?



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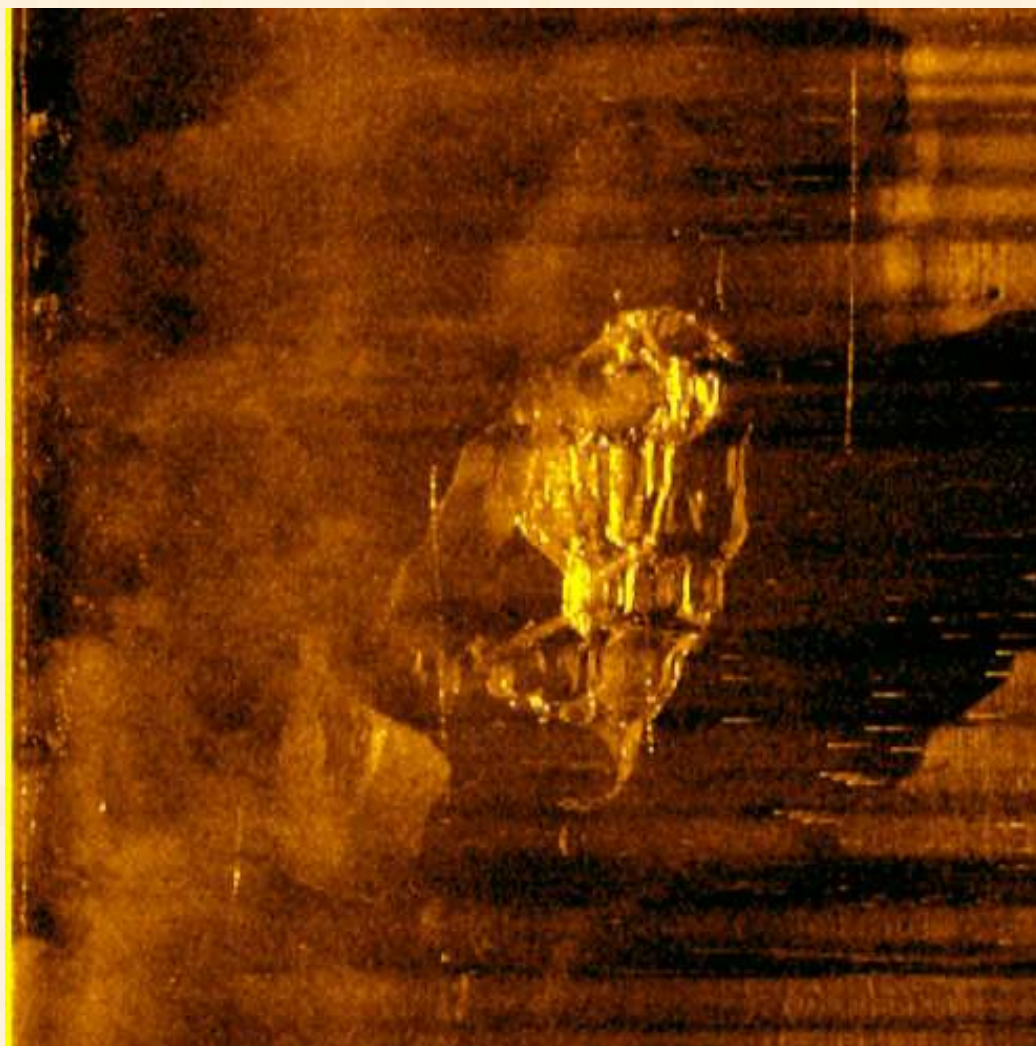
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Gulf of Mexico  
**MARINE DEBRIS**  
PROJECT

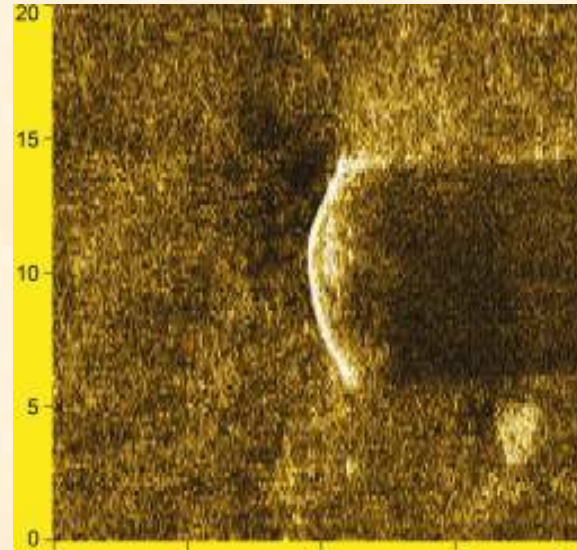
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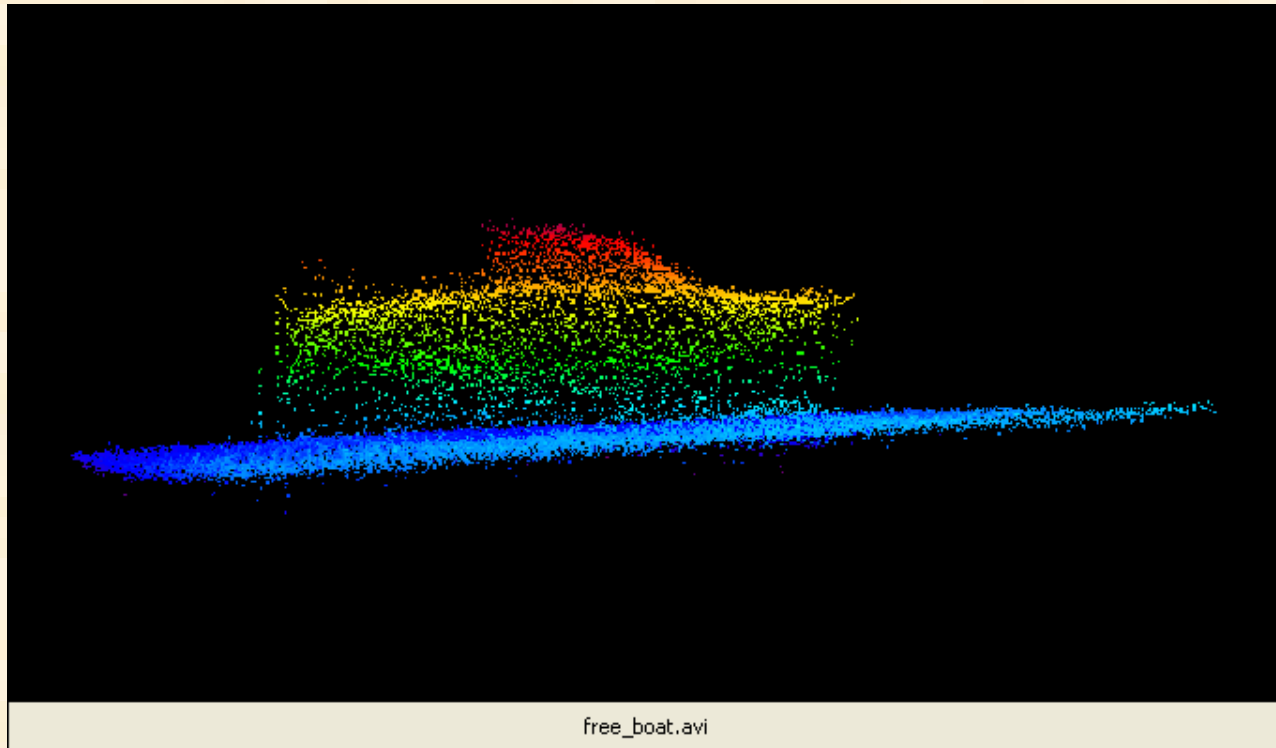
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free\_boat.avi

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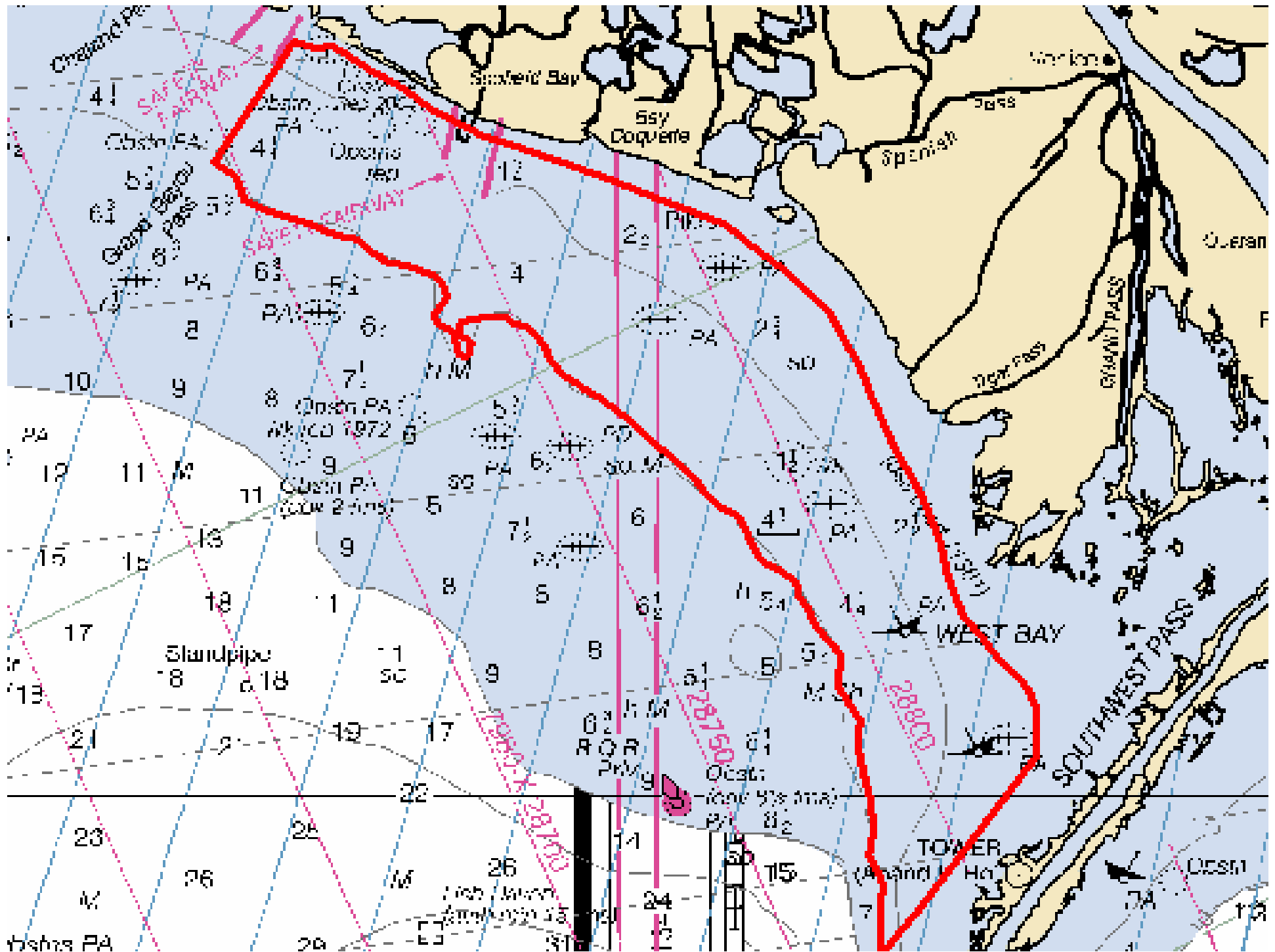
# Supplemental Funding

- In May, 2007 Congress appropriated \$24M to NOAA to “*conduct scanning and mapping as well as to provide debris removal in Louisiana’s traditional fishing grounds.*”
- This funding will permit the continuation of the survey effort that began in 2005 with a similar appropriation of \$20M (Sup1)

# Prioritization of Sup 1 Survey Areas

- Meetings were held with LA, MS and AL stakeholders to prioritize survey areas
  - Marine Resources
  - Local USCG
  - Fish and Wildlife
  - Local fisherman
- Decisions were based on estimation of highest concentration of debris and the largest gain to be realized by the local fishing community – specifically shrimpers







# “Hydro Anywhere” Contract

- Utilized five companies under the existing “Hydro Anywhere” contract
  - C&C Technologies - Mississippi
  - David Evans and Associates – Mobile Bay, AL and Plaquemines, LA
  - Fugro Pelagos – Dauphin Island, AL
  - SAIC – Lake Borgne, LA
  - Terrasond – offshore AL and Perdido Bay



# Survey Requirements

- First priority to locate debris and pass this information along to the states to aid in the removal effort
- Second priority to support nautical charting
  - Survey requirements were for 100% SSS with accompanying VBES and an additional 100% SSS and a least depth on all objects deemed navigationally significant
  - DTONS were reported as they were discovered (approximately 100 overall)
  - Sup 2 work will require 200% SSS with SWMB least depth information

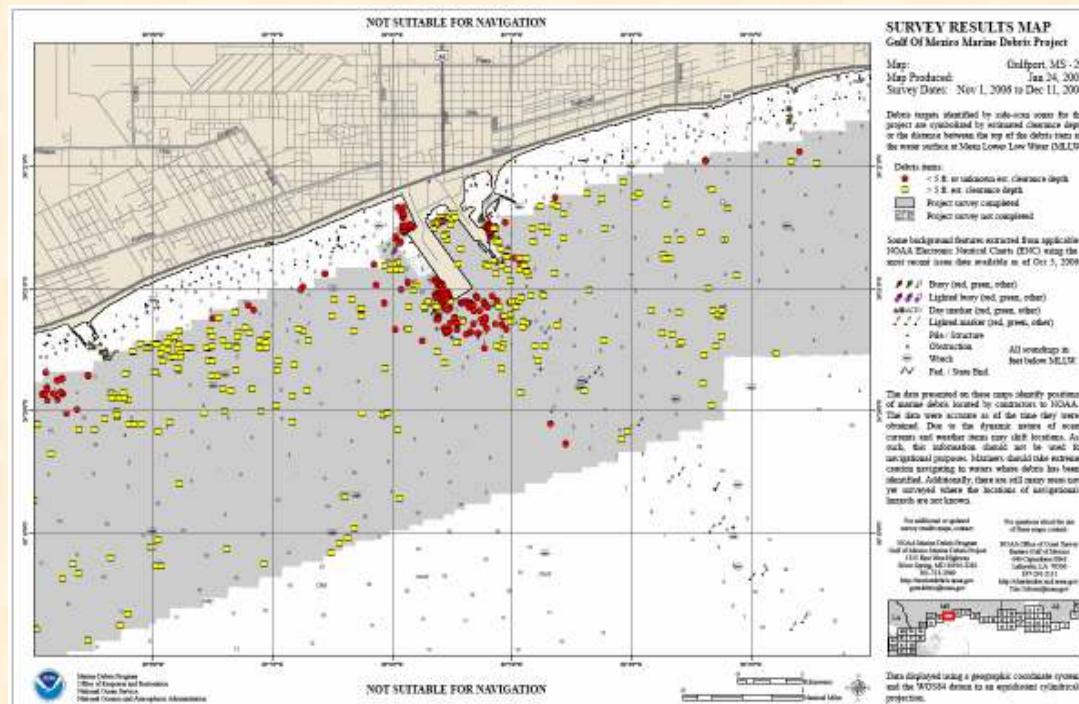


# Reporting & Data Dissemination

- Contractors submitted weekly reports of debris findings to a NOAA maintained Sharepoint
- This information was disseminated to the public and removal operators via OR&R's website

# Office of Response and Restoration

- ORR has many roles in this project
  - Maintain MDP database & website
  - Interact with local stakeholders on a regular basis
  - Ensure data are getting to the proper authorities to aid in the removal effort



<http://gulfofmexico.marinedebris.noaa.gov/>

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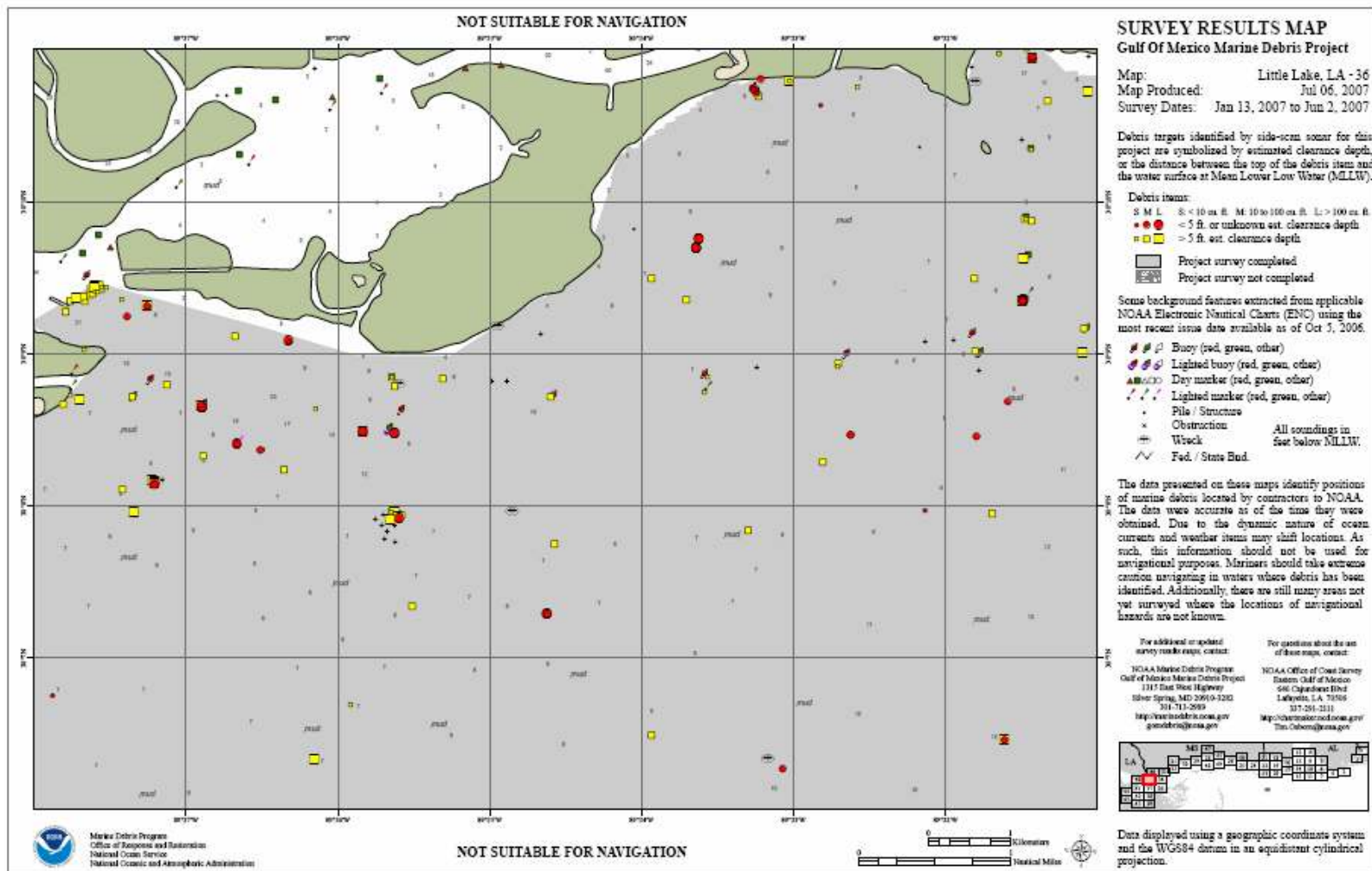
# The Project Website

- Survey maps and data, updated every 2-3 weeks
- Link to interactive Internet Mapping Server (Arc IMS)
- FEMA debris removal maps and tables, updated weekly
- Links to internal /external project partners
- Outreach products, media information, related publications, photos, and videos





# Survey Map – Lake Borgne, LA





# Internet Map Server (IMS)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
**MARINE DEBRIS PROGRAM**

Gulf of Mexico  
**MARINE DEBRIS PROJECT**

**NAVIGATION**

Zoom In Zoom Out Previous

Full Extent Pan

**OTHER TOOLS**

Identify Map Tips

**OUTPUT**

Print Map Download

Field	Value
Record #	1
Item ID	119162625
Survey Date	29 Apr 2007
Latitude	30.105413
Longitude	-89.6026103333
Image	119162625.tif
Height (ft)	5.8399
Length (ft)	5.8399
Width (ft)	4.65879
Charted Depth (ft)	7
Est. Least Depth (ft)	7.97244
Est. Clearance Depth (ft)	8
Est. Volume (cu ft)	158.885

**DATASETS**

- Debris Locations
  - < 10 cu. ft., < 5 ft. or estimated clearance depth
  - 10 - 100 cu. ft., < 5 ft. estimated clearance depth
  - unknown estimated clearance depth
  - > 100 cu. ft., < 5 ft. or estimated clearance depth
  - < 10 cu. ft., > 5 ft. or estimated clearance depth
  - 10 - 100 cu. ft., > 5 ft. or estimated clearance depth
  - > 100 cu. ft., > 5 ft. or estimated clearance depth
- Survey - Complete
- Survey - Proposed
- Runs

**Refresh Map**

Auto Refresh

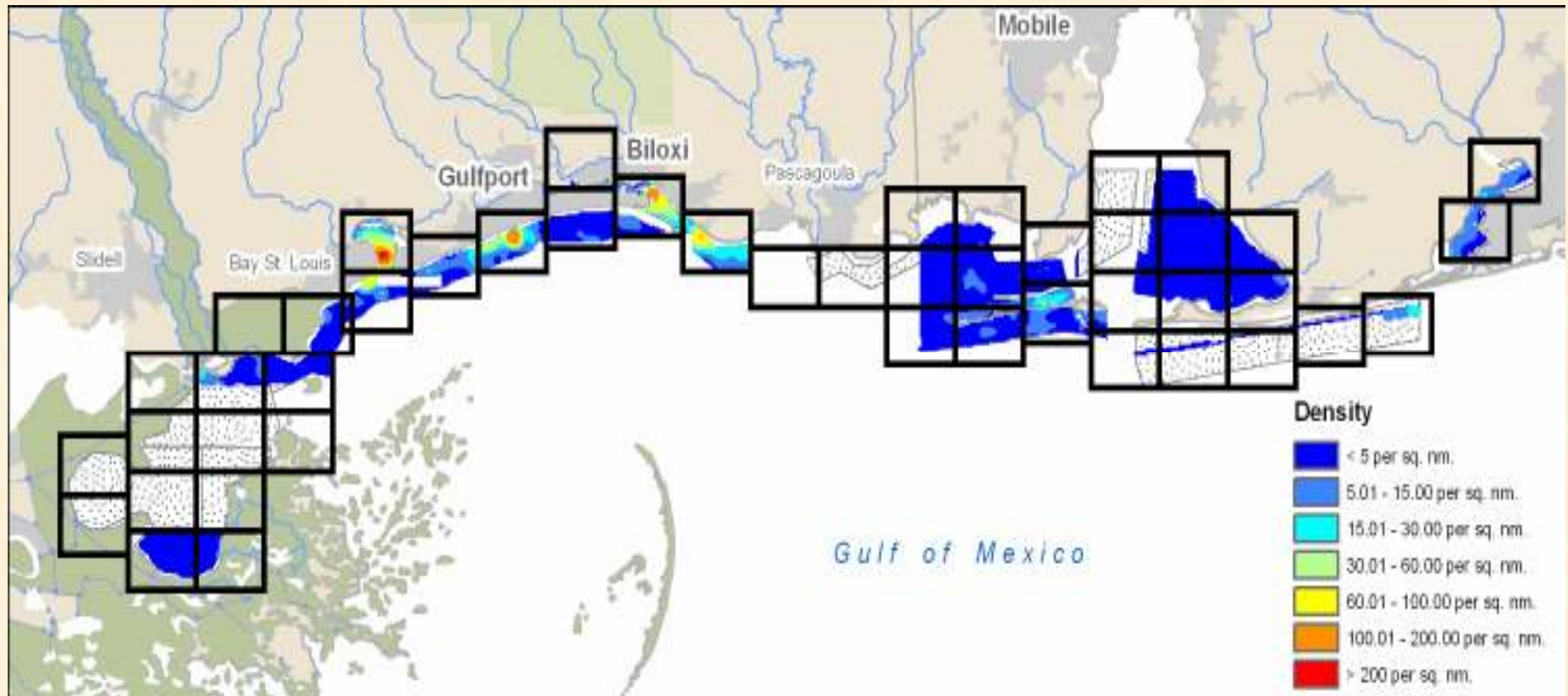
**Help:**

- A visible dataset, click to zoom.
- A visible dataset, but not selected.
- The active dataset.
- A closed legend, click to open.

Longitude: 89° 34'W Latitude: 30° 11'N



# Density by Geographic Region



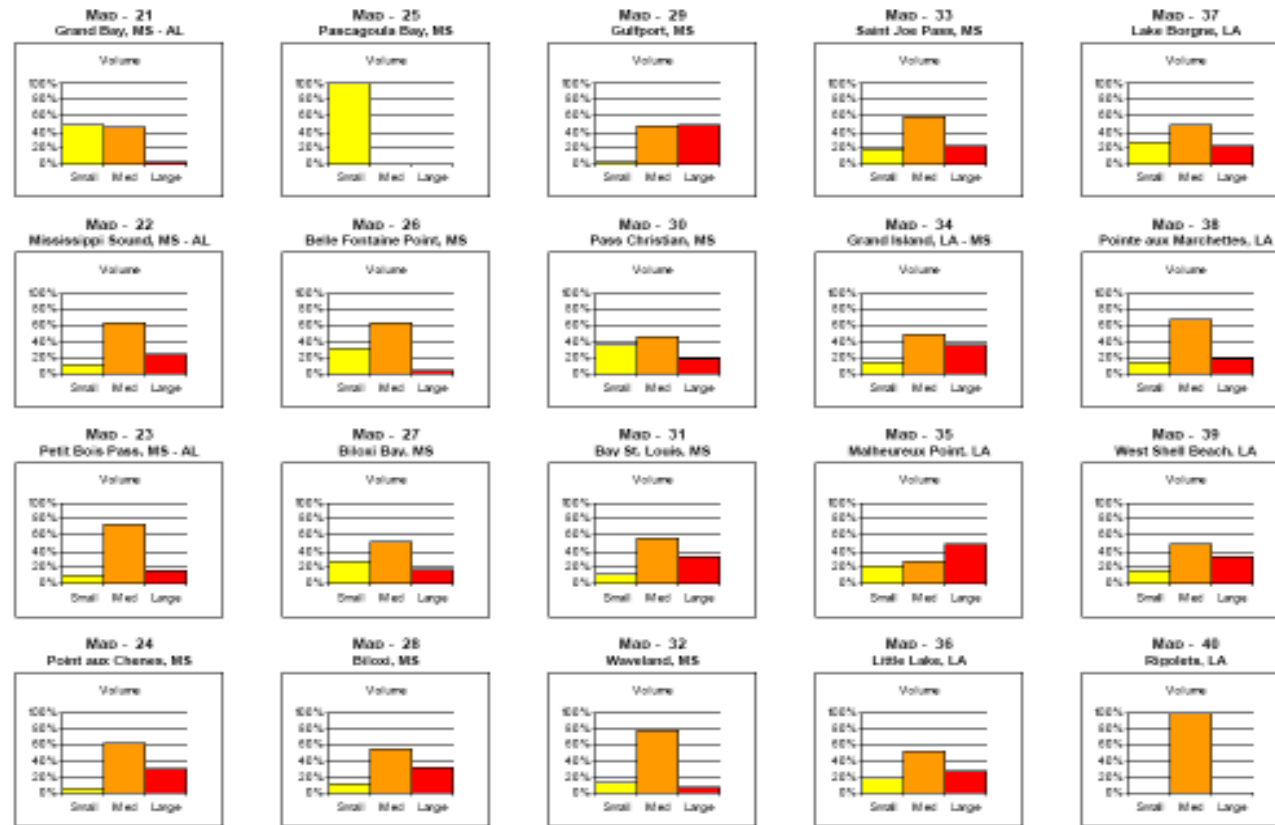
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# Data Analysis: Volume Histograms

GOMMDP Volume Histograms



NOAA Marine Debris Program  
Gulf of Mexico Marine Debris Project  
www.gommdp.noaa.gov  
Jan 6, 2007

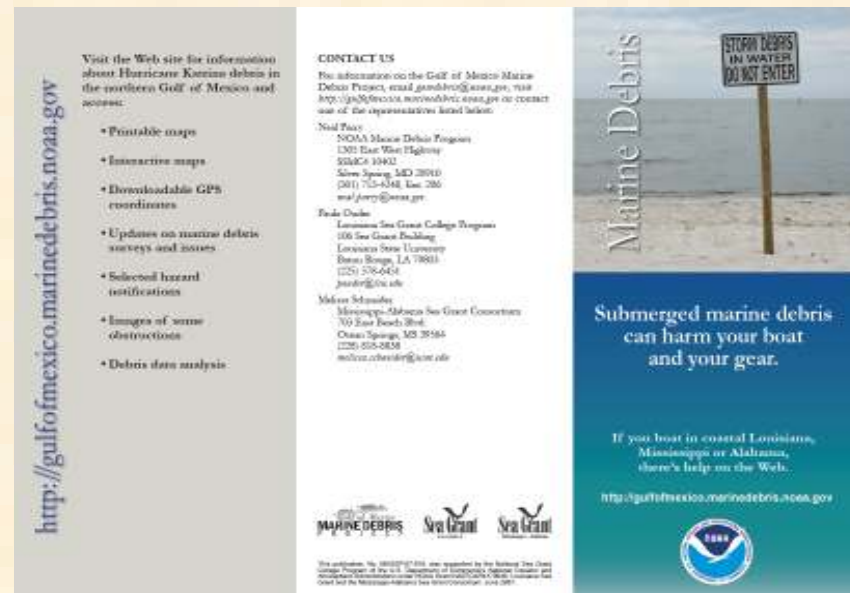




# Outreach Products



Poster

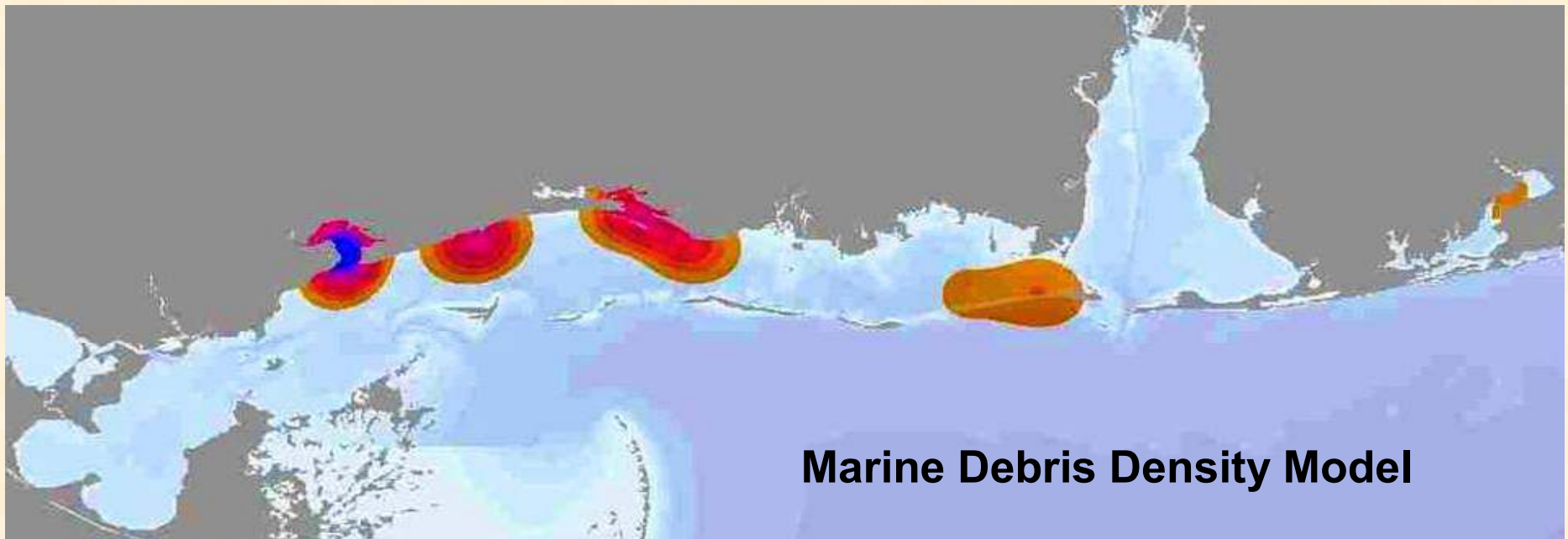


Brochure

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# In Progress....



*Figure depicting debris density. Derived from actual survey data; 2006 / 2007*

**Goal:** *Increase efficiency of post-incident response to marine debris*

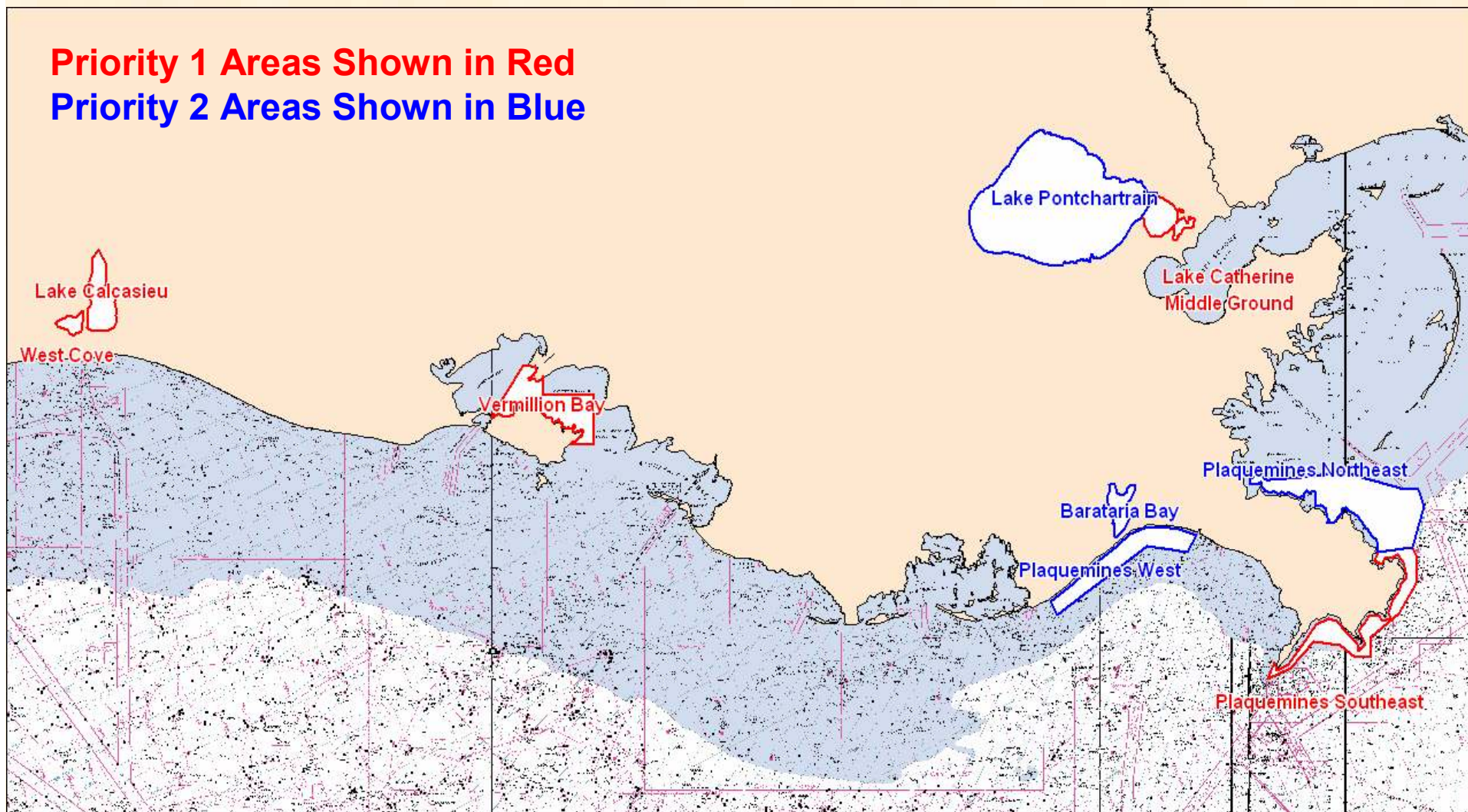
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# Proposed Survey Areas

**Priority 1 Areas Shown in Red**  
**Priority 2 Areas Shown in Blue**





# Present and Future Goals

- Develop and Implement a Standardized Approach to Surveying and Mapping Marine Debris to Reduce Risk and Support Removal
- Work with Multiple Responders and State and Federal Trust Managers in Addition to the Fishing and Navigation and Port Communities

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# Thank You

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