# Working With the Unified Command (UC): Suggestions for the Ocean Observing Community from an Oil Spill Responder

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# What Is ICS?

- The Incident Command System:
  - Is a standardized, on-scene, all-hazard incident management concept.
  - Allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries.

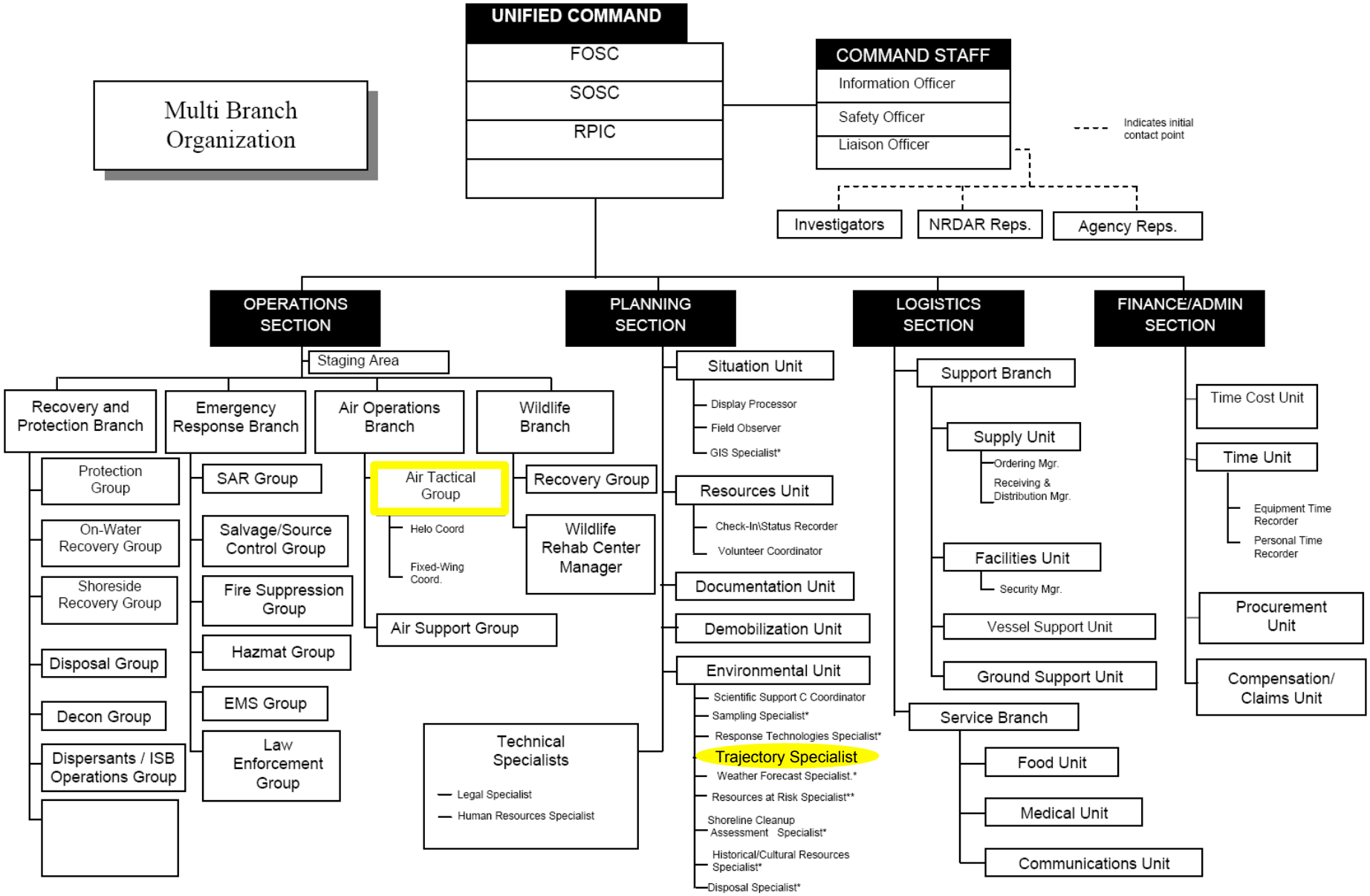
FEMA IS-100 on line course
http://training.fema.gov/IS/NIMS.asp

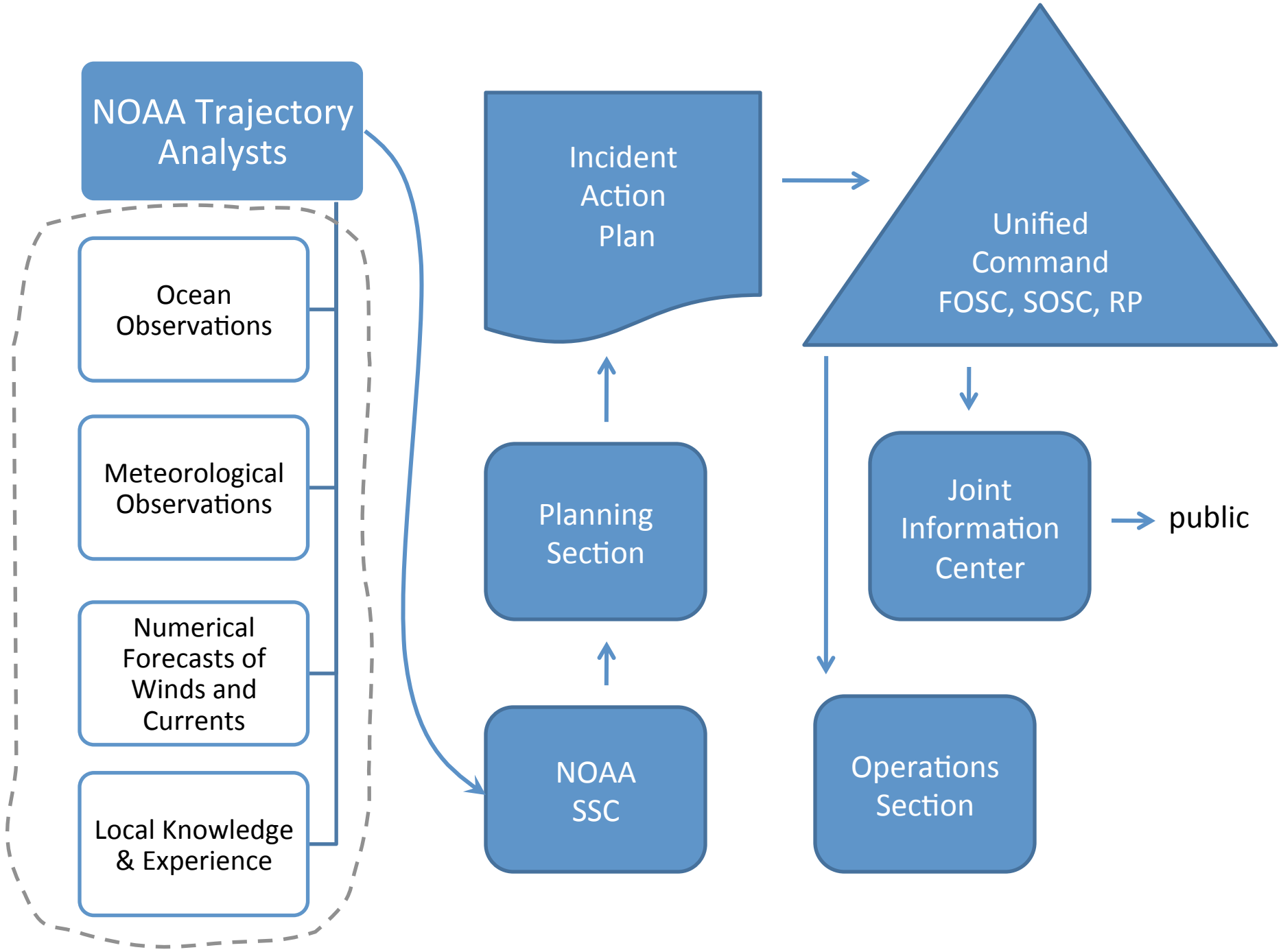
# What is the Unified Command?

- Unified Command is an ICS that brings together the "Incident Commanders" of all major organizations involved in the incident in order to coordinate an effective response while at the same time carrying out their own jurisdictional responsibilities. In oil spills, the Unified Command includes the Responsible Party (RP) along with a state on scene commander (SOSC) and a Federal on scene commander (FOSC).

- The goal is “Unity of Effort” that is driven by objectives
- In practice, this means focus on fixing the problem, not the blame

# Incident Command System




NOAA Trajectory Analysts
Ocean Observations
Meteorological Observations
Numerical Forecasts of Winds and Currents
Local Knowledge & Experience
Incident Action Plan
Unified Command FOSC, SOSC, RP
Planning Section
Joint Information Center
public
NOAA SSC
Operations Section

# Examples of what UC is looking for in trajectories:

- Generalizations (descriptions in broad brush strokes) about what areas are threatened … something they can understand in seconds.
- 2 or 3 day, simplified trajectories (not particles and not 10 day forecasts)
- Shoreline impact maps.
- Something planners can use to create strategies that protect resources at risk and minimize regret.

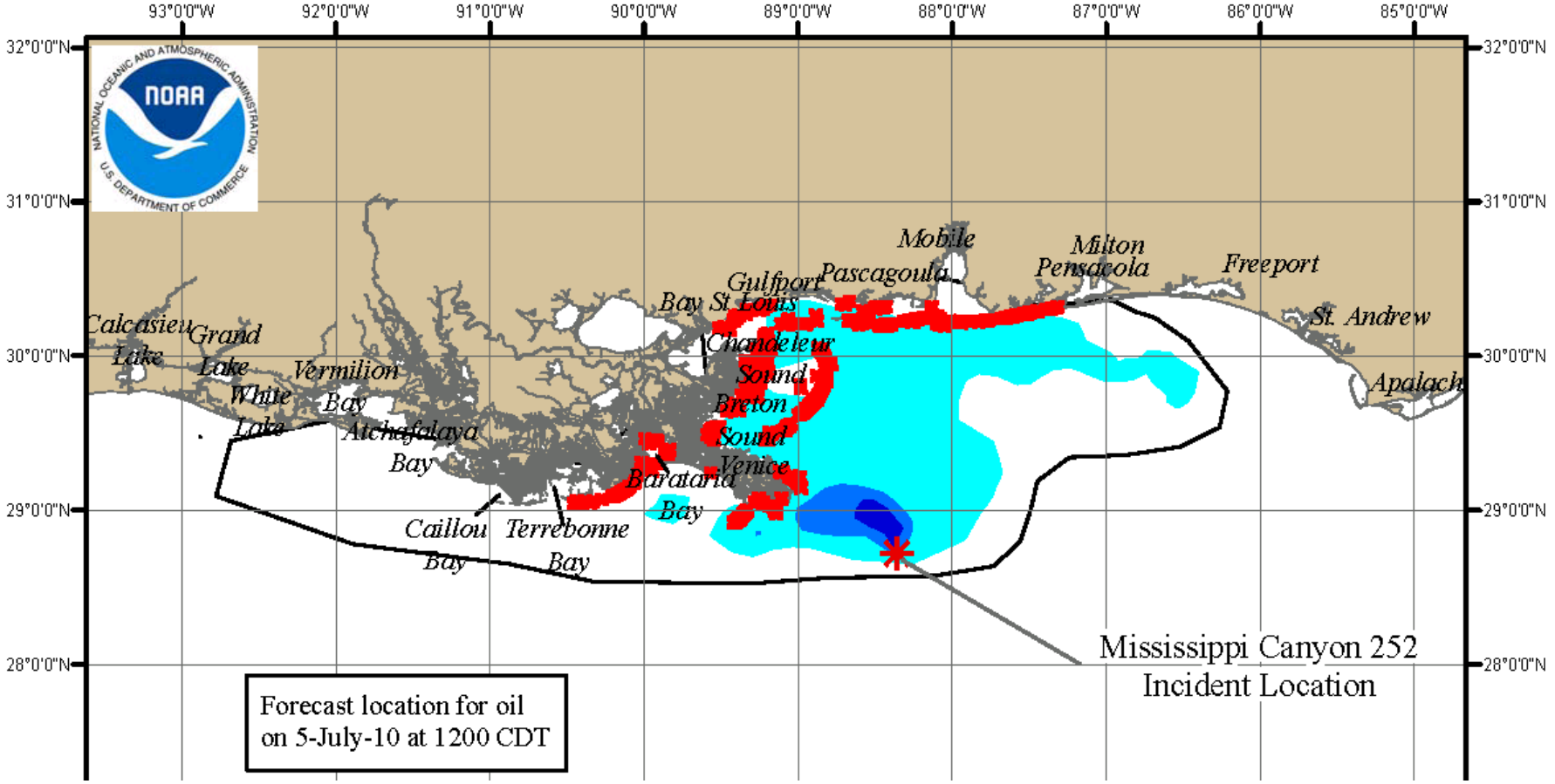
# Nearshore
# Surface Oil Forecast
# Deepwater Horizon MC252

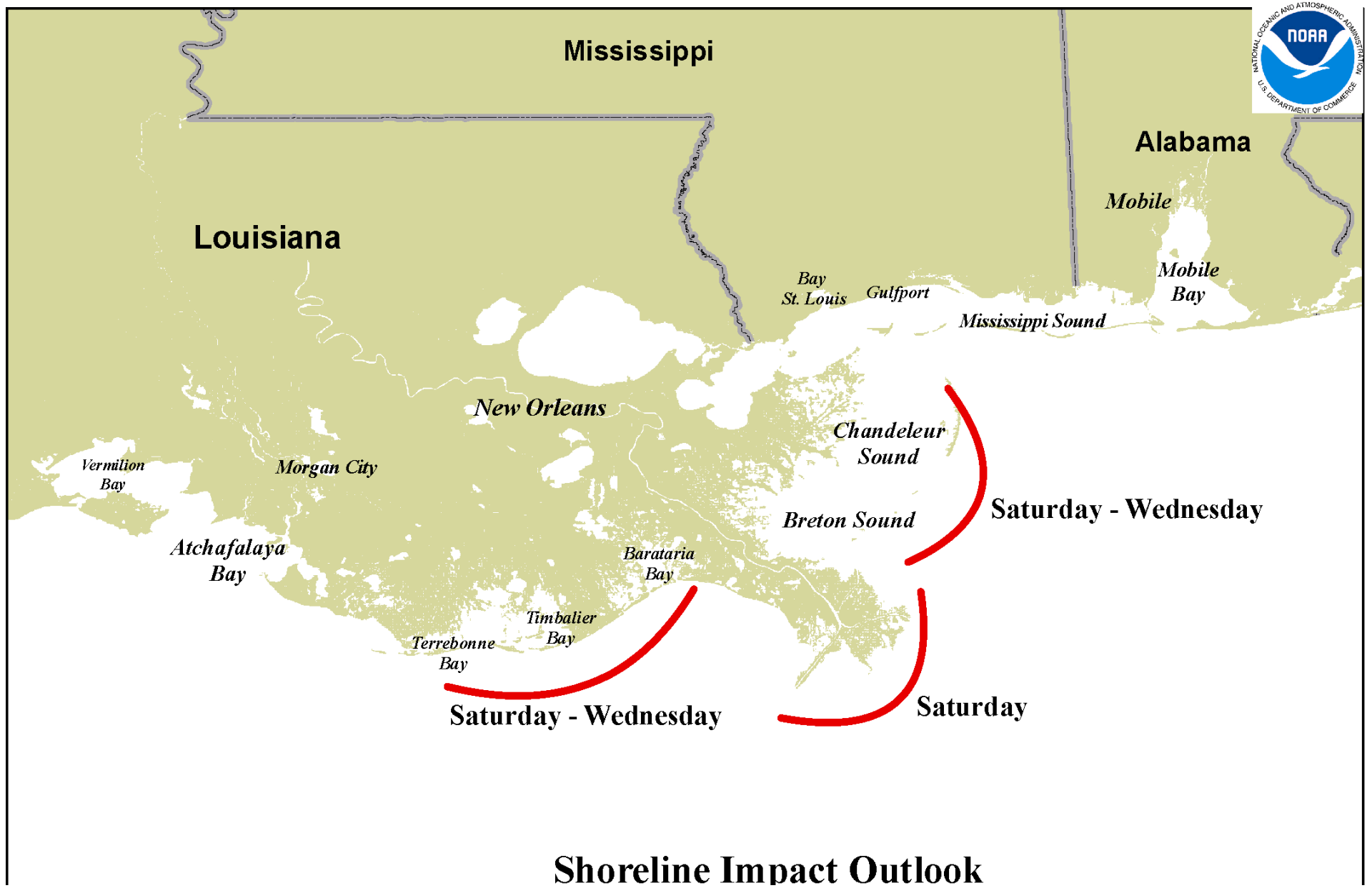
NOAA/NOS/OR&R

**Nearshore**

Estimate for: 1200 CDT, Monday, 7/05/10
Date Prepared: 2100 CDT, Friday, 7/02/10

This forecast is based on the NWS spot forecast from Friday, July 2 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Friday satellite imagery analysis (NOAA/NESDIS) and overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.




Mississippi
Alabama
Louisiana
Mobile
Mobile Bay
Bay St. Louis
Gulfport
Mississippi Sound
New Orleans
Chandeleur Sound
Breton Sound
Saturday - Wednesday
Vermilion Bay
Morgan City
Atchafalaya Bay
Barataria Bay
Timbalier Bay
Terrebonne Bay
Saturday - Wednesday
Saturday
Shoreline Impact Outlook

# Minimum Regret Approach to Trajectory Analysis

- Explore the sensitivity of our trajectory forecast to errors in the input data
- Helps us think through the implications of other less likely, but still plausible scenarios
- Tends to expand the area we consider at risk, but minimizes the regret we would feel about our course of action (protection strategies) because our course of action now accounts for a broader scenario.

# Suggestions

- Have your data in a GNOME- ready format such as netCDF.
- Post your wind and current observations and forecasts in both graphic and tabular format.
- Avoid posting your trajectories, it confuses the public and it can become an unnecessary distraction for the Unified Command where discrepancies occur.
- Work with the NOAA trajectory analysts. They can incorporate your concerns in their analysis.
- Know your model's weaknesses and be upfront about it when talking with the NOAA trajectory analysts.