REGION 6 REGIONAL RESPONSE TEAM (RRT)
WINTER MEETING
Corpus Christi, TX

MONDAY, JANUARY 26, 2009 1500 – 1730 RRT Executive Meeting

TUESDAY, JANUARY 27, 2009

0800 – 0830	Introduction / Welcome/Administrative Notes (RRT 6 Co-Chairs)\Approval of January, 2008 Meeting Minutes	CAPT Brennan / Mr. Ragan Broyles
0830 – 0945	**Committee Reports** Executive – Steve Mason, EPA Response – Craig Carroll, EPA Preparedness -- Karolien Debusschere, LOSCO	Science & Technology – Michael Baccigalopi, TGLO Status of Solidifiers Policy Industry Work Group (IWG) -- John Temperelli, Garner Environmental
0945 – 1000	**BREAK**	
1000 – 1045	American Salvage Association	James Calhoun, ASA
1045 – 1130	Surface Washing Agents / Dispersants Job Aid	Charlie Henry, NOAA
1130 – 1300	**LUNCH**	
1300 – 1400	State Reports by State Representatives	State Agency Representatives
1400 – 1415	**BREAK**	
1415 – 1500	FWS / DOI responsibilities during a spill (Spinning Blades & Birds) & PRFAs/MAs	Steven Spencer, DOI
1500 – 1615	Hurricane Ike Followup	Althea Foster, EPA; Cmdr Virginia Kammer, USCG; Jeff Lewellin, TCEQ
1615 – 1645	MMS Offshore Drill Program	Rusty Wright, MMS
1645 – 1715	Poison Control Center Updates	Patrick Young, ATSDR

REGION 6 REGIONAL RESPONSE TEAM (RRT) WINTER MEETING
Corpus Christi, TX

WEDNESDAY, JANUARY 28, 2009

0800 – 0845	Hurricane Gustav / Ike Louisiana Response	John Martin, EPA; Jeff Meyers, LDEQ
0845 – 0915	Colbert, OK Mercury Response	Eric Delgado, EPA
0915 – 0930	**BREAK**	
0930 – 1015	USCG OSC Reports	Captains of the Port
1015 – 1100	Oil Spill Claim Process to Oil Spill Trust Fund	NPFC
1100 – 1145	ARF Process for States, Federal Agencies / Accountable Property under Mission Assignments	Lorie Lafon, FEMA Region 6
1145 – 1300	**LUNCH**	
1300 – 1345	Federal Agency Reports by Agency Representatives	Federal Agency Representatives
1345 – 1400	**BREAK**	
1400 – 1415	Federal Agency Reports by Agency Representatives (continued)	Federal Agency Representatives
1415 – 1445	Summary of KAB-121 Oil Spill in the Campeche Sound, MEXICO AOR	LCDR Otilia Nakagawa, MEXICO NAVY/SEMAR
1445 – 1500	**Wrap—up / Adjournment**	Ragan Broyles, EPA / CAPT Brennan, USCG

THURSDAY, JANUARY 29, 2009

Joint US/Mexico Response Team (JRT) Meeting with Mexican Navy
Agenda will come out separately for this meeting

RRT VI
Draft Solidifier Preauthorization and Expedited Approval

Michael Baccigalopi – RRT VI Science and Technology Committee Chairman, TGLO

Stacy Boultinghouse – TAS Environmental Services L.P.

Matt Weakley – USCG Eighth District

January 27, 2008

Solidifiers

- Dry high molecular weight polymers that have a porous matrix and large oleophilic surface area that increase the oils viscosity to the point that it becomes a rubber-like solid

- Available in various forms, including: dry powder; granules; semi-solid materials (e.g., pucks, cakes, balls, sponge designs, and etc.); and contained in booms, pillows, pads, and socks

M3

Slide 2

M3 Notes reference CI Agent product demonstration and example products in back of room...not sure if you'll have this or not.
MRWeakley, 9/30/2008

Characteristics of Solidifiers

- Primarily composed of polymers
- Contain less than 5 ppm heavy metals and chlorinated hydrocarbons
- Physically react with oil at a prescribed application rate and resist leaching oil
- Do not release solidified liquids under pressure
- Non-toxic to wildlife and other species
- Insoluble in water
- Specific gravity less than 1.0

Organic product

- Mineral Compounds
  - Volcanic Ash
  - Perlite
  - Vermiculite
  - zeolite

- Synthetic Products
  - Polypropylene
  - Polyethylene
  - Polyurethane
  - Polyester

Draft Document Terminology

- **Approved** – products and uses that do not require notification or approval prior to use under current guidelines, including:
  - Loose organic and mineral sorbent
  - Contained synthetic sorbent and contained solidifier
  - Trained first responders where memorandums of agreement exist
  - Cleaning “facility spills” up to 50 gallons

Draft Document Terminology (Continued)

- **Preauthorized** – requires notification and approval of FOSC prior to use of the following products on spills up to 500 gallons:
  - Loose synthetic sorbent on land or water
  - Loose solidifier on land or water
  - *Does not apply* to specially managed land or water areas

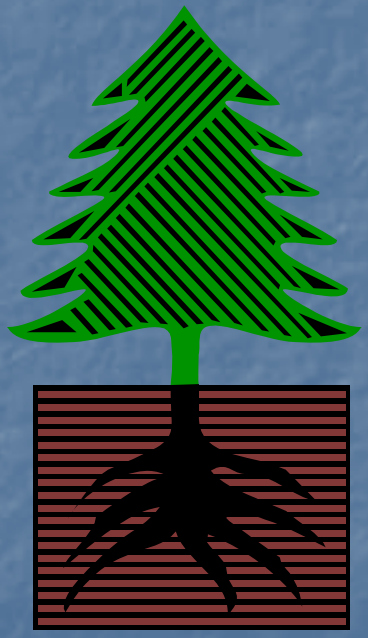
Draft Document Terminology (Continued)

- **Expedited Approval** – requires notification and approval of FOSC and any area managers prior to use of the following products on minor coastal and inland spills:
  - Loose synthetic sorbent on land or water
  - Loose solidifier on land or water

Draft Preauthorization and Expedited Approval Conditions

- **Loose products on land**
  - Only applies to product applied directly to oil or to contain flowing oil
  - Not to be applied to drains
  - Product must be prevented from entering other environmental media

    (i.e., water or non-hard-surfaced areas of ground)



Draft Preauthorization and Expedited Approval Conditions (Continued)

- **Loose <u>solidifiers</u> or <u>*synthetic*</u> <u>sorbents</u> on <u>water</u>**

  - Only applies to products that do not sink
  - Can only be applied to contained oil
    - Prevent wind drift during application
    - Not applied if entrainment is occurring
  - Can only be applied by trained responders
  - Never applied to wildlife
  - Only applied to specially managed areas under Expedited Approval
  - Complete recovery required

User Requirements

- FOSC notification and approval is still required for use of solidifiers under the Preauthorization and Expedited Approval
- Special area manager approval required for Expedited Approval
- Federal and state representatives *should* be present
- Users of NCP Product Schedule-listed solidifiers *should* be adequately trained in the use of solidifiers by product manufacturers
- Manufacturers *should* maintain records of trainees
- Solidifier users *must* collect data during application monitoring
- RP or responding organization reporting requirements

Application and Monitoring Issues

- Application Rate
- Application Method
- Mixing Energy
- Solidification Time
- Oil Type

Environmental Concerns

- Sinking of loose product and/or treated oil either initially or over time
- Fate and bioavailability of unreacted product in the environment
- Fate and behavior of treated, unrecovered oil
- Acute aquatic toxicity is not a major concern

Quick Reference Matrix for Solidifiers and Sorbents

Material	Contained Product			Loose Product			
	Land	Drains	Water	Land	Drains	Water	Facility Spill
Organic Sorbent	A	A	A	A	NA	NA	A
Mineral Sorbent	A	A	A	A	NA	NA	A
Synthetic Sorbent	A	A	A	P, EA	NA	P, EA	A^{50}
Solidifier	A	A	A	P, EA	NA	P, EA	A^{50}

A = Approved for use; no notifications required.

NA = Not approved for use under any condition.

A^{50} = Approved for use; no notifications required for spills up to 50 gallons.

P = Preauthorization for spills up to 500 gallons; FOSC notification required.

EA = Expedited Approval for spills up to 1,000 gallons for inland spills and up to 10,000 gallons for coastal spills; Special Area Manager may be required in addition to FOSC notification.

Disposal Considerations

- Media impacted with hydrocarbons may be subjected to additional testing prior to disposal
- Generators need to determine if area landfills accept petroleum impacted media
- Landfills may require waste stream specific profiles from the waste generator
- Analytical and/or MSDS data may be required prior to approved disposal

Finalization Process

Limited distribution of Draft Document

Draft Final Document submitted for Section 7 consultation/Biological Assessment

Section 7 consultation/Biological Assessment complete (up to 180 days)

Document submitted for RRT approval vote

Questions or Comments?

Points of Contact

Michael Baccigalopi
RRT VI Science and Technology Committee Chairman
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Matt Weakley
USCG Eighth District
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Stacy Boultinghouse
TAS Environmental Services L.P.
210.496.5310 sboultinghouse@taslp.com

American Salvage Association

presentation to

RRT Region VI

January 27, 2009

Jim Calhoun
Manager, Regulatory Affairs
T&T Bisso, LLC

The Oil Pollution Act of 1990

AMERICAN SALVAGE ASSOCIATION

Passed as a result of the *Exxon Valdez*

- Regs promulgated in February 1993
- Required Vessel Response Plans (VRPs) for Tank Vessels only
- Included the naming of the following in VRPs:
  - Clean Up Contractors
  - Salvors
  - Firefighters
  - Lighterers

Why were the VRP regs drafted to address clean up contractors with virtually no specifics on salvage and firefighting?

What services are included in marine salvage? And in pollution clean up?

Services…

- Firefighting
- Lightering product (surface and subsurface)
- Rescue towing
- Wreck removal
- Refloating
- Dewatering
- Diving
- Heavy lift
- Temporary structural repair
- Returning stability
- Assessment and survey
- Salvage Engineering
- Subsurface pollution removal

Spill Cleanup…

Physically recover

Disperse

In situ burn

- Salvage and firefighting not on the “radar screen.”
- Prime example EXXON VALDEZ
- Regs needed to be out fast
- Salvage F/F infrastructure not in place
- The marine industry would grow the infrastructure out of necessity

In the original tank vessel regulations, the requirements for spill cleanup contractors were more specific and rigorous than for salvors and firefighters.

- Equipment
- Response times
- Vetting by the National Strike Force

For salvors and firefighters-

33 CFR 155.1050(k)(1)… through contract or other approved means [written consent], the following resources:

(i) A salvage company with expertise and equipment.

(ii) A company with vessel firefighting capability that will respond to casualties in the area(s) in which the vessel will operate.

Respond in 24 hours

The fix?

33 CFR Part 155

Salvage and Marine firefighting

Requirements; Vessel Response Plans for Oil; Proposed Rule

Dated May 10, 2002!

U.S. Coast Guard / VOLPE Study

AMERICAN SALVAGE ASSOCIATION

- 1997 - Conducted a Meeting of all Stakeholders relative to Marine Salvage and Fire-fighting in Washington, D.C.
- Second Meeting held in Houston, TX in 2000
- May 10, 2002 Coast Guard issues proposed rule for Salvage and Marine Firefighting requirements for Vessel Response Plans

The final regulations are published

31 December 2008.

These regulations apply to tank vessels only.

What do these regulations primarily require?

- ✓ A list of fifteen criteria the Resource Provider (salvor & firefighter) must meet
- ✓ Response times
- ✓ A contract with funding agreements and written consent between the Responsible Party (vessel owner) and Resource Provider

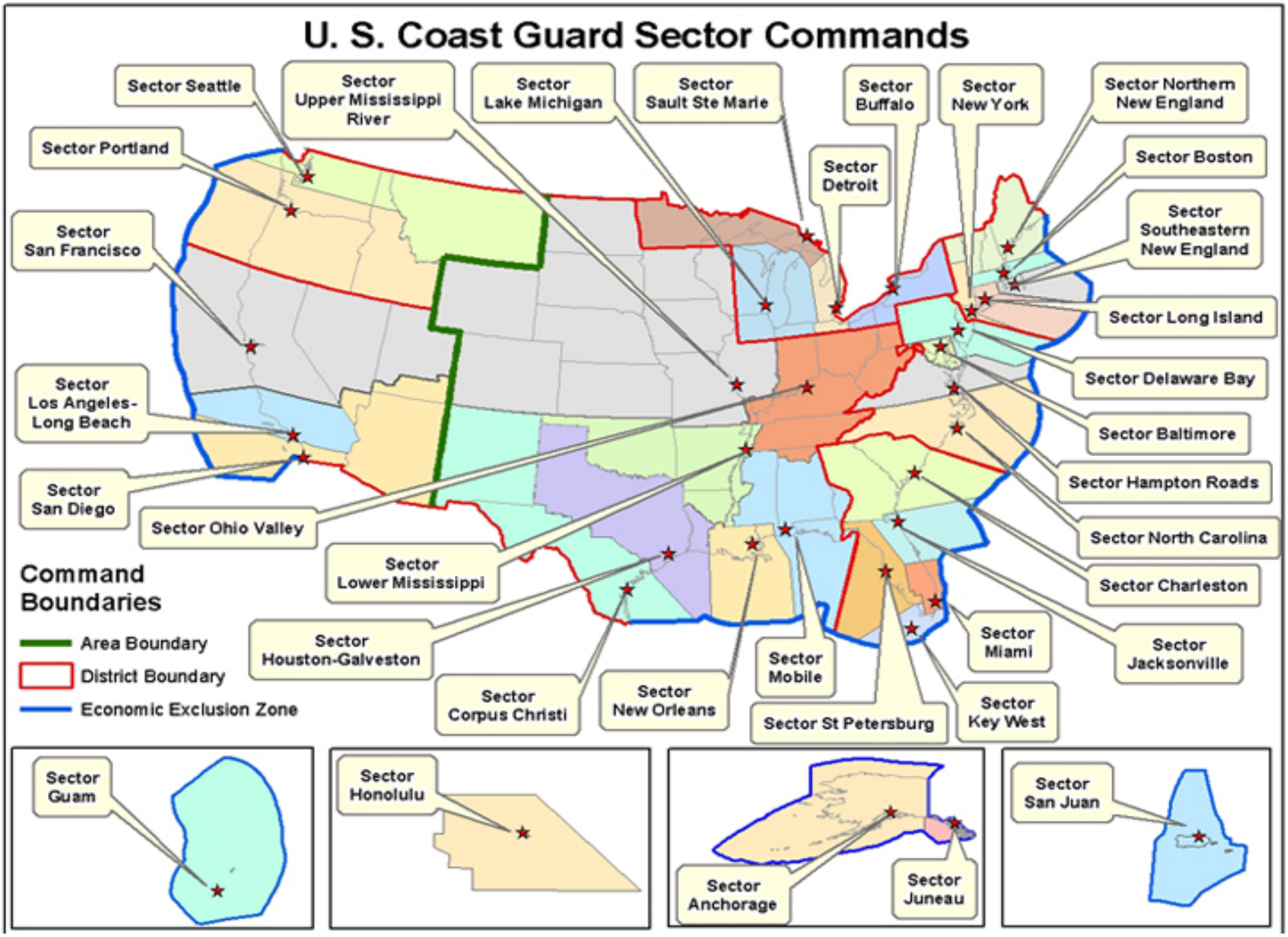
Provisions to Address the Adequacy of Salvors and Firefighters

Adequacy- Planholders (RPs) will be required to self-certify they considered the following selection criteria when choosing a contractor:

- Working in the response service needed
- Documented history of successful salvage operations and/or marine firefighting operations, including equipment deployment.
- Owns or has contracts for equipment needed to perform response services
- 24-hour availability of personnel and equipment, and history of response times compatible with the regulatory time requirements

- Has an on-going training program
- Has successful record of participation in drills and exercises
- Has sample salvage or marine firefighting plans used and approved during real incidents
- Has membership in national and/or international organizations
- Has insurance to cover operations
- Has sufficient up-front capital to support an operation
- Has sufficient equipment and experience to work in the specific regional geographic environment(s) that the vessel operates (bottom type, water turbidity, depth, temperature extremes)

- Has logistical and transportation support capability to required to sustain operations for extended periods in arduous conditions
- Capability to implement engineering, administrative and personal protective controls to safeguard workers (new)
- Has familiarity with the salvage and firefighting protocol contained in the local Area Contingency Plans (new)


U. S. Coast Guard Sector Commands
Sector Seattle
Sector Upper Mississippi River
Sector Lake Michigan
Sector Sault Ste Marie
Sector Buffalo
Sector New York
Sector Northern New England
Sector Portland
Sector Detroit
Sector Boston
Sector San Francisco
Sector Southeastern New England
Sector Long Island
Sector Los Angeles-Long Beach
Sector Delaware Bay
Sector Baltimore
Sector San Diego
Sector Ohio Valley
Sector Hampton Roads
Sector North Carolina
Sector Lower Mississippi
Sector Charleston
Command Boundaries
Area Boundary
District Boundary
Economic Exclusion Zone
Sector Houston-Galveston
Sector Miami
Sector Jacksonville
Sector Corpus Christi
Sector New Orleans
Sector Mobile
Sector St Petersburg
Sector Key West
Sector Guam
Sector Honolulu
Sector Anchorage
Sector Juneau
Sector San Juan

Services and Response Timeframes

Service	Location of incident response activity timeframe	
(1) Salvage	CONUS: nearshore area; inland waters; Great Lakes; and OCONUS: < or = 12 miles from COTP city (hours)	CONUS: offshore area; and OCONUS: < or = 50 miles from COTP city (hours)
(i) Assessment & Survey:		
(A) Remote assessment and consultation	1	1
(B) Begin assessment of structural stability	3	3
(C) On-site salvage assessment	6	12
(D) Assessment of	12	18

structural stability			
(E) Hull and bottom survey		12	18
(ii) Stabilization:			
(A) Emergency towing		12	18
(B) Salvage plan		16	22
(C) External emergency transfer operations		18	24
(D) Emergency lightering		18	24
(E) Other refloating methods		18	24
(F) Making temporary repairs		18	24
(G) Diving services support		18	24
(iii) Specialized Salvage Operations:			
(A) Special salvage operations plan		18	24
(B) Subsurface product removal		72	84
(C) Heavy lift/1/		Estimated	Estimated
(2) Marine firefighting	At pier (hours)	CONUS: Nearshore area; inland waters; Great Lakes; and OCONUS: < or = 12 miles from COTP city (hours)	CONUS: Offshore area; and OCONUS: < or = 50 miles from COTP city (hours)
(i) Assessment & Planning:			
(A) Remote	1	1	1

assessment and consultation			
(B) On-site fire assessment	2	6	12
(ii) Fire Suppression:			
(A) External firefighting teams	4	8	12
(B) External vessel firefighting systems	4	12	18

/1/ Heavy lift services are not required to have definite hours for a response time. The planholder must still contract for heavy lift services, provide a description of the heavy lift response and an estimated response time when these services are required, however, none of the timeframes listed in the table in § 155.4030(b) will apply to these services.

Contracting- Highly emphasized in the final regulations

To ensure that resource providers will respond immediately and there will be no delay due to contract or funding negotiations, the following is required:

- "Contract or other approved means"
- Written contract between the vessel owner and the resource provider.

- The contract must expressly provide that the resource provider is capable of, and intends to commit to, meeting the plan requirements.
- As part of the contract, the vessel owner and resource provider must sign a funding agreement .
- A written consent to be listed in the plan must be provided and made available for examination by the Coast Guard.
- It appears all resource providers need a funding agreement.

The regulations also provide for:

- ✓ 18 months to comply
- ✓ Waiver provisions on compliance
- ✓ A “primary resource provider” who will be the primary point of contact for the planholder, FOSC, and Unified Command
- ✓ Drill and exercises
- ✓ Public sector firefighters as listed responders
- ✓ Safety standards (OSHA)
- ✓ VRP compatible with the ACP and NCP

A few comments:

- The interface between the QIs/plan writers, plan holders and resource providers will be interesting, particularly for foreign owners.
- These will regs will take the salvor/firefighter out of the “regulatory backwater.”
- The NTVRP regs will follow soon.
- NVICs, CG directives, and other policy will soon be out.
- Considerable congressional and CG Commandant interest as the result of COSCO BUSAN.
- ASA will work with the Coast Guard to clarify these regulations

WHO WE ARE…

AMERICAN SALVAGE ASSOCIATION

The American Salvage Association:

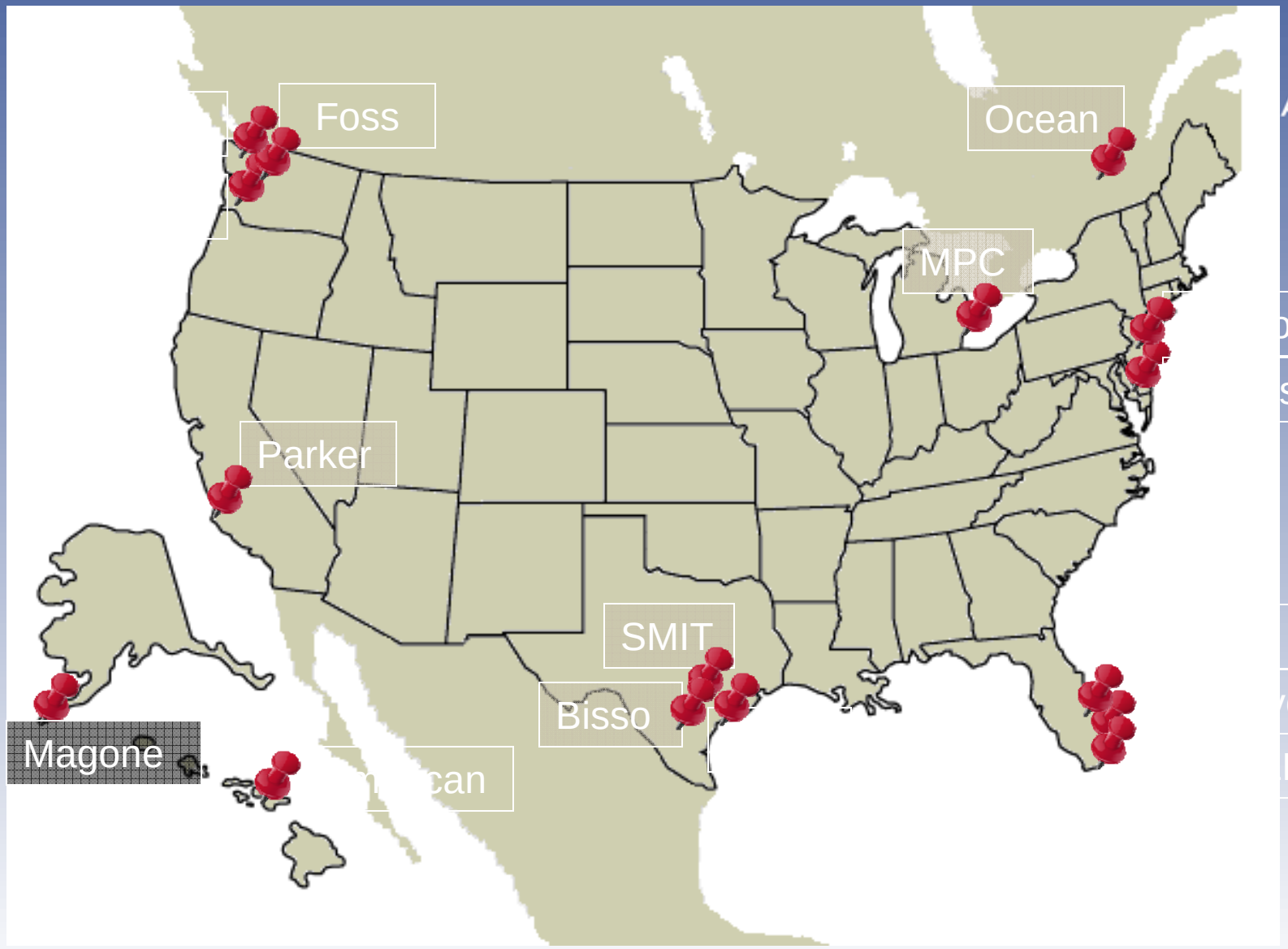
- Established in 2000 by nine Salvage Companies; Currently expanded to a total of 16 General Members and more than 40 Associate Members operating in the United States;
- Created to professionalize the U.S. marine salvage and firefighting response;
- Working to improve marine casualty response in North American coastal and inland waters;
- Affiliated with the International Salvage Union.

ASA General Membership:

AMERICAN SALVAGE ASSOCIATION

- American Marine Corp.
- Bisso Marine Corp.
- Crowley Marine Services
- DonJon Marine Co., Inc.
- Foss Maritime
- Global Diving & Salvage
- Magone Marine Service, Inc.
- Marine Pollution Control
- Ocean Group, Inc.
- Parker Diving Service
- Resolve Marine Group
- SMIT Salvage Americas, Inc.
- SVITZER Salvage
- Titan, a Crowley company
- T&T Marine Salvage
- Weeks Marine, Inc.

WHERE WE ARE…



AMERICAN SALVAGE ASSOCIATION

ASA MISSION…

AMERICAN SALVAGE ASSOCIATION

To Promote:

- **STANDARDS** of readiness, conduct and performance
- **EDUCATION** the general public on the role of marine salvage in protecting life, the environment and property
- **COOPERATION** among our members to assure a most effective, successful response in major incidents
- **SAFETY** working in a marine environment
- **TRAINING** for today's response as well as anticipating and planning for the changes certain to evolve in the future

ASA MISSION…CONTINUED

AMERICAN SALVAGE ASSOCIATION

- **STANDARD CONTRACTING OPTIONS** for salvage and wreck removal in order to facilitate prompt casualty response
- **PRE-PLANNING** among owners, their underwriters, and regulatory agencies before the actual event
- **REGULATORY FRAMEWORK** that will result in prompt, effective response
- **COMMUNICATION** and **COOPERATION** with all those potentially affected by the consequences of a marine casualty
- **INFORMATION EXCHANGE** and **COOPERATION** with other national and international trade associations and regulatory agencies for the benefit of transportation by water

WHAT WE RESPOND TO…

AMERICAN SALVAGE ASSOCIATION

Strandings and Groundings:

What We Respond To…continued

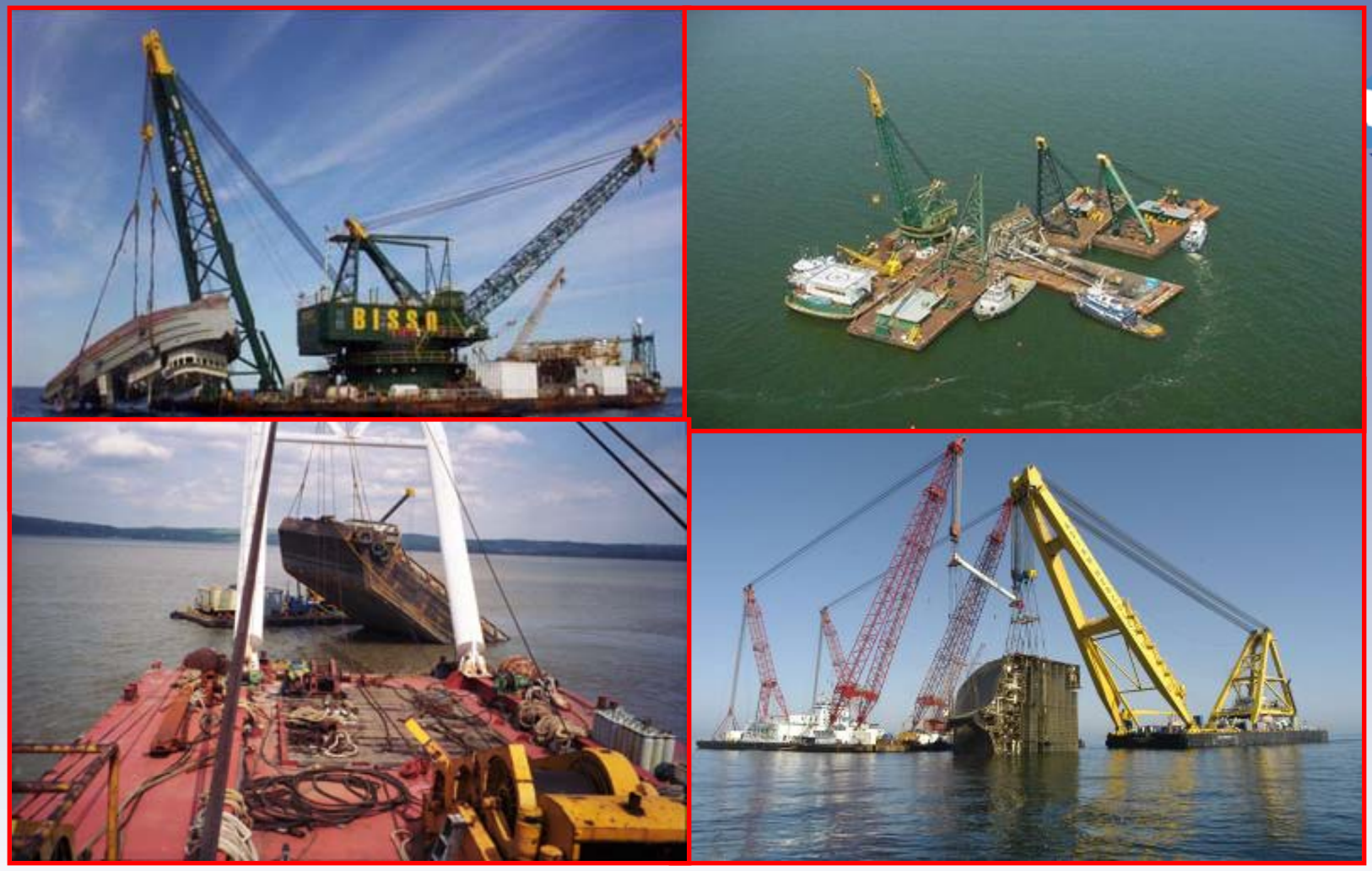
Marine Fire-fighting:

AMERICAN SALVAGE ASSOCIATION

What We Respond To…continued

Wreck Removal Operations:

AMERICAN SALVAGE ASSOCIATION



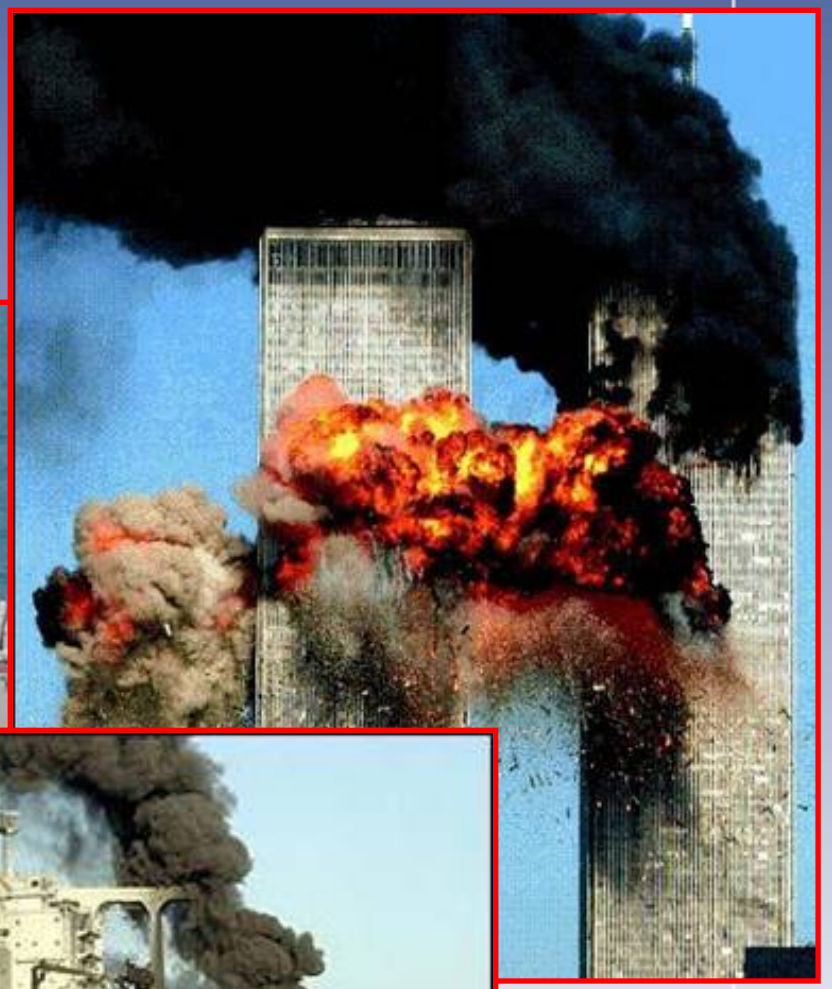
What We Respond To…continued

Vessel Casualties – Hull Failures, Sinking, etc.:

AMERICAN SALVAGE ASSOCIATION

What We Respond To…continued

Acts of Terrorism Recovery Operations:



ASA Achievements-

- Increased membership
- Established relationships with OMSA, NAMEPA, NAMS, ADC and the ISU
- Developed a “Safety Code”
- Established a “Quality Partnership” with the Coast Guard
- Initiated a training program that includes annual training for the Strike Teams, the FOSC course Yorktown, and special sessions for CGHQ and other CG entities
- Wreck removal project with NOAA, CG and API
- Presentations to the NRT, RRTs, and Area Committees
- With CGHQ, project to improve the VRP data base
- National Maritime Salvage Conference & Expo
- 2008 Plimsoll Award for Service-Professional Mariner Magazine

For More Information…

American Salvage Association

801 North Quincy Street
Suite 200
Arlington, VA 22203

Phone: 1- 703-373-2267

website: http://www.americansalvage.org

Dispersant Use Planning Assistant

RRT 6 Presentation

January 27, 2009 Corpus Christi, TX

Ecosystem Management & Associates, Inc.

Project Team

- Don Aurand, Ph.D.
- Charlie Huber
- Gina Coelho, Ph.D.
  - Researched dispersant use procedures in 22 countries
  - MSRC (1993-1995)
  - Principal in EM&A, Inc. (1996 – present)
  - 3 North Sea field trials: dispersed oil toxicity
  - CROSERF dispersed oil toxicity forum
  - Dispersed oil research and ERA projects in USA, UK, Brazil, New Zealand

Presentation Overview

- Provide briefing to RRT 6 on an American Petroleum Institute funded project
- Demonstrate progress-to-date on the "Dispersant Use Planning Assistant" Tool
- Solicit input from RRT 6 on the utility of the Tool
- Identify a small working group to provide detailed feedback on Tool content

Background

The American Petroleum Institute (API) funded a “demonstration project” to develop a CD-ROM based training aid for making and documenting dispersant decisions.

Purpose of the Tool

Assist USCG, RRT's, and RP's in gathering the information and completing the forms to authorize the use of dispersants.

Scope of the Project

- Conduct data review for five RRTs: 3, 4, 6, 9 & 10
- Prepare matrix of all information requirements for each of these five RRTs
- Project demonstration (*i.e.*- developing the CD-ROM format) limited to RRT 6
- Expand coverage to RRT's 3, 4, 9 & 10

Schedule

- Draft demonstration for RRT 6: 27 Jan 2009 (originally Aug 08 but postponed when RRT meeting was cancelled)
- Final demonstration effort for RRT 6: Mar 2009
- Expansion to RRT 3, 4, 9 & 10: Apr 2009 (pending funding from sponsors)
- Final Tool for Release: Aug 2009 (pending funding from sponsors)

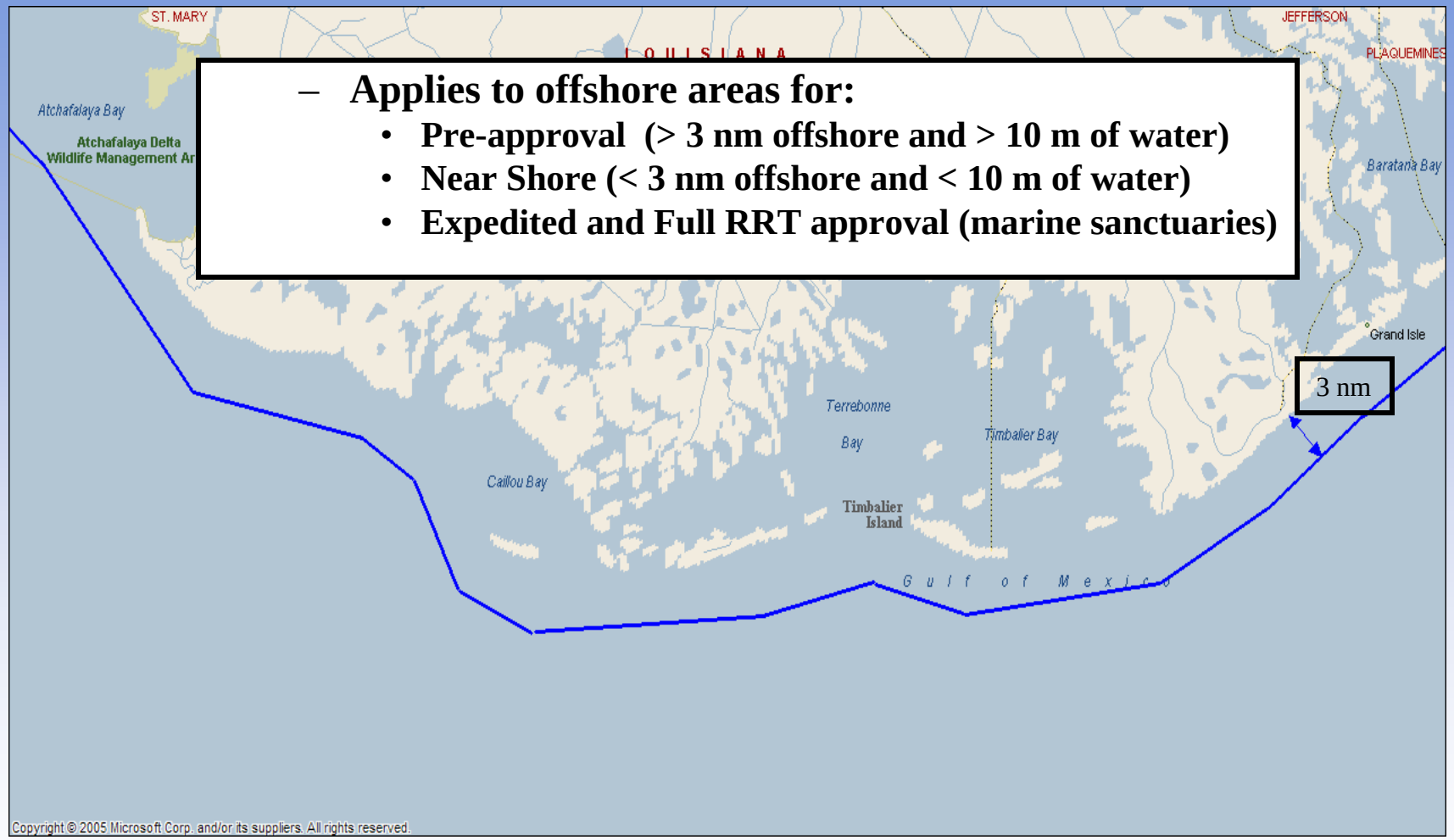
Why the Sponsors Thought this Tool would be Useful

- Constant change over of personnel
- Need to expedite dispersant-use decisions
- Different requirements among RRTs
- Provide assistance on what information is required for each form and references as to where and how to obtain the information
- Quickly provide documents to complete electronically
- Rapid distribution of completed forms via internet

Where can this Tool be Useful?

- Respond to actual spills
- RRT training exercises
- Dispersant workshops
- Area Committee meetings
- Discussions related to expansion or contraction of dispersant authorization zones
- Facilitate understanding between different RRT processes for personnel who provide coverage in more than one RRT

Tool Coverage



- **Applies to offshore areas for:**
  - **Pre-approval (> 3 nm offshore and > 10 m of water)**
  - **Near Shore (< 3 nm offshore and < 10 m of water)**
  - **Expedited and Full RRT approval (marine sanctuaries)**

The Challenge . . .

- Approximately 300 different information items
- Very few information items are common among the 5 RRTs we are examining. Here are a few:
  - Visibility
  - Ceiling
  - Wind Speed
  - Wind Direction
  - NCP Product List Status

Progress To Date

- Compiled all data (documents, forms, etc) for RRTs 3, 4, 6, 9 & 10 and organized information into matrix
- Developed a menu-driven format for the Tool (via CS3 *Dreamweaver*)
- Input select date for RRT 6 into the software to create mock up of Tool

We Want Your Input

Will this Tool be useful to RRT 6?

If so . . .

Topics for Discussion

- Apparent inconsistencies between RRTs and within documents of individual RRTs
  - Standards have changed and RRTs have not necessarily kept up
  - For example, our project team identified approx. 15 inconsistencies in RRT 6 documents, mostly stemming from recent changes in standards (e.g., ASTM requirements for fire monitors)
- Current forms do not directly lend themselves to electronic format
- Beta-test the Tool with small RRT 6 working group

Next Steps

- Update dispersant policies to make them internally consistent
- Modify the checklists to enable electronic completion
- Identify working group to help test and refine the Tool
  - Comprised of approx. five RRT 6 individuals responsible for dispersant approval checklists
  - Three to four telecons over next six weeks
  - Access the demo Tool via internet while on the telecon
  - Estimated 8-hour commitment
- Our project team can assist with the first two items

Consider Separating the "Why" from the "How"

- Current process couples the dispersant approval decision with the operational plan
- As written, pre-approval requires you to determine:

  (1) if the spill is in a pre-approved area and the oil is dispersible; and

  (2) what the operational plan is to treat the spill
- Consider separating the operational plan from the dispersant approval process since the operational plan:
  - takes time to prepare and is not really needed to decide if dispersants should be used.
  - states how to apply dispersants and should not be considered for approval to use the dispersants.

Future Process Changes to Consider

- Require dispersant spray companies to provide an informational sheet (equipment, stockpiles, personnel, response times, capability, etc.) so you know in advance the dispersant contractor can do the job.
- Operational specifics (which staging airport to use, time to the spill site, etc.) can be prepared and provided to the FOSC for approval prior to commencing spray operations
  - Time is available to do this while the operation is being put in place (which takes at least 2-8 hrs).

Questions? Comments?

Some of the updates and additions to the new DVD Toolkit …

Area Contingency Plan Updates for District 8

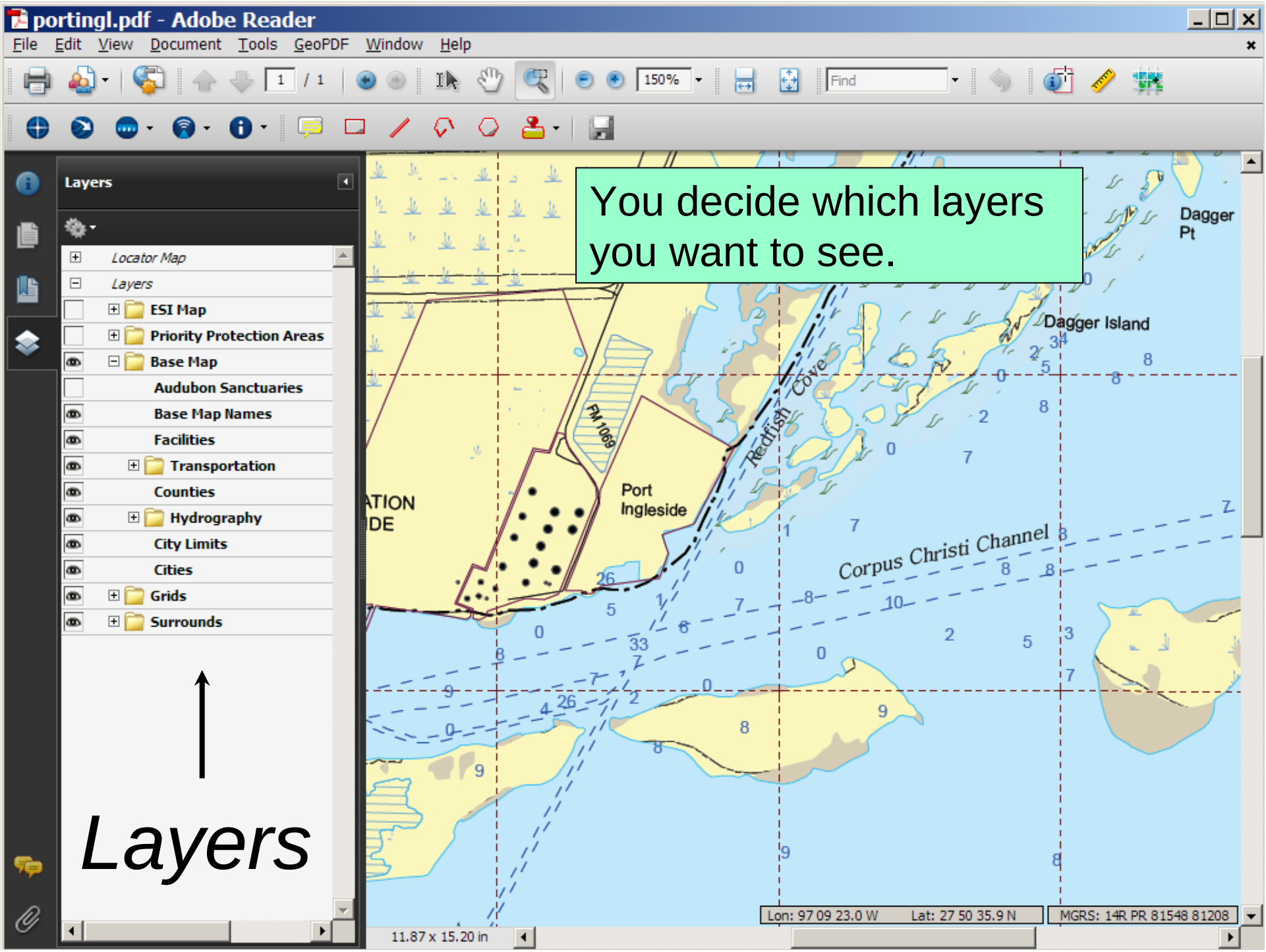
- One Gulf Plan
- Sector Corpus Christi
- Sector Houston-Galveston
- MSU Port Arthur
- MSU Morgan City
- Sector New Orleans
- Sector Mobile

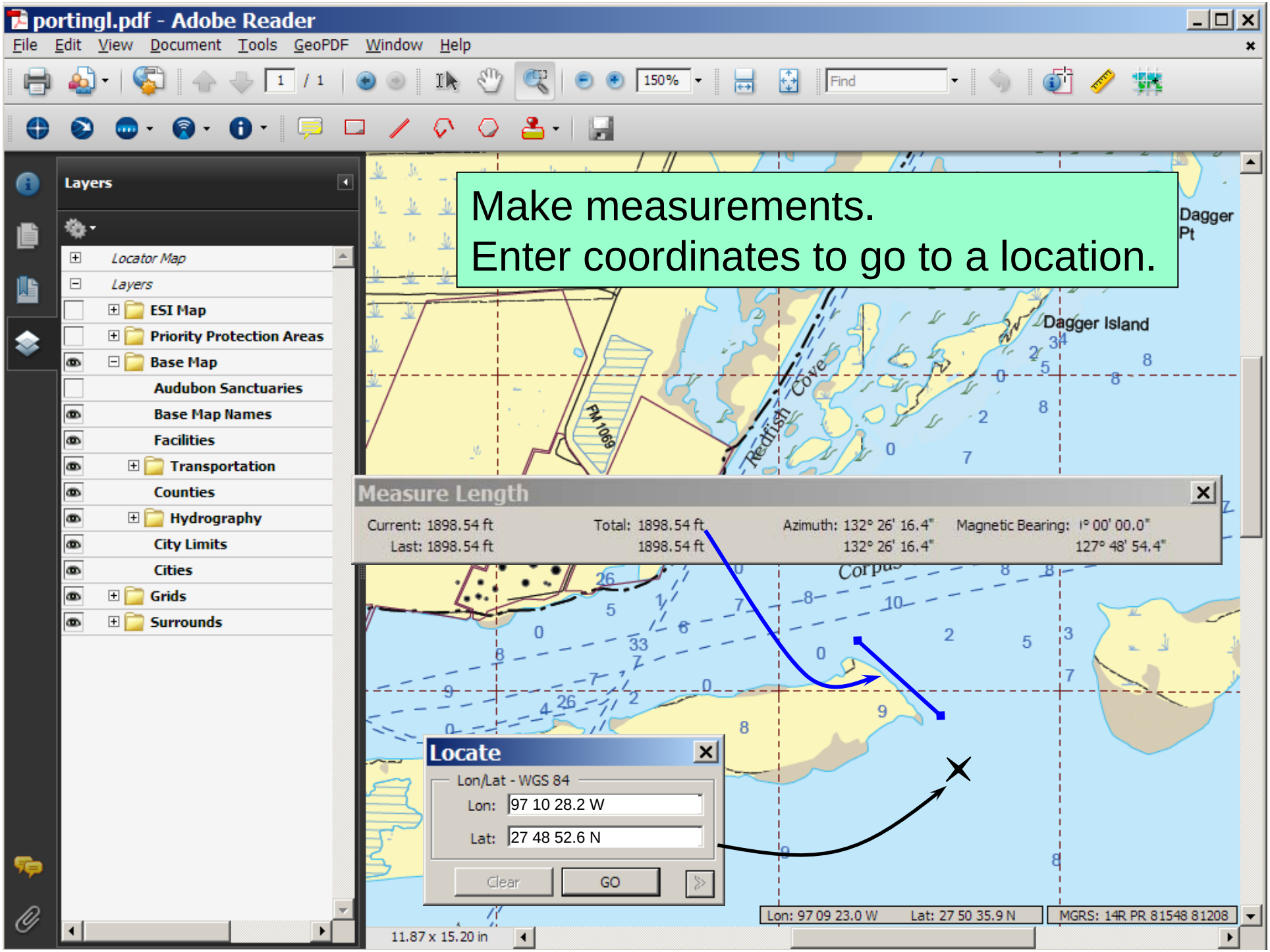
Provided by O’Brien Oil Pollution Service under contract to USCG District 8

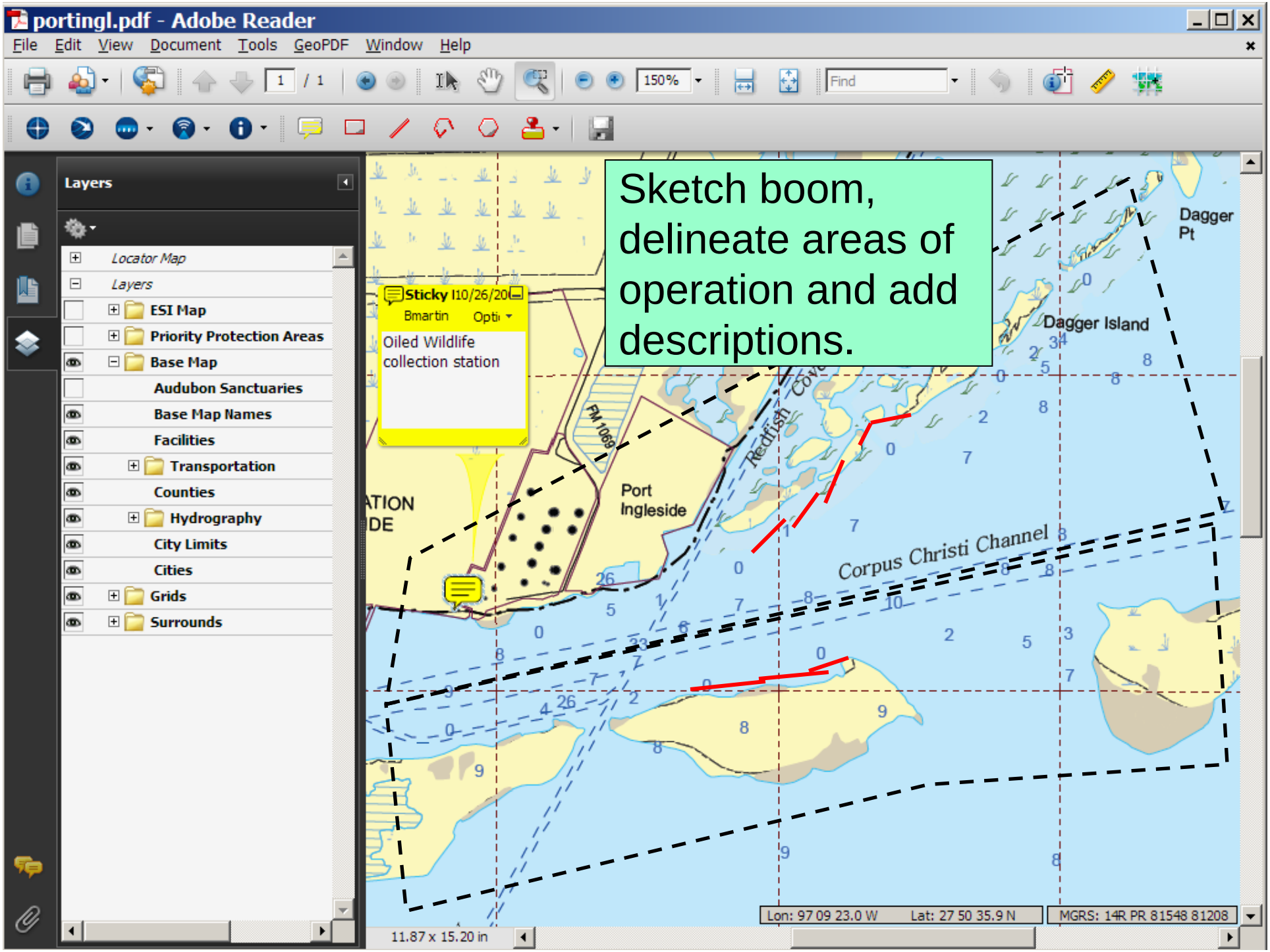
Maps

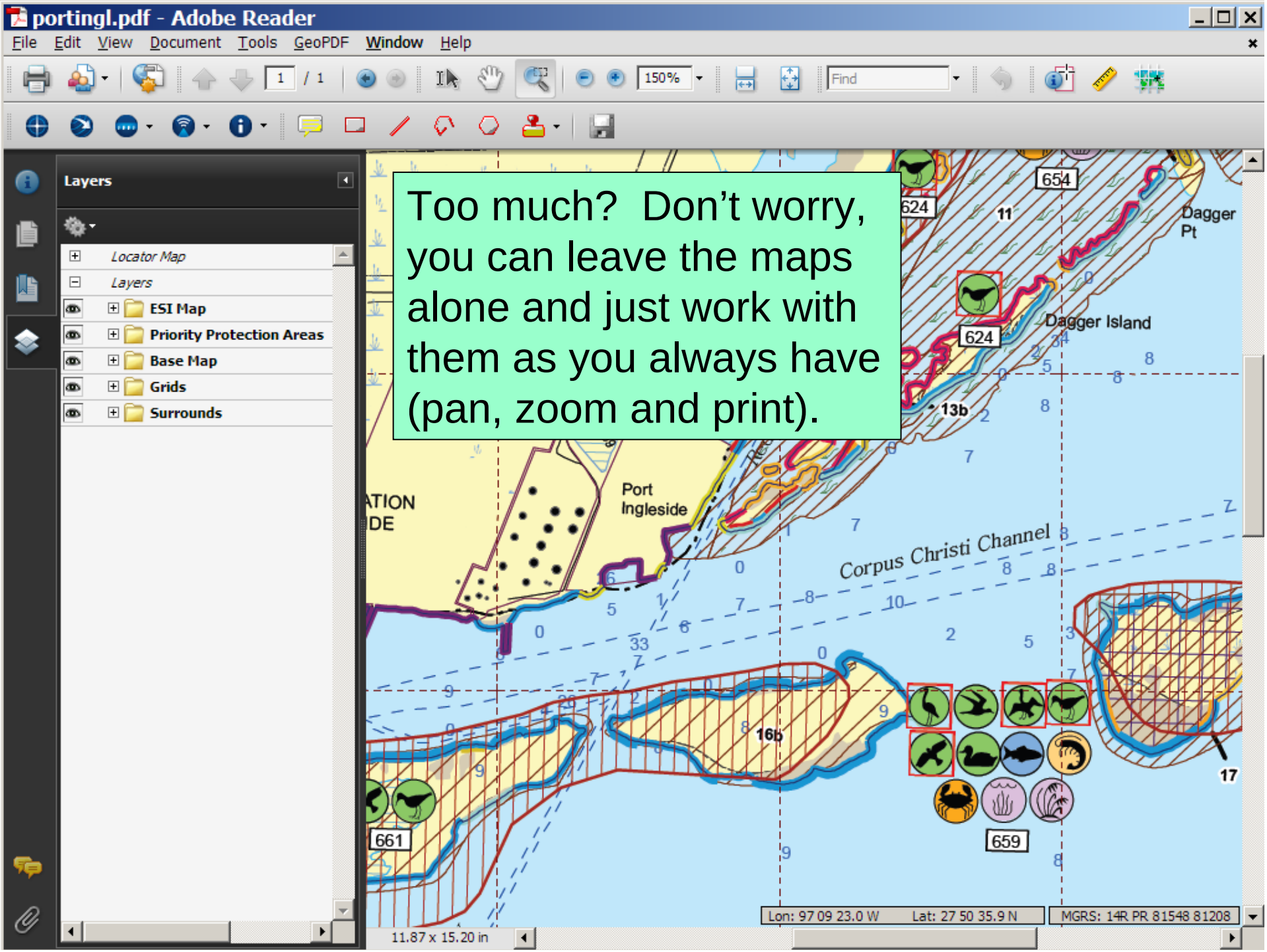
- Environmental Sensitivity Index maps added for Alabama, Louisiana and Mississippi
- ESI maps for Texas upper coast have been revised to improve legibility in sensitive areas (lower coast was done in last year's update)
- All Texas maps have been:
  GeoPDF-enabled
  Layer-enabled and
  Comment-enabled

  … giving you the ability to modify the maps, add information and save your changes using the free Adobe Reader.


portingl.pdf - Adobe Reader
File Edit View Document Tools GeoPDF Window Help
Layers
Locator Map
Layers
ESI Map
Priority Protection Areas
Base Map
Audubon Sanctuaries
Base Map Names
Facilities
Transportation
Counties
Hydrography
City Limits
Cities
Grids
Surrounds
Layers
You decide which layers you want to see.
Dagger Pt
Dagger Island
Redfish Cove
FM 1069
Port Ingleside
Corpus Christi Channel
Lon: 97 09 23.0 W
Lat: 27 50 35.9 N
MGRS: 14R PR 81548 81208
11.87 x 15.20 in


portingl.pdf - Adobe Reader
File Edit View Document Tools GeoPDF Window Help
Layers
Locator Map
Layers
ESI Map
Priority Protection Areas
Base Map
Audubon Sanctuaries
Base Map Names
Facilities
Transportation
Counties
Hydrography
City Limits
Cities
Grids
Surrounds
Make measurements.
Enter coordinates to go to a location.
Measure Length
Current: 1898.54 ft
Last: 1898.54 ft
Total: 1898.54 ft
1898.54 ft
Azimuth: 132° 26' 16.4"
132° 26' 16.4"
Magnetic Bearing: 1° 00' 00.0"
127° 48' 54.4"
Locate
Lon/Lat - WGS 84
Lon: 97 10 28.2 W
Lat: 27 48 52.6 N
Clear
GO
Dagger Pt
Dagger Island
Redfish Cove
FM 1069
Corpus
Lon: 97 09 23.0 W
Lat: 27 50 35.9 N
MGRS: 14R PR 81548 81208
11.87 x 15.20 in


portingl.pdf - Adobe Reader
File Edit View Document Tools GeoPDF Window Help
Layers
Locator Map
Layers
ESI Map
Priority Protection Areas
Base Map
Audubon Sanctuaries
Base Map Names
Facilities
Transportation
Counties
Hydrography
City Limits
Cities
Grids
Surrounds
Sticky I10/26/20
Bmartin
Oiled Wildlife collection station
Sketch boom, delineate areas of operation and add descriptions.
Dagger Pt
Dagger Island
Redfish Cove
FM 1069
Port Ingleside
Corpus Christi Channel
Lon: 97 09 23.0 W
Lat: 27 50 35.9 N
MGRS: 14R PR 81548 81208
11.87 x 15.20 in


portingl.pdf - Adobe Reader
File Edit View Document Tools GeoPDF Window Help
Layers
Locator Map
Layers
ESI Map
Priority Protection Areas
Base Map
Grids
Surrounds
Too much? Don't worry, you can leave the maps alone and just work with them as you always have (pan, zoom and print).
Port Ingleside
Corpus Christi Channel
Dagger Pt
Dagger Island
654
624
624
11
13b
16b
17
661
659
Lon: 97 09 23.0 W
Lat: 27 50 35.9 N
MGRS: 14R PR 81548 81208
11.87 x 15.20 in

One of the new software additions to the Toolkit

Microsoft Excel - vector_addition_trajectory_pub_final.xls [Read-Only]

File Edit View Insert Format Tools Data Window WindRose Help Adobe PDF

B25 =ATAN2(B22,B23)

TEXAS GENERAL LAND OFFICE OIL SPILL PREVENTION & RESPONSE

Vector Addition Trajectory Tool

for First Responders

Enter *Wind Speed*: 22 knots

Enter *Wind Direction* ***From*** (0 to 359 degrees from north): 114 °

Enter *Current Speed*: 1.1 knots

Enter *Current Direction* ***To*** (0 to 359 degrees from north): 200 °

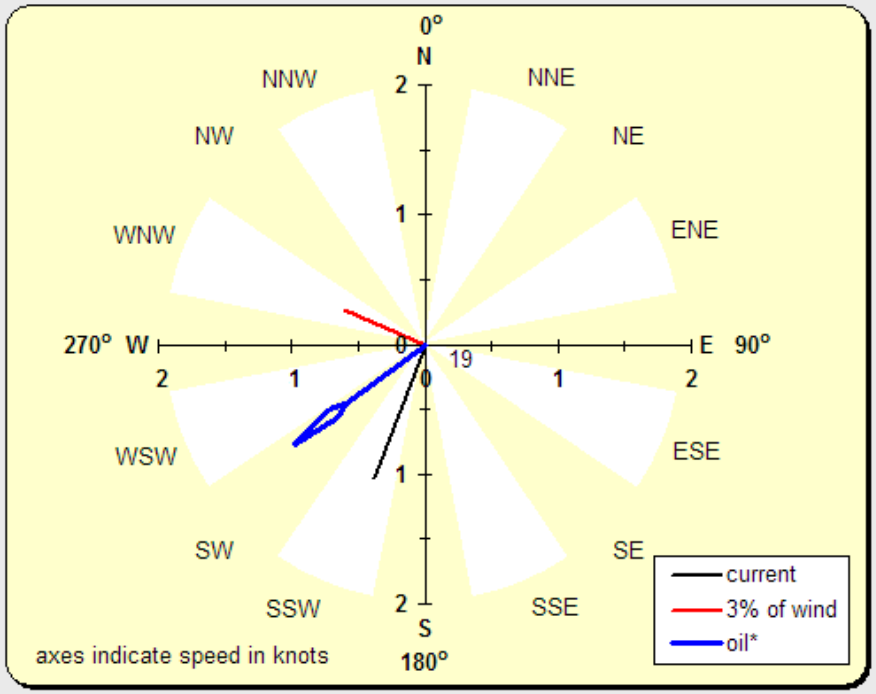
Calculated 3% of wind speed: 0.66 knots

Calculated wind direction ***to***: 294 °

Oil Speed & Direction*

Heading: 232 °

Speed: 1.2 knots



For current and wind information in the northwestern Gulf of Mexico, go to: http://tabs-os.gerg.tamu.edu/tglo

Sheet1 side_vectors

Invitation to attend

MARCH 4TH & 5TH, 2009

Registration is Free

Dispersant Workshop

Topics:

***Dispersants 101 * NCP Products Schedule**

*** Regulatory Update * Dispersant Effects**

*** FOSC/SOSC/RP Decision Making**

and much more....

Complete Agenda list on our website:www.glo.state.tx.us/oil spill

Pre-Register Today

Registration Deadline: February 19, 2009

LOCATION:
HILTON HOBBY AIRPORT HOTEL
HOUSTON, TEXAS

For more information:
Call TGLO@1800-992-4GLO(4456) Oil Spill Prog.
Visit our web site:
www.glo.state.tx.us/oilspil

Sponsored by

TEXAS GENERAL LAND OFFICE OIL SPILL PREVENTION & RESPONSE

energy API

CLEAN CHANNEL ASSOCIATION

Hotel & Registration

Matagorda Island Pollution Removal Action

After Action Review

May 28, 2008

KOHLER

DEALBASE

U S COAST GUARD
US COAST GUARD

STATE
EMERGENCY
RESPONSE

HAZ-MA

STATE
EMERGENCY
RESPONSE

83W-ZB5

Spinning Blades and Birds

U.S. Fish and Wildlife Service
Responsibilities on Spills

U. S.
FISH & WILDLIFE
SERVICE
DEPT. OF THE INTERIOR

Outline

- Survey wildlife and habitat
- Technical assistance on *in situ* burns
- Haze birds
- Capture wildlife
- Oversee wildlife rehabilitation
- Consult on / enforce MBTA and ESA
- Coordination with Planning and Ops Sections
- Media relations

Survey wildlife and habitat

LA 657 CA
YAMAHA

Technical assistance on *in situ* burns

Haze birds

Capture wildlife

A 340141

WALKER
USDA
USCG

Oversee wildlife rehabilitation

Schmalz
WILDLIFE AREAS & EDUCATION
U.S. FISH & WILDLIFE SERVICE
DEPT OF THE INTERIOR

Consult on / enforce MBTA and ESA

MIGRATORY BIRD TREATY ACT

§ 703. Taking, killing, or possessing migratory birds unlawful

Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or in part, of any such bird or any part, nest, or egg thereof, included in the terms of the conventions between the United States and Great Britain for the protection of migratory birds concluded August 16, 1916 (39 Stat. 1702), the United States and the United Mexican States for the protection of migratory birds and game mammals concluded February 7, 1936, the United States and the Government of Japan for the protection of migratory birds and birds in danger of extinction, and their environment concluded March 4, 1972 [1] and the convention between the United States and the Union of Soviet Socialist Republics for the conservation of migratory birds and their environments concluded November 19, 1976.

(July 3, 1918, c. 128, § 2, 40 Stat. 755; June 20, 1936, c. 634, § 3, 49 Stat. 1556; June 1, 1974, Pub.L. 93–300, § 1, 88 Stat. 190; Dec. 13, 1989, Pub.L. 101–233, § 15, 103 Stat. 1977.)

1 So in original. Probably should be followed by a comma.

Coordination with Planning and Ops Sections

Photo by Henry Font, USCG-NPFC

Media relations

FOX 8
NEWS

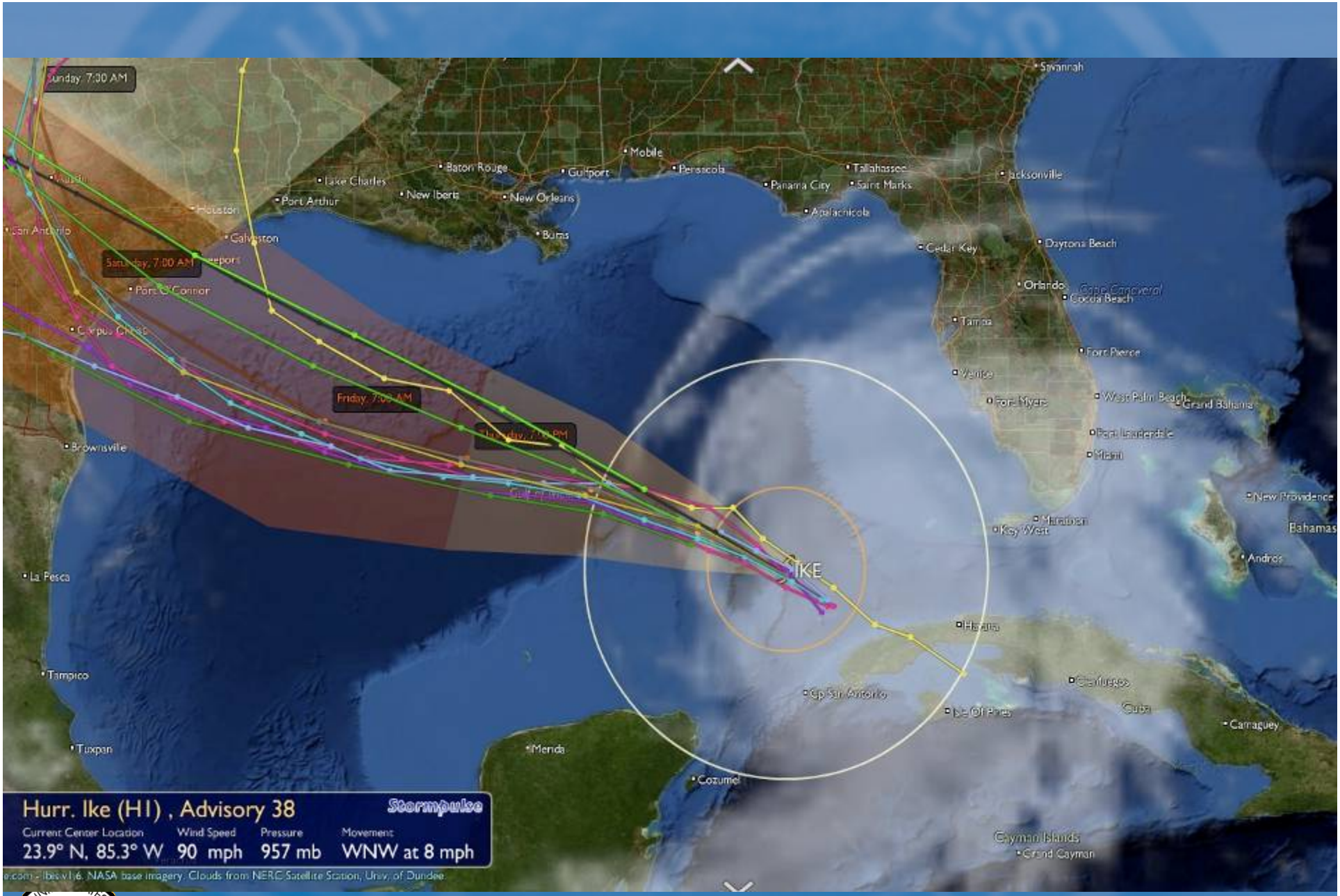
4X4

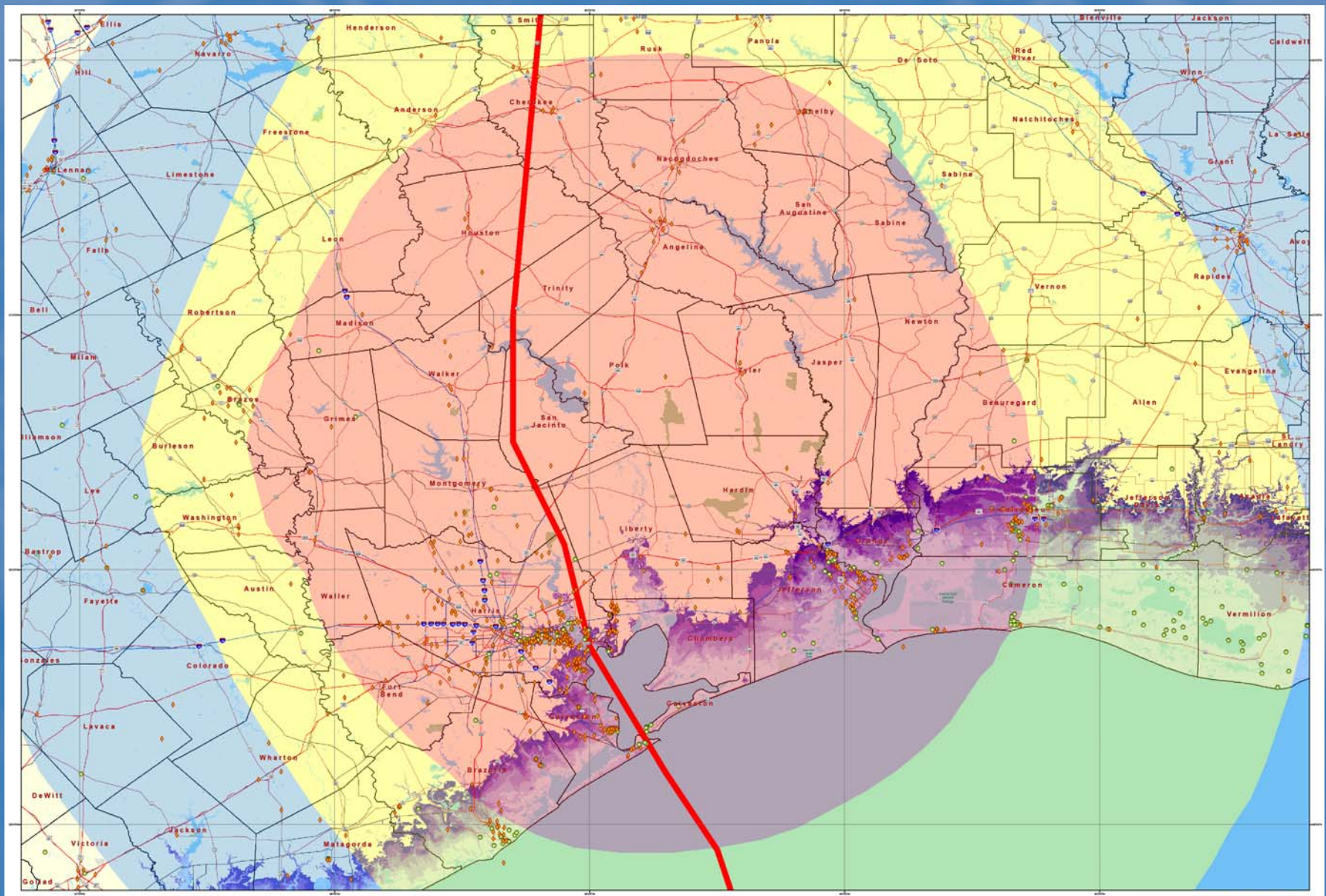
Hurricane Ike Response

United States
Environmental Protection Agency
Region 6

Timeline

- 9/9/2008 EPA begins preparation activities.
- Between 9/9/2008 and landfall EPA designates Command and General Staff establishes pre-landfall planning cycle and begins discussions with TCEQ.
- 9/11/2008 EPA begins discussions with USCG.


Sunday, 7:00 AM
Saturday, 7:00 AM
Friday, 7:00 AM
Thursday, 7:00 PM
Savannah
Mobile
Baton Rouge
Gulfport
Pensacola
Tallahassee
Jacksonville
Panama City
Saint Marks
Lake Charles
Port Arthur
New Iberia
New Orleans
Apalachicola
Houston
Galveston
Burns
Cedar Key
Daytona Beach
Orlando
Cocoa Beach
Cape Canaveral
Tampa
Fort Pierce
Venice
Fort Myers
West Palm Beach
Grand Bahama
Port Lauderdale
Miami
Brownsville
Port O'Connor
Corpus Christi
New Providence
Marathon
Key West
Bahamas
Andros
IKE
La Pesca
Tampico
Tuxpan
Merida
Cozumel
Cayman Islands
Grand Cayman
Hurr. Ike (H1) , Advisory 38
Stormpulse
Current Center Location
23.9° N, 85.3° W
Wind Speed
90 mph
Pressure
957 mb
Movement
WNW at 8 mph


Legend
RCRA TSD or LQG Facility
RMP Facility
FRP Facility
Water Treatment Plant
Waste Water Treatment Plant
Hurricane Ike Predicted Path 8am 09/13/08
ESTIMATED Storm Surge
0 - 5 Feet
5 - 10 Feet
10 - 15 Feet
15 - 20 Feet
20 - 25 Feet
Minimum Wind Speed
39 mph
58 mph
74 mph
0 15 30 60 90 120 Miles
Hurricane Ike Planning Map
Projected Path and Wind Speed as of 09/13/2008 6am thru 8am.
Source: Hurrevac 2000
N
UNITED STATES EPA REGION-SIX EMERGENCY RESPONSE TEAM ENVIRONMENTAL PROTECTION AGENCY

EMERGENCY RESPONSE PLAN

FOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGIONS 6 AND 7

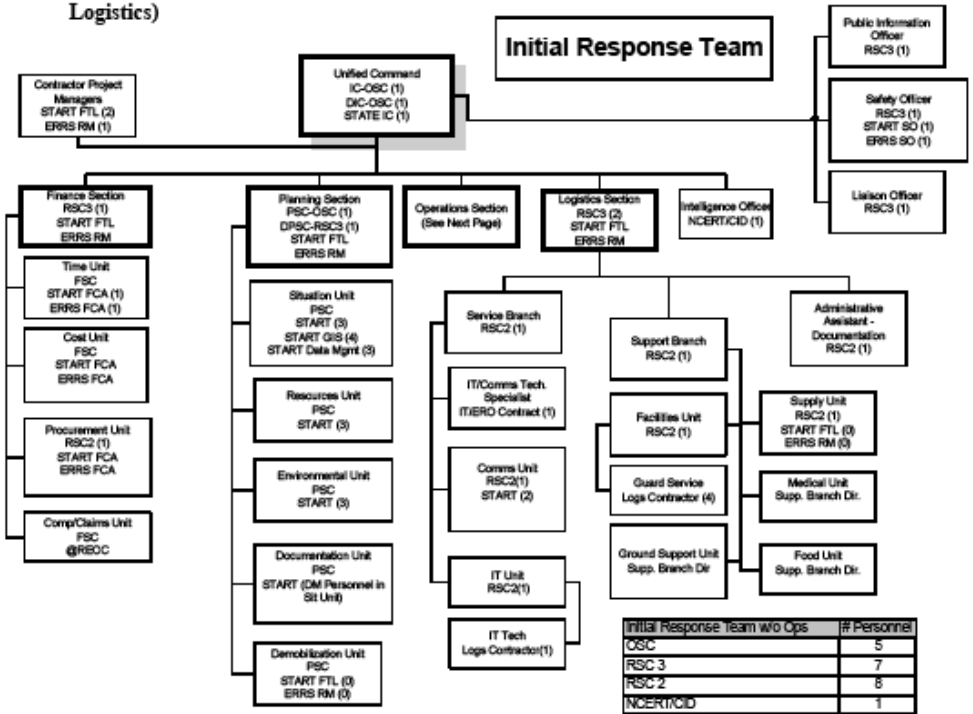
DEPARTMENT OF HOMELAND SECURITY

SCENARIO 10 – MAJOR HURRICANE IN A PORT CITY

March 2008

9.4.2 Initial Response Organizational Structure (ICS 207 Forms)

9.4.2.1 ICS 207 Form – Organizational Chart (Initial Response-Finance, Planning, & Logistics)



Initial Response Team w/o Ops	# Personnel
OSC	5
RSC 3	7
RSC 2	8
NCERT/CID	1
START Contract	22
ERRS Contract	3
Logs Contract	5
IT/ERO Contract	1
State	1
TOTAL	53

Timeline

- 9/11/2008 FEMA requests EPA participation in Task Force Ike.
- 9/12/2008 EPA mobilizes OSCs and Contractors to San Antonio, TX for Task Force Ike.

Task Force Ike - San Antonio, TX

Ike Task Force – Pre-deployment staging in San Antonio, TX

Ike Task Force in San Antonio – Immediately prior to departure for Galveston, TX

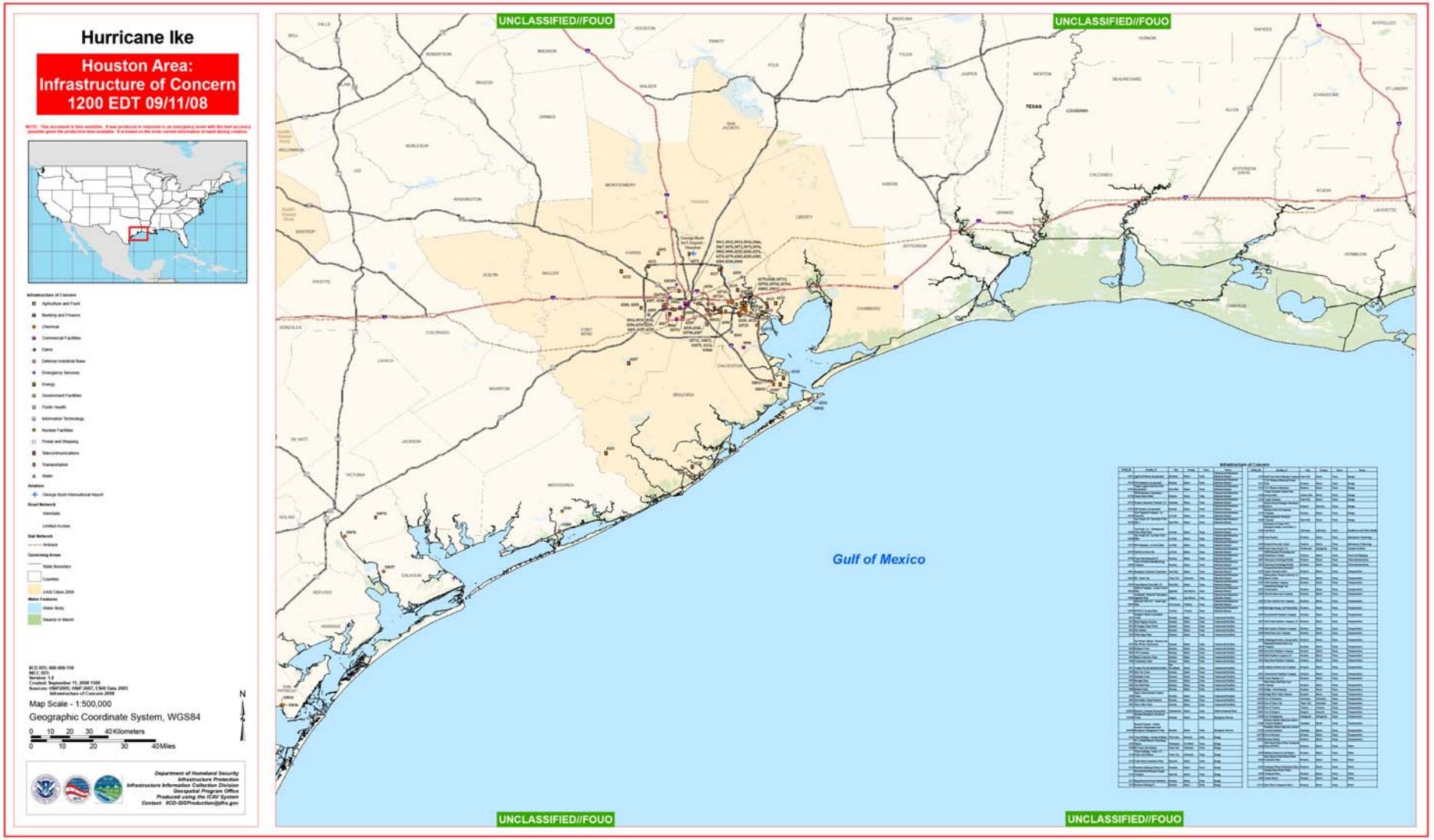
Task Force Ike - Ball High School, Galveston, TX

Memphis
Arkansas
Fort Worth
Dallas
Mississippi
Alabama
Texas
Austin
Houston
San Antonio
Monterrey
Google

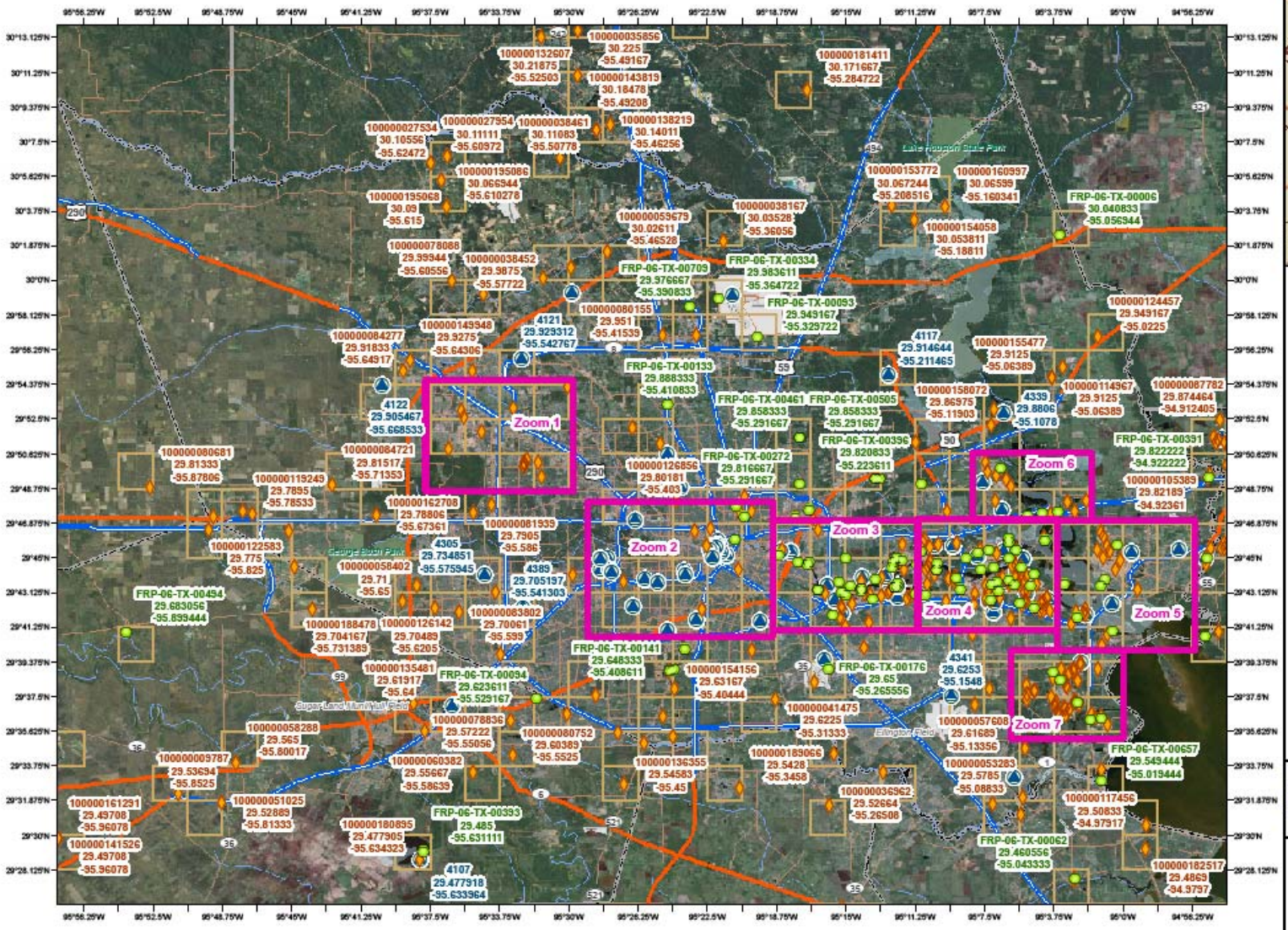
Reconnaissance activities immediately after landfall

- Critical Infrastructure Recon (ASPECT)
- FRP/RMP Facility Recon (ASPECT)
- Orphan Container/Facility Recon (Helo)
- Orphan Container (Ground)
- Water/Wastewater Treatment Plant

Critical Infrastructure Recon Utilizing ASPECT


Hurricane Ike
Houston Area:
Infrastructure of Concern
1200 EDT 09/11/08
UNCLASSIFIED//FOUO
UNCLASSIFIED//FOUO
Gulf of Mexico
Map Scale - 1:500,000
Geographic Coordinate System, WGS84
0 10 20 30 40 Kilometers
0 10 20 30 40 Miles
N
Department of Homeland Security
Infrastructure Protection
Infrastructure Information Collection Division
Geospatial Program Office
Produced using the ICAV System
Contact: IICD-GISProduction@dhs.gov
UNCLASSIFIED//FOUO
UNCLASSIFIED//FOUO

RMP/FRP Facility Recon Utilizing ASPECT



Legend

- RMP Facility
- FRP Facility
- CIKR Locations
- RNA Counties
- 6k Reference Grid

N

3 1.5 0 3 6 Miles

USEPA REGION 6

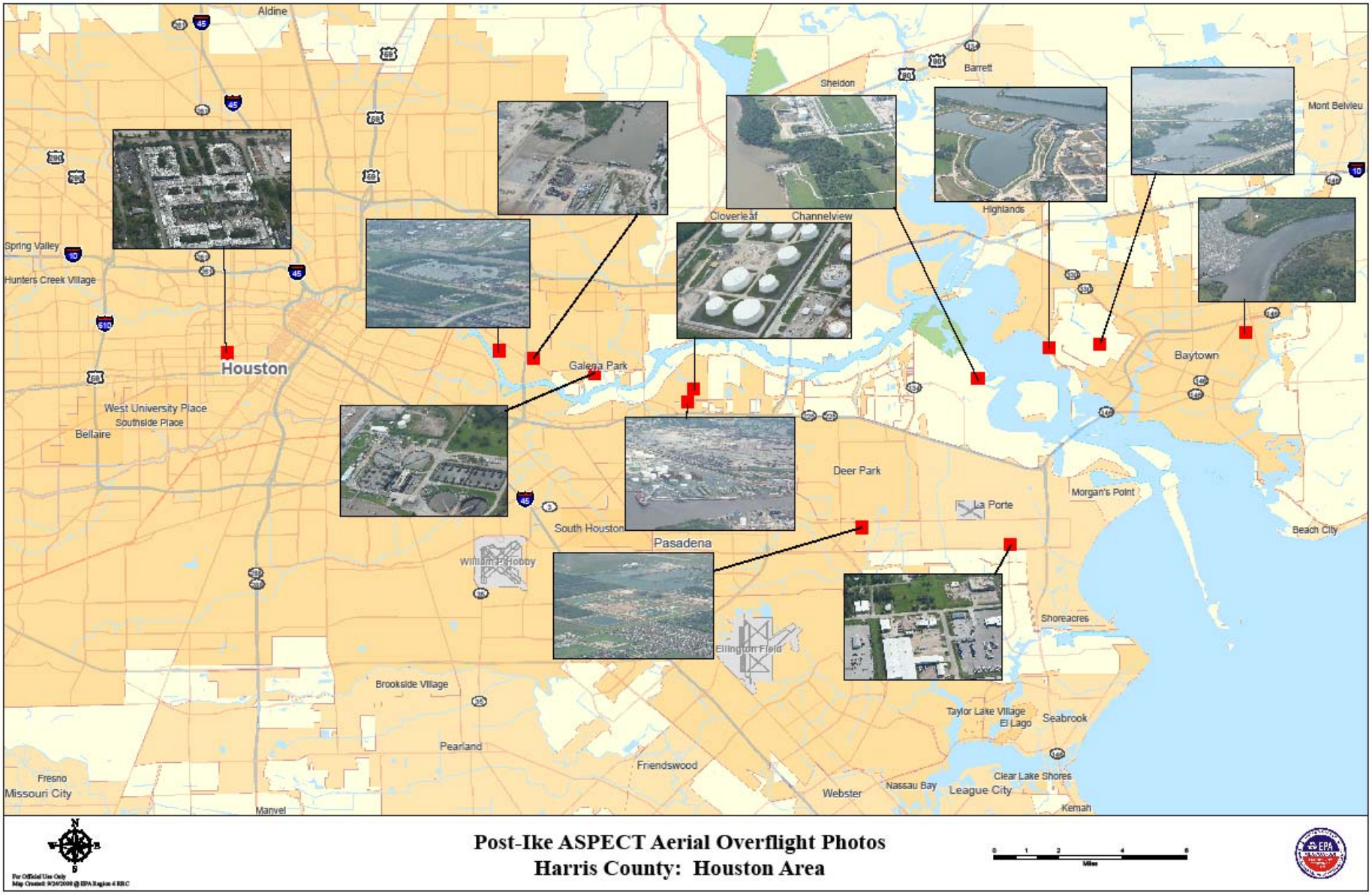
Hurricane Ike Response

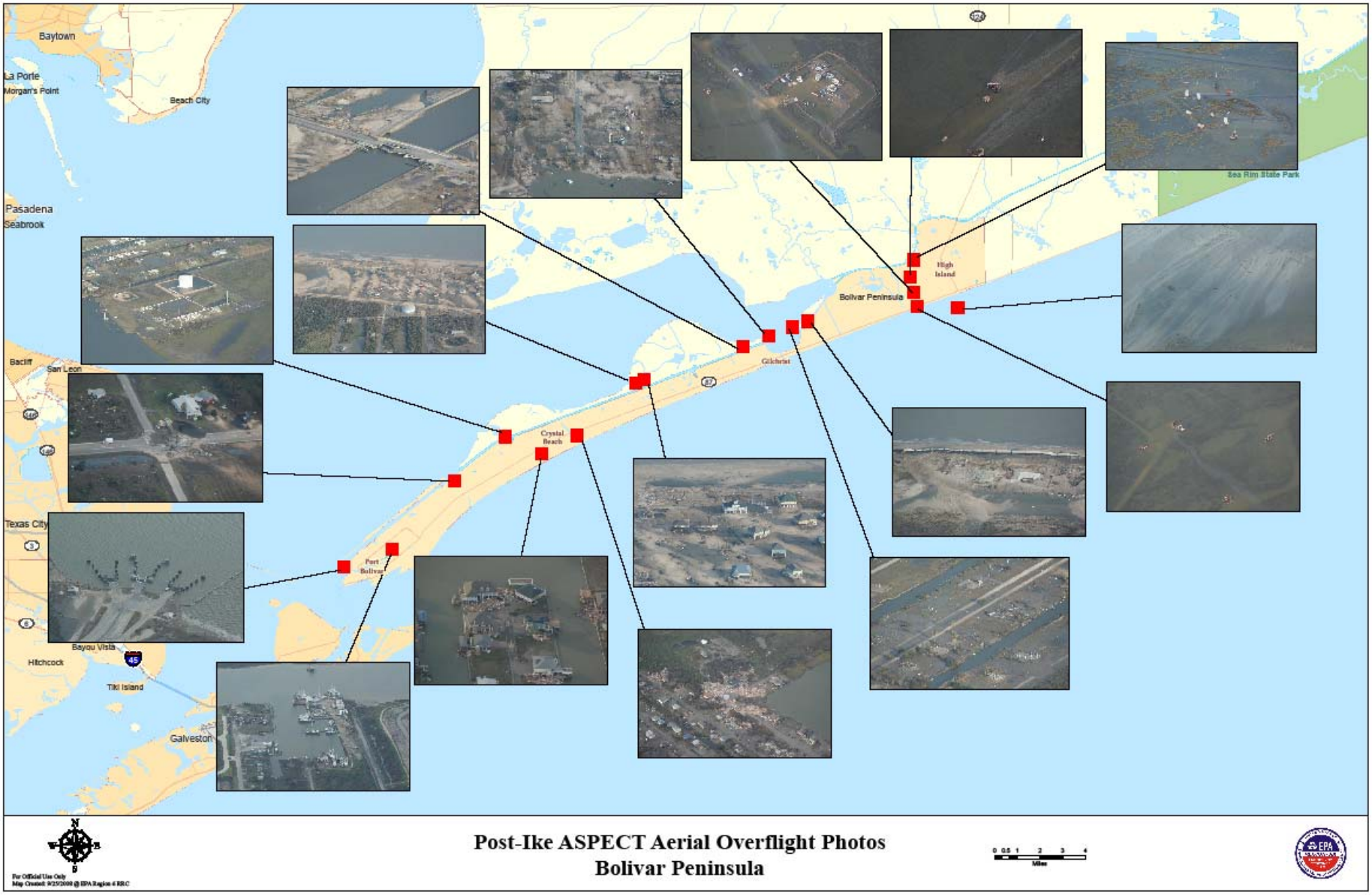
Harris

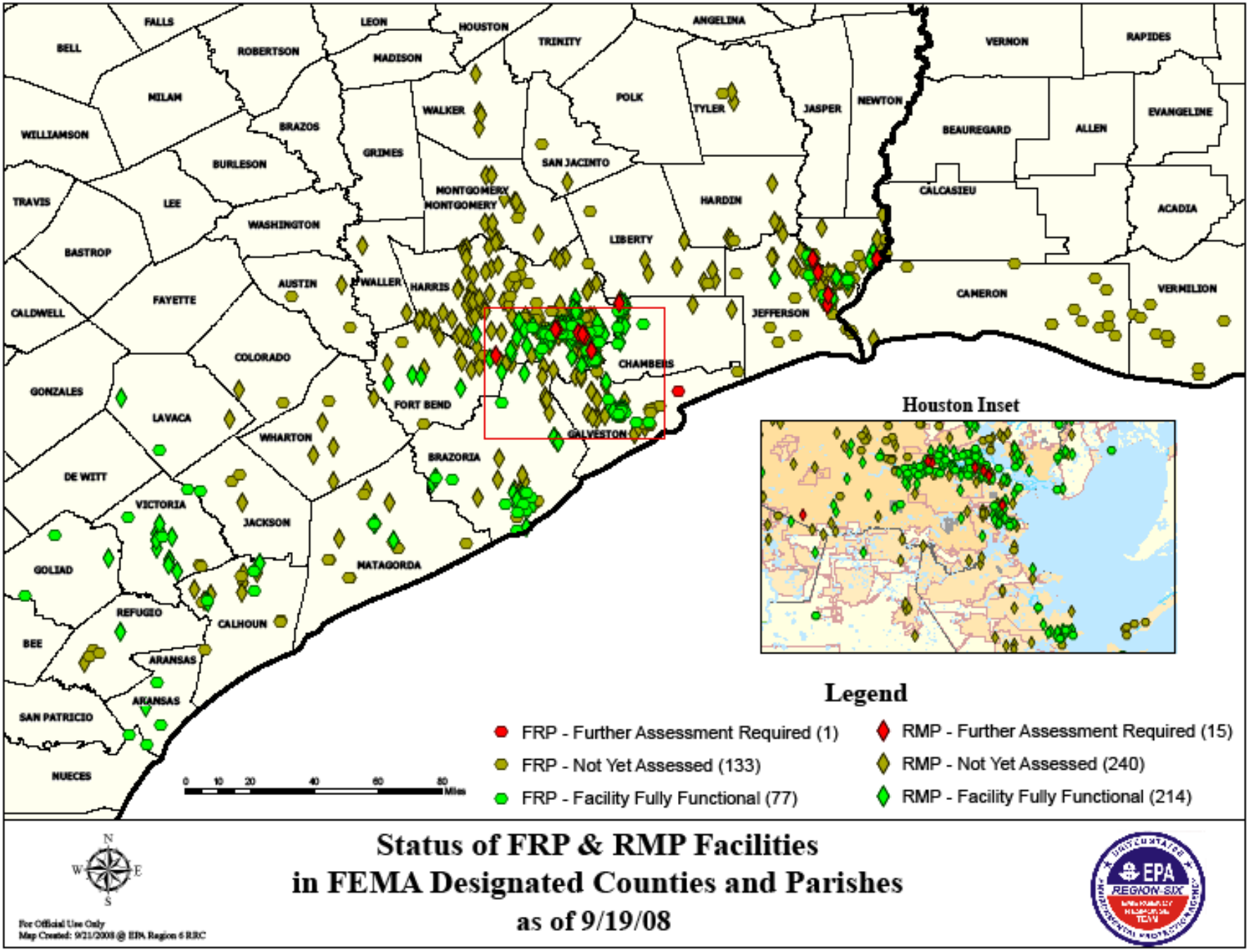
Overall Map

DATE	PROJECT NO	SCALE
Sep 12, 2008		AS SHOWN

File: C:\Documents and Settings\dutt\My Documents\ike\Prep\daily\20080911\MapBook\Ike_Recon11x17\20080911HarrisOV.mxd, 12-Sep-08 06:58, dutt


Aldine
Barrett
Sheldon
Mont Belvieu
Highlands
Cloverleaf
Channelview
Spring Valley
Hunters Creek Village
Houston
Galena Park
Baytown
West University Place
Southside Place
Bellaire
Deer Park
La Porte
Morgan's Point
South Houston
Pasadena
Beach City
William P Hobby
Shoreacres
Ellington Field
Brookside Village
Taylor Lake Village
El Lago
Seabrook
Pearland
Friendswood
Fresno
Missouri City
Webster
Nassau Bay
League City
Clear Lake Shores
Kemah
Manvel
Post-Ike ASPECT Aerial Overflight Photos
Harris County: Houston Area
Miles


Baytown
La Porte
Morgan's Point
Beach City
Pasadena
Seabrook
Bacliff
San Leon
Texas City
Hitchcock
Bayou Vista
Tiki Island
Galveston
Port Bolivar
Crystal Beach
Gilchrist
Bolivar Peninsula
High Island
Sea Rim State Park
Post-Ike ASPECT Aerial Overflight Photos
Bolivar Peninsula
For Official Use Only
Miles


BELL
FALLS
ROBERTSON
LEON
HOUSTON
MADISON
TRINITY
ANGELINA
VERNON
RAPIDES
MILAM
WILLIAMSON
BRAZOS
WALKER
POLK
TYLER
JASPER
NEWTON
BEAUREGARD
ALLEN
EVANGELINE
BURLESON
GRIMES
SAN JACINTO
TRAVIS
LEE
MONTGOMERY
HARDIN
CALCASIEU
ACADIA
WASHINGTON
LIBERTY
BASTROP
AUSTIN
WALLER
HARRIS
CAMERON
VERMILION
CALDWELL
FAYETTE
JEFFERSON
COLORADO
CHAMBERS
GONZALES
FORT BEND
LAVACA
WHARTON
GALVESTON
BRAZORIA
DE WITT
VICTORIA
JACKSON
MATAGORDA
GOLIAD
REFUGIO
CALHOUN
BEE
ARANSAS
SAN PATRICIO
NUECES
Houston Inset
0 10 20 40 60 80 Miles
Legend
FRP - Further Assessment Required (1)
FRP - Not Yet Assessed (133)
FRP - Facility Fully Functional (77)
RMP - Further Assessment Required (15)
RMP - Not Yet Assessed (240)
RMP - Facility Fully Functional (214)
N
W
E
S
For Official Use Only
Map Created: 9/21/2008 @ EPA Region 6 RRC
Status of FRP & RMP Facilities
in FEMA Designated Counties and Parishes
as of 9/19/08
EPA
REGION SIX

Orphan Container/Facility Recon Utilizing Helicopters

Overflight 9/15/08
Flooded Facility - Houston Ship Channel
N 29° 44.738' W 095° 11.807'
388 ft
09/15/2008 11:51:56 AM

Overflight 9/15/08
Light Oil Streamers - Houston Ship Channel
N 29° 43.440' W 095° 01.328'
496 ft
09/15/2008 12:02:16 PM

Overflight 9/15/08
Destroyed FRP Facility
N 29° 41.783' W 094° 06.193'
209 ft
09/15/2008 3:39:04 PM

Overflight 9/15/08
Tanks in Water
N 29° 38.483' W 094° 37.156'
190 ft
09/15/2008 1:17:27 PM

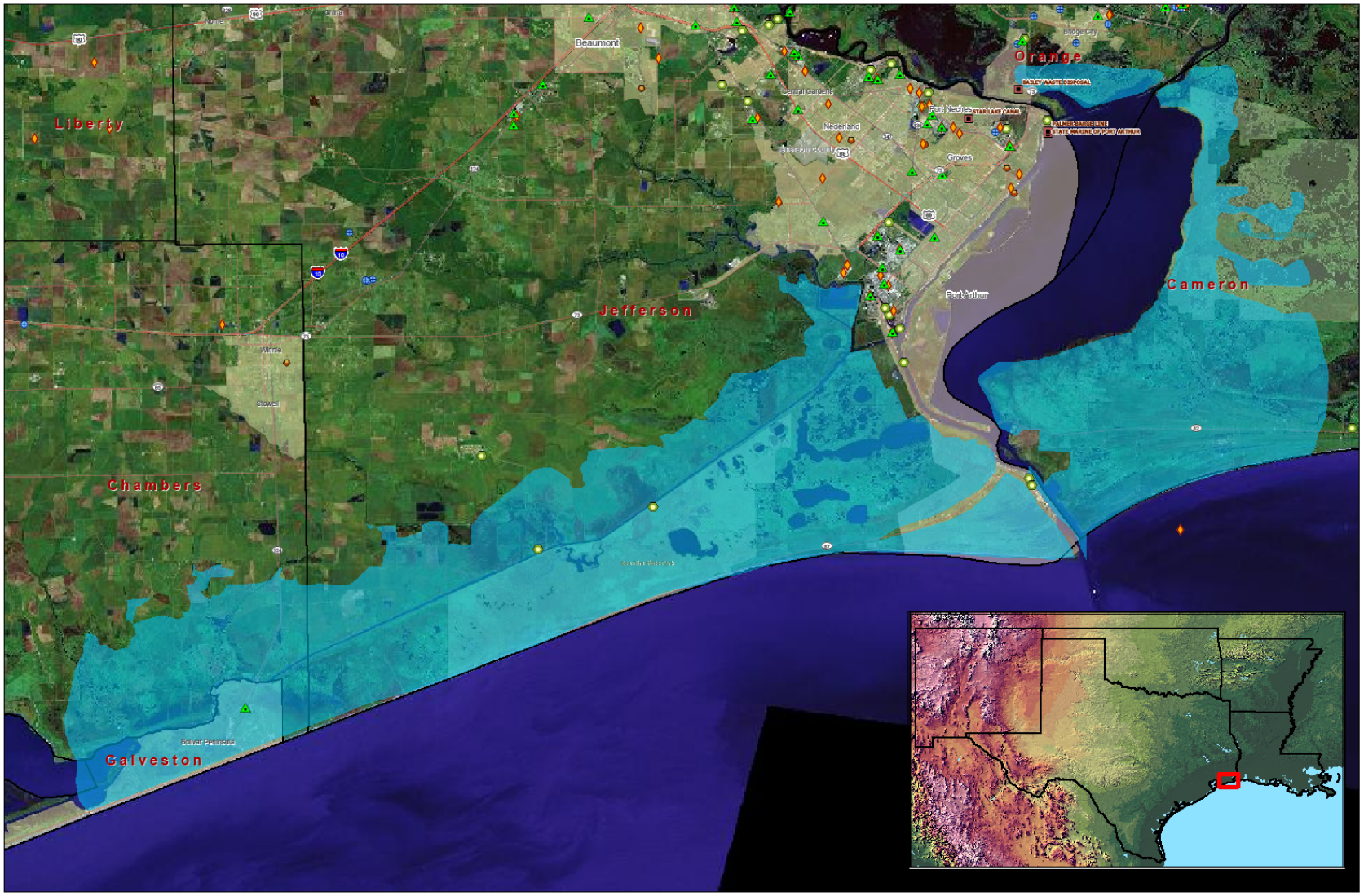
Orphan Container Ground Recon

55 Gallon Drums
15 1:58PM
N 29° 18.579' W 094° 47.450'
0 ft
09/15/2008 1:59:13 PM

Overpack Drum
N 29° 19.448' W 094° 46.392'
-28 ft
09/15/2008 3:15:47 PM

Water/Wastewater Treatment Plant Assessment

Drinking Water and Wastewater Treatment Plants on Galveston Island, TX



Legend

- NPL Site
- RCRA Facility
- RMPFacility
- Flooded Areas*
- Waste Water Treatment Plant
- Water Treatment Plant
- FRP Facility

*Source: Homeland Security Information Network

Known Flooding Extents as of 6pm 09/13/08

0 2.5 5 10 15 20 Miles

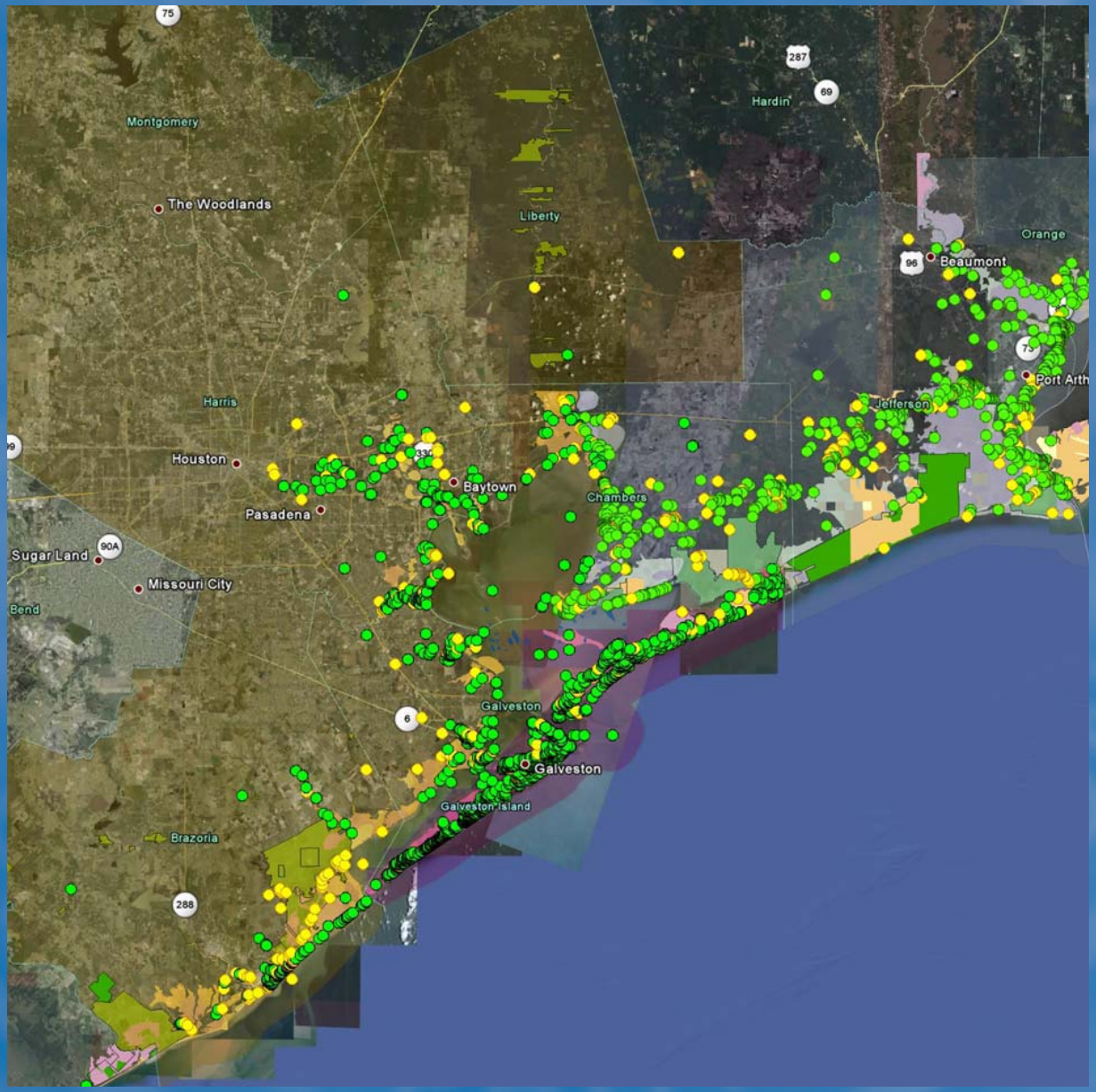
N W E S

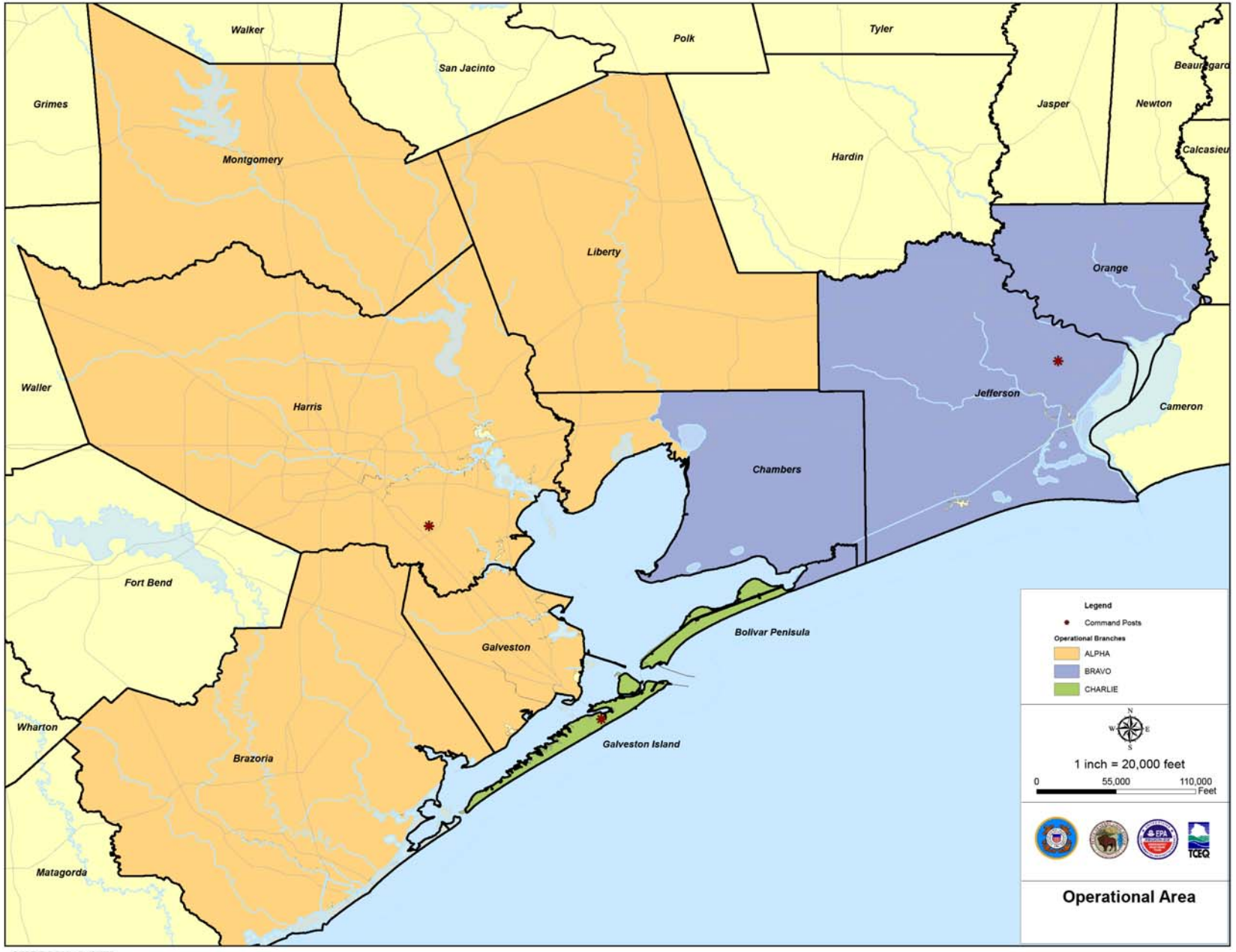
Map Created: 9/14/2008 0948 @ EPA Region 6 RRC

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EPA REGION-SIX EMERGENCY RESPONSE TEAM

Overview of Operational Area including Recovered (Green) and Left in Place Targets (Yellow)




Walker
Polk
Tyler
San Jacinto
Grimes
Jasper
Newton
Hardin
Montgomery
Liberty
Orange
Waller
Harris
Jefferson
Cameron
Chambers
Fort Bend
Bolivar Peninsula
Galveston
Wharton
Galveston Island
Brazoria
Matagorda
Legend
Command Posts
Operational Branches
ALPHA
BRAVO
CHARLIE
1 inch = 20,000 feet
0
55,000
110,000
Feet
TCEQ
Operational Area

Organization

- EPA recon teams “in theater” pre-landfall.
- Daily operations calls between EPA, USCG and TCEQ field teams conducted pre-landfall.
- EPA IC, Ops, PSC, SO, mobilized to Beaumont TCEQ offices on 9/16/2008.
- Agencies conducting aerial and ground recon since 9/14/2008.

Organization

- Organizational meeting with TCEQ, TGLO, USCG and EPA on Galveston Island 9/17/2008.
- Additional meetings with TCEQ Houston Office (Region 12) and Beaumont Office (Region 10).
- By 9/18/2008 EPA, USCG, TCEQ, and TGLO are in agreement to enter Unified Command for ESF10.

Organization

- First Unified Command IAP produced 9/22/2008.
- TCEQ, TGLO, USCG, EPA begin conducting unified operations from the Pasadena, TX Command Post.

SIGNIFICANT OBJECTIVES

- Recon and assessment of impacted areas to verify targets for recovery.
- Minimize environmental impacts from the release of oil and hazardous materials
- Conduct collection and disposal of household hazardous waste, orphan containers, high hazard materials and other such materials.
- Evaluate and determine impacts to facilities posing risk to the public.

SIGNIFICANT OBJECTIVES

- Contain recover and remove spilled oil and hazardous materials as needed.
- Conduct environmental sampling as necessary to assess the impact of releases of hazardous materials released during the storm.
- Provide assistance with debris management through landfill and staging area observations.

Operations

Unknowns
DRUM

EPA

SUCCESSES

- Smart and Professional Personnel.
- Pre-planning Activities.
- The Numbers

THE NUMBERS

Category	Total
5 gallon containers	72745
15-30 gallon containers	2307
55 gallon containers	1724
Greater than 55-gal	201
85 gallon overpacks	163

THE NUMBERS

Category	Total
cylinders	1447
large propane tanks under 250 gallons	28
large propane tanks over 250 gallons	390
totes	114
large oil and fuel tanks	9

THE NUMBERS
Household Hazardous Waste

Category	Totals
HHW	10192
lead acid batteries	818
mercury containing items	43
small propane tanks	3752

CHALLENGES

- Data Collection, Data Management, Data Users.
- ICS
- Logistics, Logistics, Logistics.
- Exit Strategy
- Pre-Planning

EPA

Questions?

ESF 10 Charlie Branch
Galveston/Bolivar Peninsula

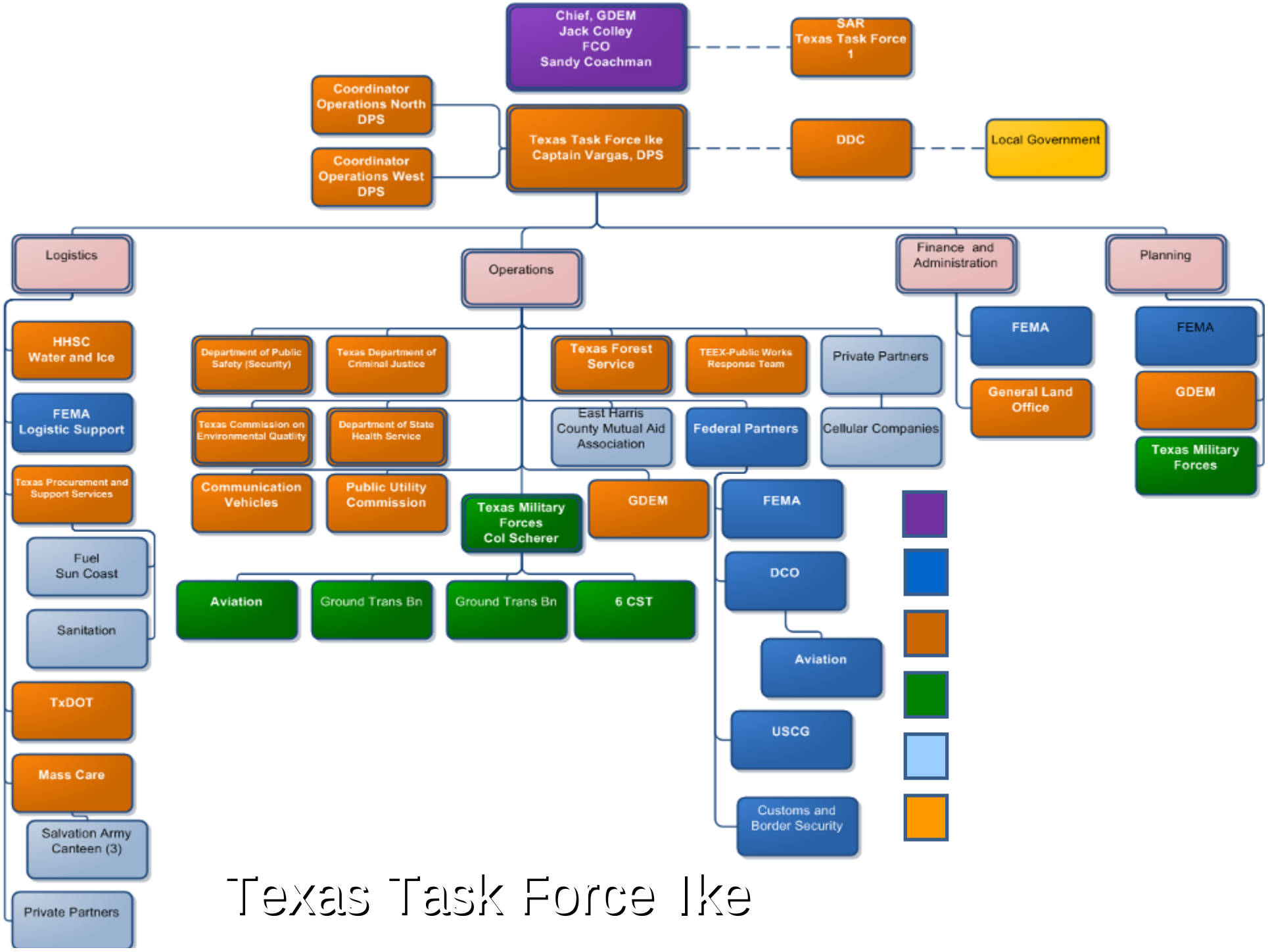
TCEQ

USEPA

USCG

6th CST

Task Force Ike



Texas Task Force Ike

STOP

576
EXIT

HURRICANE
WARNING
IN EFFECT

Broadway
Ave J
20

Marriott

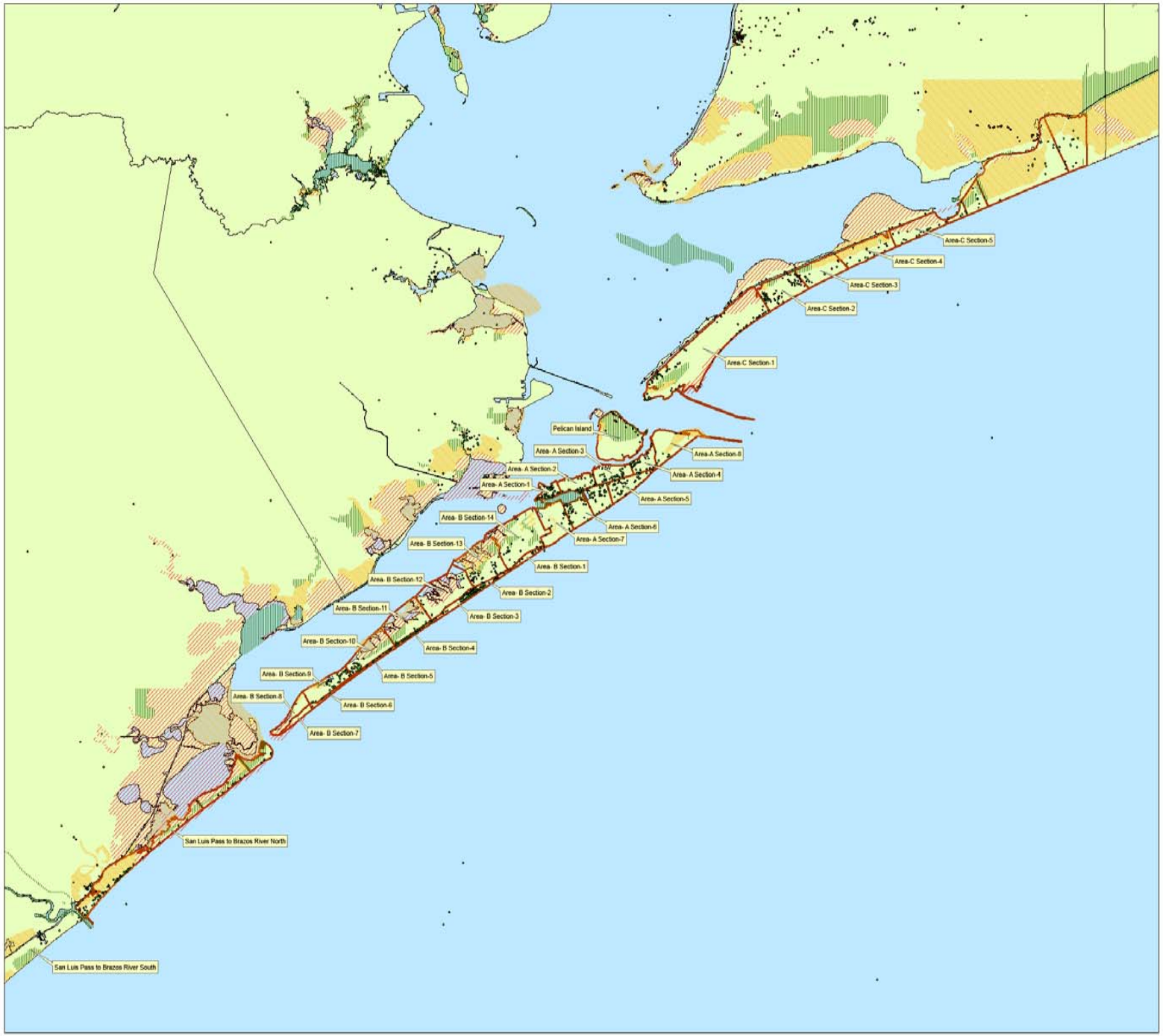
15FT 8IN

TWIN AIRBED

Summary 1

- Worst Disaster – Best Response
- In Galveston Quickly, But Not Too Early
- Future Response Should Have the Same Resources Travel Together
- Responder Logistical Support
- No Communications Problems

Galveston
West End
San Luis Pass
Surfside
Pelican Island



Status Map
Bolivar Peninsula, Pelican Island, Galveston Island, Surfside Beach
10/13/2008

Legend

- Open Recon Items (10/13/2008)
- Closed Recon Items (10/13/2008)
- Area Section Boundary

TXGLO ESI Priority Protection Areas

- HIGH
- MEDIUM
- LOW

N

0 11,000 22,000 44,000 Feet

1 in = 13,414 ft

TCEQ

WESTON SOLUTIONS

Hurricane Ike, Monday, October 13, 2008 5:55:41 PM G:\GIS\mxd\Status_Maps\ReconRecovery\Overview.mxd EPA/WESTON GIS-Galveston

Wendy's
RAMADA

rtment
Safety

STATE
EMERGENCY
RESPONSE

With
Texas
DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES
FLORIDA
CHARLES H. BRONSON COMMISSIONER
DIVISION OF FORESTRY
COMMAND POST
ALL-RISK INCIDENT MANAGEMENT

EPA
REGION-SIX
EMERGENCY RESPONSE TEAM
U.S. Environmental Protection Agency
United States Environmental Protection Agency
Region 6
10.10.2008

19

15 1:40PM
09/15/2008 1:40:42 PM

TRAM STOP 2
15 1:47PM

15 1:51PM

15 1:56PM

15 1:58PM

15 2:00PM

15 2:06PM

SODIUM
CYANIDE
TOXIC

Duo-Therm
EPA

CEQ
EPA
CONTRACTOR

10.06.2008

10.06.2008

10.06.2008

EMERGENCY

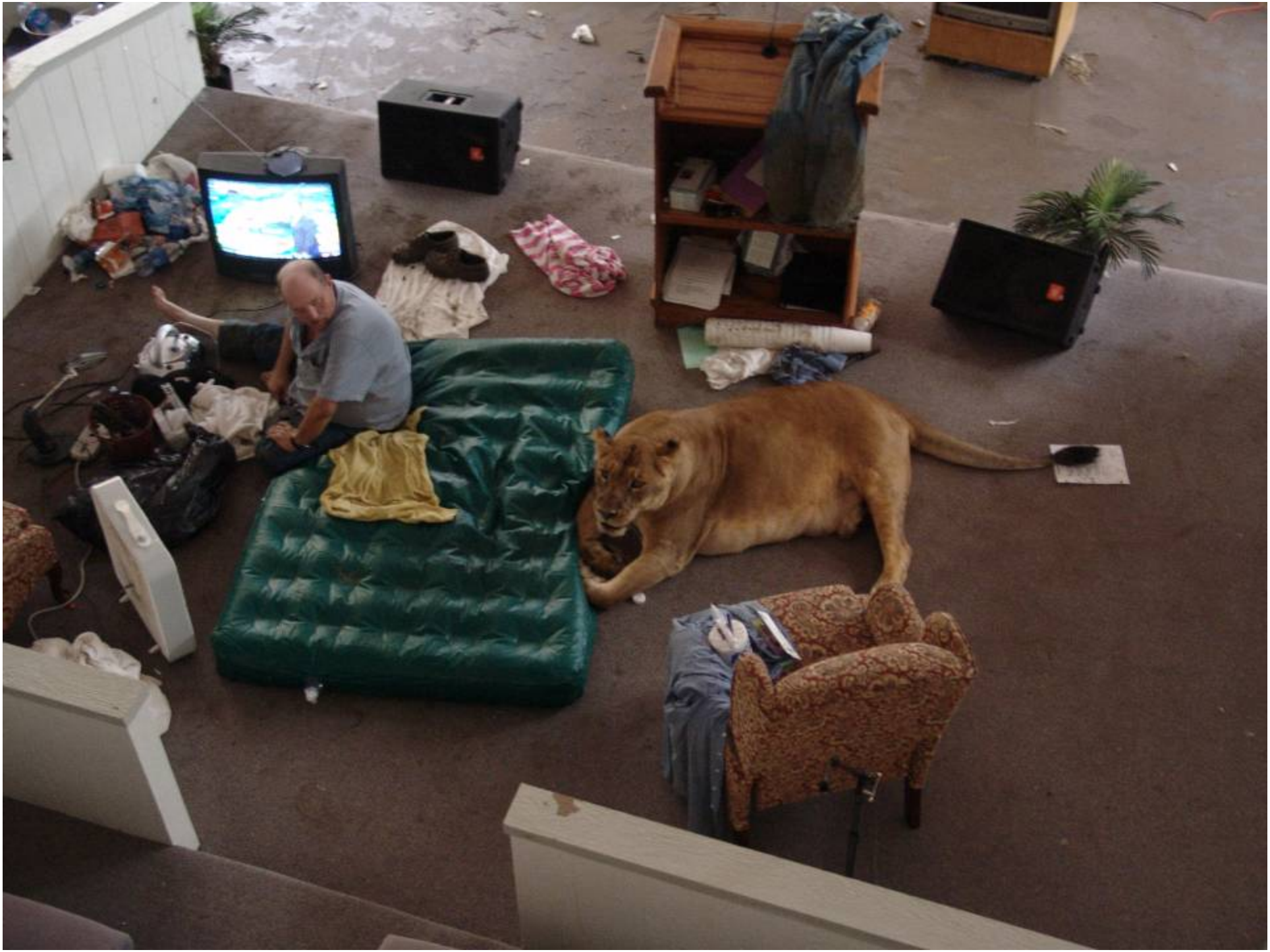
OMI
OIL MOP, LLC
THE TOTAL SOLUTION
1-800-645-6671
HAZARDOUS MATERIALS
24 HOUR EMERGENCY RESPONSE

Summary 2

- Federal Partners provided assistance with ICS, documentation, GIS and HASP
- Charlie Branch supported the City of Galveston with Hazmat response capability
- Charlie Branch completed 2 sweeps for containers from Galveston to the mouth of the Brazos River
- Total containers removed > 5 gallons roughly 6,500 from this area

Bolivar Peninsula
Goat Island

TEXAS COMMIS
ENVIRONMENTA
10.12.2008



STOP

GLA GAS
DXI INDUSTRIES, INC.
HOUSTON, TEX.
USDOT 343510
TX DOT 63004C
(281) 457-4888
62

KOMATSU
NES Rentals
PC
200

KOMATSU
NES RENTALS
NES
Rentals

Summary 3

- USEPA took contractor lead (payment) for all activities after completion of Bolivar Peninsula
- Heavy equipment utilized in dredge spoil area
- Airboats only are used in the marshes of Goat Island
- Total number of containers removed in the Charlie Branch is ~7500

Ike Completion Project

01/08/08 - ICP FINAL SUMMARY

Miles

0 5 10 20

Legend

- Wildlife Refuge
- Marsh / Swamp
- State Park
- Closed Container Item
- Verified Referral to RRC
- Command Center

TCEQ

11 6:50AM

RENTED
FROM
NES RENTALS

CAUTION
DO NOT PRESSURIZE
THIS TANK
METHANOL
iBC
INCORPORATED
ECOsafe

PALFINGER CRANE
"BOB" BOWERS
CIVIC CENTER
OVERSIZE LOAD

LaVille Airboats

Summary 4

- 140 additional targets removed
- Final day of orphan container removal was January 9, 2009
- TCEQ regional offices are the lead for any additional orphan containers as they are reported
- TCEQ is coordinating with RRC to provide information on E & P tanks remaining

Conclusion

- Safe Operation
- Efficient Operation
- Difficult Conditions
- True Team Effort
- First Time Communications Were Not Problematic
- Redundant Systems Remain Beneficial
- The First 5 Days You’re on Your Own
- Hope to be Designated the Charlie Brown Branch in all Future Responses

Hurricane IKE: Emergency Support Function #10

Federal, State and Local entities were committed from the outset to conduct the oil and hazardous materials response mission in a unified and coordinated manner even though each agency does not have identical statutory requirements.

EPA and CG shared plans and coordinated capabilities pre-landfall:

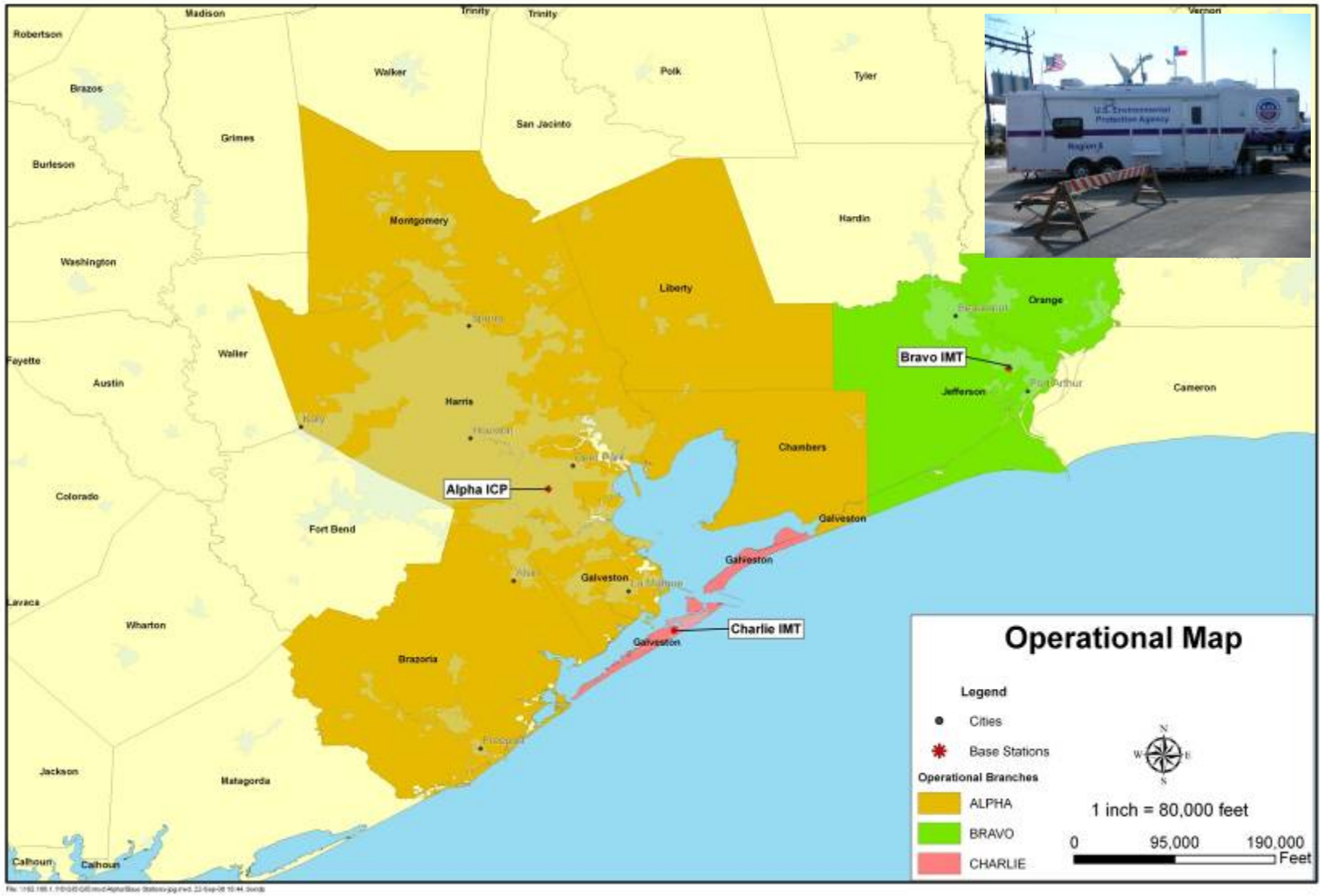
- Sector H-G designated GST CO as CGIC for ESF10/Environmental Response
- EPA & CG pre-staged personnel in the Texas Task Force in San Antonio
- GST pre-staged personnel in Sector's COOP location in Katy, TX
- GST deployed 10-man hazmat team and 5 additional responders immediately after landfall

Hurricane IKE: Emergency Support Function #10

Prior to, during, and after hurricane impact all four primary agencies worked using their resources to begin assessing and responding to potential and actual oil and hazmat incidents:

- EPA assessed more than 900 chemical facilities using targeted contracted over flights
- USCG, TGLO, & TCEQ worked out of USCG command posts to assess and respond to >250 oil & hazmat incidents via ground & water patrols
- EPA & TCEQ assessed more than 1,000 drinking water facilities & conducted air monitoring in key areas
- EPA, USCG, TGLO, TCEQ, and all other agencies worked to identify more than 3,000 hazmat targets for removal.

Emergency Support Function #10
Geographical Divisions: A, B, C



Coast Guard Sector Houston - Galveston's Hurricane IKE Response

Search and Rescue

- Several hundred persons rescued pre-storm; SAR resumed post-landfall

Waterways Management

- 58% of Aids to Navigation displaced or destroyed
- Reopening the ship channel

Regulated Facilities

- Post-landfall assessment and pre-start up inspection

Vessel Assessment

- Verifying location of all red flag vessels
- Conducting vessel assessments for salvage disposition

Environmental Response

- Responded to more than 250 reports of pollution

Coast Guard Sector Houston - Galveston's Hurricane IKE Response

Environmental Response - more than 250 reports of pollution

- Several major oil spills but all had proactive Responsible Parties
- Marinas had significant impact from tanks & sunken vessels
- Hydrogen Cyanide and another 40+ inter-modal containers in Greens Bayou; grounded sulfuric acid barge adjacent to the container facilities
- Hundreds of vessels to assess for integrity and pollution threat
- Goat Island oil production facilities: St. Marys, Tek Oil

Operated from the Katy ICP from 13-17 September & Clearlake ICP from 17-21 September for all spills in Houston-Galveston Area; we sent additional people to Port Arthur to assist and they reported their numbers in the totals.

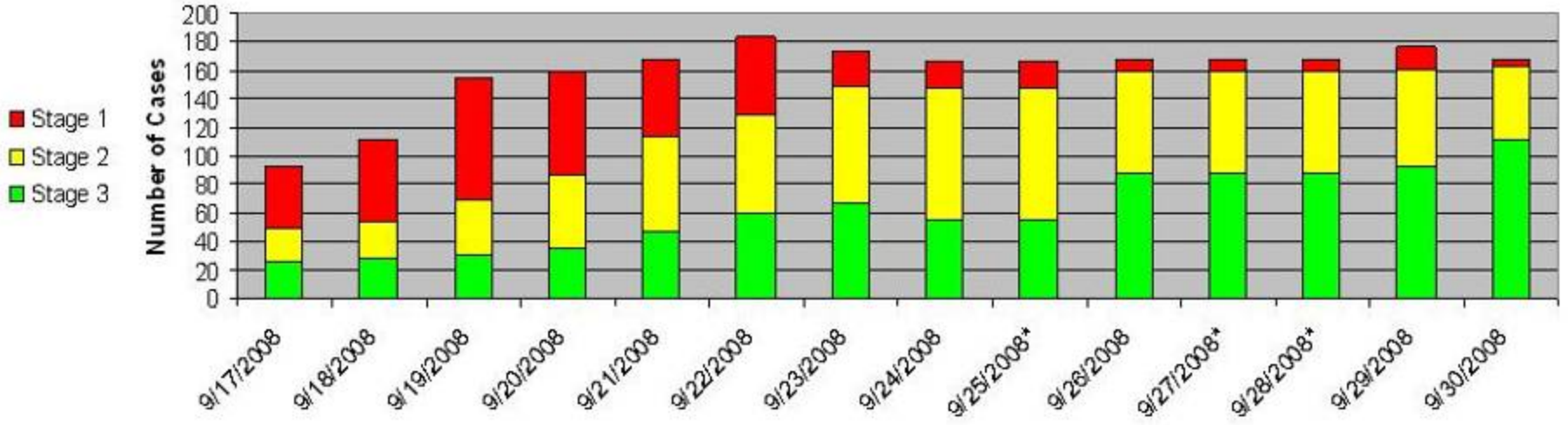
On 21 September the CG Environmental Branch detached to the Pasadena ICP to establish the ESF10 ICP

Coast Guard Sector Houston - Galveston's Hurricane IKE Response

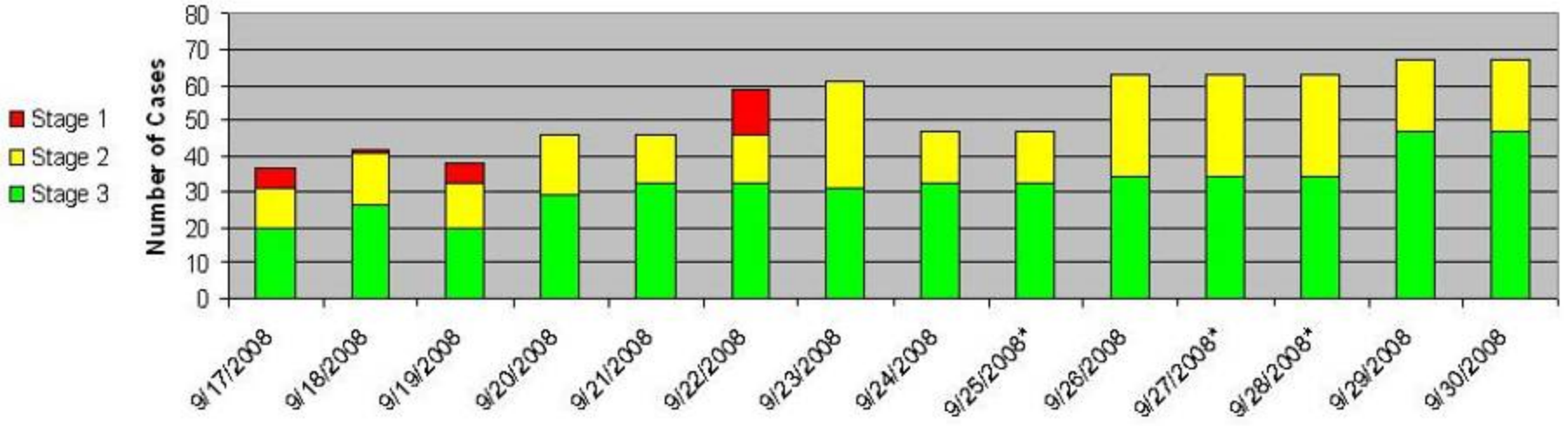
Environmental Response - more than 250 reports of pollution

Coast Guard Sector Houston - Galveston's Hurricane IKE Response

Houston/Galveston Stage Progression



Port Arthur Stage Progression



** Denotes data from previous day*

Coast Guard Sector Houston - Galveston's Hurricane IKE Response

Successes

- Sector had ordered 40+ qualified field personnel prior to landfall that were staged in San Antonio
- Pre-deployment of Strike Team personnel, including the 10-person Hazmat Team
- Joint use of resources; vehicles & boats for transportation
- Joint prioritization of sites
- NOAA support in H-G and Port Arthur

Challenges

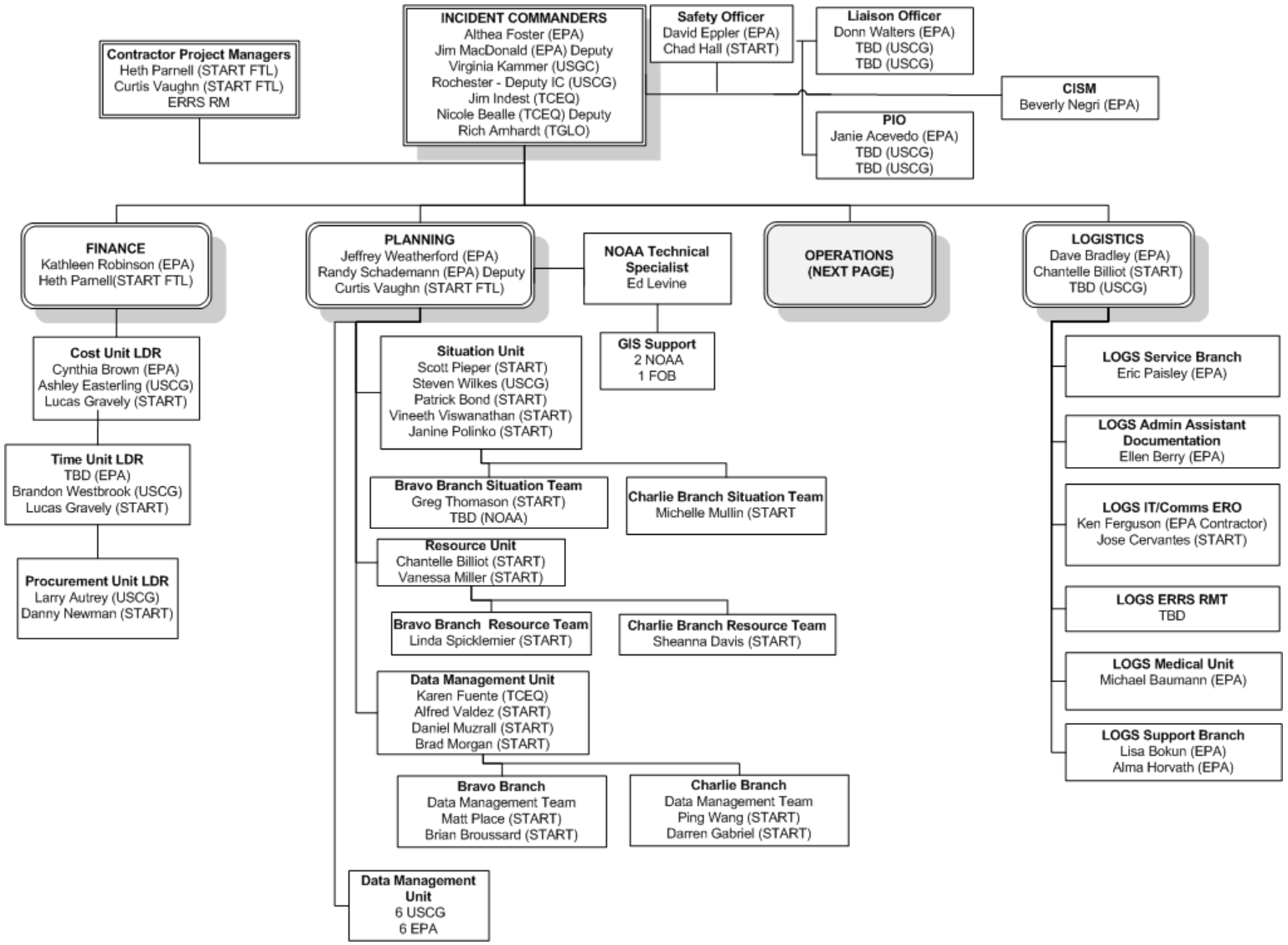
- Funding; mission assignment process is too slow for initial actions
- Opened "general" FPN for $3M which has limitations (no PFRAs)
- Data management – feeding the beast and tracking field operations

Hurricane IKE: Emergency Support Function #10

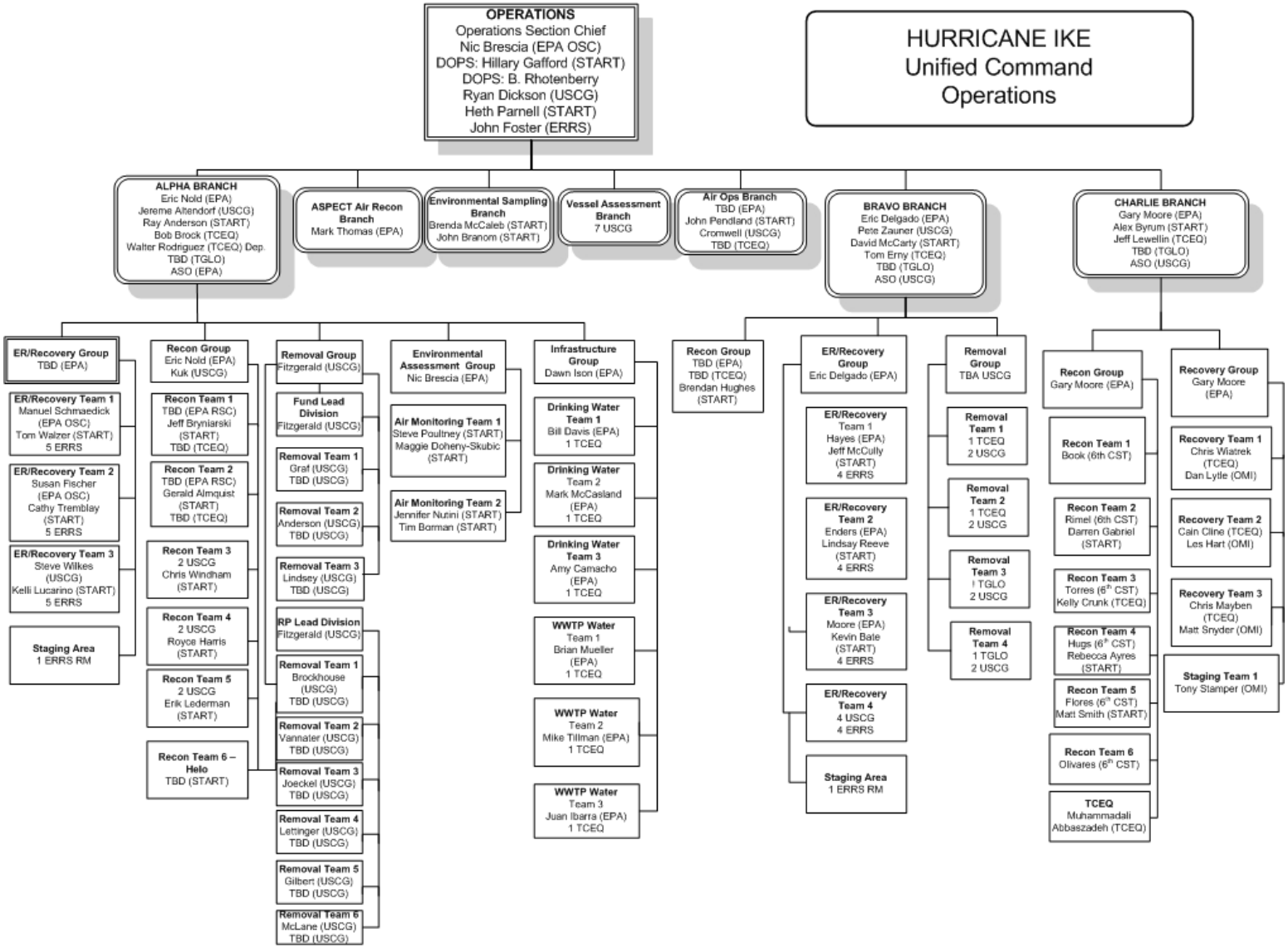
Parallel to the field operations, the CG, EPA and State agencies were having daily telcons to discuss daily operations and plans for stand-up of ESF10.

- EPA Operations Section Chief met with CG Ops several days prior to stand-up and they developed an integrated response organization for all ESF10 tasks
- I met with CG Commanders in Houston, Galveston and Port Arthur to explain ESF10 and assess their needs & concerns
- ESF10 ICP stand-up & integration on 21 September went smooth
- CG left the UC 15 October after closing or transferring the few remaining cases to CG commanders; GST stayed to support ongoing EPA operations

Emergency Support Function #10 Unified Command Organization



Emergency Support Function #10 Operations Section Organization



Hurricane IKE: Emergency Support Function #10

What went well:

- Cooperation among and integration of all agencies, including local fire departments
- Designation by the USCG FOSC (Sector Houston-Galveston) of a Coast Guard Incident Commander (CGIC) for ESF10
- NOAA Scientific Support Coordinator support in Houston, Port Arthur, and Lake Charles
- Mission assignment for pre-deployment of Gulf Strike Team resources to assist the EPA and Sector significantly enhanced response capability
- Separation of ESF10 function/personnel from Sector to unified ESF10 location
- Proactive media engagement & public outreach

Hurricane IKE: Emergency Support Function #10

What could be improved:

- Communication from the JFO on mission assignment status
- A single CG POC for the CGIC for ESF10 to deal with on funding and logistical issues
- Funding must be equitable
- Delineation of responsibilities among higher echelons
- Expansion of the mission assignment area to include counties south of the direct impact zone to include all natural debris collection areas
- Remember the local agencies early – they can help you!
- Data management and integration

Hurricane IKE: Emergency Support Function #10

Questions?

Questions?

ESF 10 Unified Commanders talking to the Houston Chronicle

Minerals Management Service

Gulf of Mexico Region

30 CFR 250, 253, 254

"Areas Of Responsibility"

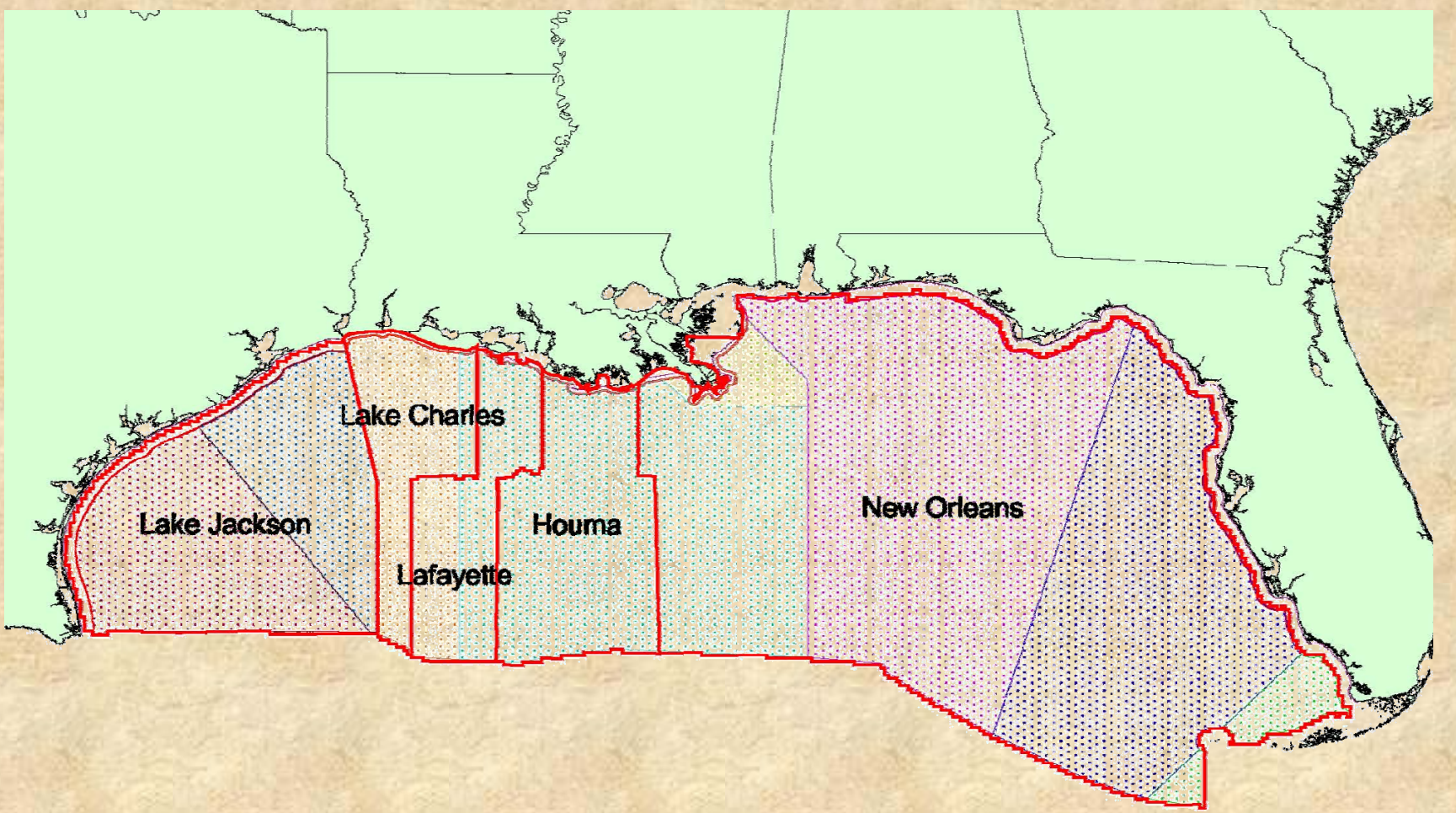
Where Does the MMS Fit into

Oil Spill Response?

Minerals Management Service
Gulf of Mexico Region

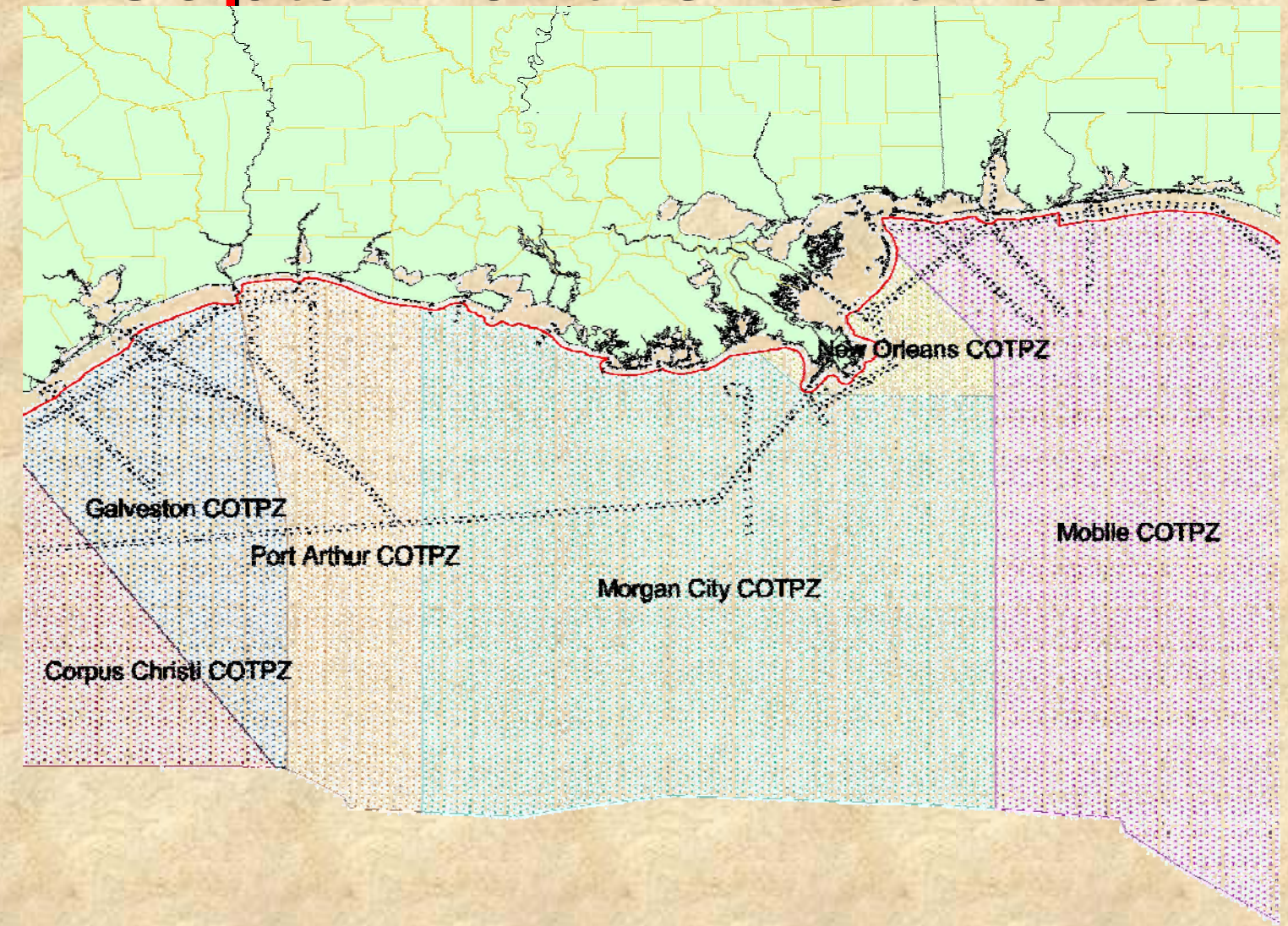
- Oil Spill Financial Responsibility
- Oil Spill Program
- Outer Continental Shelf Operations

MMS – Gulf of Mexico Region



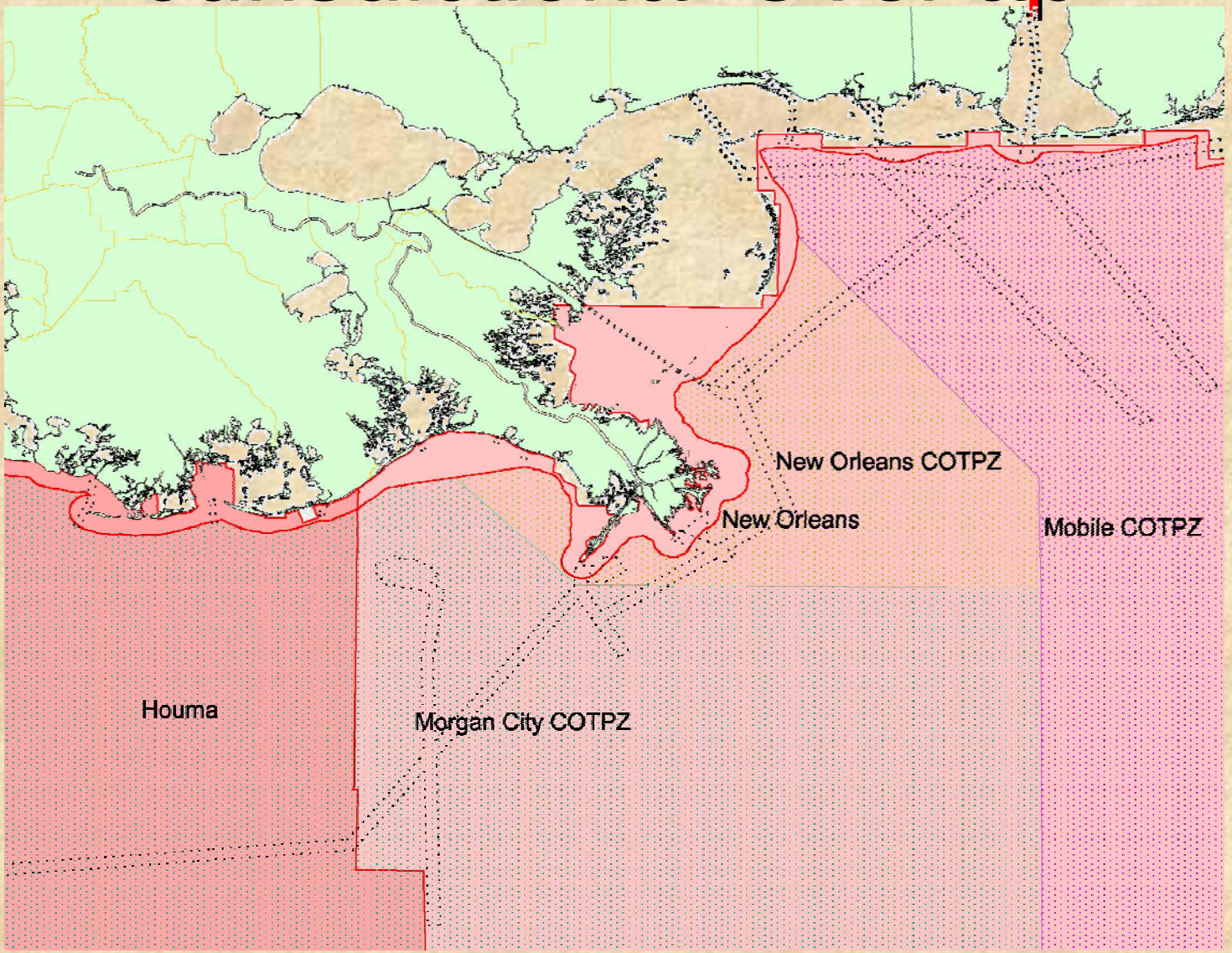
Minerals Management Service

Captain of the Port Zones



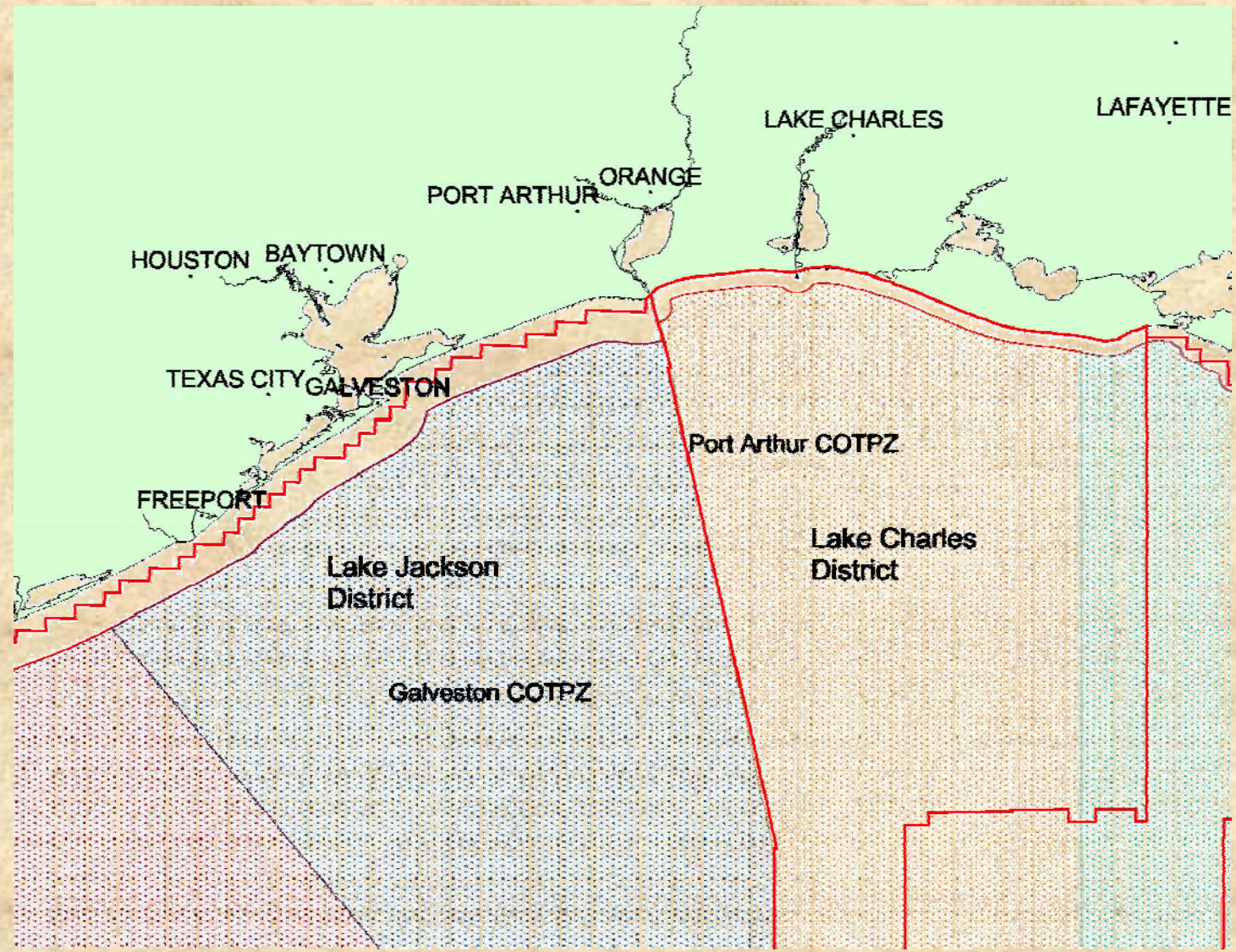
Minerals Management Service

Jurisdictional Overlap



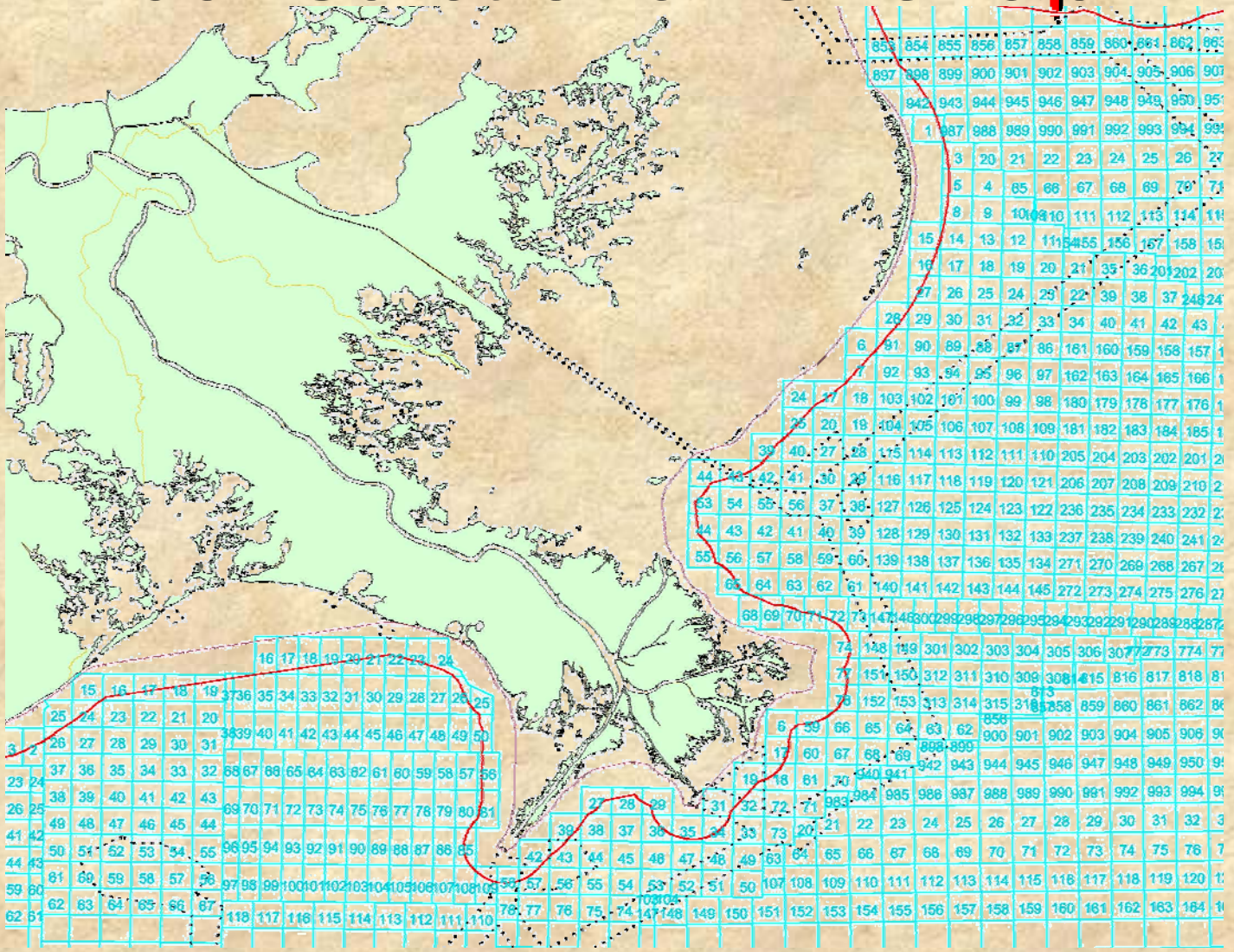
Minerals Management Service

Jurisdictional Overlap



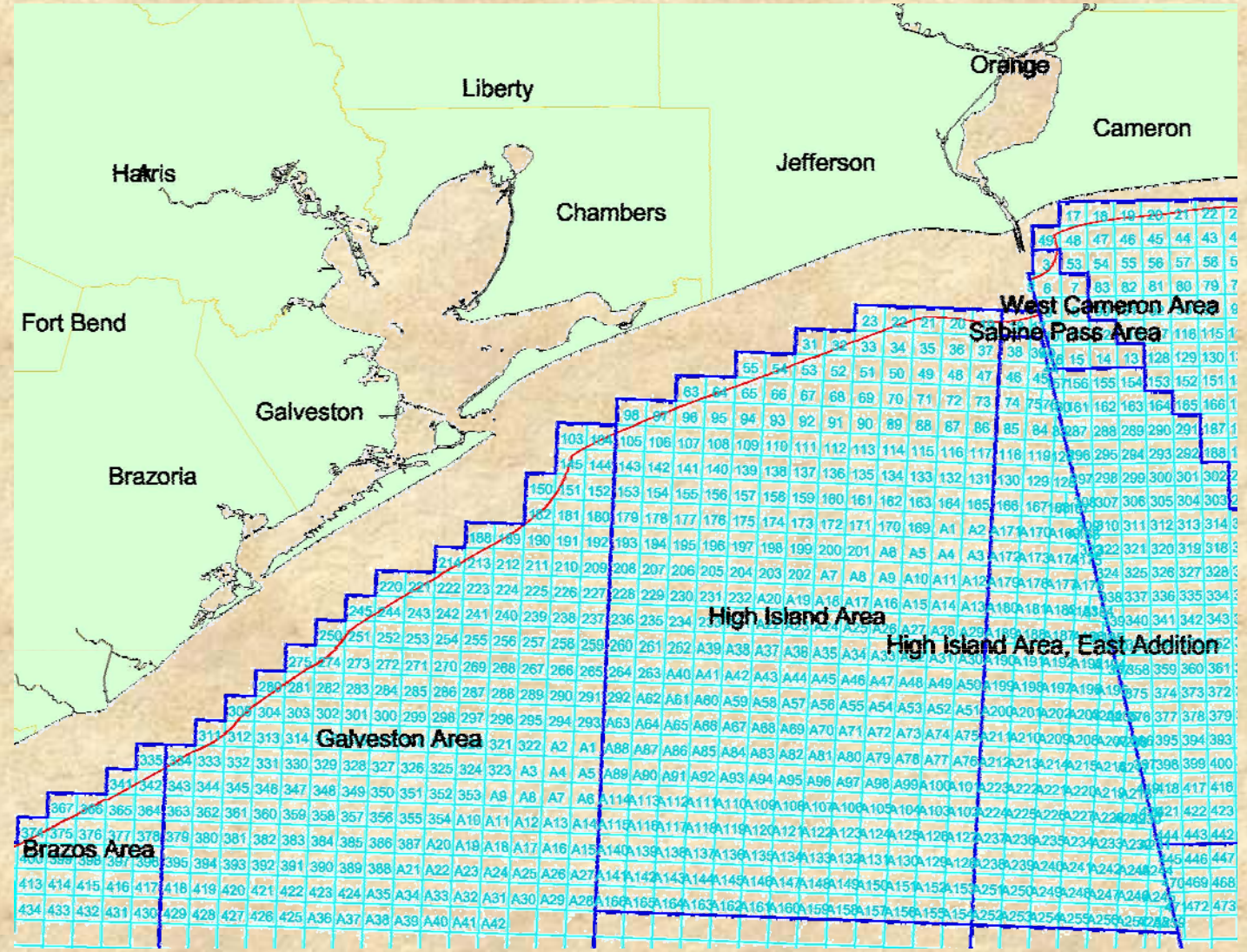
Minerals Management Service

Jurisdictional Overlap



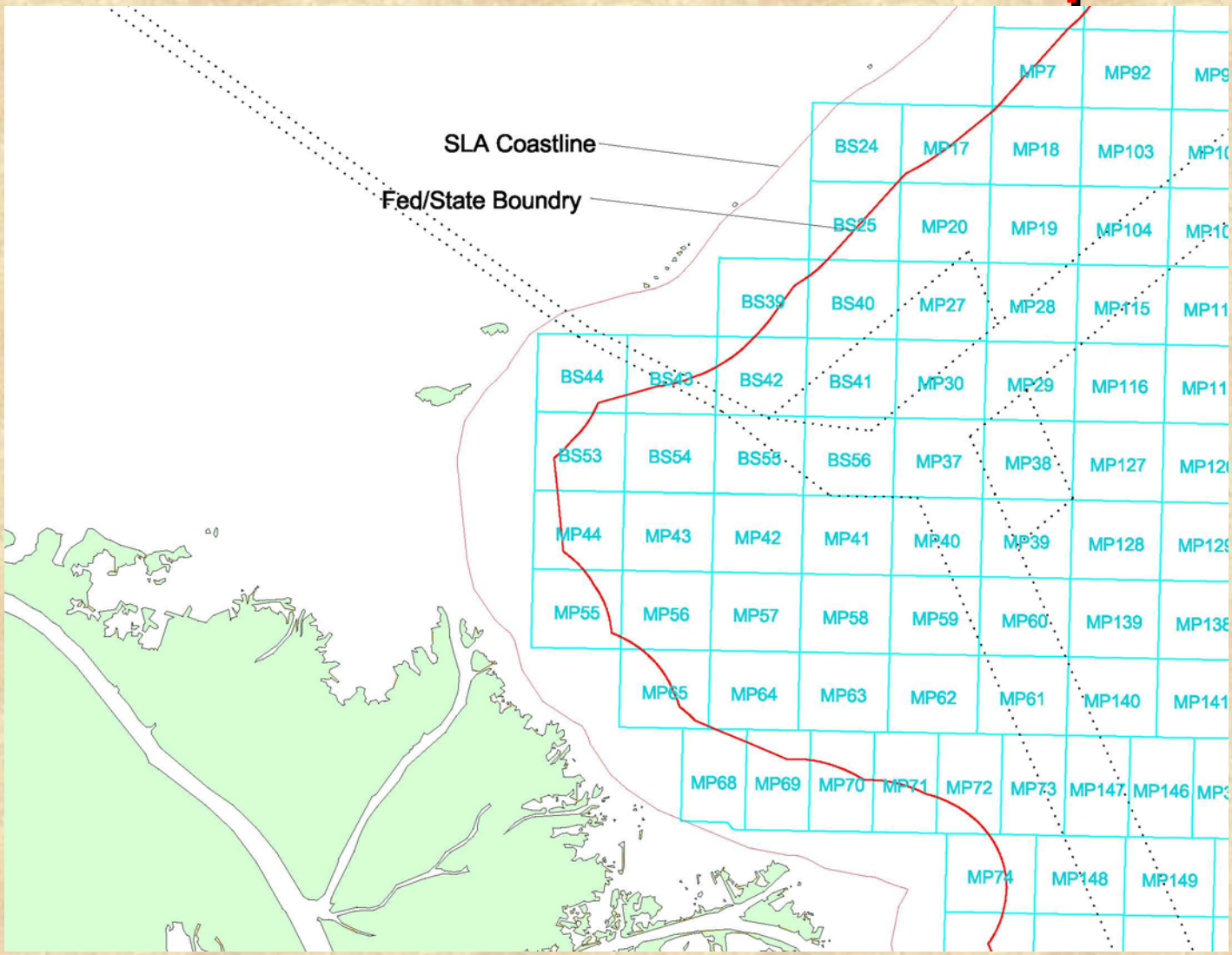
Minerals Management Service

MMS/USCG/TGLO/TRRC



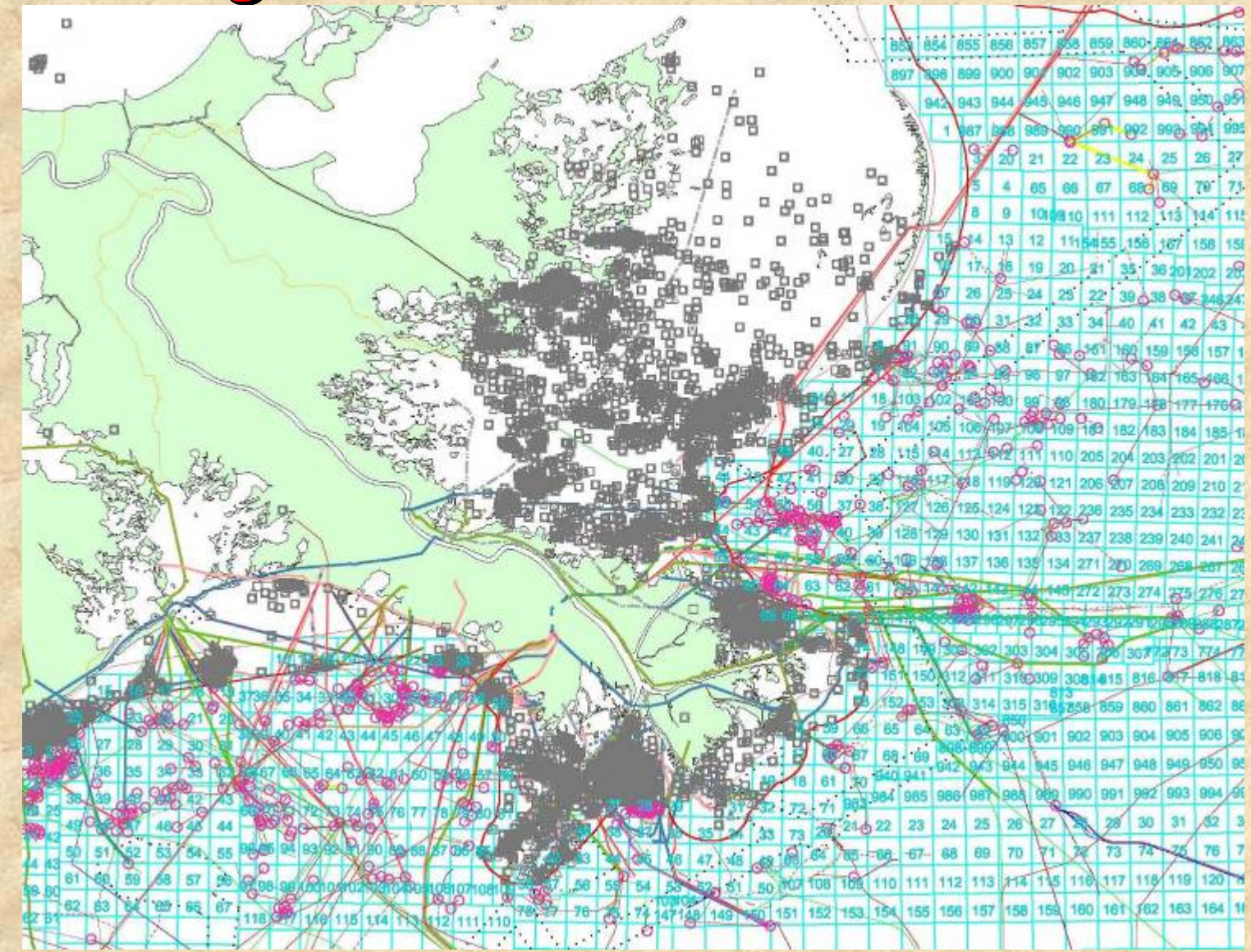
Minerals Management Service

Jurisdictional Overlap



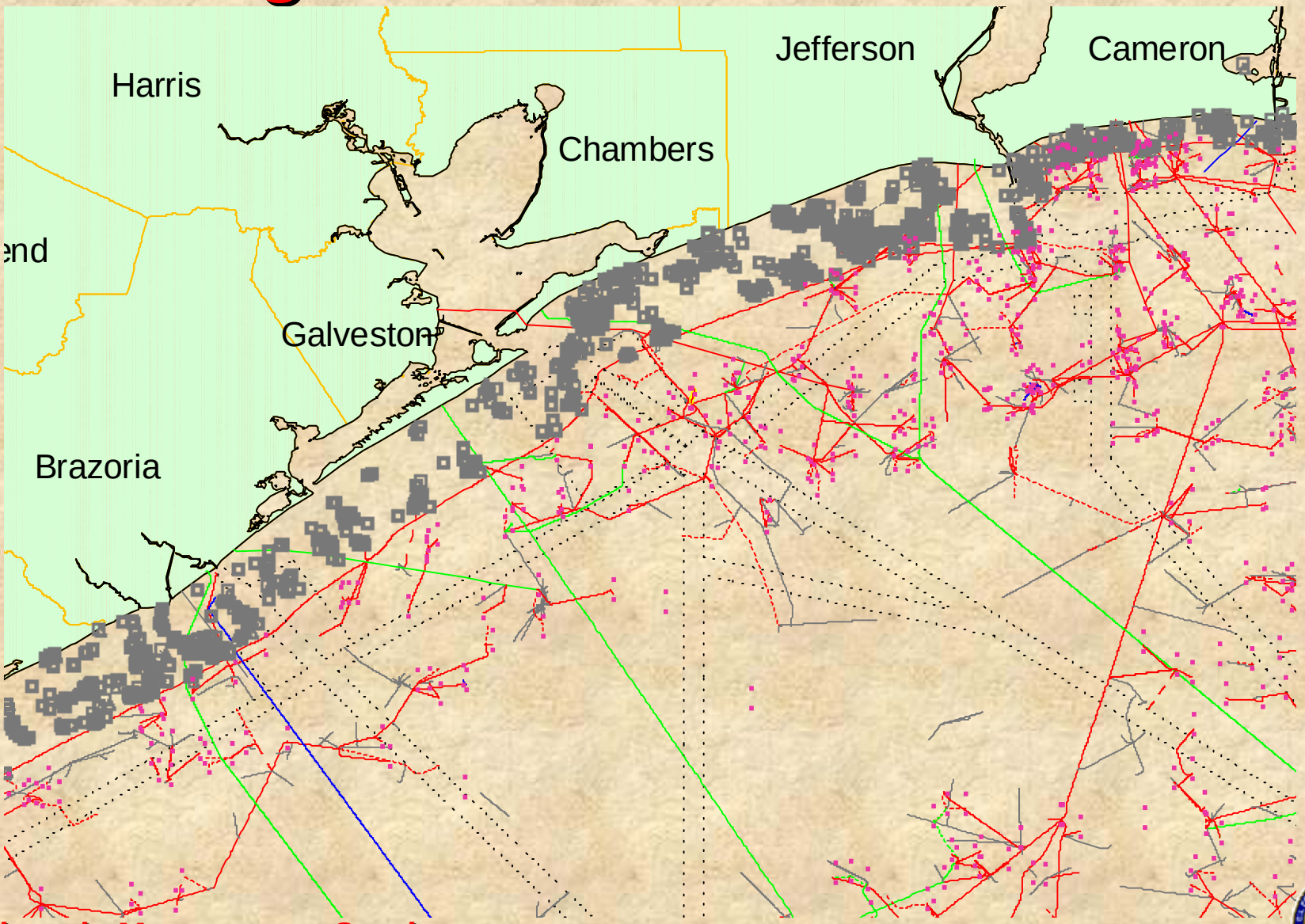
Minerals Management Service

Large Number of Facilities



Minerals Management Service

Large Number of Facilities



Minerals Management Service

http://gis2.rrc.state.tx.us/public/

Minerals Management Service

Oil Spill Financial Responsibility 30 CFR 253

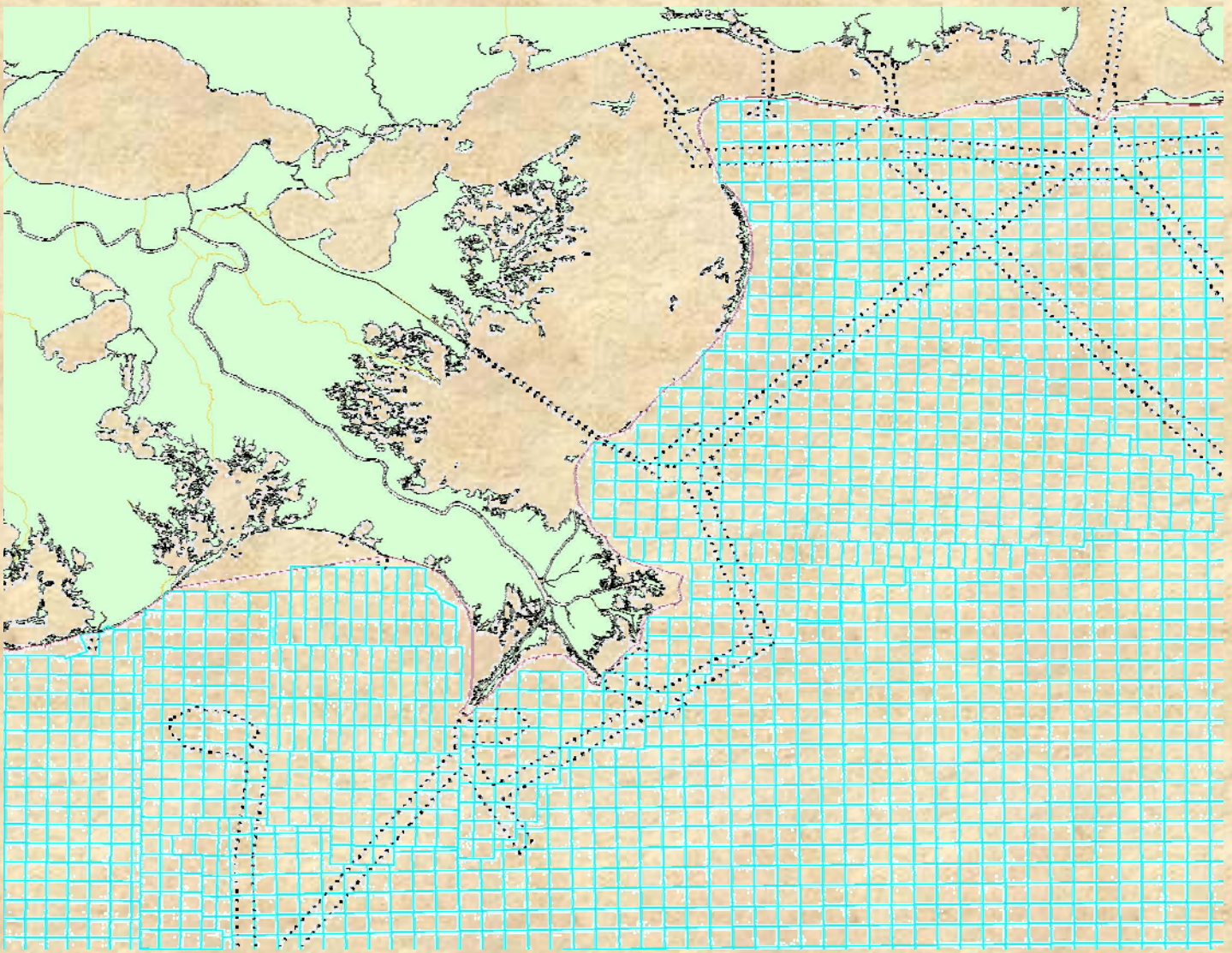
- Oil Spill Financial Responsibility (OSFR) applies to the:

  (A) Outer Continental Shelf (OCS) and

  (B) State waters seaward coast line including certain inland bays and waterways

- The Gulf of Mexico OCS Region (GOMR) serves as the national program manager for all OSFR applications - it verifies compliance for all MMS regions and coastal States through analysis of submitted evidence (OSFR forms and related documents).

Oil Spill Financial Responsibility



Minerals Management Service

Oil Spill Financial Responsibility

- **MMS uses collected information to:**

(1) ensure OPA compliance with offshore lessees and owners and operators of covered facilities

(2) establish eligibility of designated applicants for OSFR certification

(3) establish a reference source of names, addresses, and telephone numbers of responsible parties for covered facilities and their designated agents, guarantors, and U.S. agents for service of process for claims associated with oil pollution from designated covered facilities.

Oil Spill Financial Responsibility

For a COF located in State waters:

1,001 bbls >	10,000 bbls	= $ 10 million
10,001 bbls >	35,000 bbls	= $ 35 million
35,001 bbls >	70,000 bbls	= $ 70 million
70,001 bbls >	105,000 bbls	= $ 105 million
> 105,000 bbls		= $150 million

For a COF located wholly or partially in OCS waters:

1,001 bbls >	35,000 bbls	= $ 35 million
35,001 bbls >	70,000 bbls	= $ 70 million
70,001 bbls >	105,000 bbls	= $ 105 million
> 105,000 bbls		= $ 150 million

Oil Spill Financial Responsibility

STATISTICS (12/31/07)

Total Number of Companies: 172

Total Number of COFs: 8,940

OCS (7,746)

State waters (1,194) - AK (170); AL (29); CA (6); LA (762); MS (1); TX (226)

Oil Spill Financial Responsibility

Total Coverage by Type:

Self-Insurance (23)	$ 1,746,000,000	(15.3%)
Insurance (122)	4,491,100,000	(39.4%)
Indemnification (49)	5,152,600,000	(45.3%)
Bonds (3)	300,000	(> .1%)
Total	$ 11,390,000,000	

Oil Spill Financial Responsibility

Company Coverage by Amount:

$ 10 M:	19
$ 35 M:	100
$ 70 M:	10
$ 105 M:	1
$ 150 M:	42

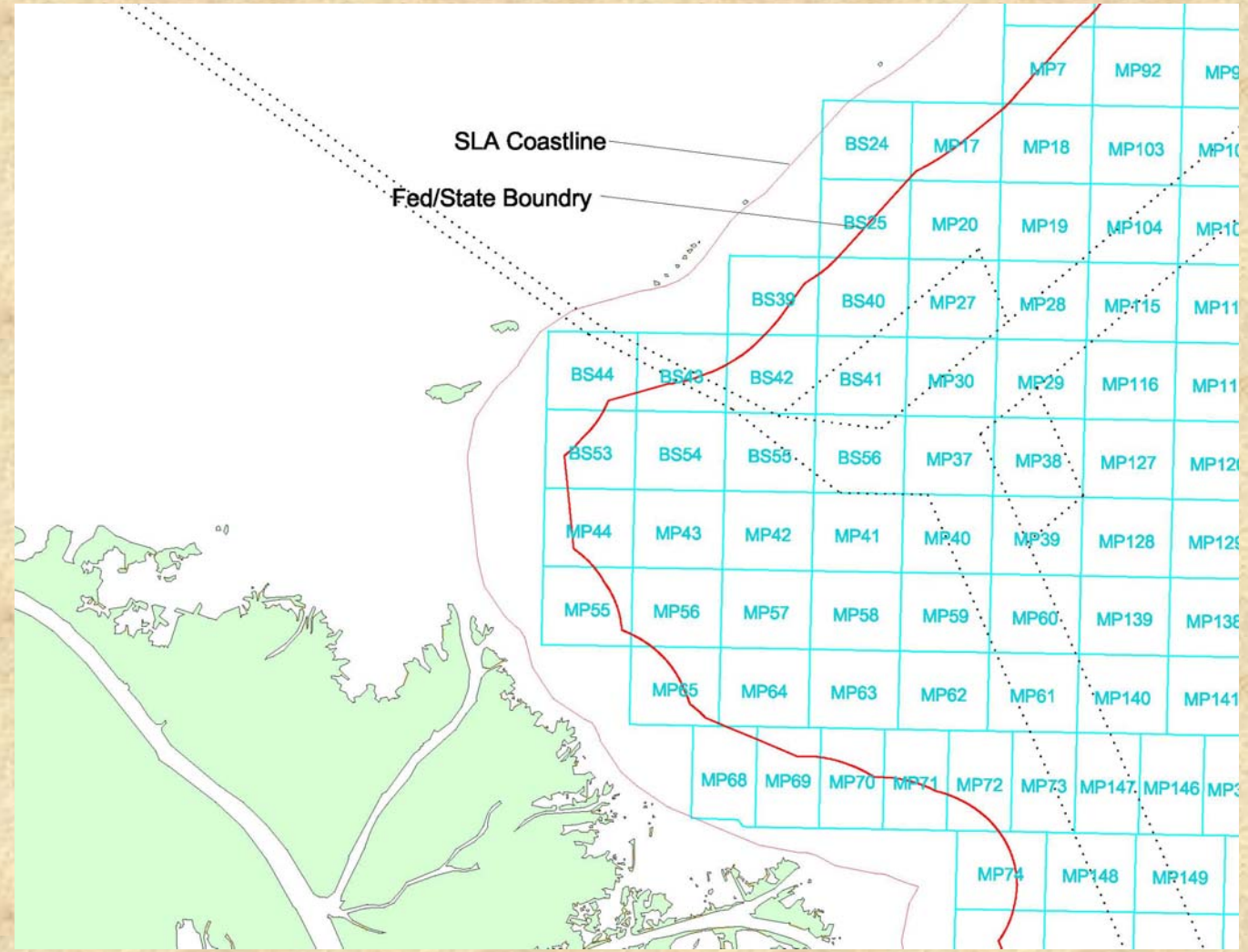
MMS Oil Spill Program
30 CFR 254

For Facilities Located **Seaward** Of The Coast Line

The coast line as defined in the Submerged Lands Act of 1953.

- Grants coastal States jurisdiction over a belt of submerged lands that extends seaward off the coast 3 nautical miles (3.45 statute miles or 5.5 km) except for the coasts of Texas and Florida where jurisdiction extends 3 marine leagues (10.35 statute miles or 16.65 km).

Oil Spill Program
Seaward of the Coastline



Minerals Management Service

Oil Spill Program

The purpose of the Oil Spill Program is to ensure that the Gulf Of Mexico Region is OPA 90 Compliant

Oil Spill Program

Coordination, technical review, and evaluation of regional and site-specific oil spill response plans.

Coordinates periodic inspections jointly with District and State personnel for compliance with oil spill-response plans and equipment to determine if they meet the requirements of OPA 90 and MOU's. Schedules inspections of oil spill response equipment, analyzes and disseminates inspection results.

Conducts all unannounced oil spill drills. Develops the spill scenario, establishes an observation plan, and assembles and provides advice and training to the monitoring team concerning drill observation and evaluation. Prepares and disseminates the final technical analysis of the drill.

MMS District Offices
30 CFR 250

The MMS Gulf of Mexico OCS Region is comprised of five (5) Districts:

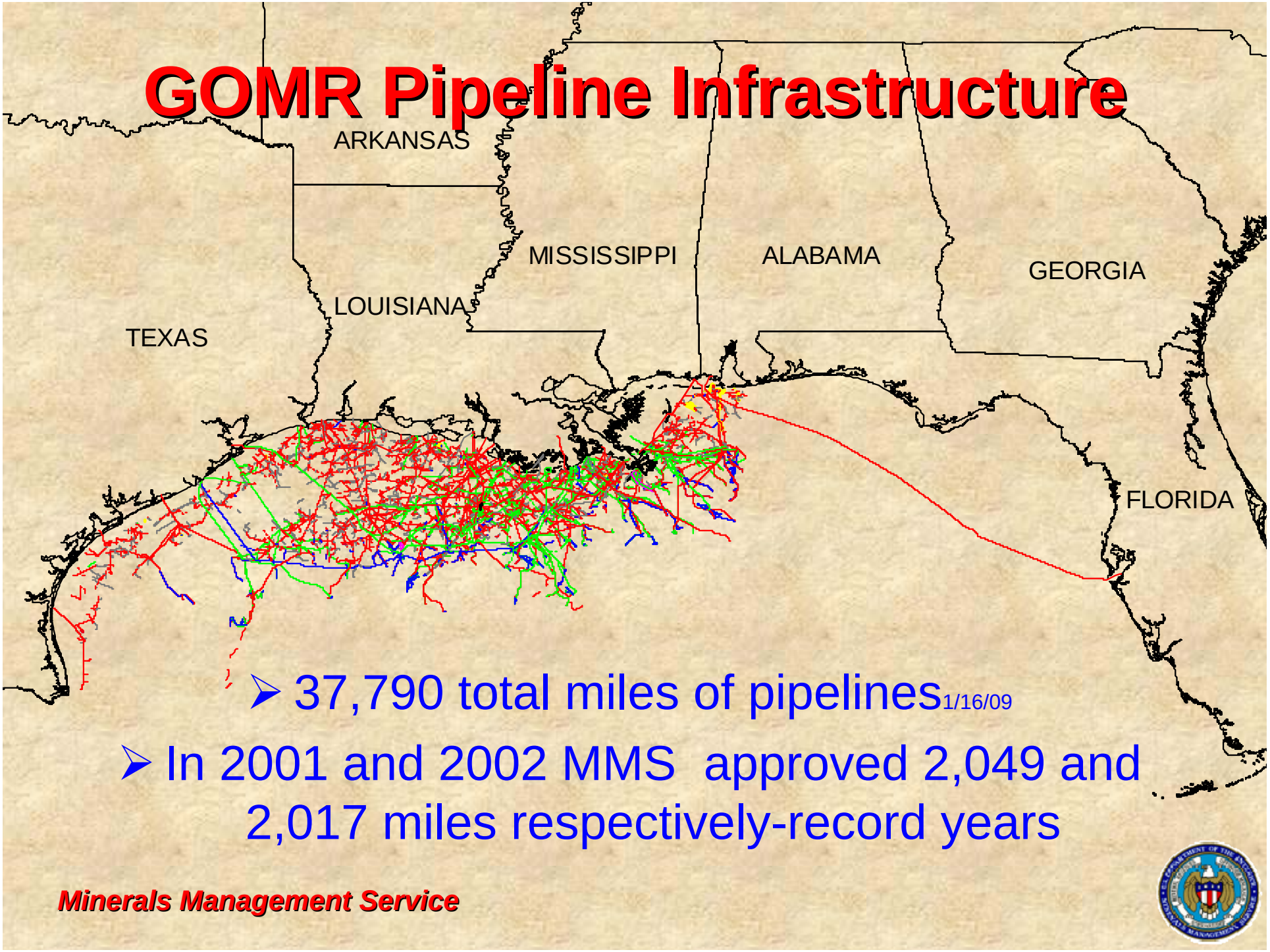
- New Orleans District
- Houma District
- Lafayette District
- Lake Charles District
- Lake Jackson District.

District Inspection Staff

Each district has 11 inspectors and one supervisory inspectors except the Lake Jackson District. The Lake Jackson district has 6 inspectors and one supervisory inspector.

MMS inspectors in each district utilize three (3) helicopters to perform inspection work. Each helicopter can carry three to five passengers. One helicopter is available 365 days per year. Two helicopters are available Monday through Friday, not including holidays. The exception is the Lake Jackson district which has two helicopters available to perform inspections

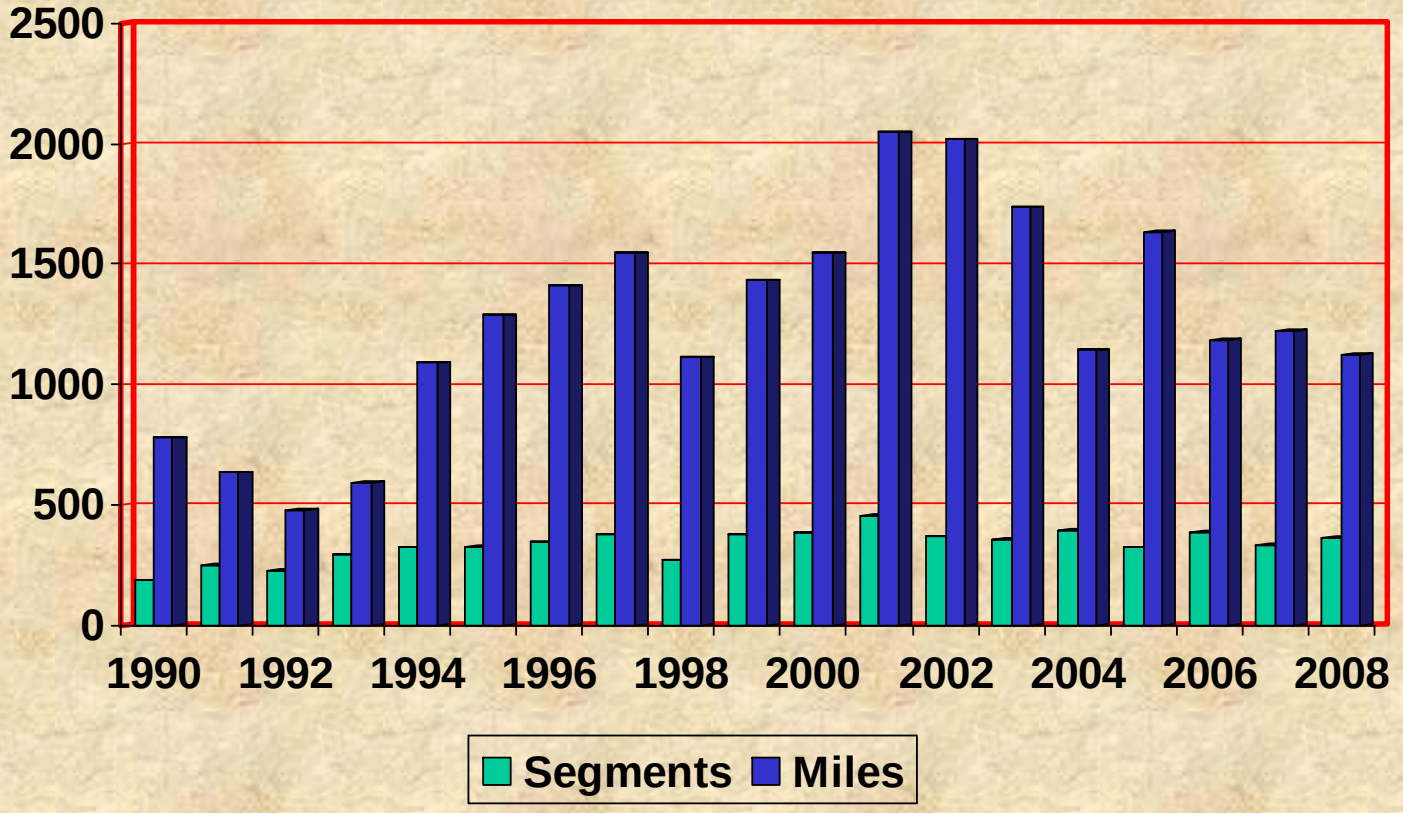
GOMR Pipeline Infrastructure



- 37,790 total miles of pipelines 1/16/09
- In 2001 and 2002 MMS approved 2,049 and 2,017 miles respectively-record years

Minerals Management Service

Pipelines Approved (Updated Jan. 16, 2009)

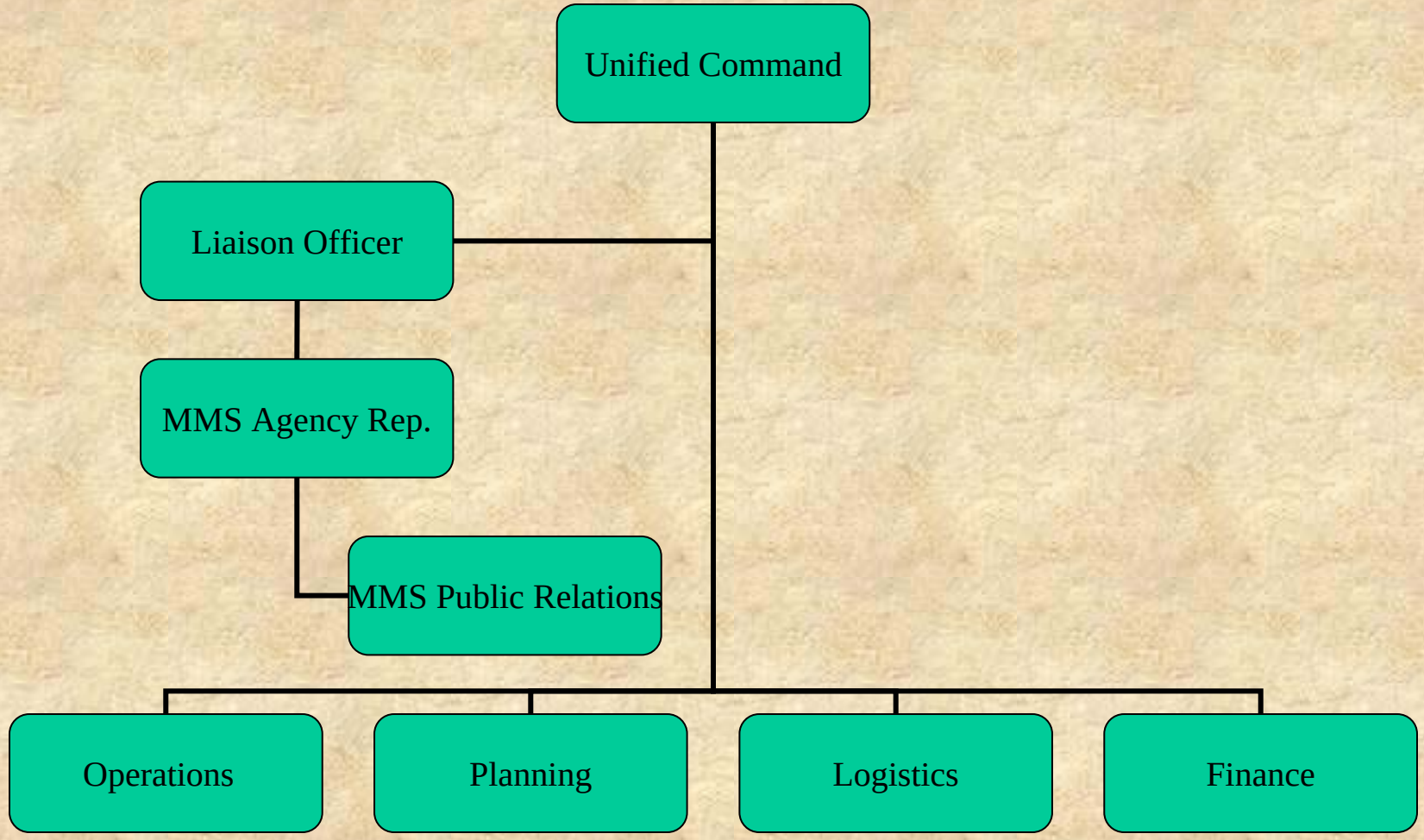


Minerals Management Service

Pipeline Technical Considerations

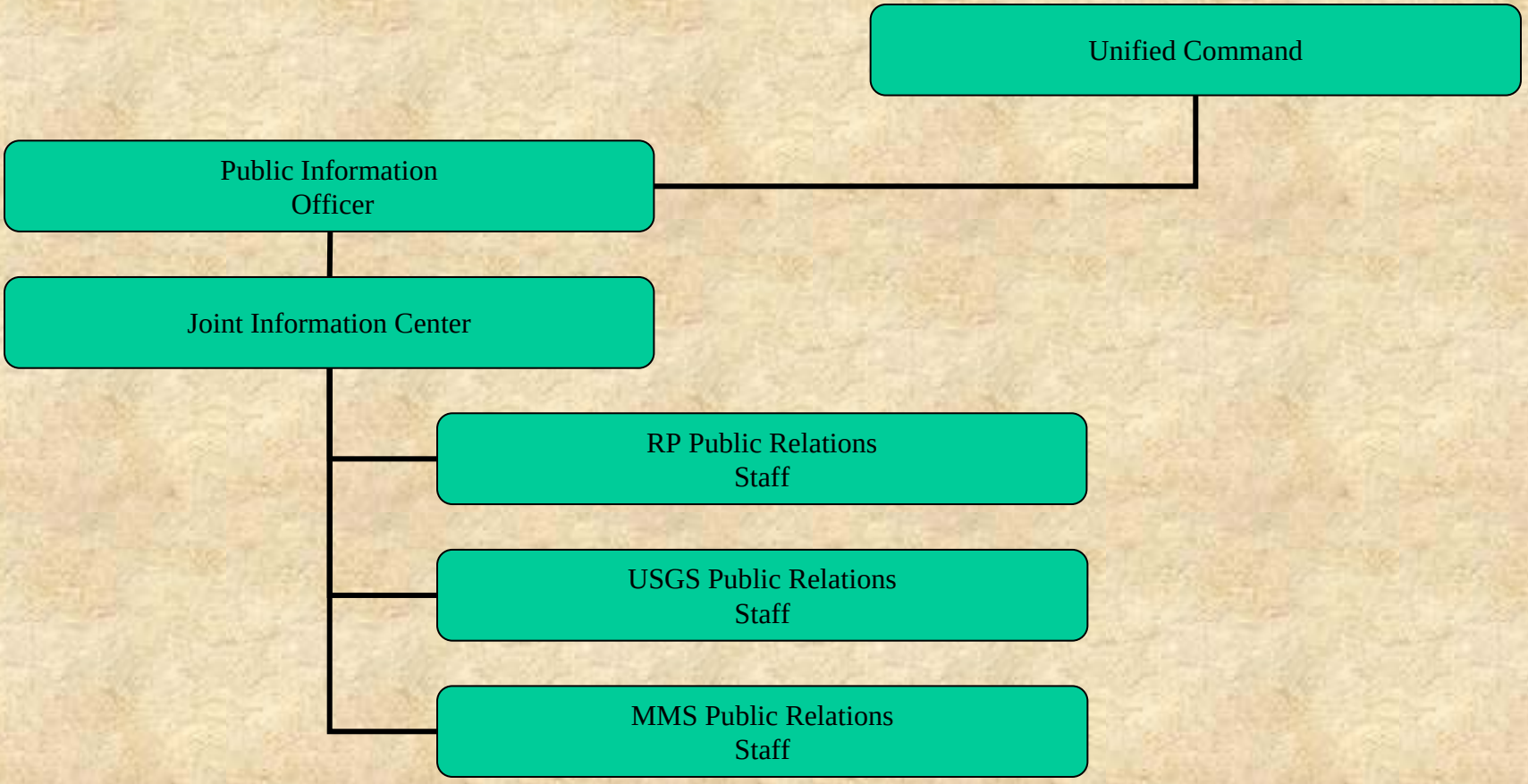
- Pipeline sizes range from 1” to 42”
  - Typical infield line size is 4-6 inch
  - Typical export line is 8-12 inch
  - Typical transmission lines range from 12- 36 inch
- Pipeline operating pressures range from low hundreds up to 15,000 psi

Where MMS Fits into UC

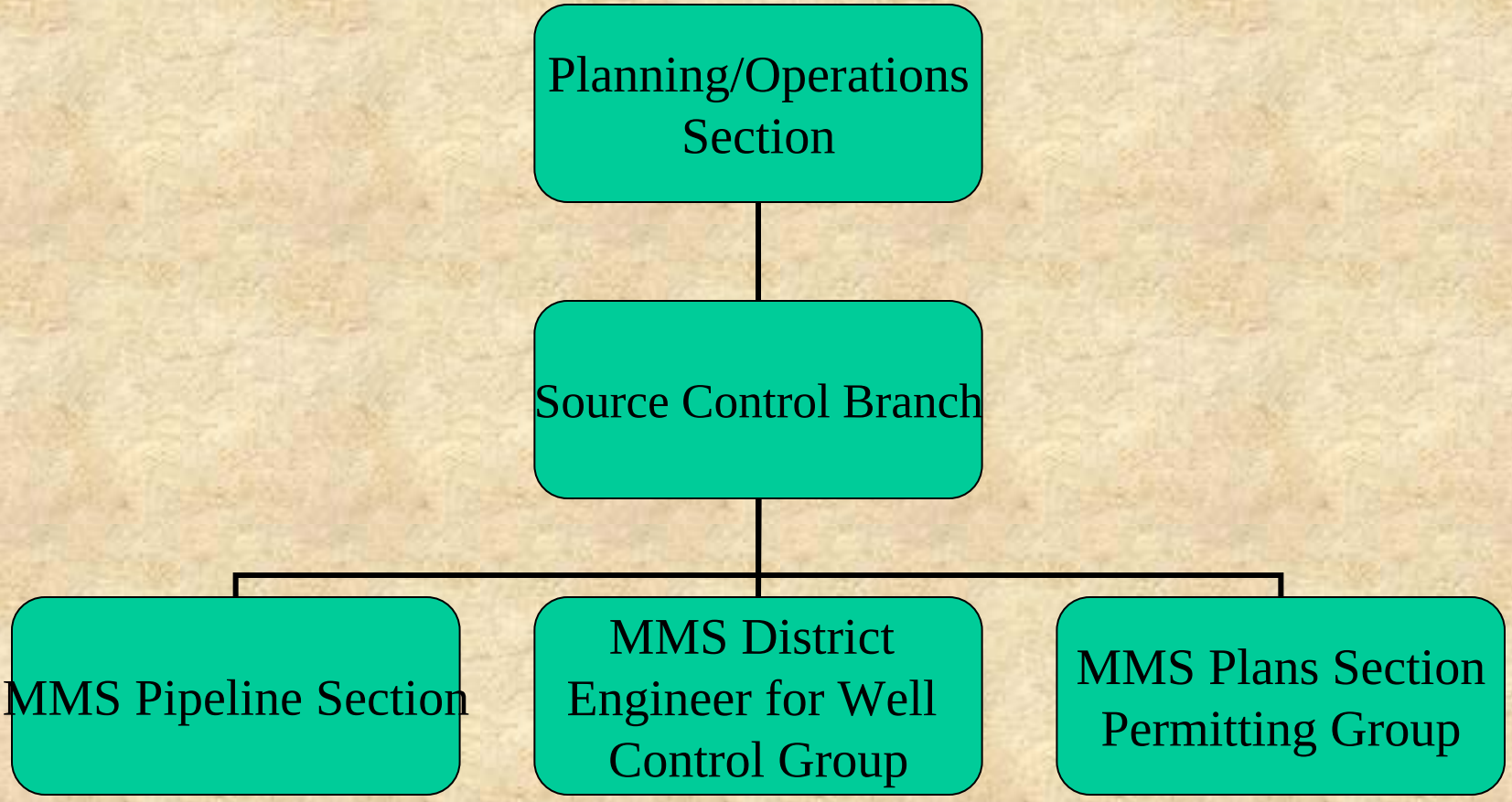


Minerals Management Service

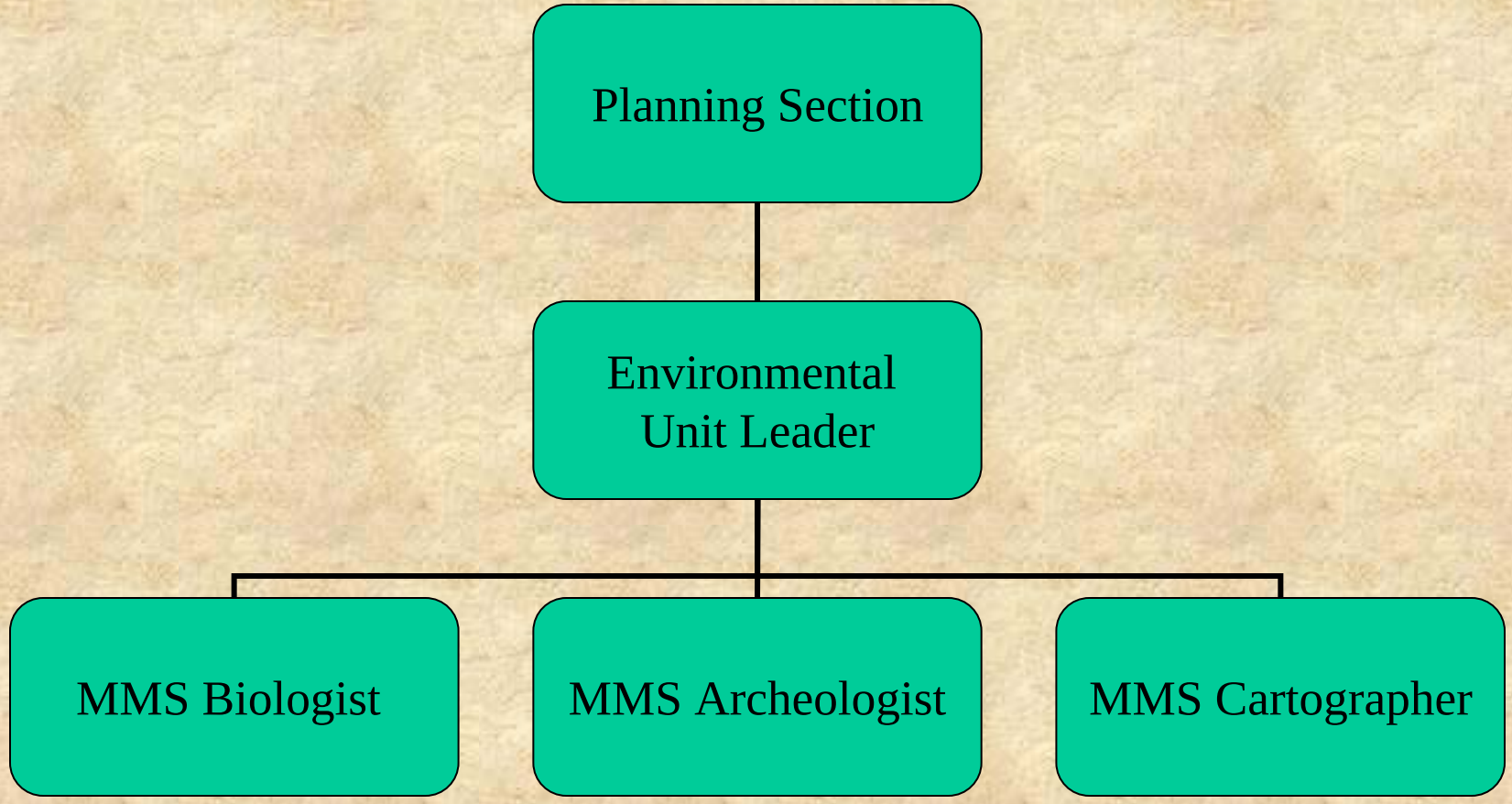
Where MMS Can Fit in the Response



Where MMS Can Fit in the Response



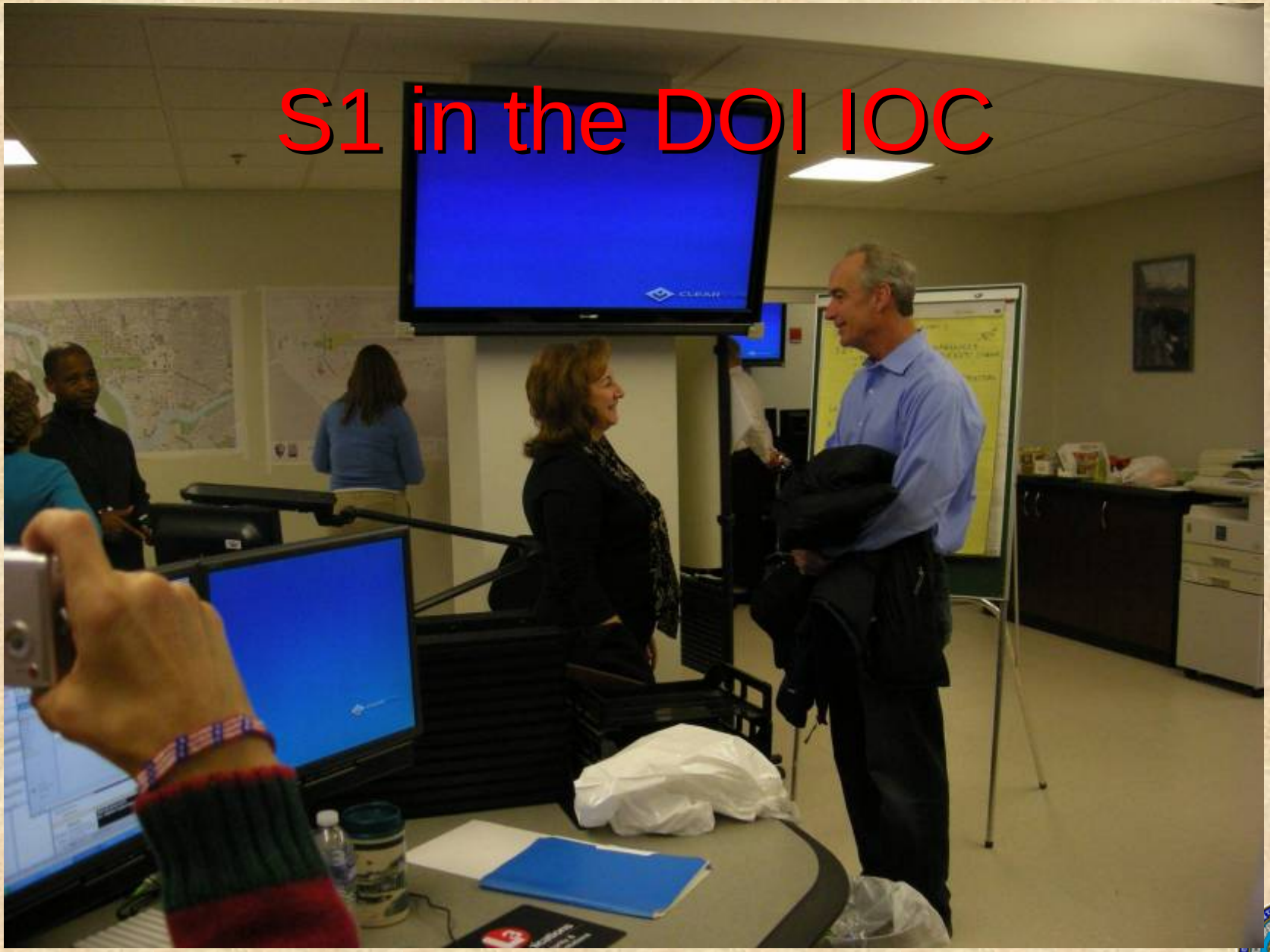
Where MMS Can Fit in the Response



DOI IOC

Minerals Management Service

S1 in the DOI IOC



Minerals Management Service

Best Picture Taken!

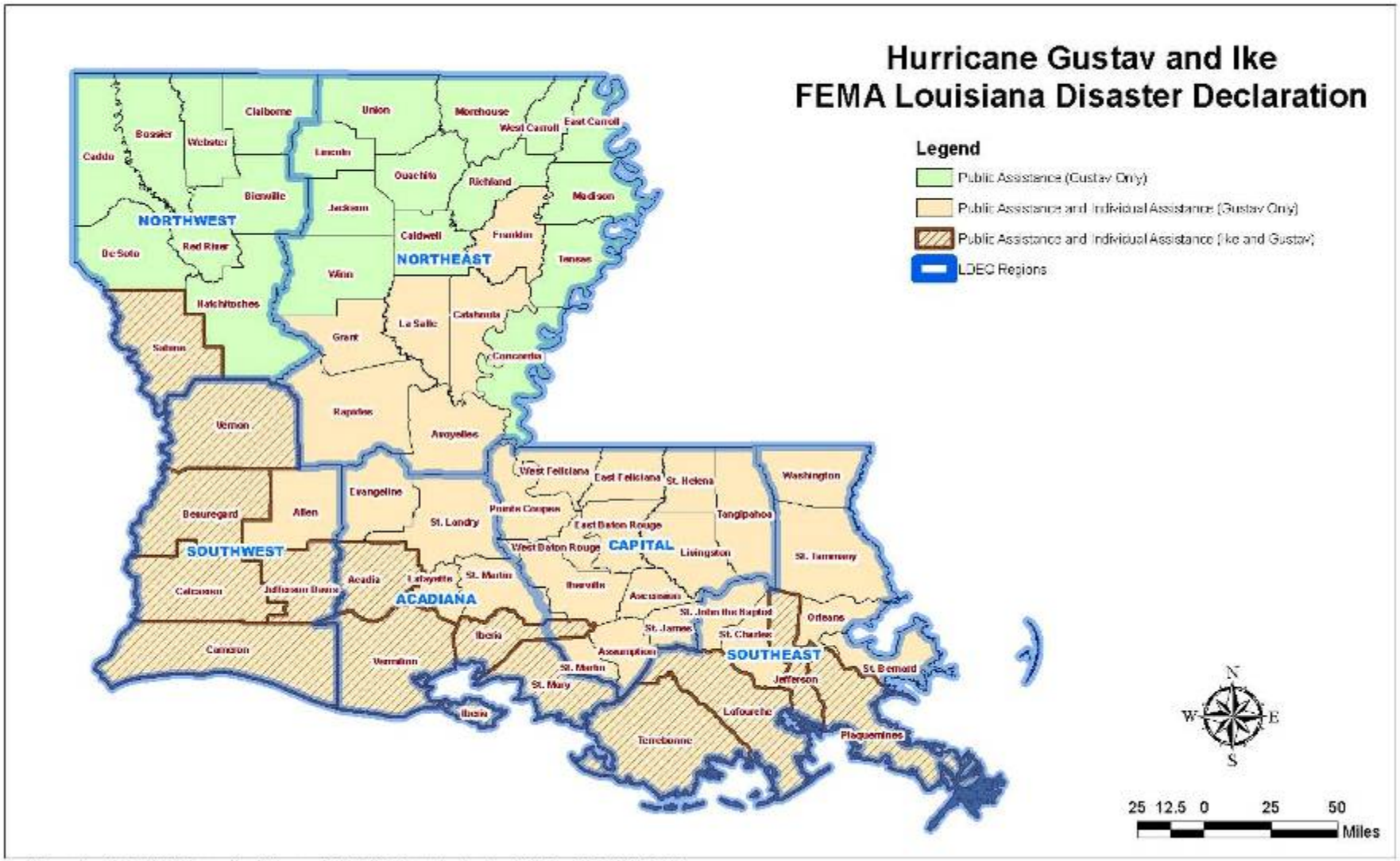
QUESTIONS???

- MMS mapping website
  - http://www.gomr.mms.gov/homepg/pubinfo/MapsandSpatialData.html
- LOSCO mapping website
  - http://atlas.lsu.edu/doqq/
- MMS Oil Spill Research
  - http://www.mms.gov/tarprojects/
- MMS Notice to Lessees
  - http://www.mms.gov/ntls/
- Rusty Wright
  - 504.736.2529 Office – 504.559.1514 Cell

Hurricanes Gustav / Ike
Louisiana
EPA OSC John Martin

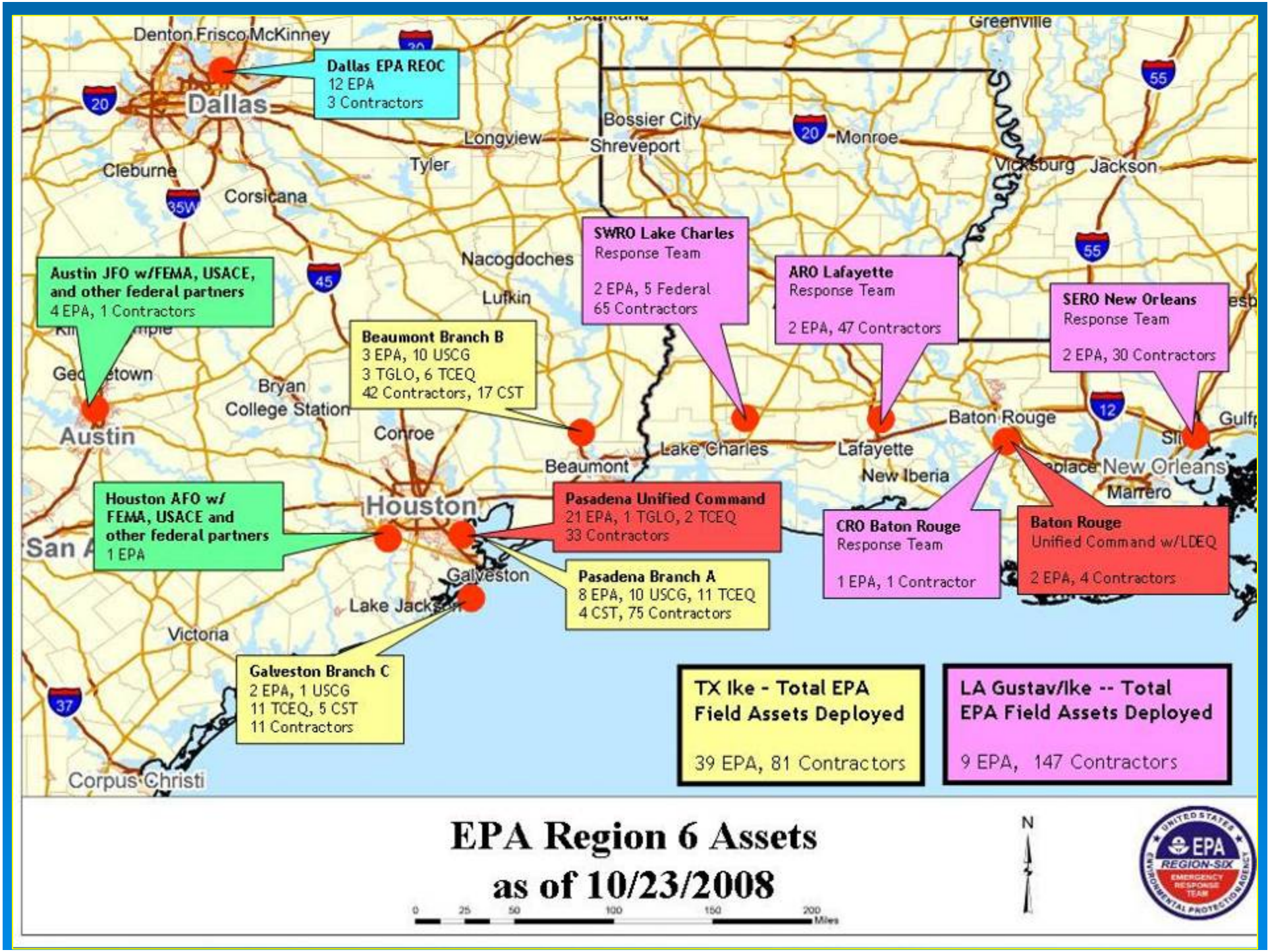
Timeline: 2008

- Pre-LF: Activated REOC and R6 IMT; mob aerial recon team/Logistics Strike Team
- Sep 1: Hurricane Gustav made landfall in Cocodrie, LA
- Sep 13: Hurricane Ike made landfall in Galveston, TX
- Nov 21: EPA demobilized from Baton Rouge
- Dec 12: Completed ESF 10 fieldwork

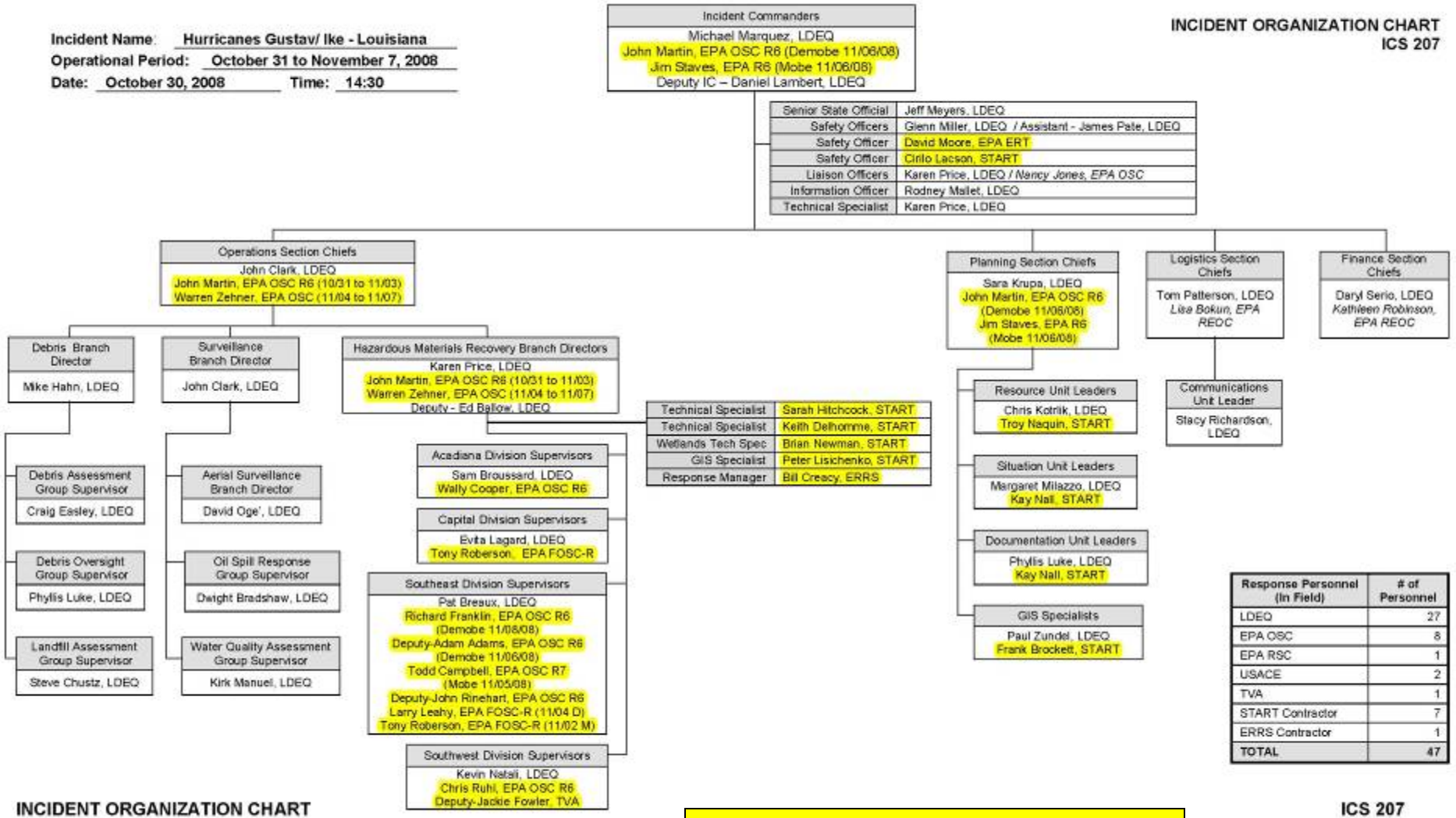

Hurricane Gustav and Ike
FEMA Louisiana Disaster Declaration
Legend
Public Assistance (Gustav Only)
Public Assistance and Individual Assistance (Gustav Only)
Public Assistance and Individual Assistance (Ike and Gustav)
LDEC Regions
NORTHWEST
NORTHEAST
SOUTHWEST
CAPITAL
ACADIANA
SOUTHEAST
Claiborne
Union
Morehouse
West Carroll
East Carroll
Bossier
Webster
Caddo
Lincoln
Ouachita
Richland
Madison
Bienville
Jackson
De Soto
Red River
Caldwell
Franklin
Tensas
Winn
Natchitoches
La Salle
Catahoula
Grant
Concordia
Sabine
Vernon
Rapides
Avoyelles
West Feliciana
East Feliciana
St. Helena
Washington
Evangeline
Pointe Coupee
Tangipahoa
Beauregard
Allen
St. Landry
East Baton Rouge
West Baton Rouge
Livingston
St. Tammany
Calcasieu
Jefferson Davis
Acadia
Lafayette
St. Martin
Iberville
Ascension
St. John the Baptist
Orleans
St. James
St. Charles
Cameron
Iberia
Assumption
St. Mary
St. Bernard
Jefferson
Lafourche
Terrebonne
Plaquemines
N
W
E
S
25 12.5 0 25 50
Miles

Operational Tasks

- Recognizance
  - Aerial RMP/FRP: ASPECT and Helo
  - Ground: ATVs and Trucks
  - Water: air boats
- Collection
  - E-Goods & White Goods
  - HHW
  - Orphan Containers
  - Ammo (NO WEAPONS)
- T & D
- Wastewater Facilities
- Drinking Water Facilities

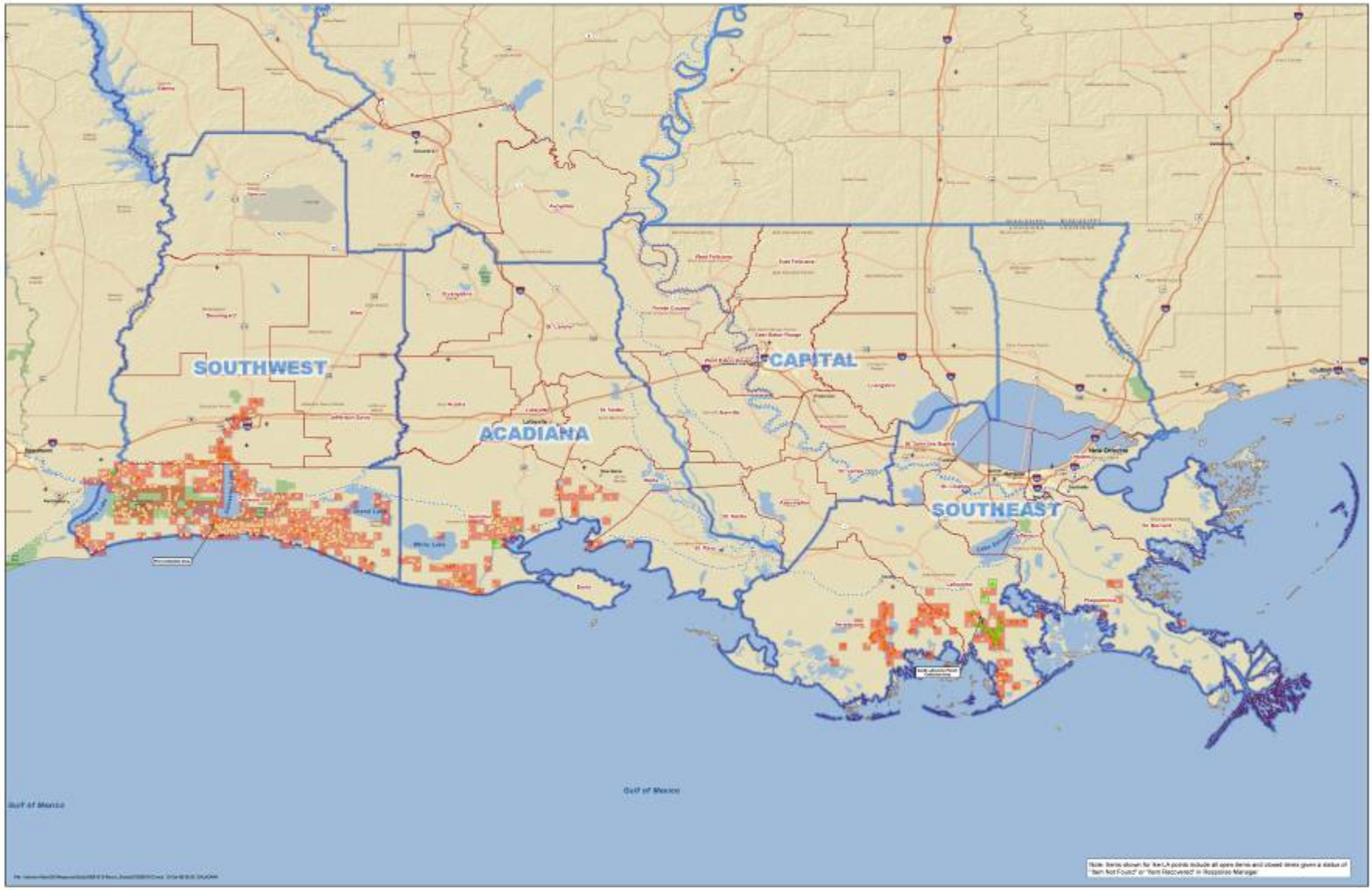


EPA Region 6 Assets as of 10/23/2008



WW with LDEQ

DW with LDHH



OPEN RECON ITEMS
- Debris Line
- Single Point

CLOSED RECON ITEMS
- Debris Line
- Single Point

LEGEND
- Open Grid
- Closed Grid
- LDEO Regions
- FEMA Declared Disaster Parishes
- EPA-Coast Guard Jurisdiction Boundary

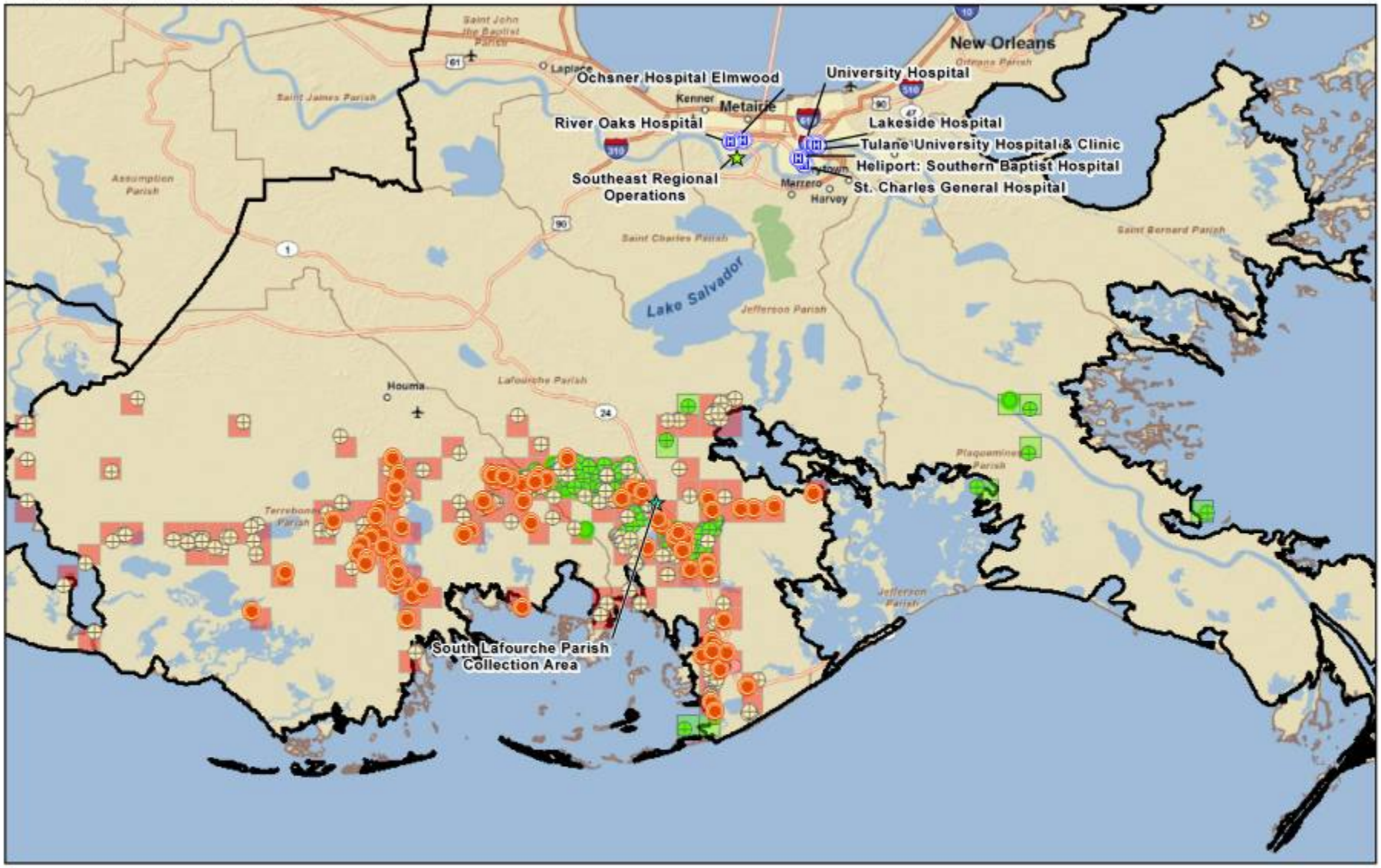
Overview Map

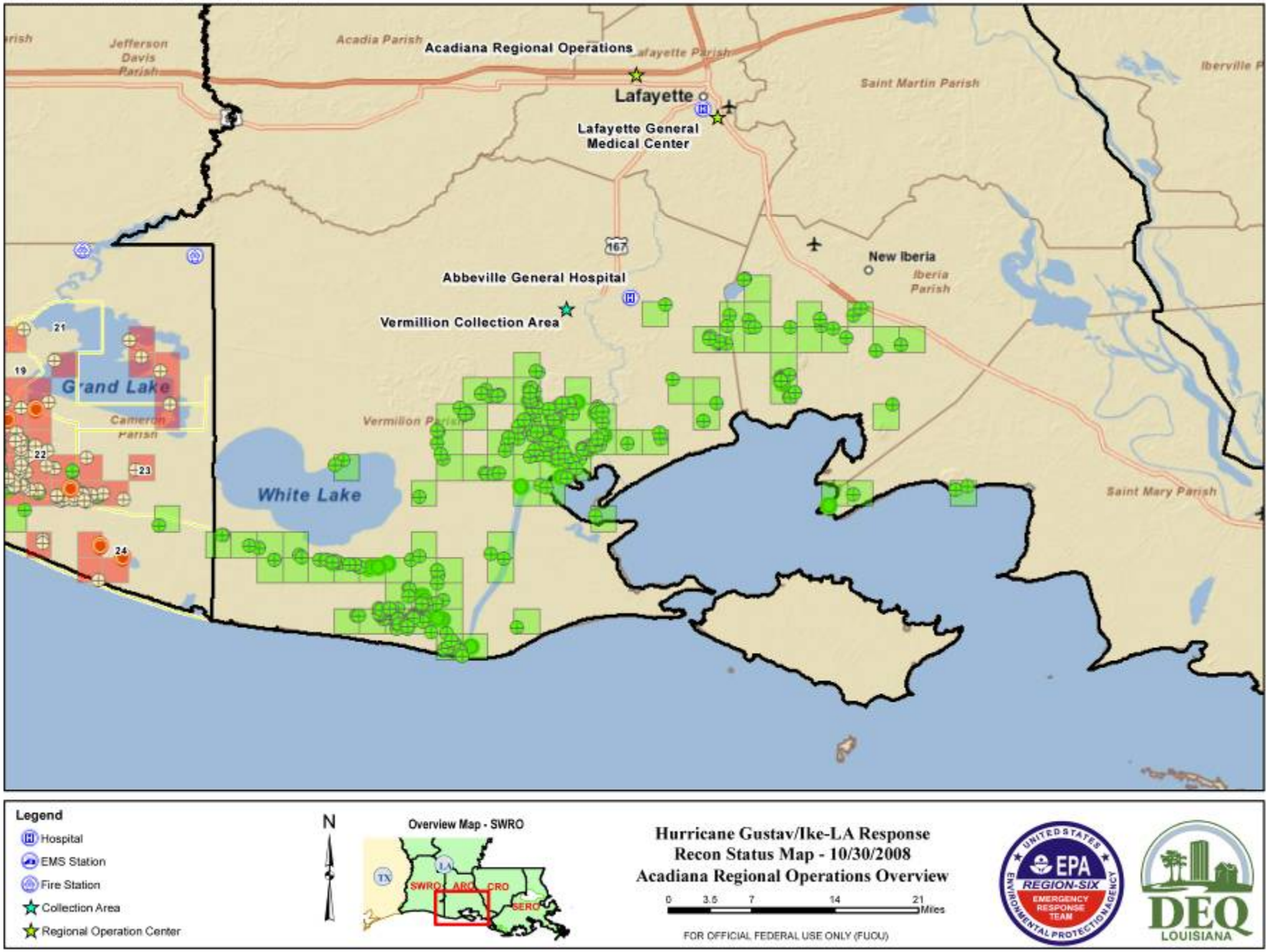
Hurricane Gustav/Ike-LA Response
Recon Status Map - 10/13/2008

N

0 15 30 60
Miles

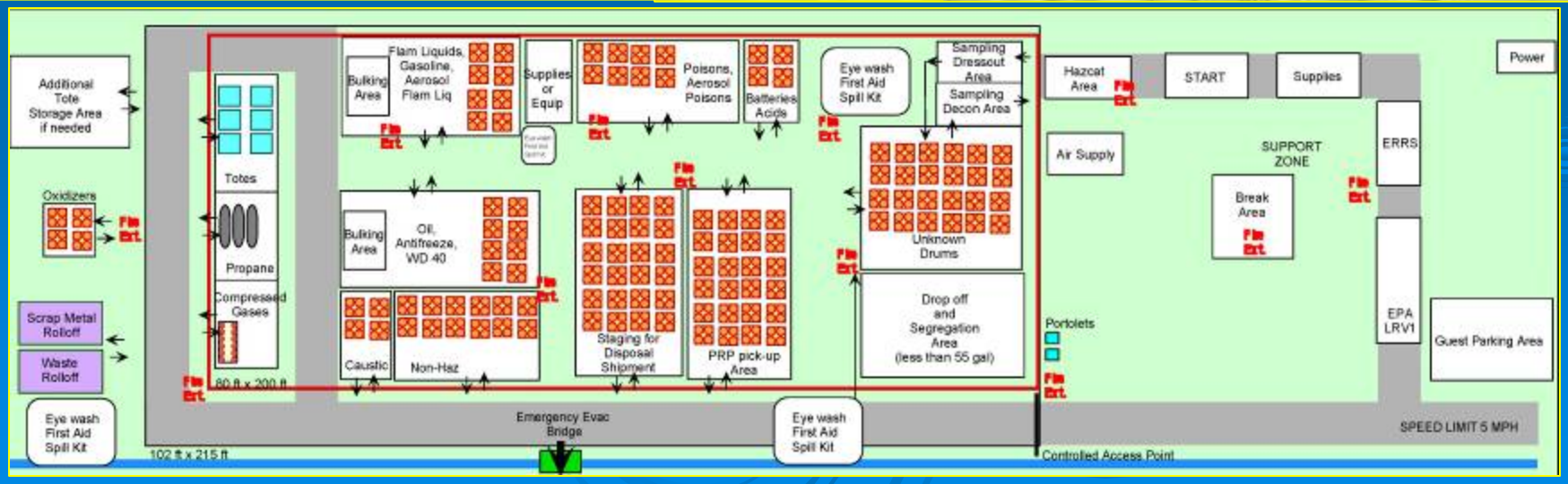
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA
REGION-SIX
EMERGENCY RESPONSE TEAM


New Orleans
Ochsner Hospital Elmwood
University Hospital
Metairie
Kenner
River Oaks Hospital
Lakeside Hospital
Tulane University Hospital & Clinic
Heliport: Southern Baptist Hospital
St. Charles General Hospital
Southeast Regional Operations
Lake Salvador
Houma
South Lafourche Parish Collection Area
Saint John the Baptist Parish
Saint James Parish
Assumption Parish
Saint Charles Parish
Jefferson Parish
Lafourche Parish
Terrebonne Parish
Plaquemines Parish
Saint Bernard Parish
Orleans Parish
Legend
Hospital
EMS Station
Fire Station
Collection Area
Regional Operation Center
N
Overview Map - SWRO
TX
LA
SWRO
ARO
CRO
GERO
Hurricane Gustav/Ike-LA Response
Recon Status Map - 10/30/2008
Southeast Regional Operations Overview
0 5 10 20 30 Miles
FOR OFFICIAL FEDERAL USE ONLY (FUOU)
EPA
REGION-SIX
EMERGENCY RESPONSE TEAM
DEQ
LOUISIANA


Jefferson Davis Parish
Acadia Parish
Acadiana Regional Operations
Lafayette
Lafayette General Medical Center
Saint Martin Parish
Iberville P
167
New Iberia
Iberia Parish
Abbeville General Hospital
Vermillion Collection Area
21
19
Grand Lake
Cameron Parish
Vermilion Parish
22
23
White Lake
24
Saint Mary Parish
Legend
Hospital
EMS Station
Fire Station
Collection Area
Regional Operation Center
N
Overview Map - SWRO
TX
LA
SWRO
ARO
CRO
SERO
Hurricane Gustav/Ike-LA Response
Recon Status Map - 10/30/2008
Acadiana Regional Operations Overview
0 3.5 7 14 21 Miles
FOR OFFICIAL FEDERAL USE ONLY (FUOU)
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA
REGION-SIX
EMERGENCY RESPONSE TEAM
DEQ
LOUISIANA

Zoom 1
Zoom 2
Legend
RMP Facility
FRP Facility
CIKR Locations
RNA Counties
6k Reference Grid
N
USEPA REGION 6
Hurricane Ike Response
Cameron
Overall Map
DATE
Sept 12, 2008
PROJECT NO
SCALE
AS SHOWN

GALLIANO Collection Pad



Lafitte Neighborhood

Delta Farms (ARO)

Vermillion Parrish

Jet A Fuel Tanks

Vermillion
Collection Pad

SW Region

West Ferry Collection Pad

EBR HHW Collection Day Event

A total of 558 vehicles

HHW	312	Oil Products	248
Paint	116	Batteries/Lights	207
		Electronics	94

Gus / Ike Louisiana

Hazardous Waste Containers Collected

as of 11/20/08

E-Goods	0
White Goods	0
<55 gal	13,392
Cylinders	177
Drums 55-110	2,626
Propane Tanks L	155

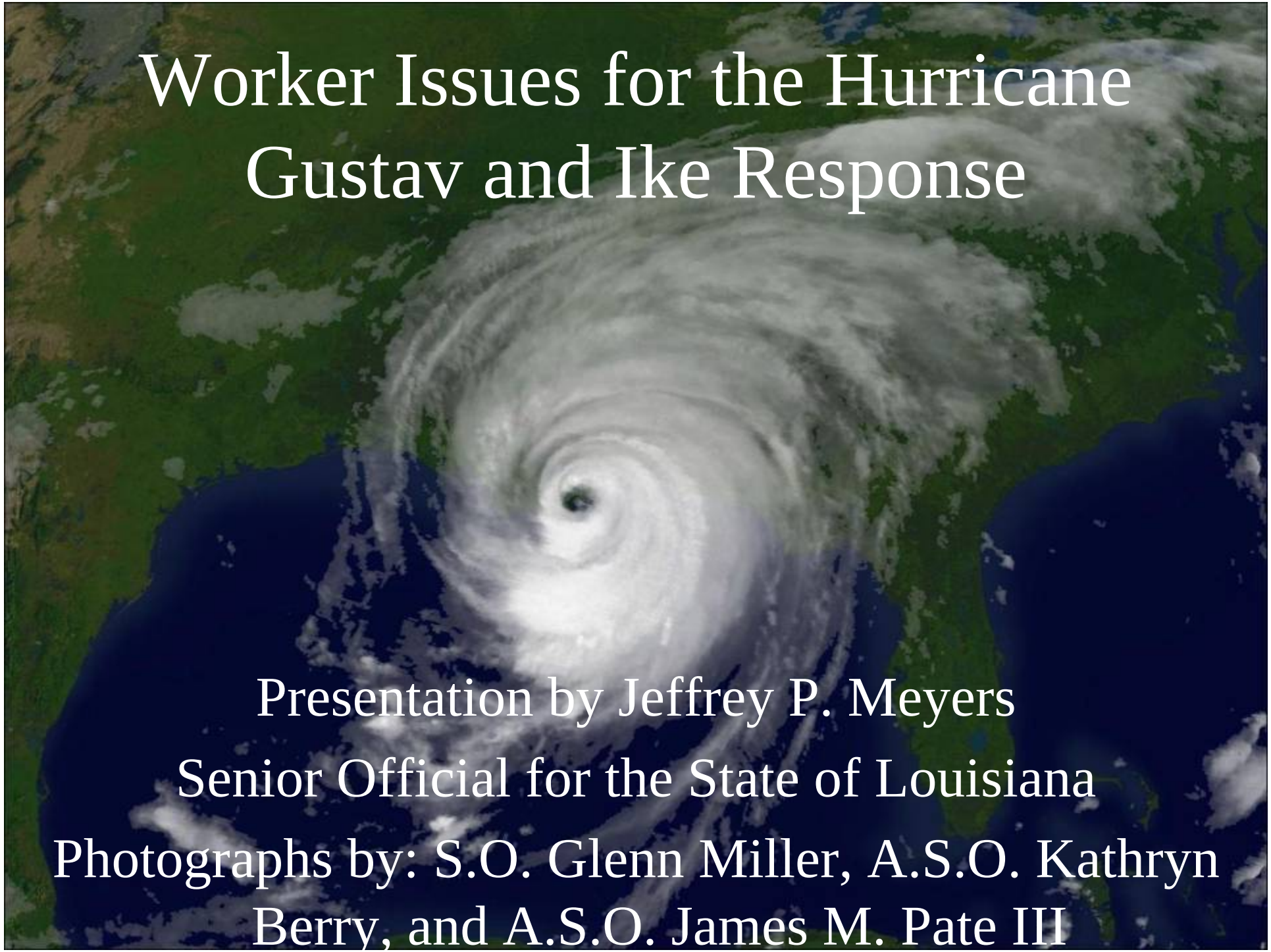
Propane Tanks 5 g	442
Tanks <250 g	149
Tanks >250 g	110
Totes all types	267
Other	340
TOTAL	17,758

WHAT WENT WELL:

- Team Work
- ICS was flexible
- REOC “reach-back”

IMPROVEMENTS:

- Internal LL
- MA / funding
- Access Issues



Worker Issues for the Hurricane Gustav and Ike Response

Presentation by Jeffrey P. Meyers

Senior Official for the State of Louisiana

Photographs by: S.O. Glenn Miller, A.S.O. Kathryn Berry, and A.S.O. James M. Pate III

CleanHarb

AIR HORN
INSTRUCTIONS
FIRE EXTINGUISHER
INSTRUCTIONS

51842-20
iBC
DIESEL FUEL
1993
3
52047-11
iBC
350gals
1203
3
49312-11
iBC
1203
3

W I

6-235

Filled
4/13/08 EH

EYEWASH

Directions for Use:

All personnel should be trained in the proper use of emergency eye wash equipment.

CERTIFIED MODEL Z358.1-1990

Encon®

Encon Safety Products
Houston, Texas
Model No. 01-1040-50
Made in USA

1. Pull down eye wash basin to activate water flow.

2. Hold eyelids open, roll eyeballs in water flow.

3. *Seek medical attention immediately.*

WARNING:

1. Eyewash units should be inspected weekly as required by ANSI Standard Z-358.1-1990.
2. Inspection should include:
   - Verifying proper water flow
   - Examination of hose connecting reservoir to basin (if surface cracking or other signs of wear are observed, hose should be replaced immediately or unit should be taken out of service)
   - Check water level
   - Reservoir should be free of fungi, algae or other foreign materials

Directions for Maintenance:

Eyewash should be drained, flushed and refilled with potable water once every 90 days or as needed.

TO MAINT.
5-MIN. FLOW

TANK

SUNBELT
Waste
Oil

CleanHarbors

UFL
UFL

CORROSIVE
EYE
WASH
STATION

771602
RSC
Equipment Rental
Bobcat
RSC

Decanted
Water
Area

Decanted
Water
Area

HAZARDOUS
WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.
GENERATOR INFORMATION:
NAME EPA Region VI Hurricane Ike SWRO
ADDRESS 104 Beach Hwy
CITY Cameron
STATE LA ZIP 70631
PHONE 636-485-0537
MANIFEST TRACKING NO.
EPA ID NO. LAR000059030
ACCUMULATION START DATE Nov 14 08
EPA WASTE NO. D001 D007 D008, D035
UNIVERSAL WASTE PAINT, 3, PG II
HANDLE WITH CARE!
FLAMMABLE LIQUID
3

HAZARDOUS
WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
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AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.
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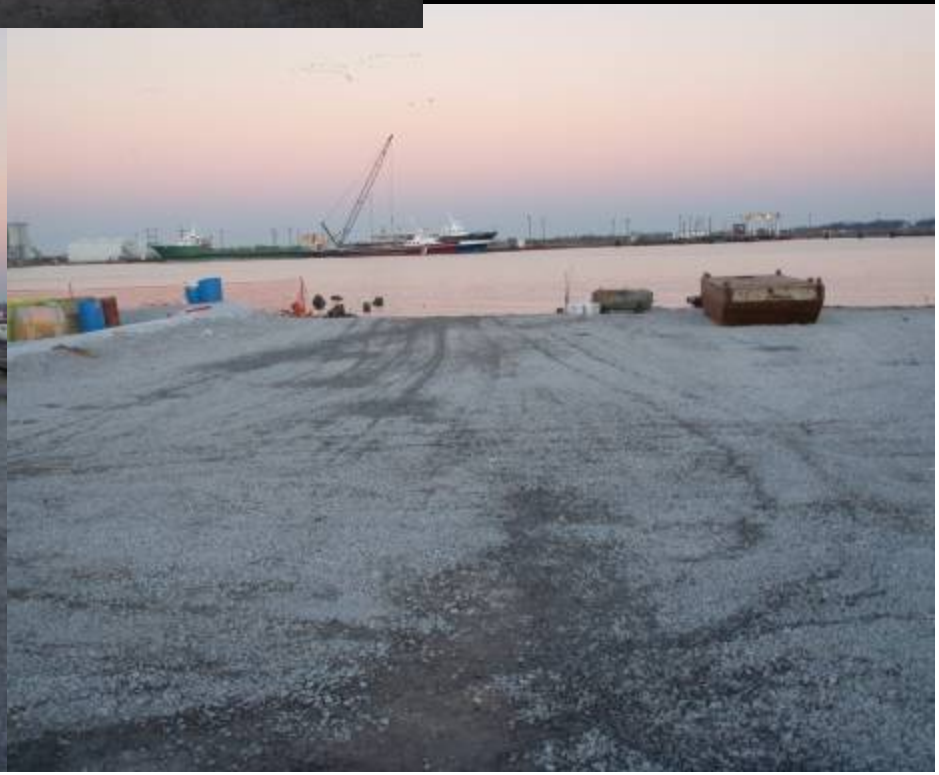


IBC
IBC
IBC

Tote 12

DANGER
NO SMOKING

DEWALT
DEWALT 12v

100

Questions?

Colbert Mercury

OSC Eric Delgado

Colbert Mercury

- On March 20, 2008, ODEQ notified the NRC which notified the EPA Region 6 Prevention and Response Branch of a release of mercury due to intentional vaporization at a private single-family residence in Colbert, Bryan County Oklahoma.

- The two occupants of the residence who were intentionally vaporizing elemental mercury were hospitalized in Durant, Oklahoma from mercury vapor exposure related to the release.

Background

- Two individuals in Colbert were utilizing elemental mercury to extract gold from circuit boards and gold plated jewelry
- The individuals of the residence transported themselves to the local hospital in Durant, Oklahoma
- The male occupant was transported to the ICU in Tulsa where he later died of respitory failure.

External Agency Coordination

- Poison Control Center
- Bryan County Sheriff's Department
- Oklahoma Drug Task Force
- Bryan County Health Department
- Oklahoma State Health Department

Extracting Process

- On contact with mercury, gold “dissolves” and forms an amalgam.
- The “leftover” unreacted mercury is separated off through a cheese cloth
- The amalgam was placed over a double boiler to vaporize the mercury to isolate the extracted gold

Double boiler

Actions Taken

- Interviewed the one of the occupants at the hospital
- Personal items at the hospital were analyzed and found to be 10X the level for reuse.
- Screened hospital for cross contamination

Actions Taken

- Arrived at residence and performed air monitoring around the perimeter and inside the home
- The team backed out when readings exceeded 100 µg/m^3
- The team opened up all windows to bring the vapors levels down (10-25 µg/m^3)

Actions Taken

- The team located a cast iron skillet containing mercury
- The team removed all furniture, appliances, clothing, personal items, carpet, and flooring to stage them outside for screening
- The items were bagged and screened (25-100 µg/m^3) and prepped for disposal

Actions Taken

- Disposed 70 yd^3 of mercury contaminated material
- Applied chelating agent to walls and surfaces
- Conducted air sampling of indoor air
- Analytical data showed that ambient air was 6 to 25 times higher than the ATSDR recommended level for habitation

Actions Taken

- The mercury vapors had permeated the structure and the threat of environmental contamination was abated
- Remedial actions to make the home habitable would be intensive and potentially destroy the building
- EPA provided results to the County and Health Officials

Actions Taken

- Revisited the site to present the data to the living homeowner
- The family decided to demolish the home
- The total cost of demolition was approximately $4000
- EPA and TCEQ organized a mercury collection effort that collected 500 lbs of mercury

Lessons Learned

- Need to get the local and state health agencies involved
- EPA gets involved in residential mercury spills to prevent contamination to the environment
- What do we do when the building itself is the source of contamination to the ambient air inside the home and is no longer a threat to the environment

Referral - Health Dept Listing Letter

HANCOCK COUNTY DEPARTMENT OF HEALTH
ROOM 105 COURT HOUSE
9 East Main Street
GREENFIELD, INDIANA 46140

RAY A. HAAS, M.D.
HEALTH OFFICER

TELEPHONE 462-1125
462-1127
462-1128

August 14, 2000

Steven L. Renninger
On-Scene Coordinator
USEPA Region 5
Superfund Division (B-2)
Emergency Response Section 1
26 W. Martin Luther King Drive
Cincinnati, OH 45268

Re: 69 South 400 East, Greenfield, IN 46140
222 East McKenzie, Greenfield, IN 46140

Mr. Renninger,

The Hancock County Department of Health has identified residents and homes that likely were involved with mercury contamination. The listing of addresses above will give you specific addresses identified in our initial investigation. We refer these potentially exposed areas to you. Please contact us if you require any additional information.

Respectfully,

Kyle Schrink
Environmental Health Specialist
Hancock County Department of Health

cc: Ray A. Haas MD, Health Officer

Recon - Air Results & Health Dept Actions

Example action levels utilized in Ohio & Indiana (provided by ATSDR)

Table 1

SUMMARY OF ACTION LEVELS

Action Level	Mercury Vapor Levels	Immediate Action	Decontamination Procedure
Level 1	Greater than 10 $\mu g/m^3$	Relocate residents immediately.	Remove all potential sources of contamination including carpets, furniture, linoleum, floor tile, clothes, food, etc. Scrub all non-porous surfaces with a solution of HgX (MercX)™ powder and water. HgX(MercX)™ bonds to and breaks down mercury into a harmless compound. Heat the residence overnight, ventilate, and conduct air sampling.
Level 2	Between 0.31 and 10 $\mu g/m^3$	Schedule relocation for the residents as soon as possible.	Search all areas for potentially contaminated items and dispose of any items with mercury contamination. Remove all carpeting. Scrub all non-porous surfaces with a solution of HgX(MercX)™ powder and water. HgX(MercX)™ bonds to and breaks down mercury into a harmless compound. Heat the residence overnight, ventilate, and conduct air sampling.
Level 3	Less than 0.3 $\mu g/m^3$	No action necessary.	None.

Key: $\mu g/m^3$ = Micrograms per cubic meter.

Source: Ohio Department of Health and the Agency for Toxic Substances and Disease Registry established the mercury vapor action levels and U.S. EPA established the decontamination procedures.

Options for locals to respond

- Monitoring instruments can be procured with Homeland Security money
- Federal funds are available to local governments for costs related to temporary emergency measures conducted in response to releases or threatened releases of hazardous substances. These funds are available through the Local Government Reimbursement (LGR) Program

Options for locals to respond

- The LGR provides supplemental funding to local governments that need assistance in paying for emergency response actions. Eligible local governments can submit applications to U.S. EPA for reimbursement of up to $25,000 per incident.
- If you have questions about the LGR Program and how it works, call the LGR HelpLine at (800) 431-9209 or e-mail questions to lgrinfo@epa.gov.

http://www.epa.gov/superfund/programs/er/lgr/lgrfaqs.htm

QuickTime™ and a
decompressor
are needed to see this picture.

Hurricane IKE

US Coast Guard Response

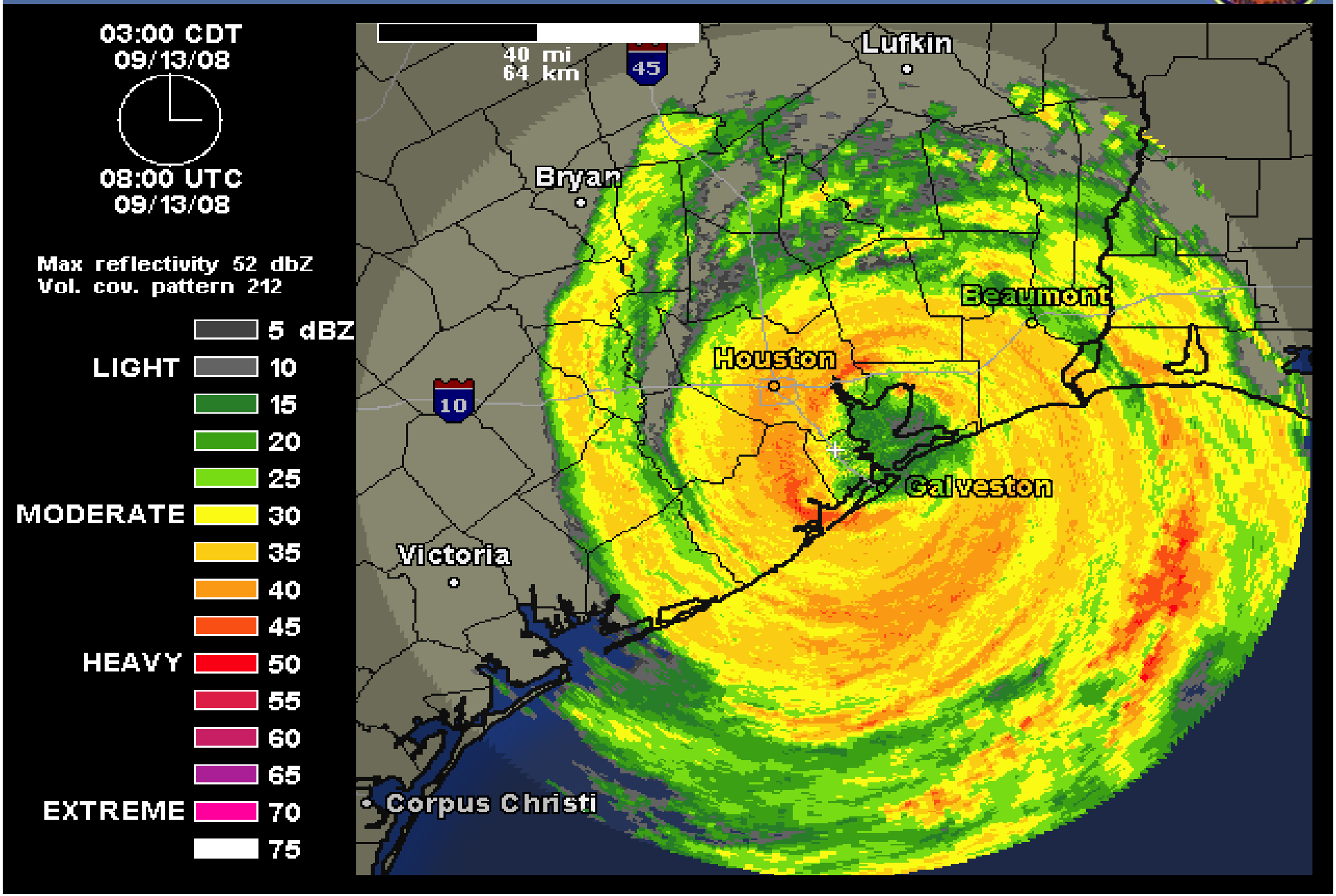
Captain Marcus Woodring
Sector Houston-Galveston

ALL THREATS ALL HAZARDS
ALWAYS READY

Overview

- **USCG had a maritime focus**
- **3rd costliest hurricane in U.S. history**
- **2,400 USCG responders**
- **Joint effort in every sense (local, state, federal agencies, and industry partners)**

Hurricane IKE



The Four Phases

- **“Hunker Down”**
- **Emergency Response / Search and Rescue**
- **“Assess the Mess”**
- **Prioritize and “Go to Work”**

Resources Requested

- IMAT
- NSF/GST
- Comms Support
- Cost Documentation
- CISM
- Chaplains
- Mobile Food Kitchens
- Buoy Tenders
- PST
- SSC
- NAVSUPSALV
- DARTs
- MSST
- Airsta
- Liaisons
- EMICP
- Documentation
- Safety Officers
- Medical
- DAT
- Lawyers
- Claims
- Fuel Trucks
- PIAT
- TMAAC
- Generators

Assess the Mess

Assess the Mess

Assess the Mess

Assess the Mess

Assess the Mess

Assess the Mess

Assess the Mess

Assess the Mess

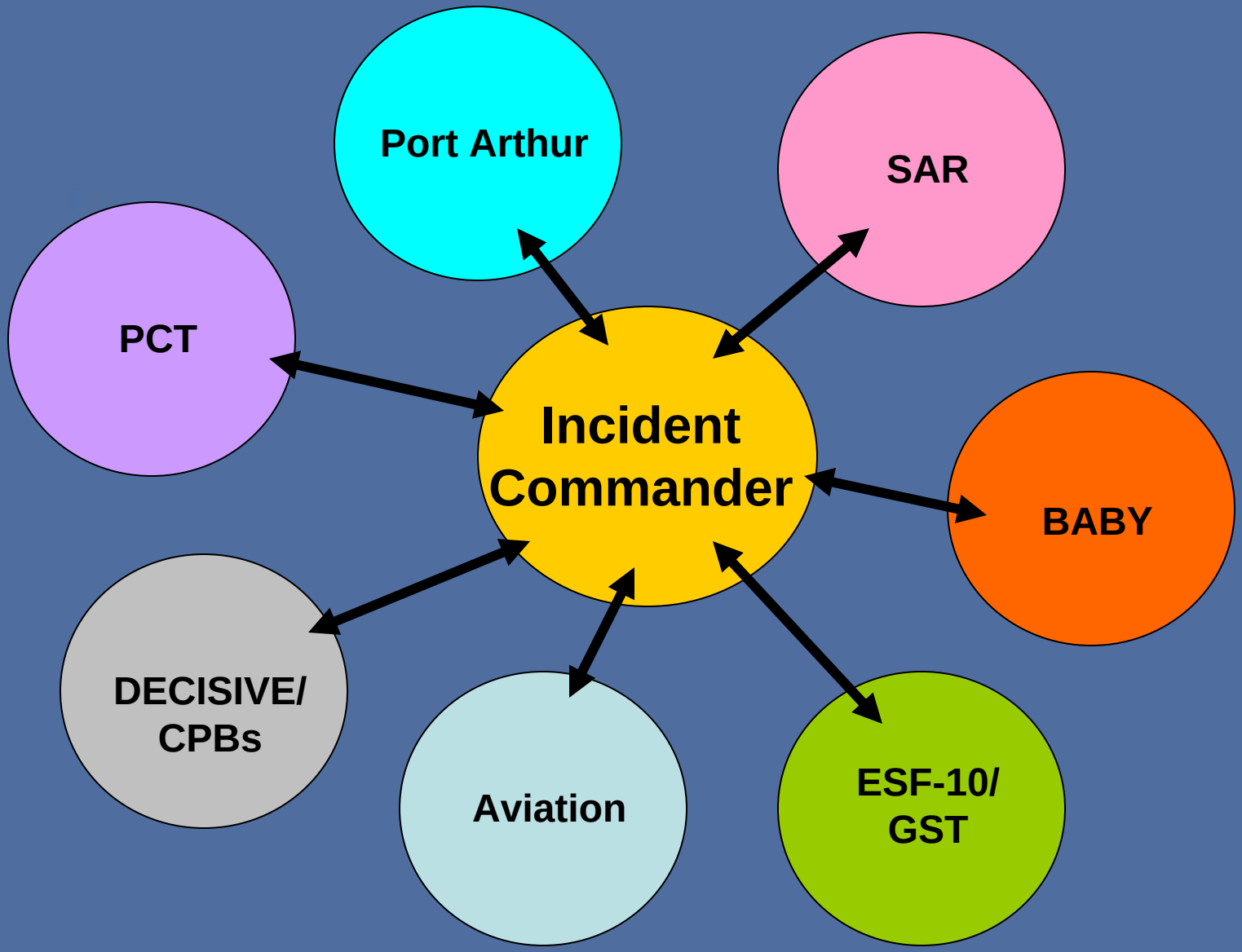
Assess the Mess

Assess the Mess

Assess the Mess

Assess the Mess

Prioritize and Go to Work



How did we do??

- **Health and Safety:**
  - **235 lives saved (103 pre-storm/132 post-storm)**
- **The Environment:**
  - **242 maritime pollution incidents Sectorwide**
  - **All addressed with initial response by 01Oct**
  - **Embedded with EPA in ESF-10 for long term**
- **Economic Impact:**
  - **Sectorwide waterways produce approx 412M a day**
  - **Hurricane IKE cost maritime industry > $2B**
  - **HSC reopened to 12ft draft within 48hrs and to deep draft vessels within 96hrs**

How did we do??

- **Economic Impact (cont):**
  - **1,237 total aids/782 damaged (58%) Sectorwide**
  - **464 total aids/396 damaged (85%) in HSC**
  - **4 organic ATON units and 11 additional ATON units utilized in effort, 96% corrected by 01Oct**

- **Public Communications:**
  - **Over 2,800 news clips about USCG and IKE**
  - **$47 million dollars in positive coverage**

- **Stakeholder Involvement:**
  - **Port Coordination Team managed reopenings**
  - **Facilities readiness addressed via PCT**
  - **Active participation with GICA and ACOE**

Marine Safety Unit Morgan City

FOSC – Captain Scott Paradis
Chief Response – LCDR Karen Quiachon

RRT Meeting

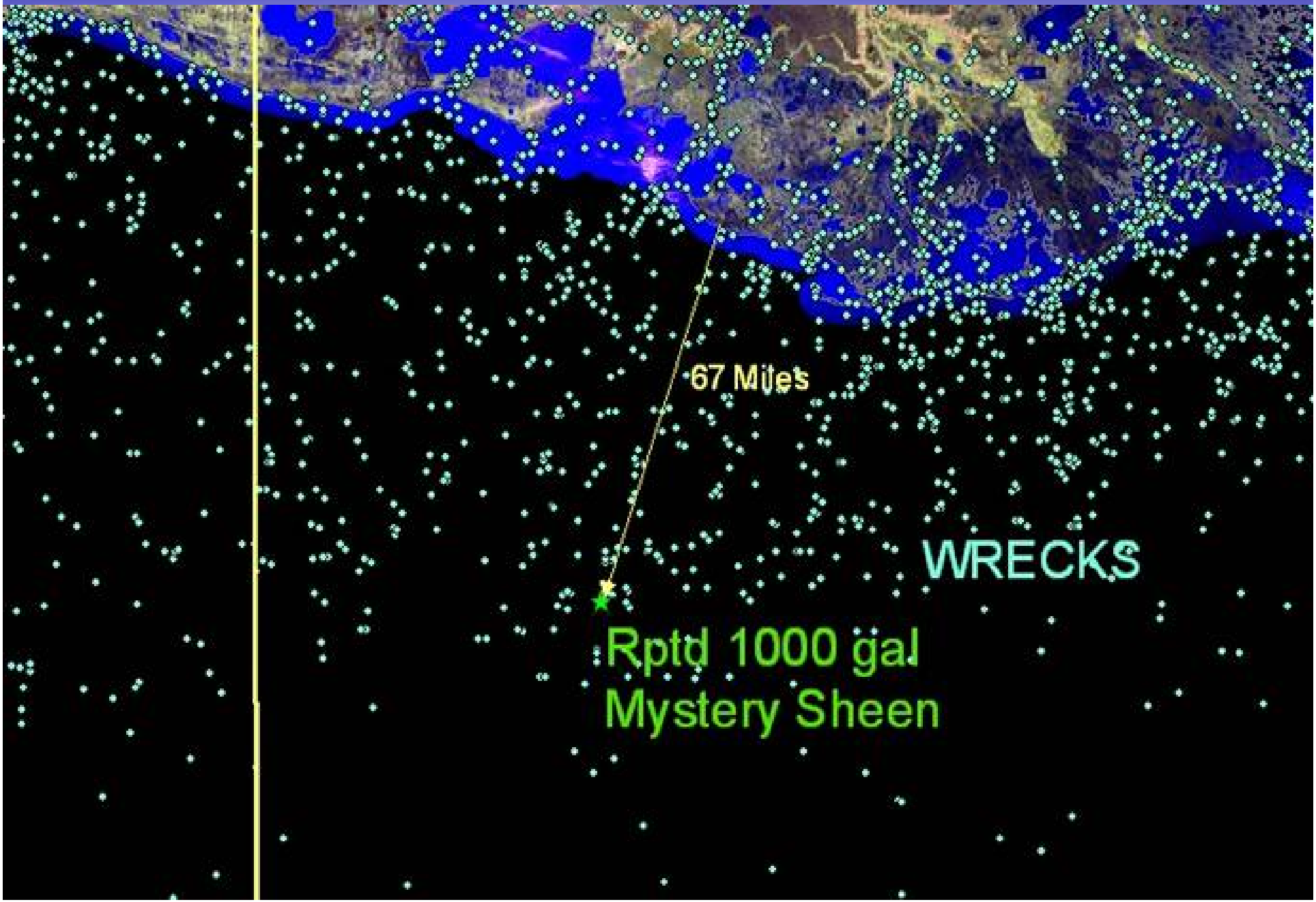
28 January

Corpus Christi, TX

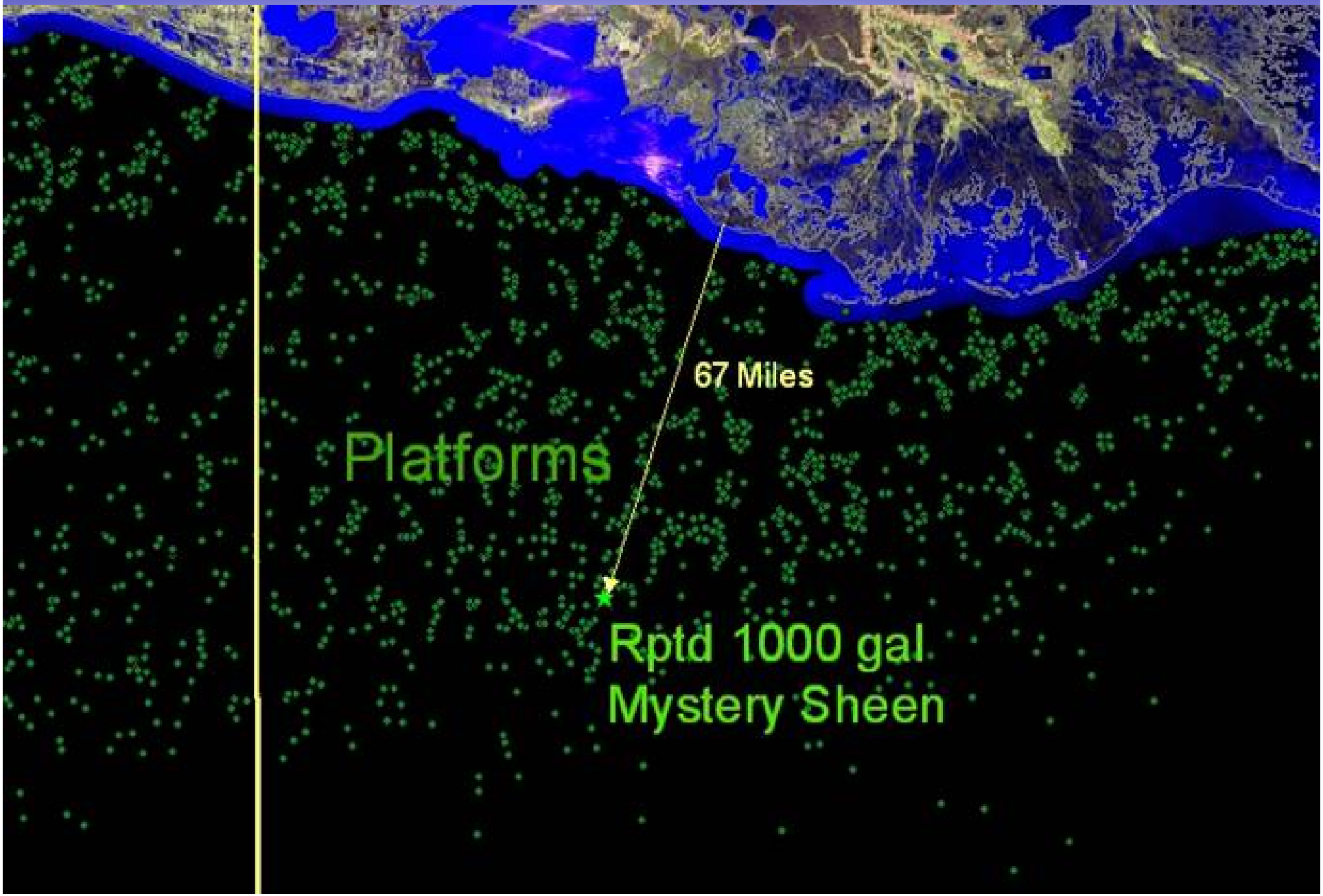
NRC Reports

- **Average 1500 NRCs annually**
- **2008: Exceeded 2000 NRC reports**
  - **Approximately 500 hurricane related**
- **73 damaged offshore platforms**
- **2008: 428 offshore mystery sheens reported**

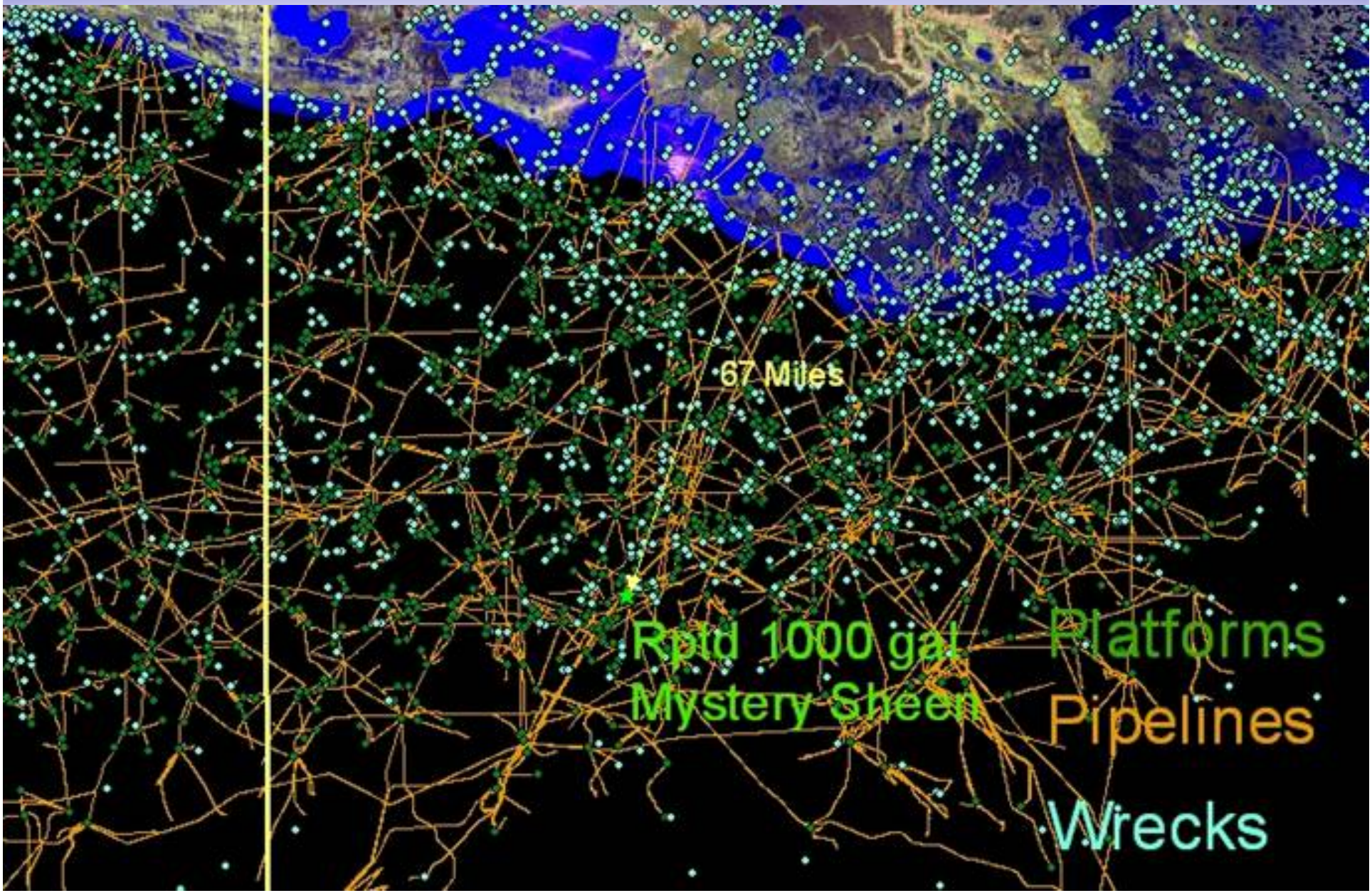
Wrecks



Platforms



Platforms, Pipelines, & Wrecks



Questions

LCDR Karen Quiachon

985-380-5318

Karen.w.quiachon@uscg.mil

MARINE SAFETY UNIT

MORGAN CITY, LA

SEVEN THOUGHTS ABOUT THE SPILL RESPONSE

ICS

LIAISONS

PUBLIC AFFAIRS

VESSEL CLEANING

DREDGING OIL

SALVAGE

HOSS

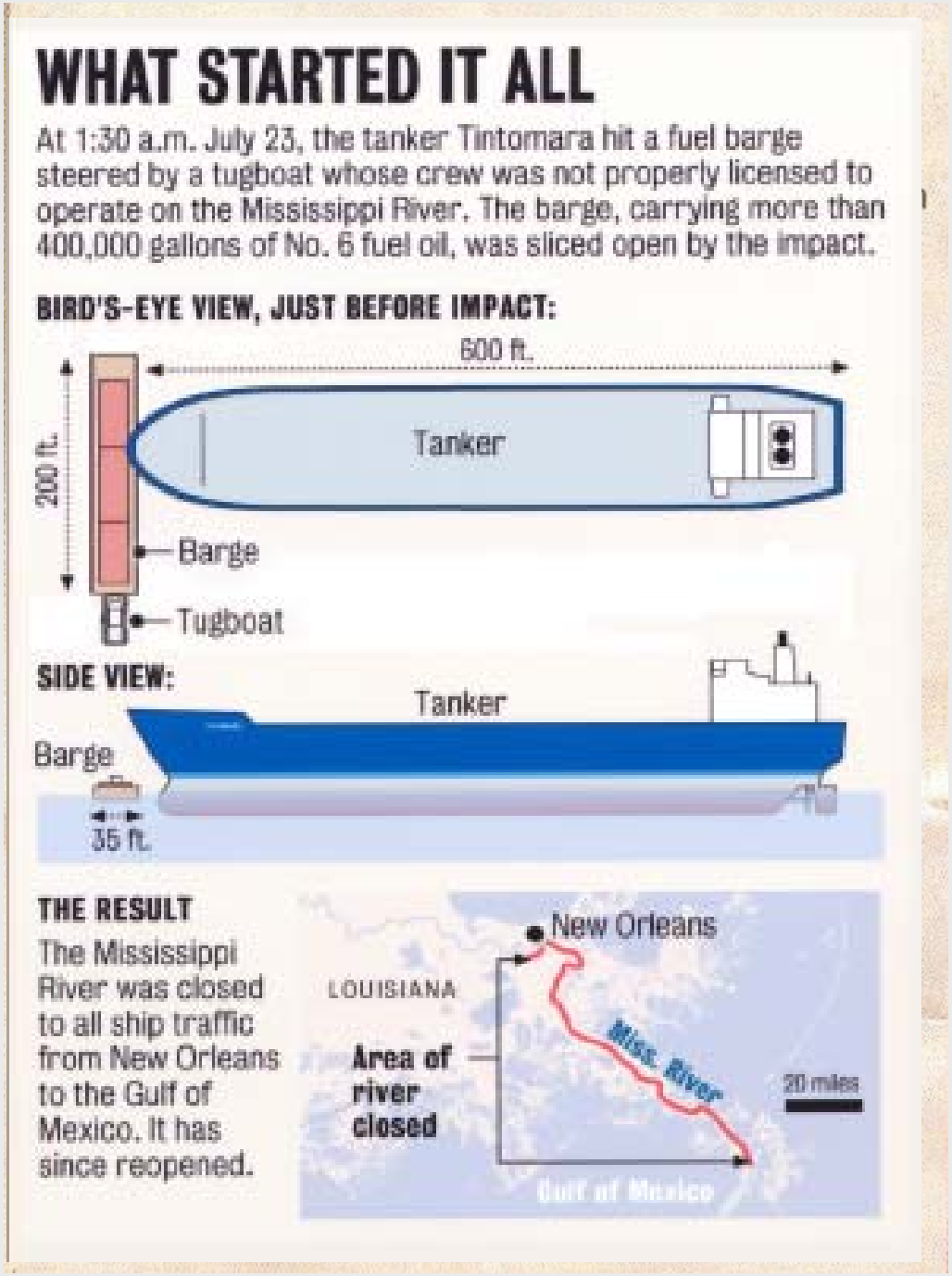
TINTOMARA

MEL OLIVER & DM932

COLLISION

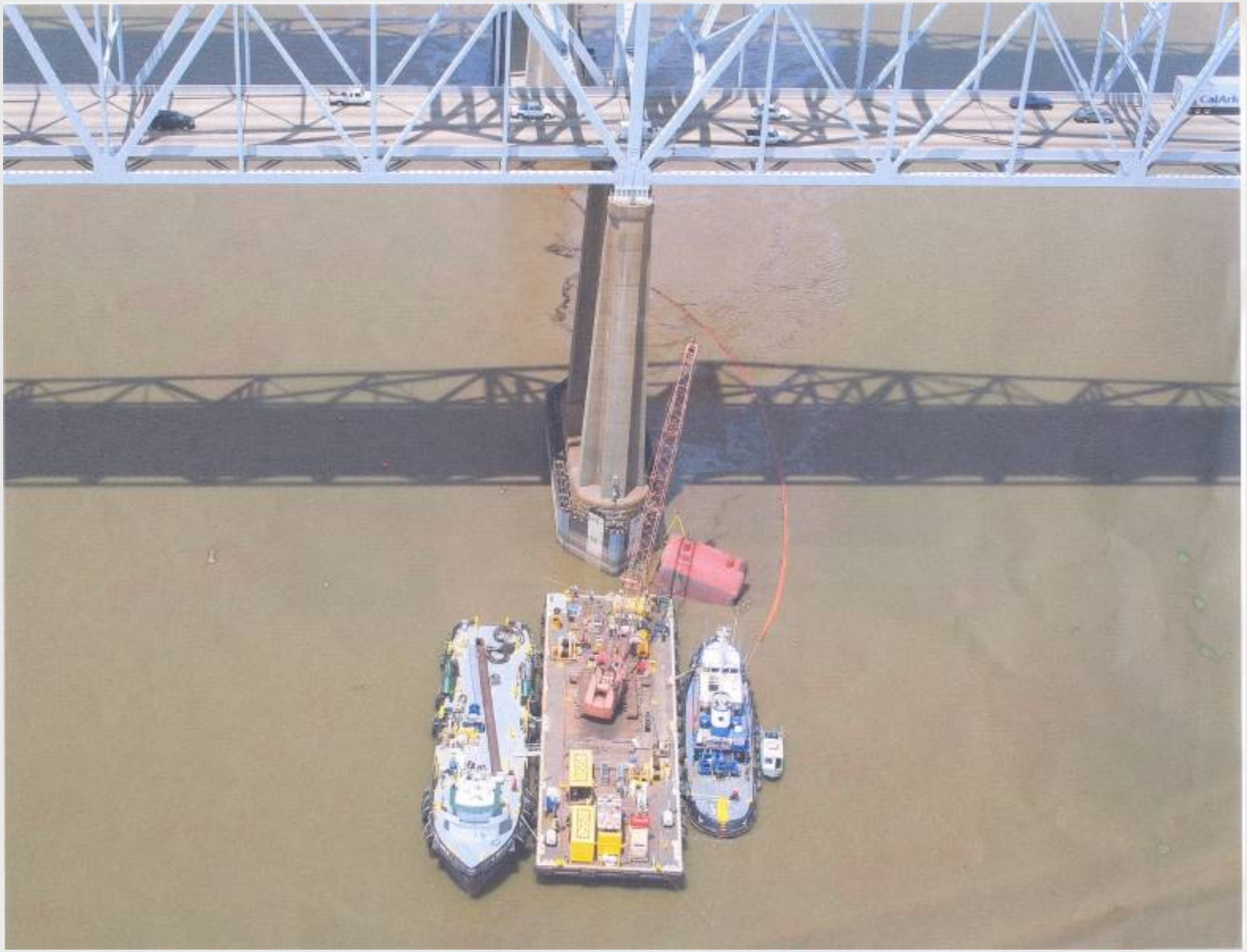
- JULY 23, 2008
- TANKSHIP DOWNBOUND
- 10 KNOTS
- RIGHT-OF-WAY
- VDR AUDIO

Homeland Security

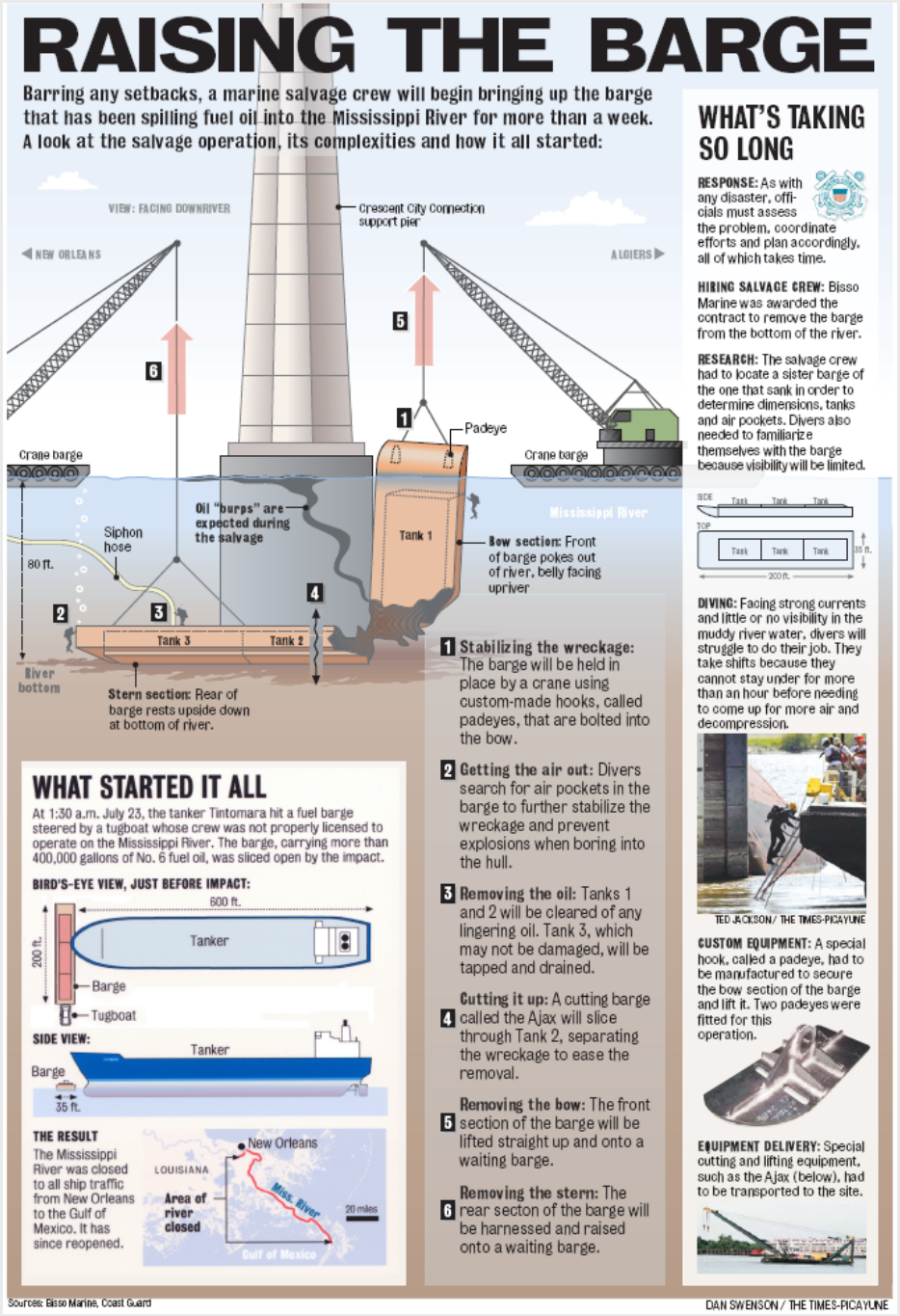


ADRIFT 8:00 a.m.

BRIDGE PIER



PRESS


RAISING THE BARGE
Barring any setbacks, a marine salvage crew will begin bringing up the barge that has been spilling fuel oil into the Mississippi River for more than a week. A look at the salvage operation, its complexities and how it all started:
VIEW: FACING DOWNRIVER
Crescent City Connection support pier
NEW ORLEANS
ALGIERS
Crane barge
Crane barge
Padeye
Oil "burps" are expected during the salvage
Siphon hose
80 ft.
Tank 1
Tank 2
Tank 3
Mississippi River
River bottom
Bow section: Front of barge pokes out of river, belly facing upriver
Stern section: Rear of barge rests upside down at bottom of river.
1 Stabilizing the wreckage: The barge will be held in place by a crane using custom-made hooks, called padeyes, that are bolted into the bow.
2 Getting the air out: Divers search for air pockets in the barge to further stabilize the wreckage and prevent explosions when boring into the hull.
3 Removing the oil: Tanks 1 and 2 will be cleared of any lingering oil. Tank 3, which may not be damaged, will be tapped and drained.
4 Cutting it up: A cutting barge called the Ajax will slice through Tank 2, separating the wreckage to ease the removal.
5 Removing the bow: The front section of the barge will be lifted straight up and onto a waiting barge.
6 Removing the stern: The rear secton of the barge will be harnessed and raised onto a waiting barge.
WHAT'S TAKING SO LONG
RESPONSE: As with any disaster, officials must assess the problem, coordinate efforts and plan accordingly, all of which takes time.
HIRING SALVAGE CREW: Bisso Marine was awarded the contract to remove the barge from the bottom of the river.
RESEARCH: The salvage crew had to locate a sister barge of the one that sank in order to determine dimensions, tanks and air pockets. Divers also needed to familiarize themselves with the barge because visibility will be limited.
SIDE
TOP
Tank
35 ft.
200 ft.
DIVING: Facing strong currents and little or no visibility in the muddy river water, divers will struggle to do their job. They take shifts because they cannot stay under for more than an hour before needing to come up for more air and decompression.
TED JACKSON/ THE TIMES-PICAYUNE
CUSTOM EQUIPMENT: A special hook, called a padeye, had to be manufactured to secure the bow section of the barge and lift it. Two padeyes were fitted for this operation.
EQUIPMENT DELIVERY: Special cutting and lifting equipment, such as the Ajax (below), had to be transported to the site.
WHAT STARTED IT ALL
At 1:30 a.m. July 23, the tanker Tintomara hit a fuel barge steered by a tugboat whose crew was not properly licensed to operate on the Mississippi River. The barge, carrying more than 400,000 gallons of No. 6 fuel oil, was sliced open by the impact.
BIRD'S-EYE VIEW, JUST BEFORE IMPACT:
600 ft.
200 ft.
Tanker
Barge
Tugboat
SIDE VIEW:
Tanker
Barge
35 ft.
THE RESULT
The Mississippi River was closed to all ship traffic from New Orleans to the Gulf of Mexico. It has since reopened.
New Orleans
LOUISIANA
Area of river closed
Miss. River
20 miles
Gulf of Mexico
Sources: Bisso Marine, Coast Guard
DAN SWENSON / THE TIMES-PICAYUNE

PRESS

Oil clean-up a delicate job

Re: *"Barge belches more oil, closing river for 6 hours," Page 1, July 31.*

The interruption of traffic on the Mississippi River due to the collision between the Tintomara and an oil barge has been frustrating to many of us in the maritime community. Until given an opportunity by the salvage team to observe the infinite details and precision of their effort, little did I appreciate the magnitude of it all.

Their commitment to maintaining safety, security and the environment is commendable. The cleanup and removal is a delicate procedure with many moving parts, and I appreciate the efforts of the Coast Guard and the salvage team to work to accommodate the maritime interests to the best of their abilities.

Gary P. LaGrange
President and CEO
Port of New Orleans
New Orleans

SALVAGE

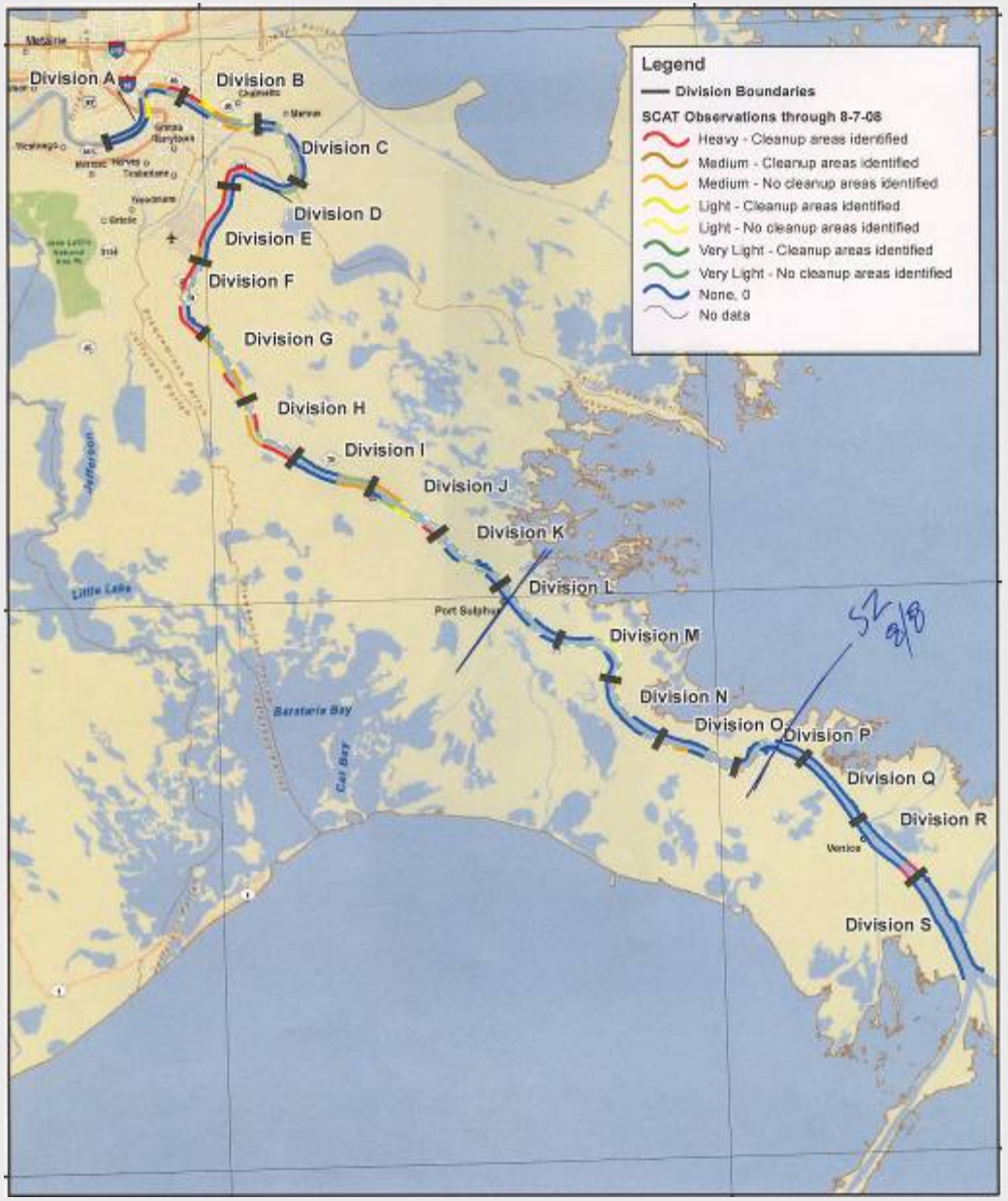
SALVAGE

HOSS

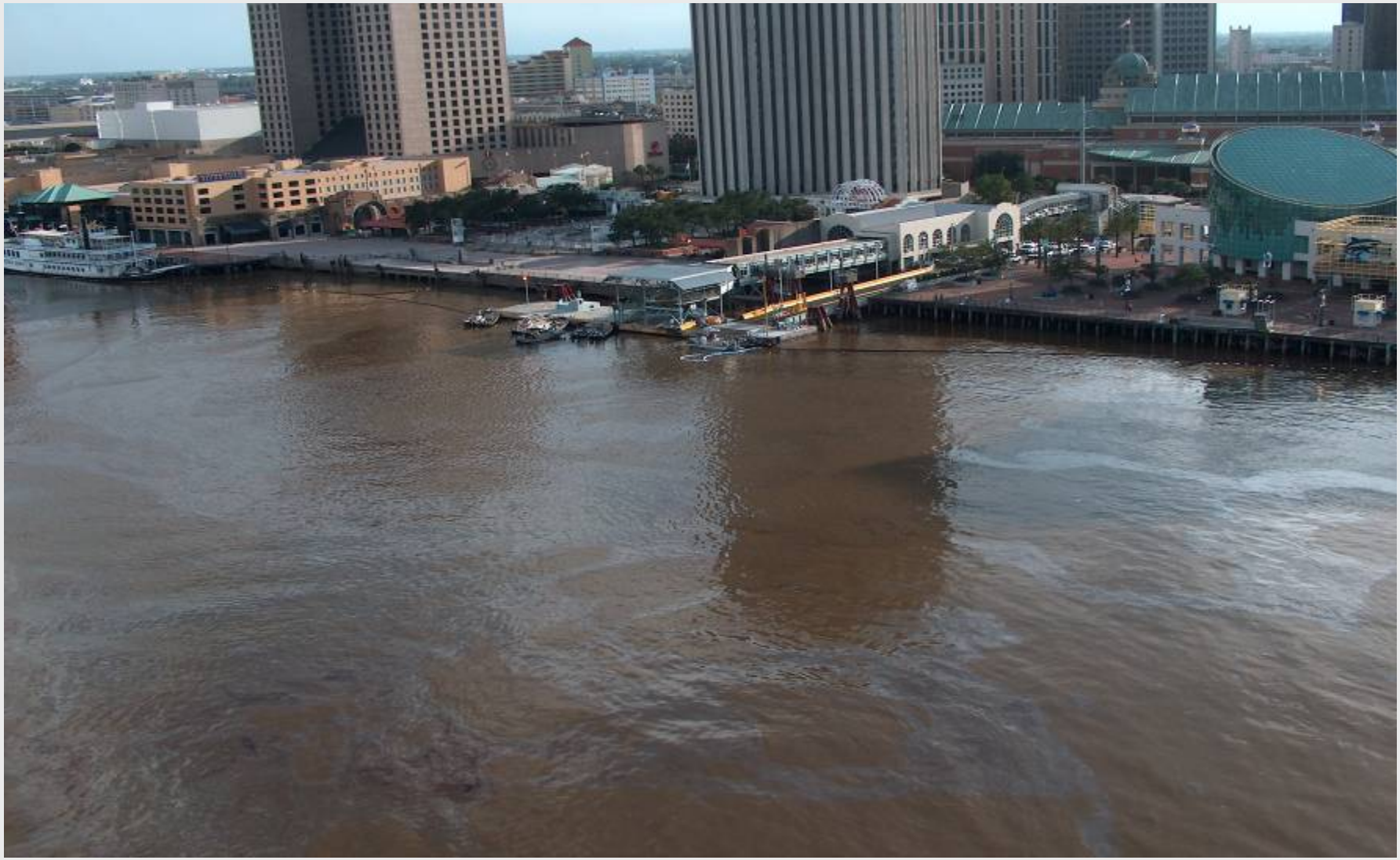
VESSEL CLEANING

DREDGING OIL

RIVER CLEANUP



STAGING AREA



STREAMERS

SHEEN

BATTURES

RIVER CLEANUP

RIVER CLEANUP

STATS

- 200
- 1,185
- 2,300
- 3,250
- 6,733
- 130,000
- 100,000,000
- 275,000,000

Marine Safety Unit Port Arthur/

Marine Safety Unit Lake Charles

Captain J.J. Plunkett

Commanding Officer

Overview

- Pipeline spills & aging infrastructure
- Sinkers
- Sabine Lake Spill
- Hurricane Ike
  - Abandoned vessels
  - Shifting tanks
  - Prescribed & in-situ burns
- LNG
- AMSTEP

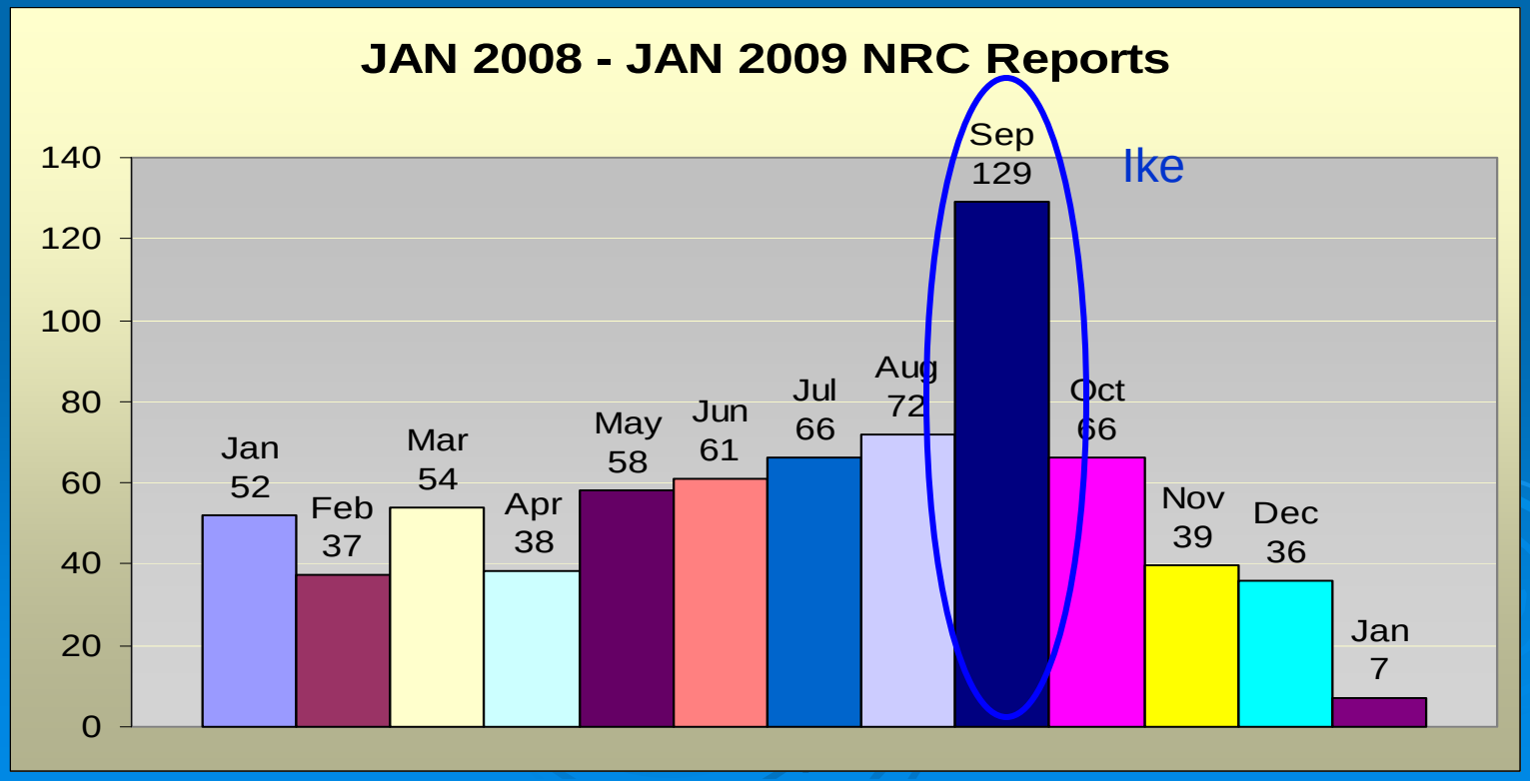
MSU Port Arthur NRC Reports
JAN 2008 – JAN 2009

715 NRC Reports:

567 - Pollution (Oil)

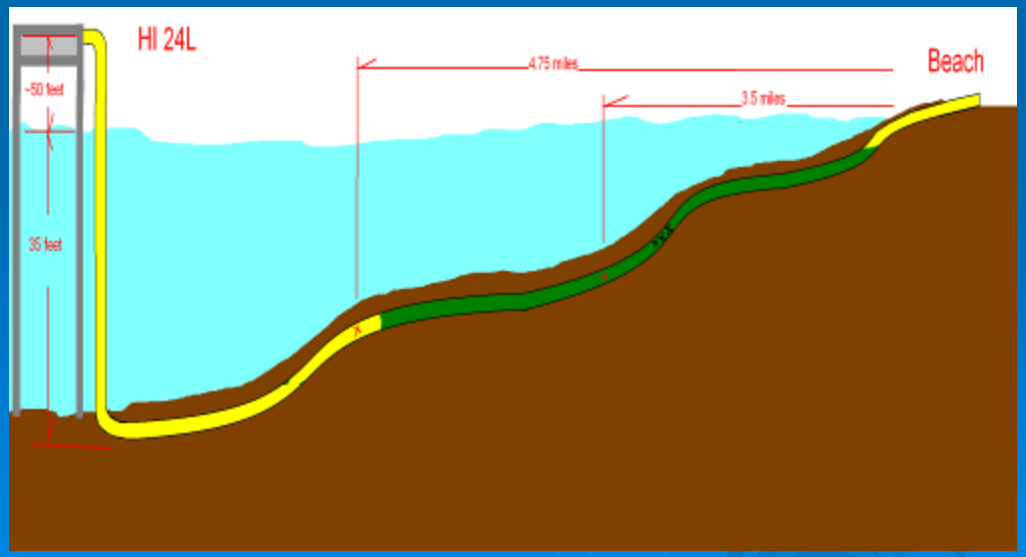
66 - Pollution (HAZMAT)

82 - Other (Security, Vessel Casualties)



Tammany Oil and Gas Pipeline Discharge

- Completed 08 FEB 08
- 50 bbls discharged
- 5,445 bbls recovered
- Crude Oil



Texas Petroleum Investment Company
Black Lake Facility, Hackberry, LA

- Out of service field that was recently purchased and put back into operation.
- 18,930 BBL storage capacity - 28 active wells
- 500 bbls crude oil production capacity from prox 2200 bbls of oil/brine mix.
- Pipelines tested before being brought back into service.

Texas Petroleum Investment Company

- 13 minor oil releases in past 2 years.
- CG partnered with LA DEQ and EPA to develop plan with company to reduce risk of these releases as new lines are brought back into service.

Pipeline Discharges

01 Jan 2008 – 30 Jun 2008

Date	Waterway	Gallons	Product	Classification
09-Jan-08	Jefferson Block 24	228,690	Oil, Crude (Potential Only)	Potential Major
18-Jan-08	Sabine-Neches	1	Oil, Fuel: No. 6	Actual Minor
19-Jan-08	Land spill	2,100	Reformate	Actual Medium
22-Jan-08	East Cameron 272	3	Natural Gas (Condensate)	Actual Minor
26-Jan-08	East Cameron	1	Natural Gas (Condensate)	Actual Minor
9-Mar-08	West Cameron 198	1	Oil, Crude	Actual Minor
13-Mar-08	Land spill	5	Waste Water (Acrylonitrile, Acetonitrile and Hydrogen Cyanide)	Actual Minor
20-Mar-08	High Island	2	Natural Gas (Condensate)	Actual Minor
29-Mar-08	Neches	30	Oil, Crude	Actual Minor
17-Apr-08	Sabine-Neches	1	Oil, Diesel	Actual Minor
4-May-08	Neches River	1	Oil, Unknown	Actual Minor
6-May-08	Gulf of Mexico	1	Oil, Crude	Actual Minor
20-May-08	Sabine-Neches	1	Benzene	Actual Minor
22-Jun-08	Unnamed Canal	42	Oil, Crude	Actual Minor
30-Jun-08	Gulf of Mexico	2	Natural Gas (Condensate)	Actual Minor

16 Cases 92 Gal 1 Potential Major

Pipeline Discharges

01 JUL 08 – 31 DEC 08

Date	Waterway	Gallons	Product	Classification
5-Jul-08	Neches River	1	Oil, Unknown	Actual Minor
17 JUL 08	Land spill	10,000	Methanol	Actual Major
15 SEP 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
16 SEP 08	Land spill	100	Oil, Crude	Actual Minor
18 SEP 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
21 SEP 08	Land spill	28	Benzene	Actual Minor
30 SEP 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
03 OCT 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
07 OCT 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
07 NOV 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
07 NOV 08	Gulf of Mexico	1	Natural Gas (Condensate)	Actual Minor
07 DEC 08	Gulf of Mexico	2	Oil, Crude	Actual Minor

12 cases 10,138 Gal 1 Major

F/V MISS LISA

- 16 Mar 2008
- Diesel / Lube Oil
- Potential Only (310 Gallons)

Total PFO/PGO

- 30 Mar 2008
- ~210 barrels
- (10 Gallons in water)
- PFO/PGO

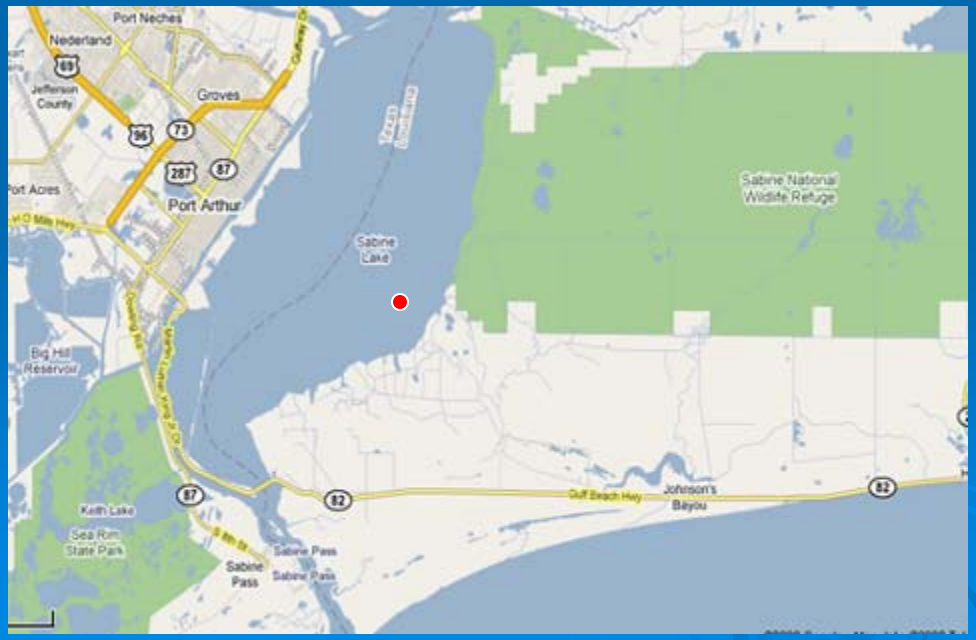
Oil Tanking Allision

- 20 Jun 2008
- 233,000 barrel Potential
- Blended Gasoline

- Occurred just 10 minutes before a barge transfer op was to begin

Sabine Lake Well Blowout

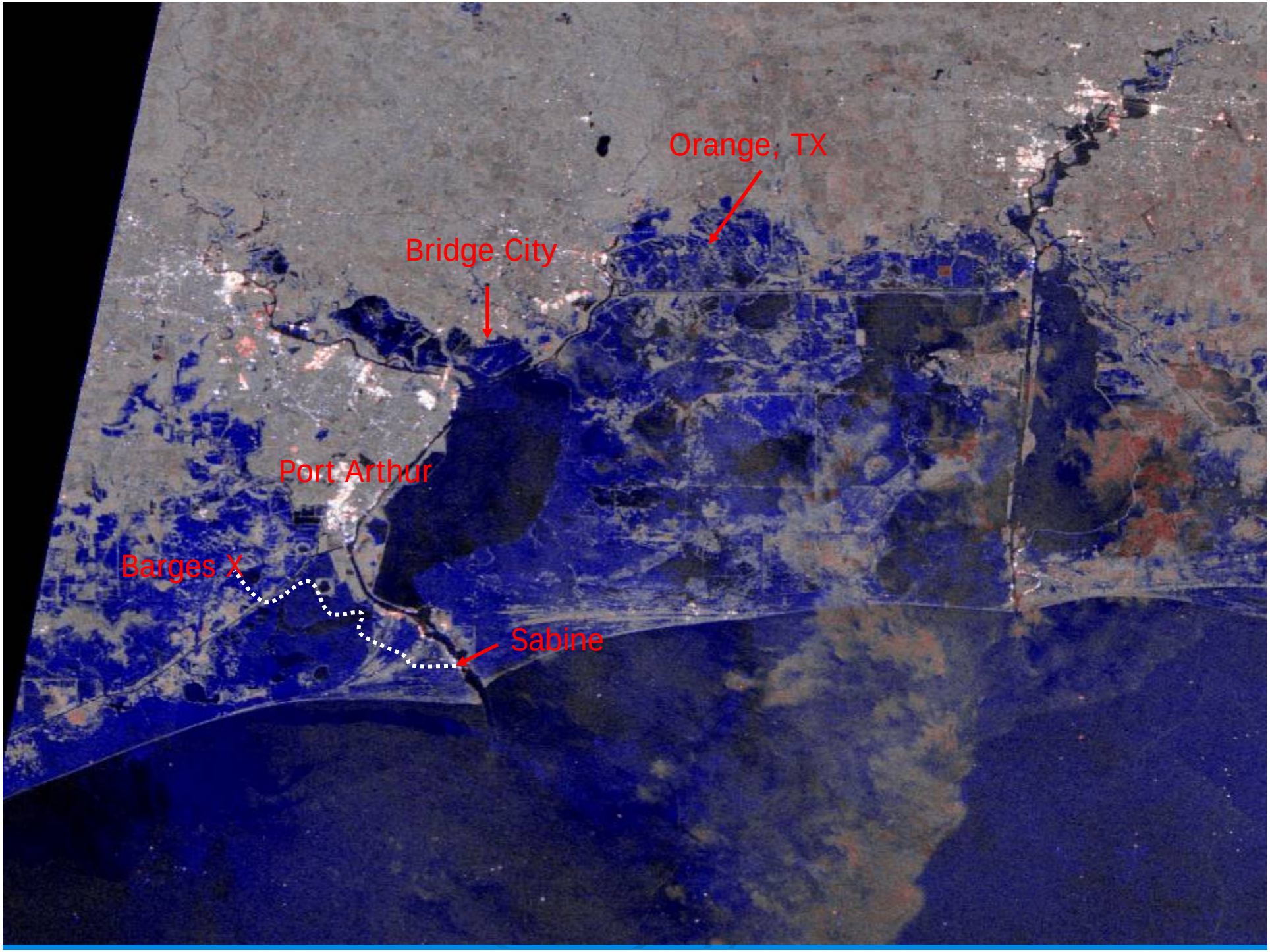
- 18 Feb 2008
- 840 Gallons
- Condensate



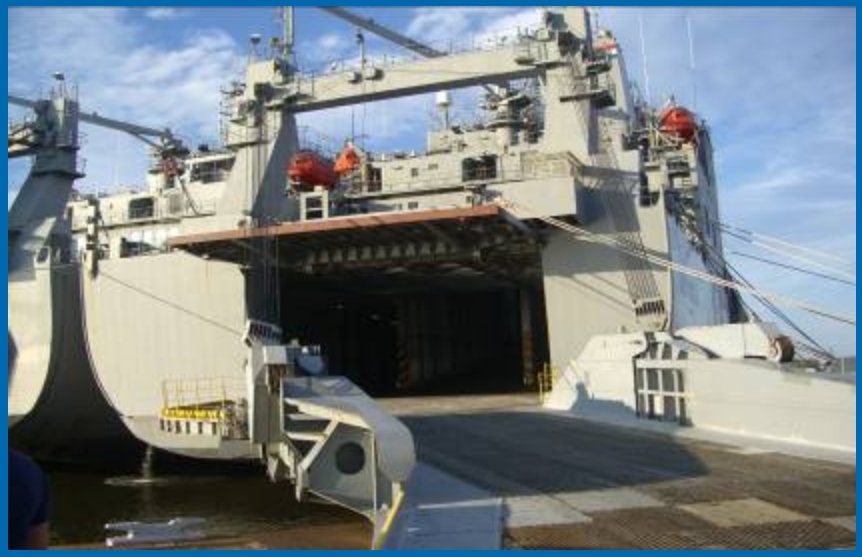
Sabine Lake Well Blowout

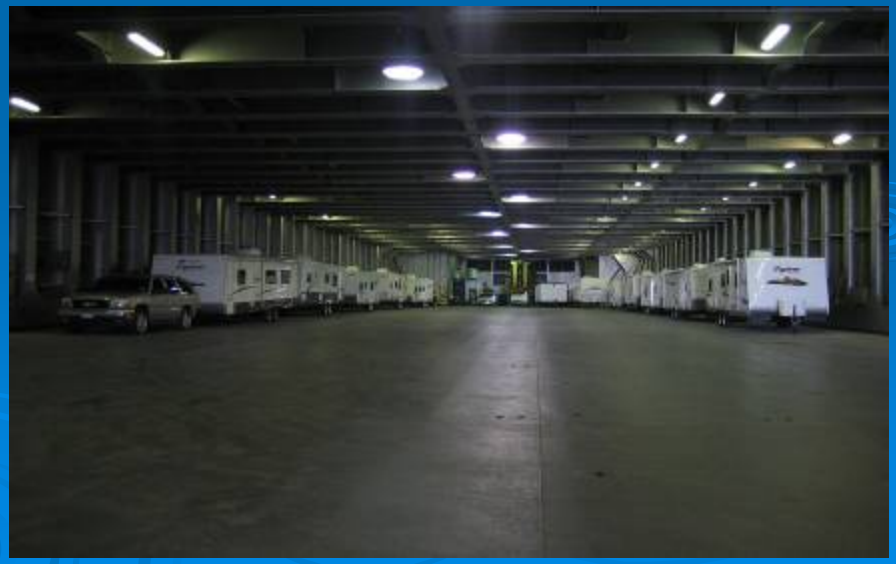
Hurricane Ike

Port Arthur, TX


Orange, TX
Bridge City
Port Arthur
Barges X
Sabine

Hurricane Ike





Water Level at Hurricane Barrier
Motiva Port Arthur

F/V Hannah Leigh

Oil Spill Response (ESF 10)

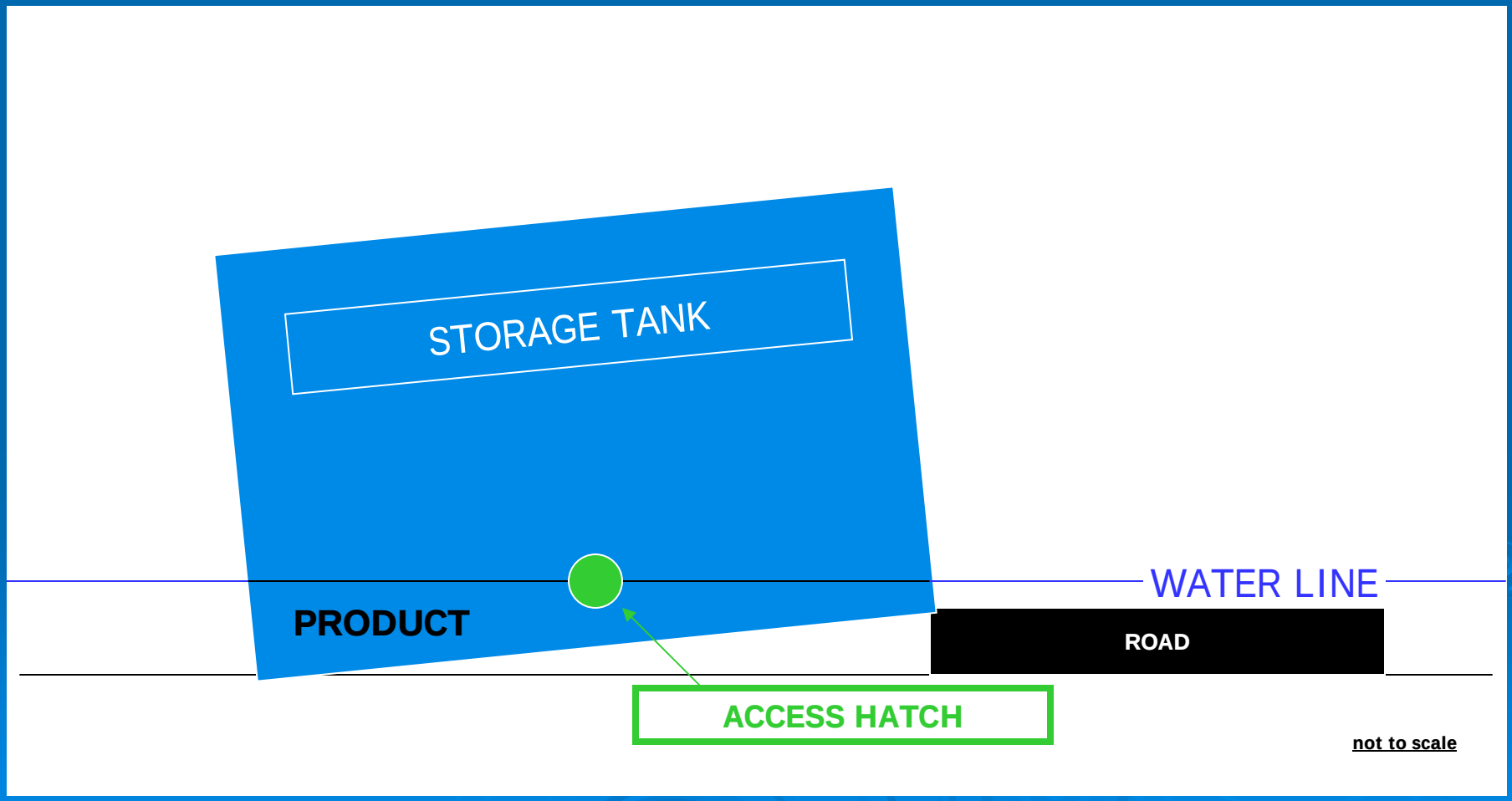
vs

Salvage/Debris Removal (ESF #3)

F/V Hannah Leigh

Exxon Mobil

Exxon Mobil


STORAGE TANK
PRODUCT
WATER LINE
ROAD
ACCESS HATCH
not to scale

Prescribed Burns on Wildlife Management Areas

Upland pine stand prior to prescribed burn, (courtesy of Don Dietz).

Planned application of fire to:

- Enhance habitat and plant diversity
- Increase food and manipulate cover
- Improve the structure of the habitat

Winter prescribed fire in upland pine (Courtesy D. Dietz).

Upland pine stand approximately 2 months after winter burn (Courtesy D. Dietz).

J.D. Murphree WMA
Post IKE

- In-Situ vs. Prescribed
- Approaching migration & hunting season
- Oil, Hazmat, Bio… other “debris” in marsh

New LNG Facilities

- In operation: Sabine Pass & Trunkline
- Under construction: Golden Pass & Cameron
- On hold: Sempra & Creole Trail

Sabine Pass LNG

- 11 Apr 2008
- Largest LNG facility in U.S.
- M/V CELESTINE RIVER

AMSTEP 16-17 July

- Combined: Area Maritime Security & PREP Exercise
- MARSEC level increased
  - MARSE 2 July 16th,
  - MARSEC 3 on 17th
- All facilities in area participated.
- Included tanker sinking in Sabine Pass & 12,000 BBL spill -
- Boom/equipment was deployed – strategies tested

National Pollution Funds Center and the Oil Spill Liability Trust Fund

National Pollution Funds Center
Jeff D'Alessandro Case Officer Team 1

Presentation for
On-Scene Coordinator
Crisis Management Course
Yorktown, Virginia
January 8, 2008

1st What NOT to do…..

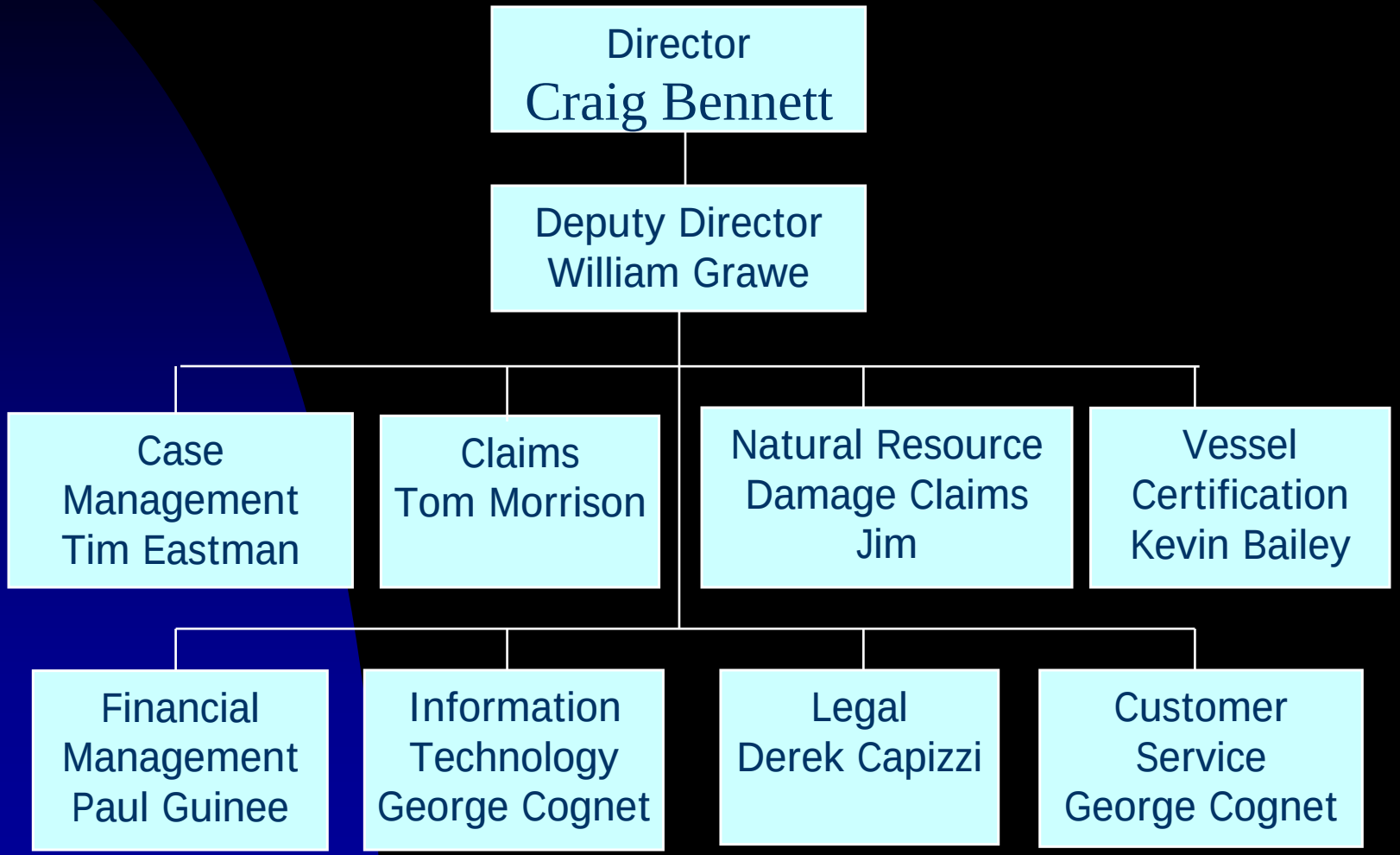
What Are Our Goals Today?

- Role of the National Pollution Funds Center
- Overview of the OSLTF
- OSLTF Threshold Issues
- Procedures for Accessing the Fund
- Funding for Removal Activities vs. NRDA Activities vs. Claims
- Limitation of Liability
- District Interface w/ NPFC
- Sector Interface w/ NPFC

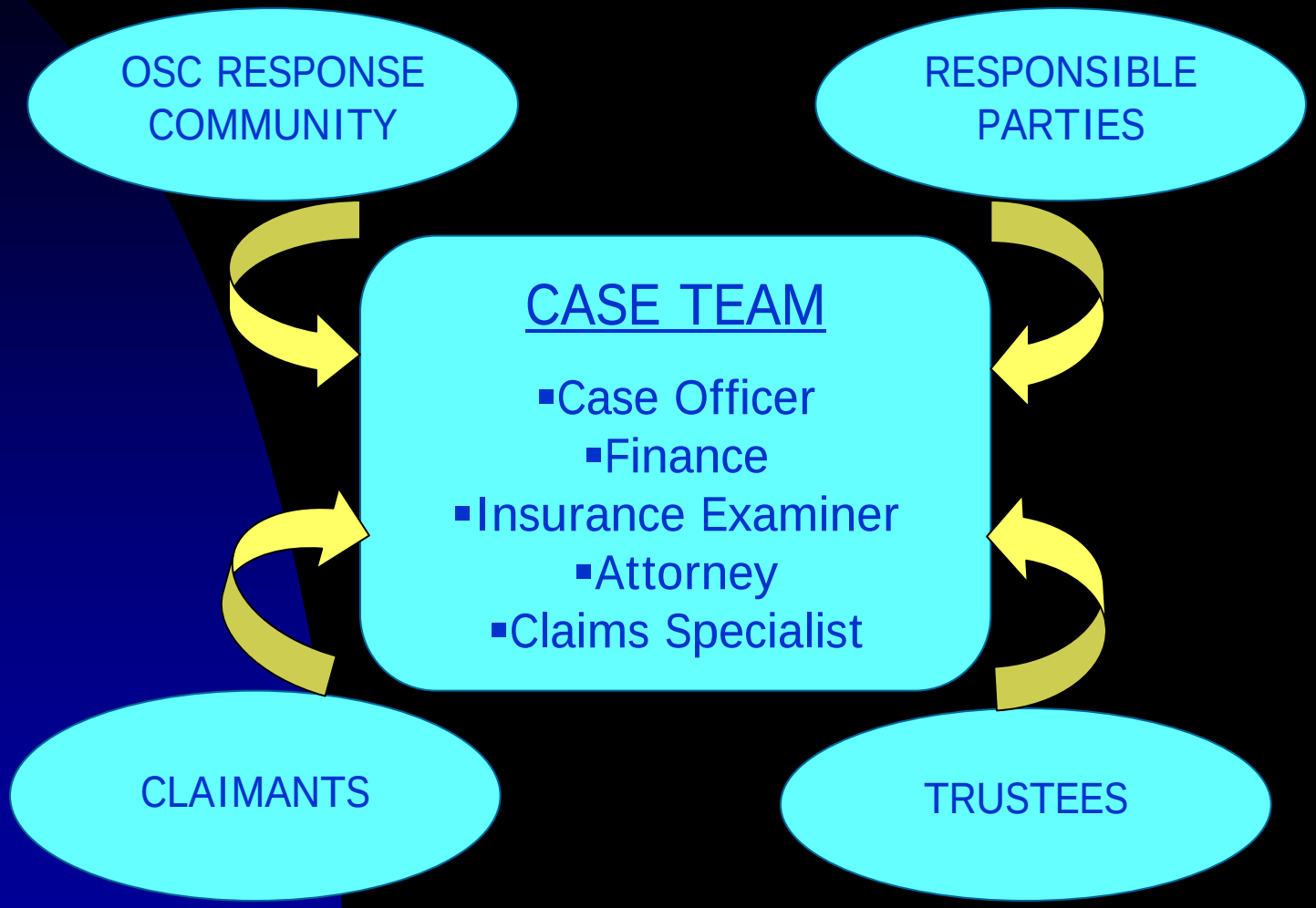
Major Missions of the NPFC

- Administer the Oil Spill Liability Trust Fund (OSLTF)
  - Provide Funding for Oil Removal Activities and the Initiation of Natural Resource Damage Assessments (NRDA) Related to Oil Discharges
  - Pay Claims for Loss and Damage from Oil Discharges
  - Recover Costs from Responsible Parties
- Administer the Certificate of Financial Responsibility (COFR) Program
- CERCLA Funding Manager for the Coast Guard

National Pollution Funds Center

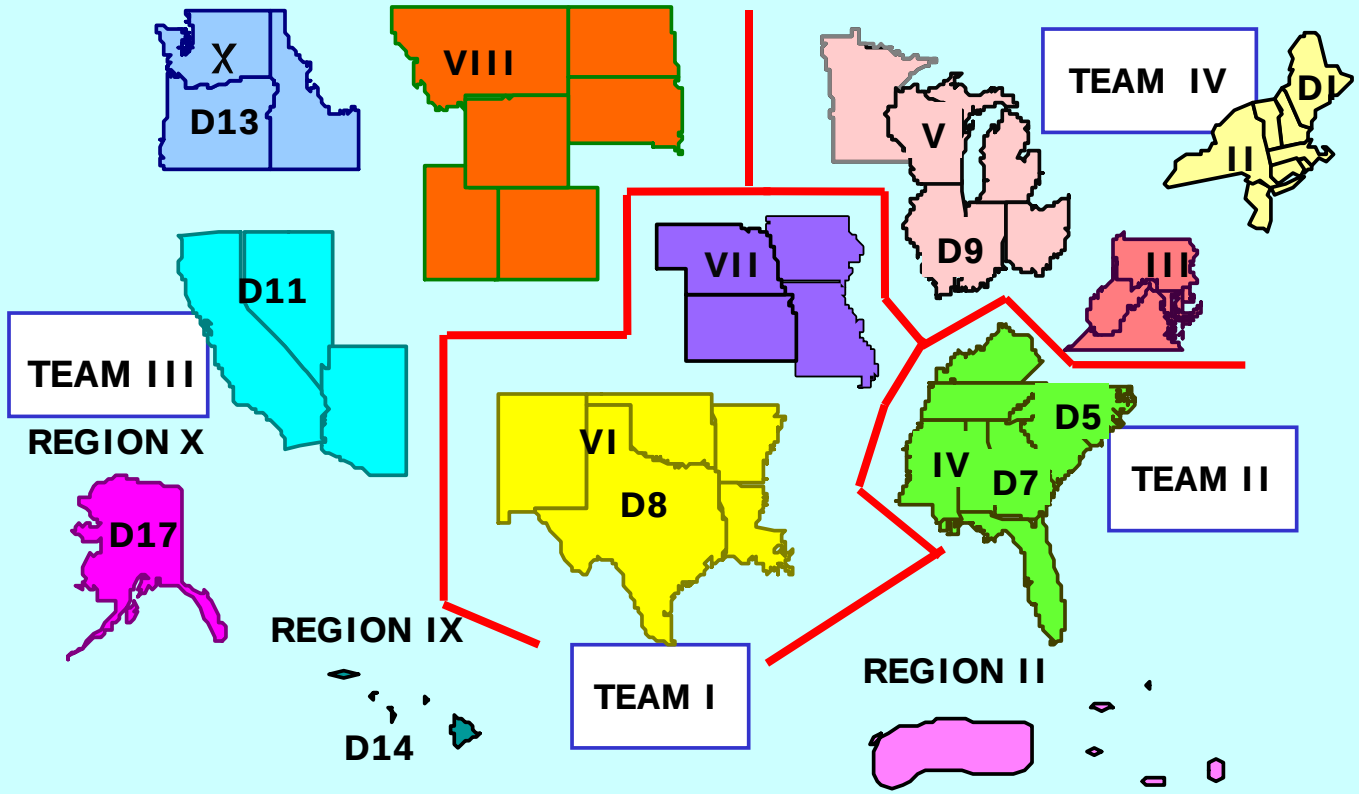


Case Team and its Customers



NPFC Case Teams

Illustrating CG Districts and EPA Regions



NPFC Resources

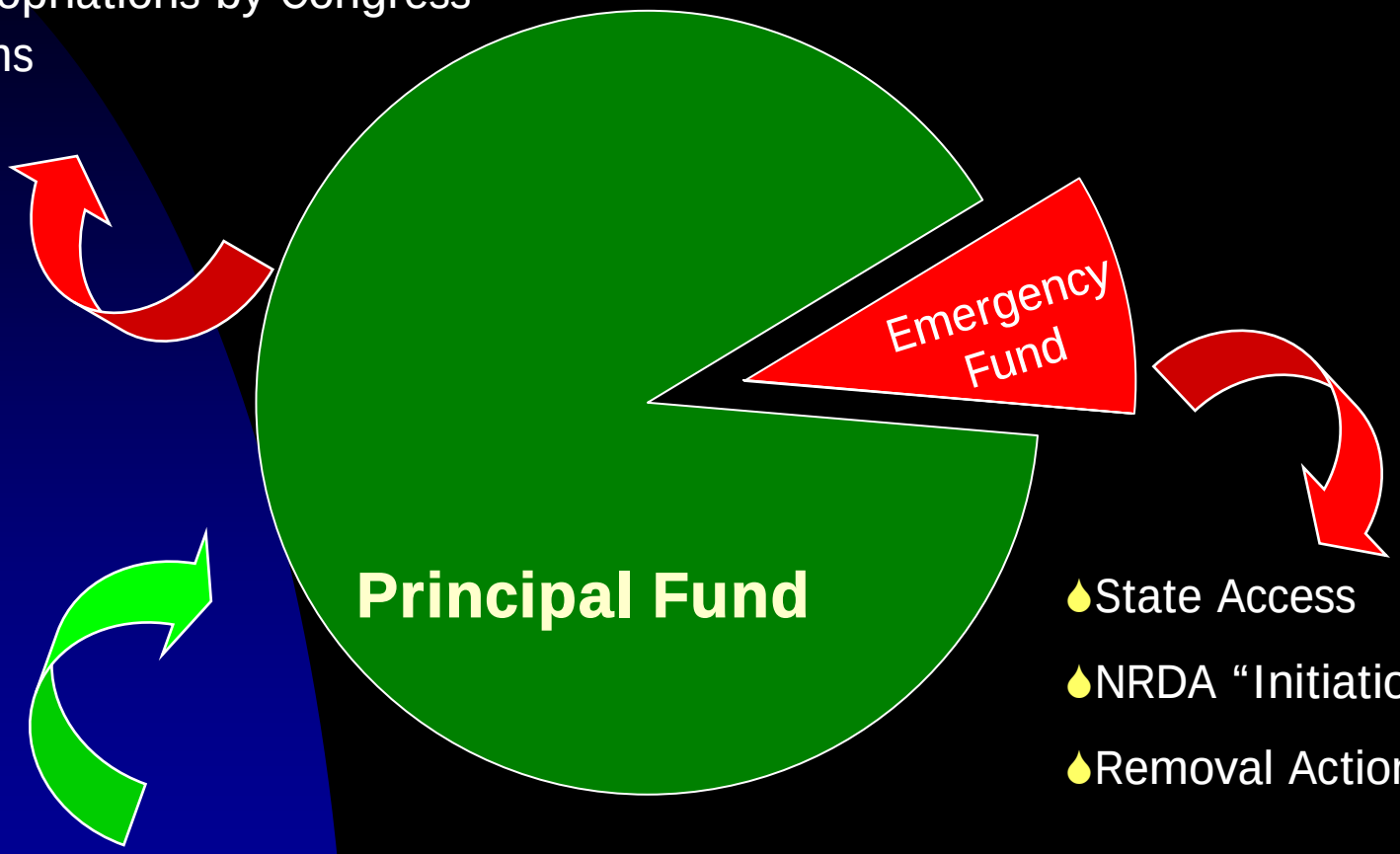
- Ceiling And Number Assignment Processing System (CANAPS)
- E-COFR
- Deed and Title Searches
- On-line Financial Management Tools
  - User Reference Guide
  - Cost Documentation Forms and Spreadsheets
- www.uscg.mil/npfc

Primary Fund Sources

- OSLTF is Replenished From:
  - Five Cents a Barrel Tax on Domestic and Imported Oil
    - 2006-2014
    - $2.0 – $2.7 B
  - Investment on Interest on the Fund's Principal
  - Costs Recovered from Responsible Parties
  - Penalties from Responsible Parties
  - ~~Transfers from Other Funds~~

One Billion Dollar Fund

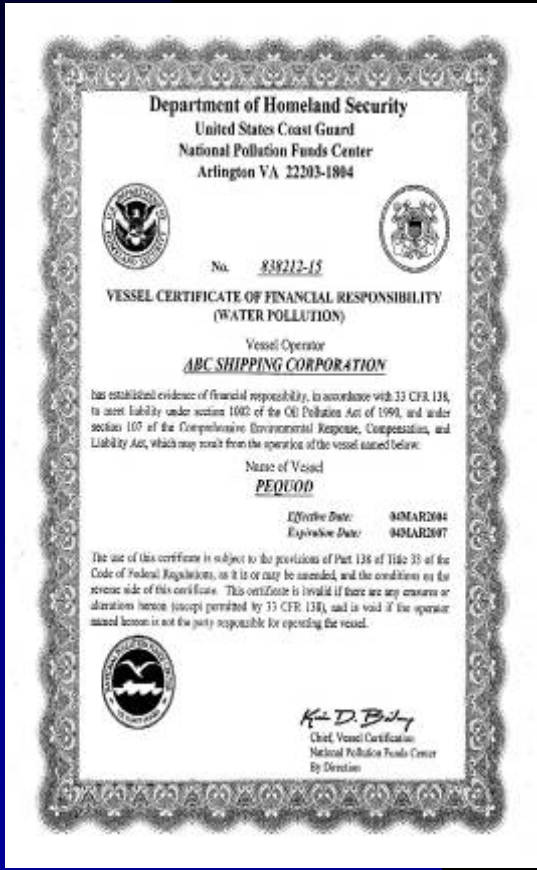
- Appropriations by Congress
- Claims



- State Access
- NRDA "Initiation"
- Removal Actions

- Tax collections, recoveries, fines, penalties, interest

Certificates of Financial Responsibility



Department of Homeland Security
United States Coast Guard
National Pollution Funds Center
Arlington VA 22203-1804

No. 838212-15

VESSEL CERTIFICATE OF FINANCIAL RESPONSIBILITY
(WATER POLLUTION)

Vessel Operator
ABC SHIPPING CORPORATION

has established evidence of financial responsibility, in accordance with 33 CFR 138, to meet liability under section 1002 of the Oil Pollution Act of 1990, and under section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act, which may result from the operation of the vessel named below:

Name of Vessel
PEQUOD

Effective Date: 04MAR2004
Expiration Date: 04MAR2007

The use of this certificate is subject to the provisions of Part 138 of Title 33 of the Code of Federal Regulations, as it is or may be amended, and the conditions on the reverse side of this certificate. This certificate is invalid if there are any erasures or alterations thereon (except permitted by 33 CFR 138), and is void if the operator named hereon is not the party responsible for operating the vessel.

Chief, Vessel Certification
National Pollution Funds Center
By Direction

- Enhance the “polluter pays” concept
- Assure that the responsible party (RP) has resources to pay removal costs and damages up to OPA limits of liability
- Operational control
  - 300 GT
  - Denial of Entry
  - Legitimacy of operations

“Best Response”

“Best Response”

Key Business Drivers	Critical Success Factors
Human Heath and Safety	No spill related public injuries, illness, death. No response worker injuries, illness, death
The Natural Environment	Source Discharge Minimized Spill Effectively Contained/Controlled Sensitive Areas Protected Resource Damage Minimized
The Economy	Economic Impact Minimized
Public Communication	Accurate Timely Information Positive Media Coverage of Response Positive Public Perception
Stakeholder Support and Services	Minimize Impact to Stakeholders Stakeholders Well Informed Positive Meetings with Stakeholders Prompt Handling of Damage Claims

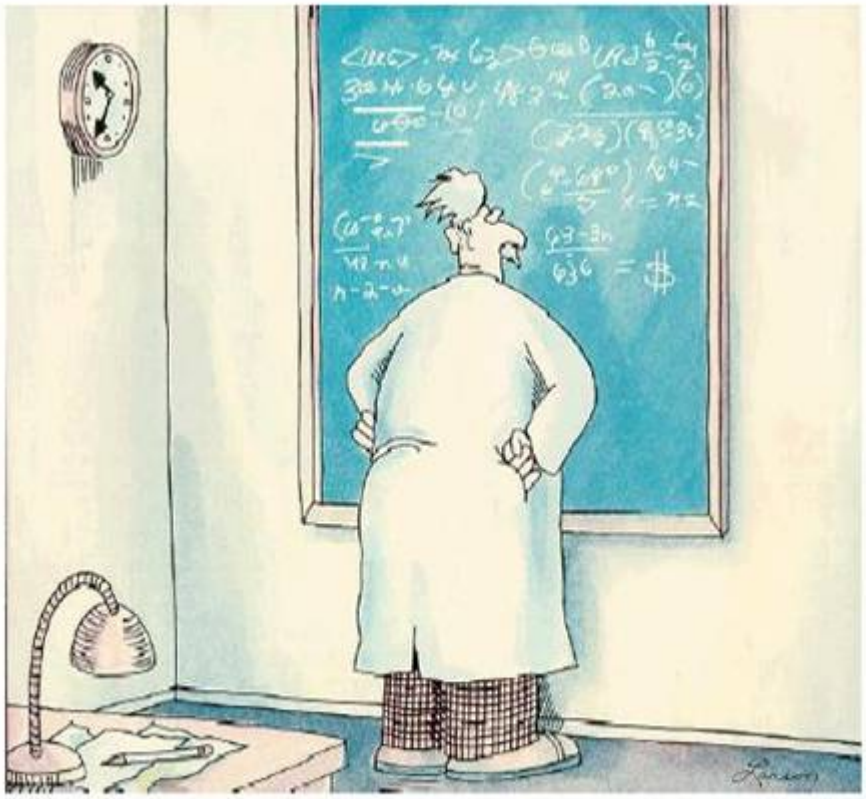
Four Phases of Response Operations

- ✈ Notification & Discovery
- $ Assessment & Initial Action
- $ Containment & Countermeasures (a.k.a. Removal Activities)
- $ Documentation & Cost Recovery

When is Funding Available?

- FOSC must affirmatively answer two questions:
  - 1. Was there a discharge of oil, or a substantial threat of a discharge of oil (i) into navigable waters; (ii) on the adjoining shorelines; (iii) into the waters of the exclusive economic zone; or (iv) that may affect natural resources under exclusive management authority of the United States?
  - 2. Are further actions necessary to ensure effective and immediate removal, mitigation or prevention of the substantial threat?

Threshold Issues



Einstein discovers that time is actually money

- Is the substance oil?
- Is there a substantial threat of a discharge of oil?
- Is the discharge or threat of discharge into navigable waters?

Substantial Threat

- Complex assessment & evaluation of incident by FOSC
- OSLTF may be used to respond to substantial threats of discharge
- FOSC has sole authority to make these determinations
- FOSC determines when threat has been mitigated
- Determinations have significant funding and liability implications for response ops

Factors to Consider

- 1. The likelihood of a discharge under the circumstances; that the situation presents an unacceptable probability that a discharge will occur without FOSC intervention.
- 2. The proximity to navigable waters, the quantity of oil which may be discharged, and the lack of barriers to stop the oil from flowing to the water indicate that a spill will impact navigable waters.
- 3. The flow path to surface waters (for land based discharges) as indicated by slope, soil permeability, water table, storm drains, curtain drains, natural or manufactured conduits, or the like.

Factors to Consider (continued)

- 4. The condition of or damage to the source, and the environmental factors or weather which may change the conditions, indicate that a spill will occur.
- 5. The potential impact of a discharge on the particular environment, including proximity to environmentally sensitive areas, populous areas, etc.
- 6. That action must be taken quickly to prevent a spill.

Review : Threshold Issues

- Is the substance oil?
- Is there a discharge or a substantial threat of a discharge of oil?
- Is the discharge or threat of discharge into navigable waters?

Does CERCLA Apply?

- Hazardous substance or unknown pollutant or contaminant
- Released into the environment
- Imminent and substantial threat to public health and welfare
- USCG FOSC: Marine

Show Me the Money: Accessing the Fund

- FOSCs use CANAPS
- Estimating Ceiling
- Direct OSLTF Charges
- CG Personnel & Equipment
  - Billable
  - “Level of Effort”

Show Me the Money: CERCLA

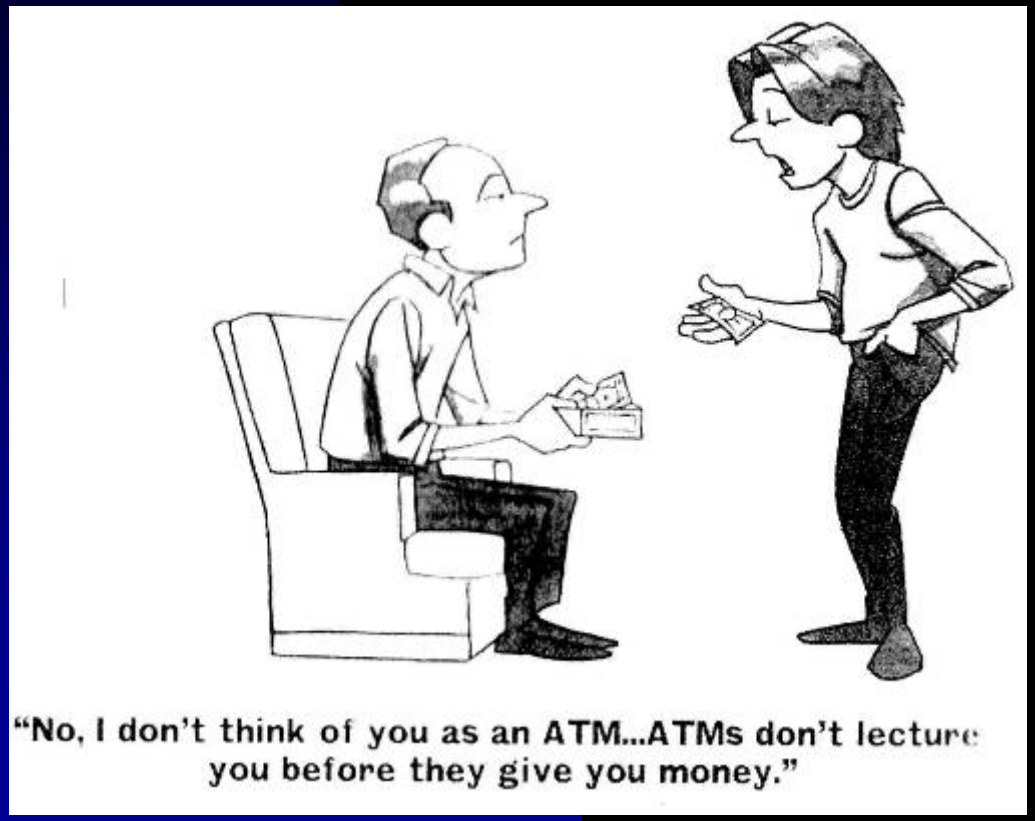
How do you access the Superfund?

- Use CANAPS
- FPN & CPN together?
- Mixed Substances
- An EPA Action Memo is required on ceilings of $250K or greater

Show Me the Money: Accessing the Fund

- Pollution Removal Funding Authorization (PRFA)
- Initiate IAG – NRDA Activities, not removal
- Contracts
- Uncompensated Removal Cost Claims

Pollution Removal Funding Authorizations (PRFAs)



- A Financial Document
- Commits the OSLTF
- Two Types
  - Federal Agency
  - Non-Federal Agency
- Two Key Elements
  - Scope of Work
  - Estimated Cost
- PRFA Amendments

PRFA – State Response Agency

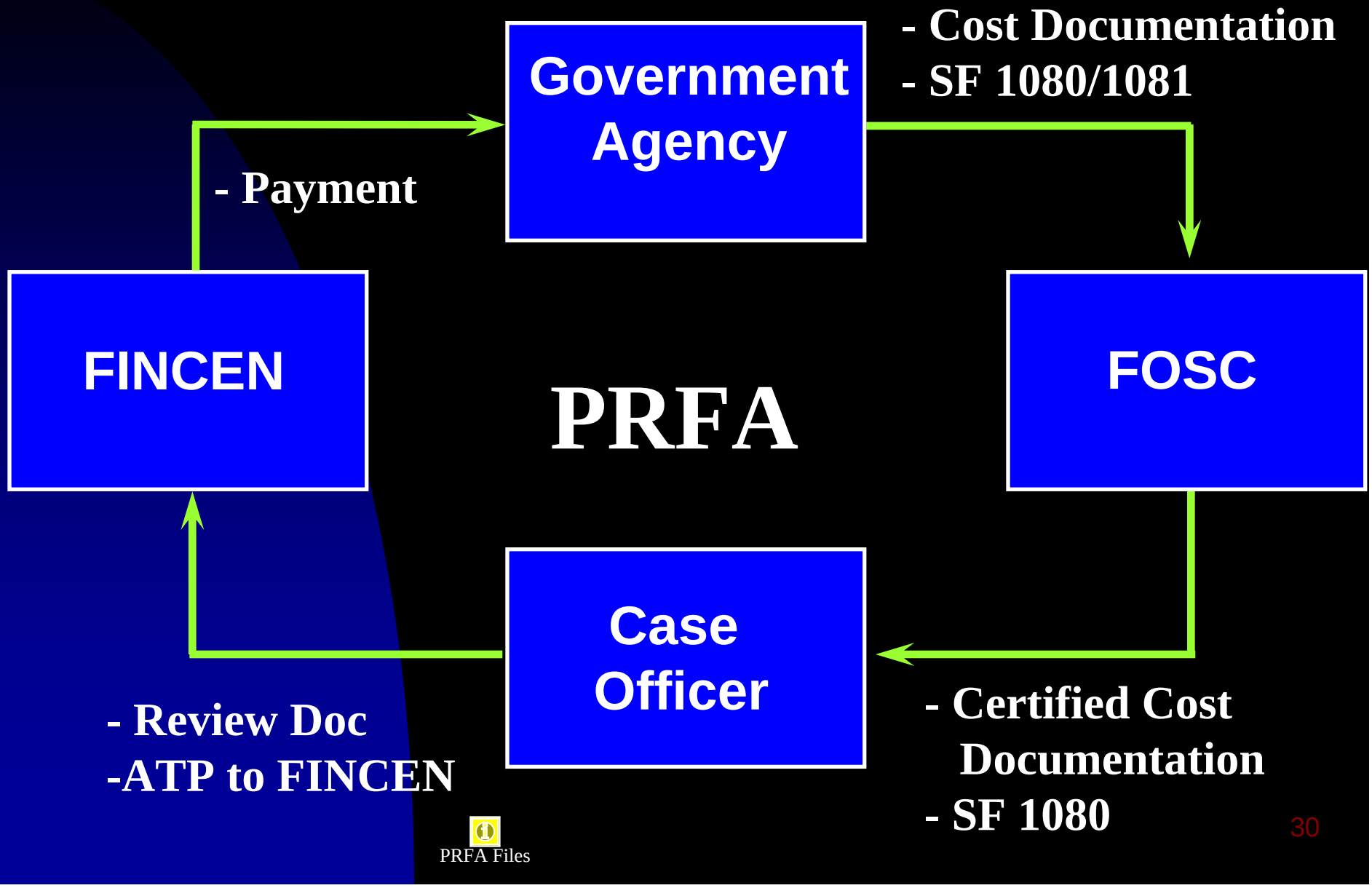
PRFA - Private Contractor?

- Absolutely Not!
- Hire With a Contract!
- Agencies with PRFAs can Subcontract with Commercial Entities Per Agency Rules
- OSLTF Reimburses Agency for its Contractor Costs

PRFA - Not-For-Profit Organization?

- Absolutely Not!
- Hire With a Contract!
- Agencies with PRFAs can Subcontract with Not-For-Profits Per Agency Rules
- OSLTF Reimburses Agency for its Costs

PRFA Reimbursement Process



PRFA Files

Show Me the Money: Accessing the Fund

- PRFA – Incident Management
- PRFA – Removal (Agency or using Contractors)
- PRFA – Wildlife Branch & Environmental Unit
- PRFA – ESA Section 7
- Initiate IAG – NRD Activities, not removal

Accounting Responsibilities

- NPFC Resource Cost Documentation Package or Equivalent Agency Documentation
- CG-5136 Series of Forms
- Keep NRD activities separate from removal activities
- Daily activity log (WWWWW)

PRFA Pitfalls

- Mixing removal and NRDA activities
- Activities outside agreed SOW
- Failure to amend the PRFA ceiling
- “What was this person doing?”
- No SF-1080
- Forget to submit to FOSC for certification

NPFC - District Interface

- RRTs
- DRAT
- DR(M?)
- DL
- CANAPS POCs
- Disaster funding POCs

NPFC - Sector Interface

- Use of the Fund
- CANAPS
- OSLTF/CERFCLA
- Routine Response Issues
- Contracting Interface
- RRT issues
- Vessel destruction
- Legal issues
- Training
- Exercises
- Disaster funding
- NSSEs
- Audits

NPFC - Sector Interface

Anchorage Daily News

Team works to refloat tanker

Fuel-laden ship aground near Nikiski

On-duty tugs not present in Cook Inlet

Armed agents raid Security Aviation

Federal employees in Alaska face cost-of-living cut

Expenses have dropped; economist says move will likely hurt Anchorage

- Information
  - SITREPS/POLREPS
  - Bang lists
  - Web EOC
- Augmentation
  - IMTs
  - Reserves
  - Auxiliary
- Multi-mission Resources
  - Primary Purpose
  - Commercial vs. Government
  - Cutters
  - Aircraft

NPFC - Sector Interface

- Limitation of Liability
  - LOL set by law - PL 109-241
  - $3,000/GT – Single Hull Tank Vessels
  - $1,900/GT – Double Hull Tank Vessels
  - $950/GT – Non-tank vessels
  - $22/$16M minimum liability – SH/DH
  - $6/$4M if less than 3,000 GT – SH/DH
  - $800k – minimum liability F/V; P/C etc.
- NPFC Role
- Transition to FOSC-lead
- SMT/Contracting

ICE CARVERS
Frozen works of art, fun come to Town Square
ALASKA

PATENT FIGHT
BlackBerry addicts fear loss of gadget
LIFE

HOVER SCOOTER
Float on the air for a mere $17,000
LIFE, F-5

WEATHER

Anchorage Daily News

Saturday, February 4, 2006 ALASKA'S NEWSPAPER www.adn.com

Coast Guard studies ice rules

■ TUGS: Preventive measures not as common in Cook Inlet as in Prince William Sound

Tugs and tide free grounded tanker

■ RELIEF: The Seabulk Pride heads to ice-free Kachemak Bay under its own power.

Assembly majority takes hard look at school bonds

■ $80.9 MILLION: District wants package on ballot, but poll shows low voter support.

Internet privacy laws undefined

■ GRAY AREA: Users leave data trails that law enforcement readily tracks

ANCHORAGE READIES FOR NATION'S NO. 1 HOUSE PARTY

Sports bars feel pinch as more Super Bowl fans stay home

Pubs' traditional big day losing ground to take-out and big-screen TVs

INSIDE

Jeff D'Alessandro
Case Management Division
TEAM1 Case Officer
Gulf/Mississippi River
EPA Region 6

NOTE NEW MAIL ADDRESS

Director (cm)
U. S. Coast Guard
National Pollution Funds Center
4200 Wilson Boulevard, Suite 1000
Arlington, Virginia 20598-7100

Desk: (202) 493-6724
Fax: (202) 493-6896
Cell/Pager: (703) 999-7655
E-mail: jeffry.dalessandro@uscg.mil
Web: www.npfc.gov