

It's Not The Steel, It's the Paper!

Louisiana Oil Berm Construction

2010 (and 2011)

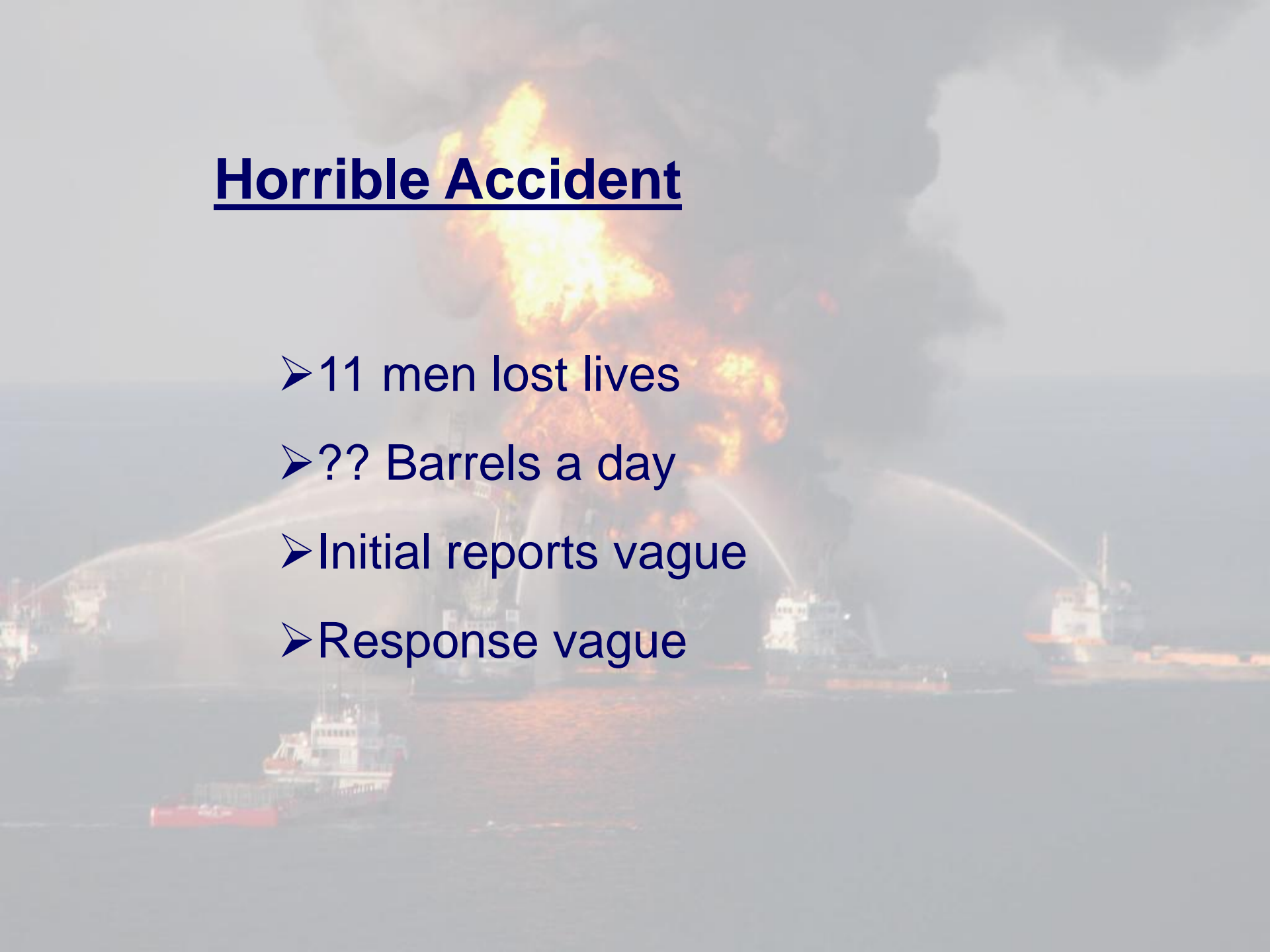




DEEPWATER HORIZON EXPLOSION 20 APRIL 2010

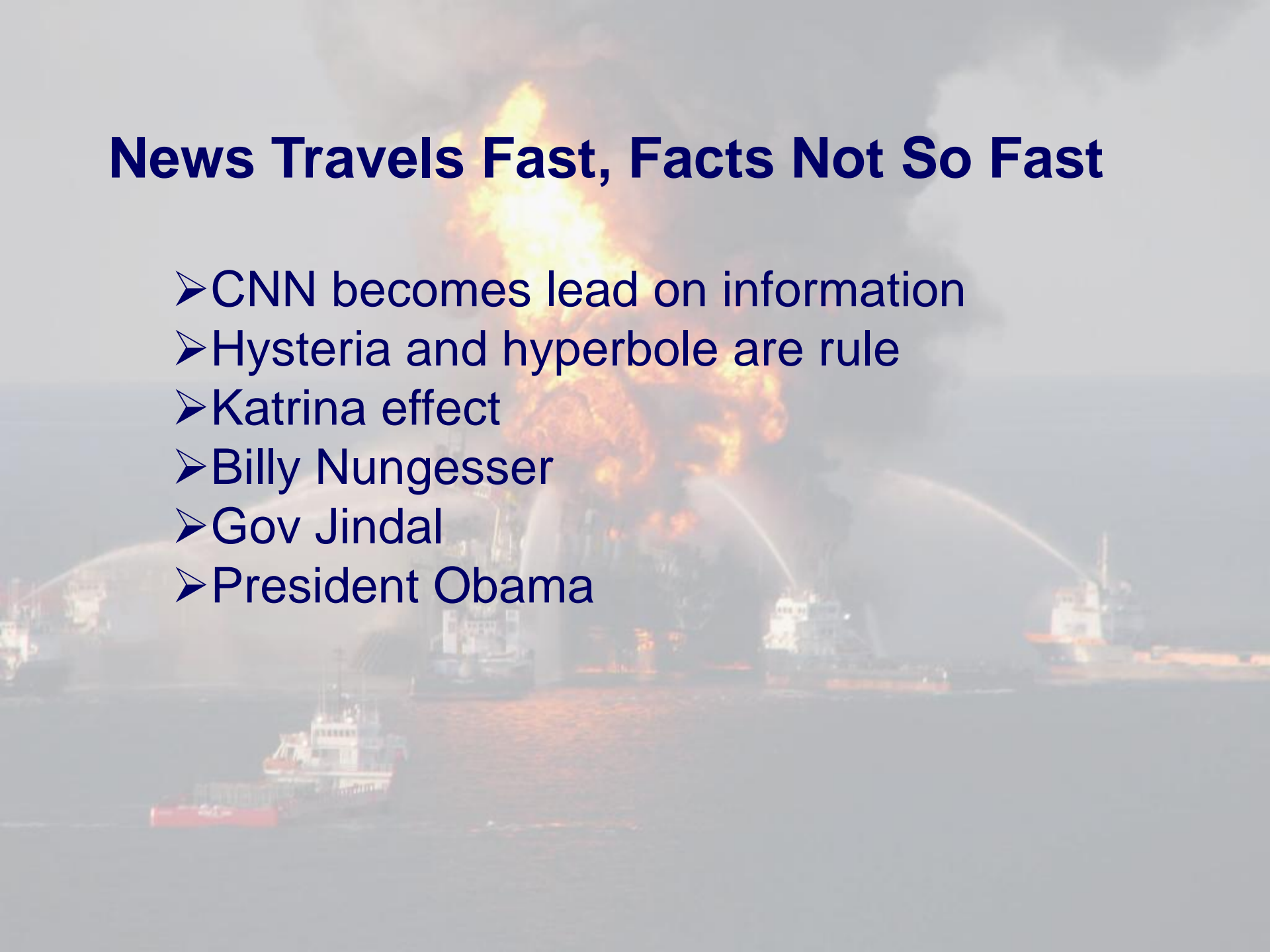
Horrible Accident

- 11 men lost lives
- ?? Barrels a day
- Initial reports vague
- Response vague



News Travels Fast, Facts Not So Fast

- CNN becomes lead on information
- Hysteria and hyperbole are rule
- Katrina effect
- Billy Nungesser
- Gov Jindal
- President Obama





New Orleans

Chandeleur Sound

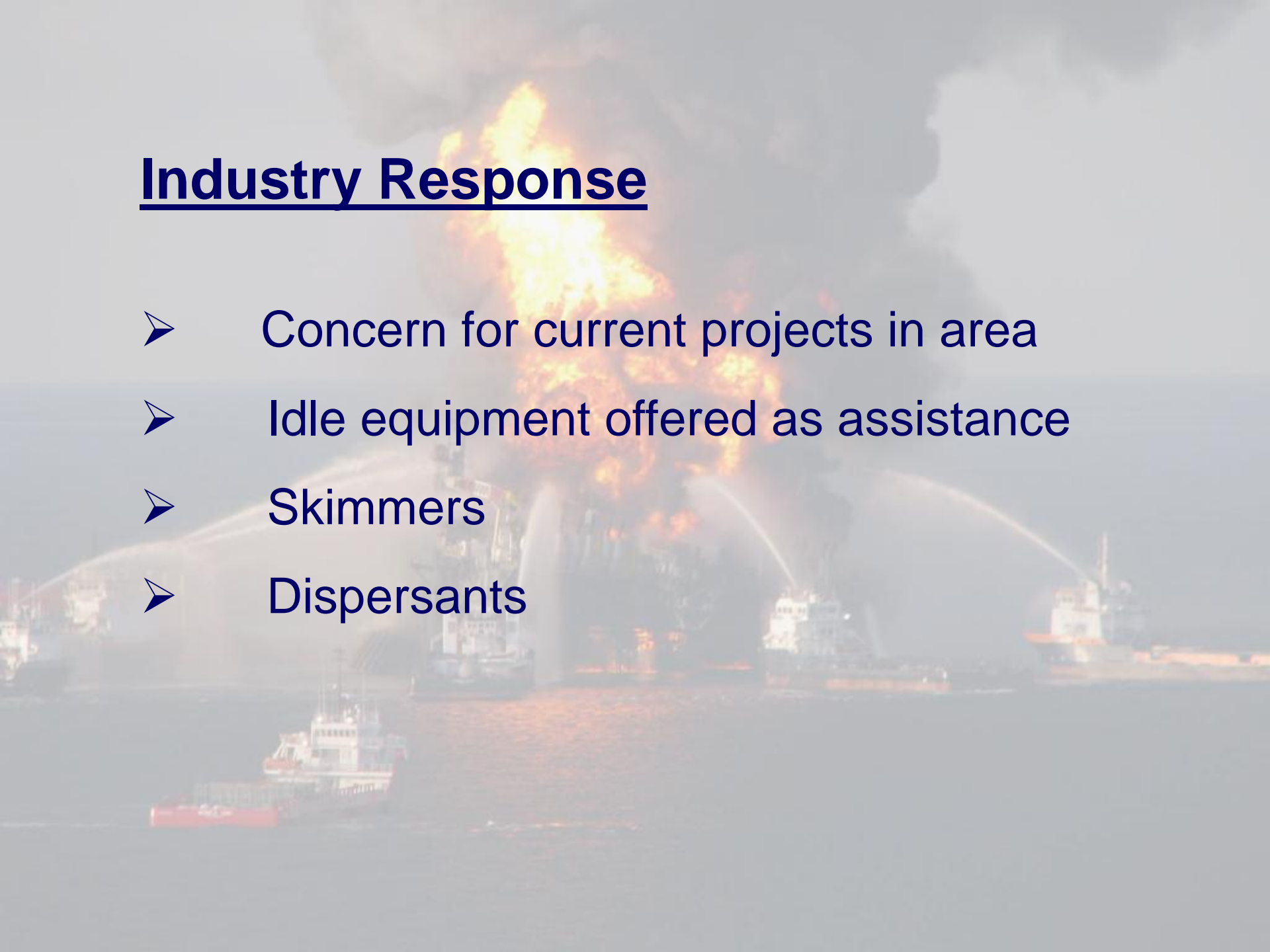
Barataria Basin

Deepwater Horizon



Industry Response

- Concern for current projects in area
- Idle equipment offered as assistance
- Skimmers
- Dispersants



Berm Plan

- Old State Plan
- More Damage Than Benefit
- Foreign marketing efforts distraction
- Concept gained momentum as spill continued

Berm Plan

- Ancil Taylor, Bean Consultant
- Pressure on BP building, so what if??
- Steel Availability
 - Idle
 - Otherwise available
- Paper Availability
 - Permits
 - Engineering
 - Contracts
- Meet With Corps, USCG, BP



New Orleans

Chandeleur Sound

Line of Defense

Barataria Basin

Line of Defense

Deepwater Horizon

Berm Plan

- Cap Failed
- USCG/BP State Funding Next Day
- Corps permits to State
- Shaw hired
- Shaw meets with industry
- Corps protocol for dredges

Start Up Challenges

Philosophical

- No negative thoughts
- We can do this
- This is what we do
- SAFETY



Start Up Challenges

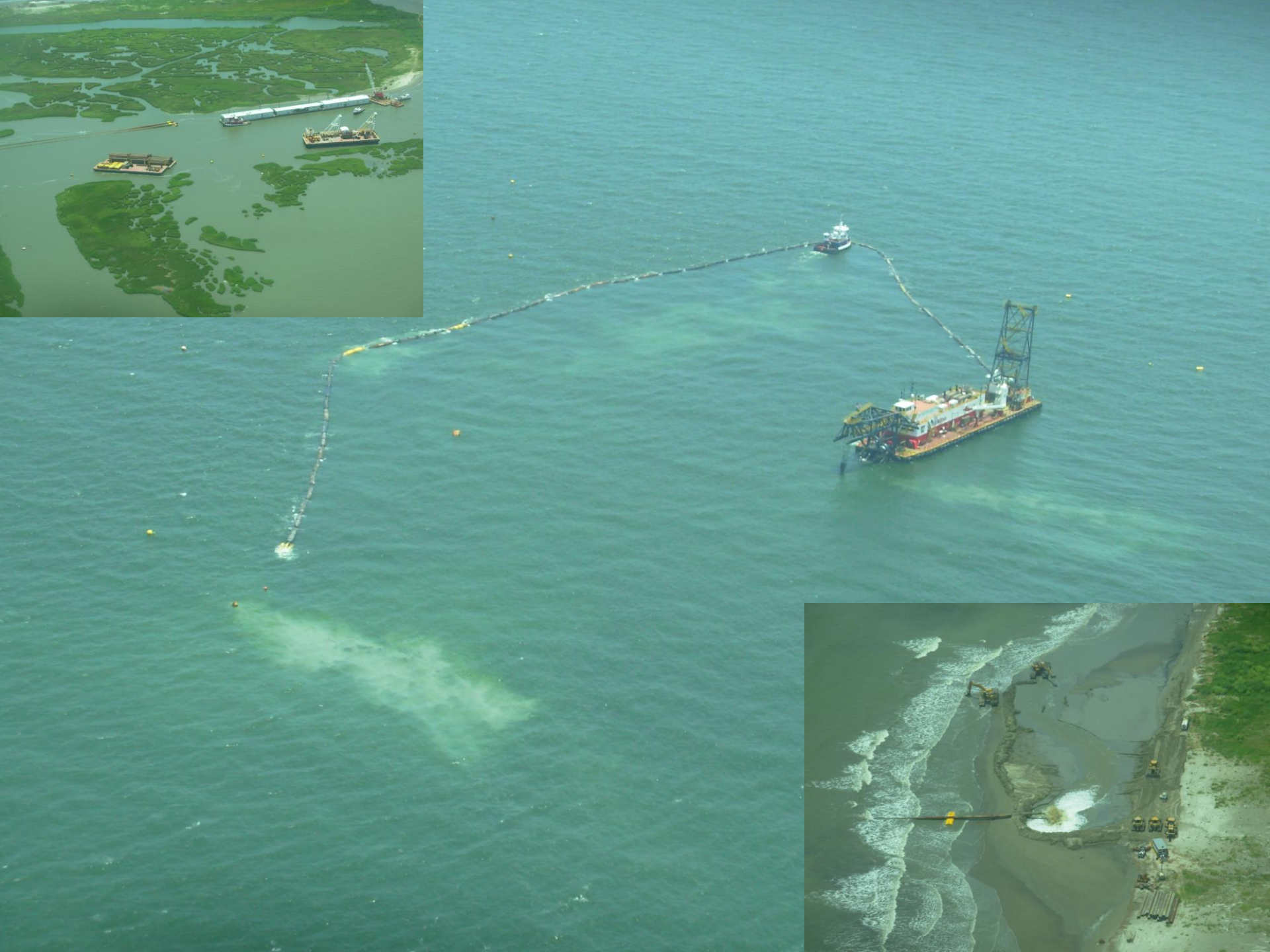
- No time for planning and preparation
- Minimal plans and specifications
- Difficult Communications
- Long transport distances / Exposed Conditions
- Small unit operations in remote locations
(surveys, pipeline install)
- Large workforce- influx of subcontractors
- Pressure to show progress and meet milestones

Start Up Challenges

- Weeks Clamshell first dredge deployed – same day – cancelled
- First Dredge in Site TSHD “Stuyvesant”
- CSD California next on site









Timeline

- BP Deepwater Horizon Explosion 20 Apr
- State pushes for Berm Permits May
- Shaw signs Contract with State of LA 8 Jun
- Shaw Meets with Contractors 9 Jun
- Stuyvesant and California on Site 11-14 Jun
- NTP for Alaska, Texas, Liberty, Terrapin Padre, Spider Barge, Scows 15 Jun
- Liberty Island starts dredging 19 Jun
- Terrapin Island starts 23 Jun
- Padre Island starts 27 Jun
- Alaska departs NJ 29 Jun
- Texas departs Jax 8 Jul
- Complete April 2011













Equipment Crews, Staff,



State / Shaw / GLDD Focus on
Production



Incidents

Safety Intervention Update



An Incident Injury Free Workplace

It's about caring for your coworkers

It's about speaking up when you see something unsafe

It's about planning activities and asking questions

It's changing from complying with safety practices to adopting them as the standard



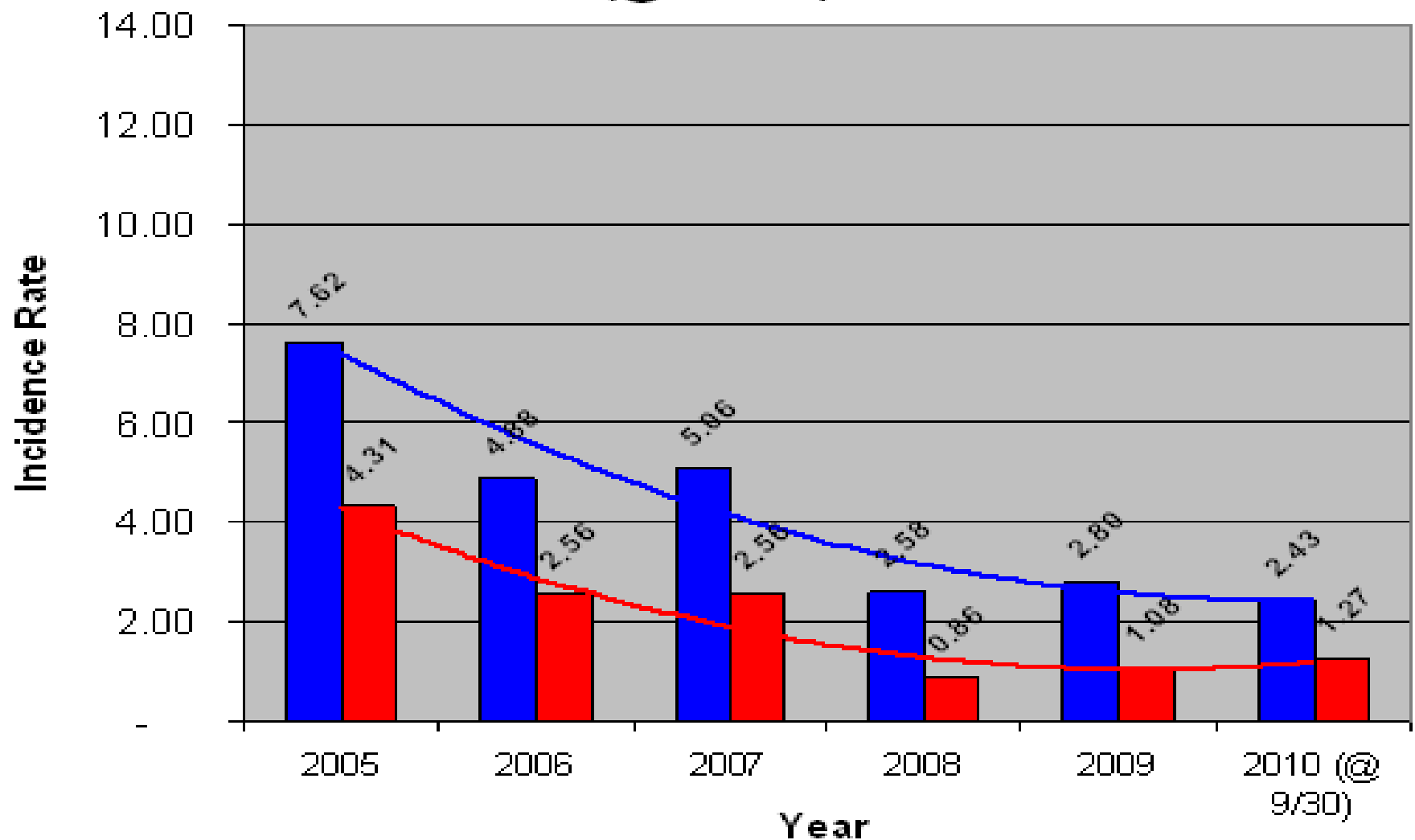
It's about taking responsibility for your own safety and the safety of those who work with you

It's about acknowledging your importance to the company

It's about choosing to follow safety rules because you want to not have to



Personal Injury Incidence Rates Calendar Years 2005 through 2010 (@ 9/30/10)



■ Total
 ■ Lost Time
 — Trend (Total)
 — Trend (Lost Time)

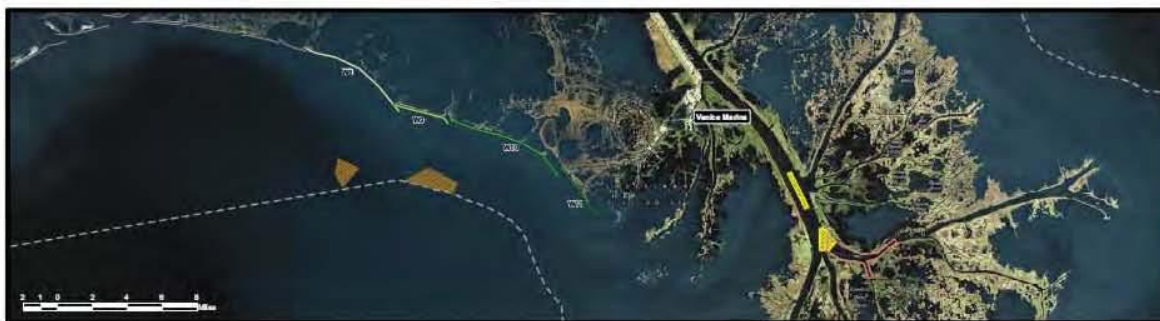
Incidence Rate = (# of injuries & illnesses ÷ total hours worked) X 200,000

Thinking on Our Feet

- Innovation in methodology
- Innovation in technology
- SAFETY
- Communication - Corps starts weekly meetings
- Production challenges
 - Variable material , how measure progress?

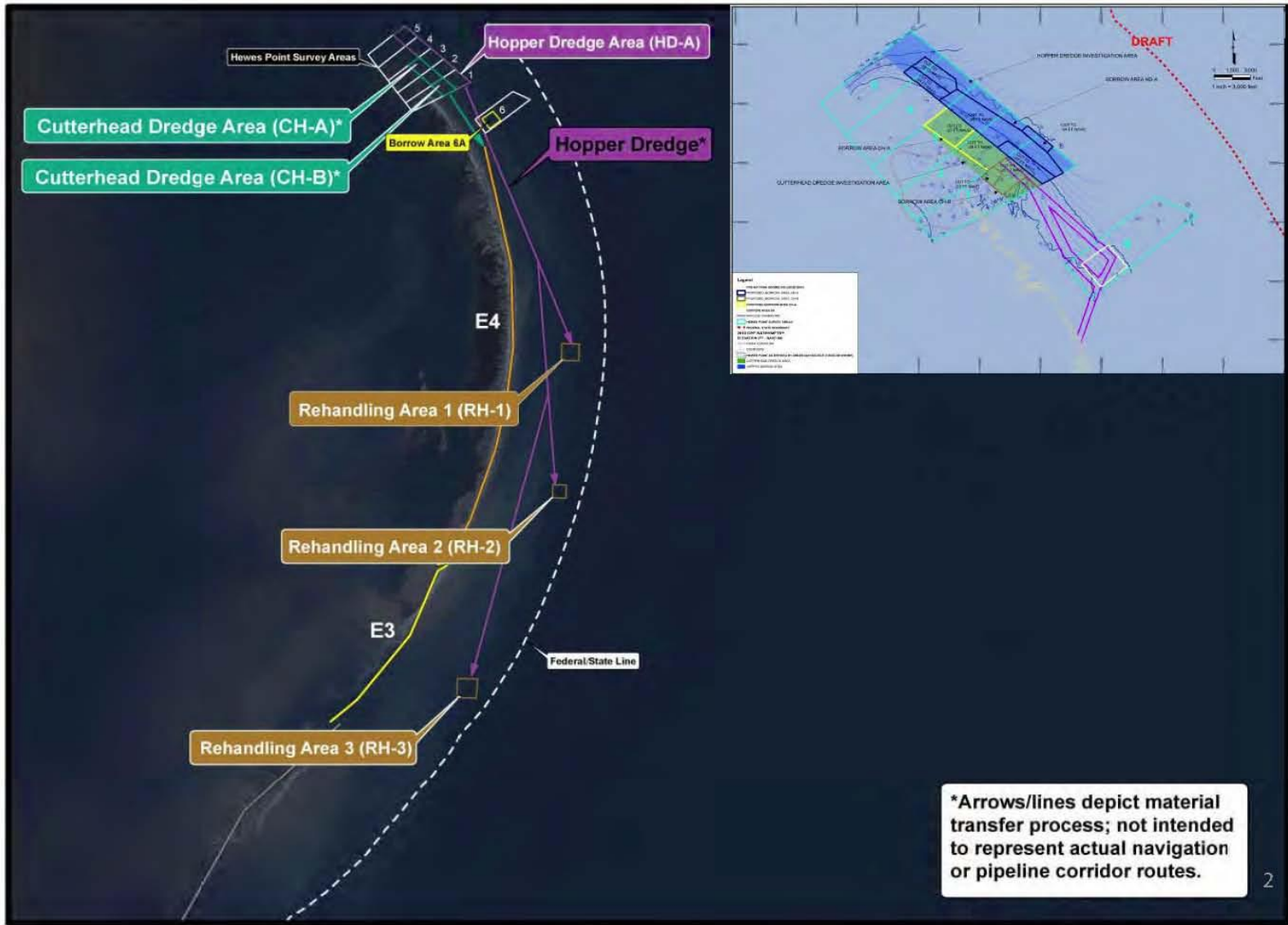


BARRIER BERM PROJECT

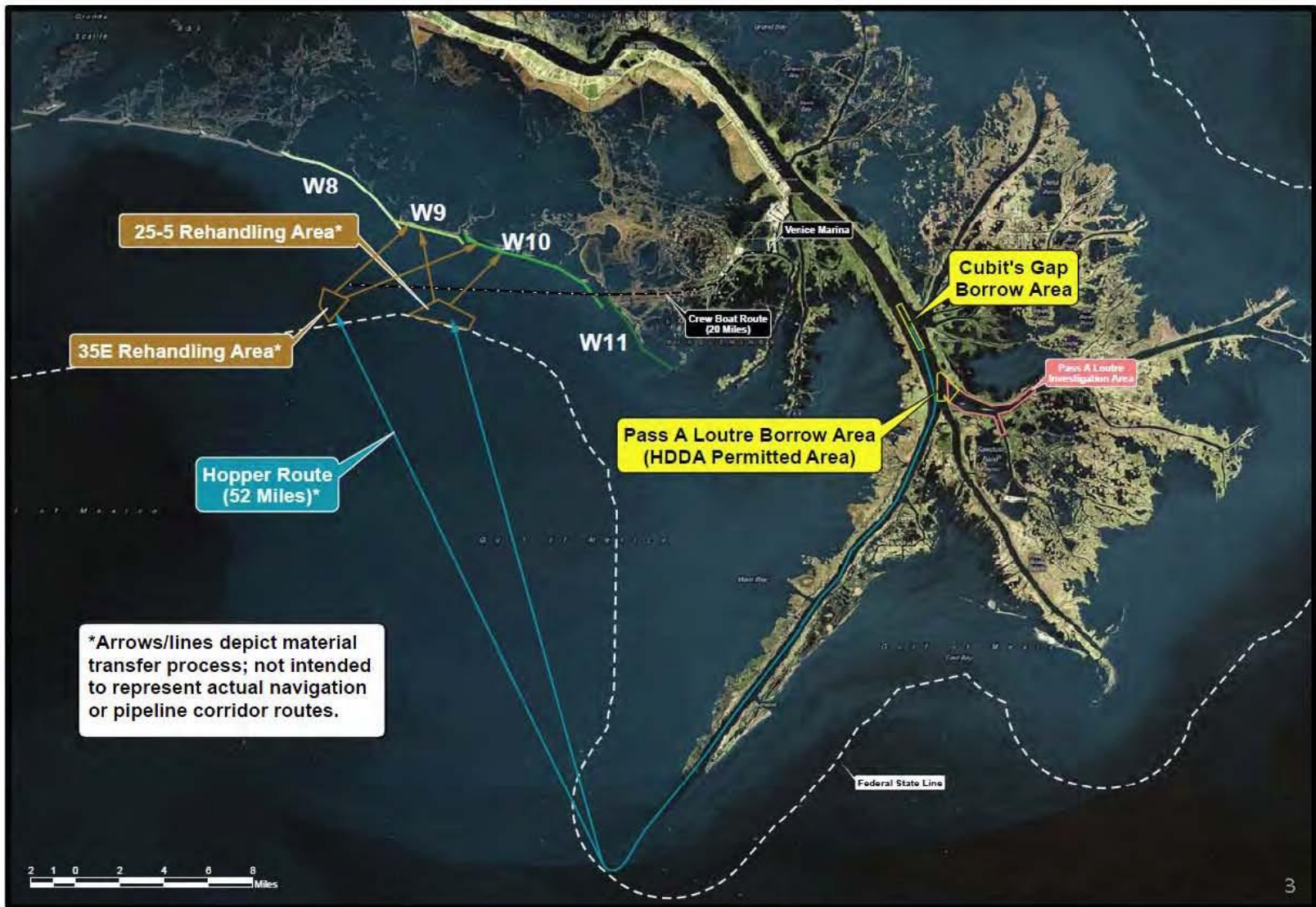


(File name: Overall Berm)

EASTERN BARRIER BERM DETAIL



WESTERN BARRIER BERM DETAIL



Eastern Barrier Berm Activity

Overview

Reach

Fleet

GIS

Photography

Documents



Berm Status

- Berms (22)
 - Incomplete (18)
 - Complete (1)
- Fleet (19)
 - Cutterhead (4)
 - Tug (4)
 - Hopper (2)
- Borrow Areas (9)
 - Active (7)
 - Pending (2)
- Rehandling Areas (7)
 - Active (5)
 - Pending (2)
- Points of Interest (1)
 - Deepwater Horizon (1)

Parish Boundaries

Parish Labels

Latitude: 29.7605 Longitude: -98.6713

20 km

10 mi

Alaska

Vessel: Alaska
Vessel Type: Cutterhead
Company: Great Lakes
Last Updated: Oct 26 2010 9:06AM



Western Barrier Berm Activity

Overview

Reach

Fleet

GIS

Photography

Documents



Berm Status

<input checked="" type="checkbox"/> Berms (22)	<input checked="" type="checkbox"/> Borrow Areas (9)
<input checked="" type="checkbox"/> Incomplete (18)	<input checked="" type="checkbox"/> Active (7)
<input checked="" type="checkbox"/> Complete (1)	<input checked="" type="checkbox"/> Pending (2)
<input checked="" type="checkbox"/> Lease (1)	<input checked="" type="checkbox"/> Rehandling Areas (7)
<input checked="" type="checkbox"/> Hopper (3)	<input checked="" type="checkbox"/> Active (5)
<input checked="" type="checkbox"/> Cutterhead (4)	<input checked="" type="checkbox"/> Pending (2)
<input checked="" type="checkbox"/> Tug (4)	<input checked="" type="checkbox"/> Points of Interest (1)
<input checked="" type="checkbox"/> Hopper (2)	<input checked="" type="checkbox"/> Deepwater Horizon (1)

Parish Boundaries

Parish Labels

EW Ellefsen

Vessel: EW Ellefsen
Vessel Type: Cutterhead
Company: Weeks
Last Updated: Oct 26 2010 11:00AM



Latitude: 29.4524 Longitude: -89.1929

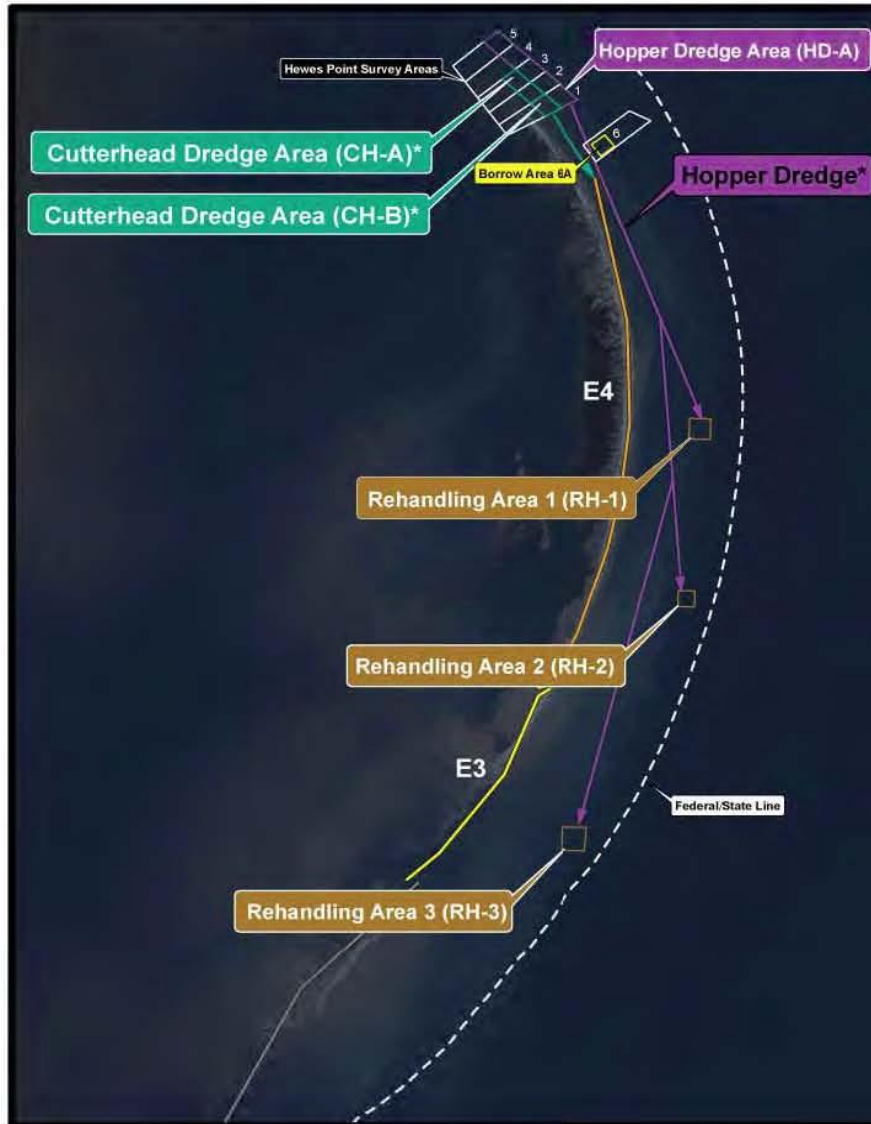
20 km
10 mi

Barrier Berm Progress Through October 25, 2010

Berm ID	Linear Foot Under Construction	Linear Foot to Elevation (+6 foot)	35E Handling Site (yd ³)	25-5 Handling Site (yd ³)	Hewes Point (yd ³)	RH-2 Handling Site (yd ³)	RH-2	St. Bernard Shoals (yd ³)	Berm (yd ³)
Reach W8	3,250	2,550							564,955
Reach W9	12,449	12,449	5,017,108						2,281,314
Reach W10	8,830	8,230		2,562,324					1,162,519
Reach W11		0							
Reach E3		0							
Reach E4	24,747	24,407			3,162,672	471,634	438,546		3,601,218
6A Refill					533,000				
Linear Foot Total	49,276	47,636							
Volume			5,017,108	2,562,324	3,695,672	471,634	438,546	0	7,610,006
Summary									16,194,072

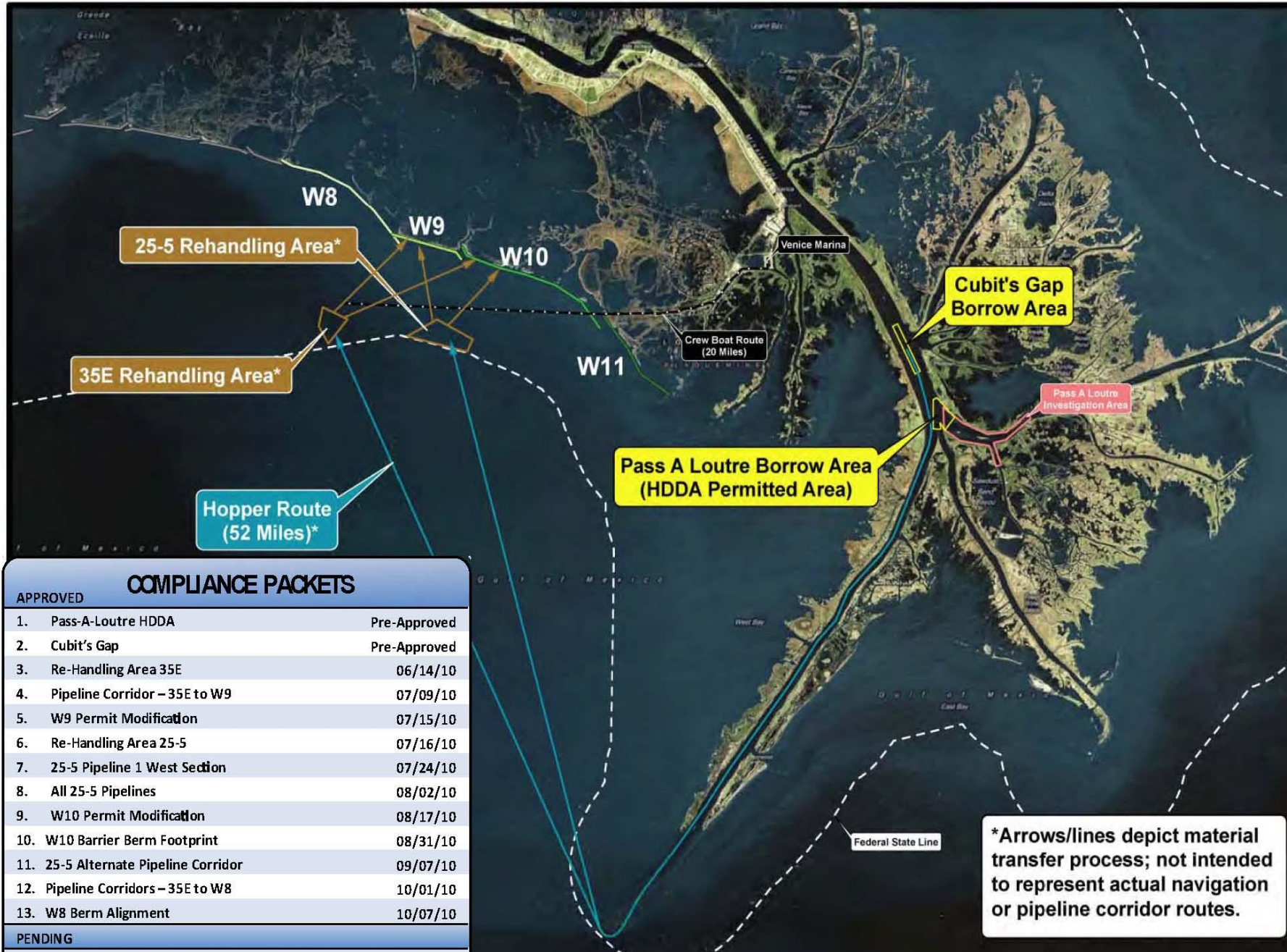
 Material from Hewes Point directly to Berm

EASTERN BARRIER BERM DETAIL



COMPLIANCE PACKETS		
APPROVED		
1.	First 2,000 LF of Reach E4	06/12/10
2.	Borrow Area 6A	06/13/10
3.	Borrow Area CH-B	06/28/10
4.	First 7,000 LF of Reach E4	06/28/10
5.	Re-Handling Area RH-2	07/02/10
6.	Borrow Area HD-A	07/02/10
7.	Borrow Area CH-A	07/02/10
8.	Borrow Area HD-A Revised	07/09/10
9.	Pipeline Corridor – RH-2 to E4	07/09/10
10.	Re-Handling Area RH-1	07/16/10
11.	Re-Handling Area RH-3	07/16/10
12.	Pipeline Corridor – RH-3	07/22/10
13.	First 20,000 LF of Reach E4	08/02/10
14.	4,800 LF of Reach E4 South	08/10/10
15.	Remaining E4-Sections	09/20/10
16.	Borrow Area 6A Backfill/Restoration Activities	10/19/10
PENDING		
1.	E-4 Permit Modification	10/15/10

*Arrows/lines depict material transfer process; not intended to represent actual navigation or pipeline corridor routes.



COMPLIANCE PACKETS		
APPROVED		
1.	Pass-A-Loutre HDDA	Pre-Approved
2.	Cubit's Gap	Pre-Approved
3.	Re-Handling Area 35E	06/14/10
4.	Pipeline Corridor – 35E to W9	07/09/10
5.	W9 Permit Modification	07/15/10
6.	Re-Handling Area 25-5	07/16/10
7.	25-5 Pipeline 1 West Section	07/24/10
8.	All 25-5 Pipelines	08/02/10
9.	W10 Permit Modification	08/17/10
10.	W10 Barrier Berm Footprint	08/31/10
11.	25-5 Alternate Pipeline Corridor	09/07/10
12.	Pipeline Corridors – 35E to W8	10/01/10
13.	W8 Berm Alignment	10/07/10
PENDING		

*Arrows/lines depict material transfer process; not intended to represent actual navigation or pipeline corridor routes.

CURVE BALLS

- After everything geared up, only two weeks at full capacity
- Turtle issues shut down hoppers
- SAFETY
- Lack of commitment makes tough to plan.



Lessons learned. Take aways?

- We can do this. This is what we do.
- What an opportunity for engineers/scientists
- Good material in Gulf/River
- Equipment versatility is important
- Engineering flexibility is important
- Need team effort owner, regulators,& dredgers
- Need progressive thinking regulators

Lessons learned. GLDD look in the mirror

- GL/Dredging industry as part of process
 - Clients and Policy Makers need our input
 - We need to work on image of arrogant pirates
 - Evaluate how clients get our attention
 - We need to be mentors to our clients

Lessons learned. Take aways?

- Reporters don't care about facts
- Real experts aren't relevant
- Short term impacts?
- Long term impacts?
- Gulf shorelines need protection, study, and action.
- US Shorelines need protection, study, and action.

Engineers can be heroes too!!

An aerial photograph of a long, narrow island or atoll stretching across the frame from the bottom left towards the top right. The island is light-colored, likely sandy or coral, and is surrounded by deep blue water. The text is overlaid on the image.

It's Not The Steel, It's the Paper!

WE CAN DO THIS!