

Coast Guard Sector New Orleans

Hydrographic Services Review Panel

January 25, 2006





Presentation Overview

- Introduction
- Discussion of NOAA support in:
 - Waterways Management
 - Pollution Response
 - Wreck and Debris Removal







Monday, August 29, 2005

Hurricane Katrina makes landfall near Gulfport, MS







- Thursday, August 25, 2005
 - Issued Initial Industry Bulletin; Katrina could become Category One & affect New Orleans
- Friday, August 26, 2005
 - No Port restrictions initiated, but urged industry to prepare; offshore platforms to consider evacuations
- Saturday, August 27, 2005
 - 1330: Closed Southwest Pass to all deep draft traffic







- Sunday, August 28, 2005
 - 1200: Closed all waterways with New Orleans area, including:
 - Gulf Intracoastal Waterway; mile 60 EHL to mile 177 WHL
 - Lower Mississippi River; SWP to mile 507
 - Mississippi River Gulf Outlet
 - Morgan City-Port Allen Alternate Route
 - Atchafalaya River, Red River, Ouachita
 - Bayou Lafourche & other waterways within Port of Fourchon



Waterways Management Vessel Movement Summary



Mile Marker 88 to Mile Marker 93 August 28th at 6 p.m.







- Waterway Openings
 - Tuesday, August 30 & Wednesday, August 31
 - Lower Mississippi River to tug and barge traffic
 - Red River, Ouachita River, Atchafalaya River
 - Thursday, September 1
 - GICW (mile marker 60 EHL to IHNC)
 - MRGO (to depth of 30')
 - Baptiste Collette (to depth of 9'6'')





- Waterway Openings (continued)
 - Friday, September 2
 - Lower Mississippi River to vessels
 - less than 35 feet;
 - daylight transits only;
 - one-way traffic zones between miles
 - » minus 20 to 2;
 - » 87 to 119 and
 - » 151 to 226
 - Saturday, September 3
 - GICW (mile marker 55, WHL, through Harvey Lock)





- Waterway Openings (continued)
 - Sunday, September 4
 - Lower Mississippi River to vessels
 - less than 39 feet;
 - daylight transits only
 - Algiers Canal
 - Monday, September 5
 - Baptiste Collette (no depth restrictions)
 - Tuesday, September 6
 - GICW (mile marker 177 WHL to 60 EHL, emergency vessels only thru IHNC lock)

NOAA

Navigation Surveys

Navigation Response Teams, NOAA ships and contract vessels surveyed rivers and ports to ensure waterways were clear of hazards

Surveys allowed critical ports and harbors to open to commercial and emergency vessel traffic sooner

Will be used to update nautical charts









• Mississippi River Surveys

- NRT 1, 4 and 6 completing surveys from mile marker 235 downriver
- M/V Davidson surveying mouth of river up
 USN contracted Onyx for additional coverage
- LMR opened to unrestricted depth by Monday, September 12



Aids to Navigation Post Hurricane Katrina



• Southwest Pass Entrance to Head of Passes:

- <u>Pre Katrina</u>:
 - 47 AtoN in place from the Sea Buoy to SWP Head Ranges
- <u>Post Katrina</u>:
 - 33 (or 70%) AtoN destroyed or missing
 - 14 AtoN damaged
 - Sea Buoy missing
 - Lighthouse on emergency power
 - Entrance to SW Pass east front and rear range structures destroyed
 - All side range structures destroyed
 - SWP Head right front light destroyed



Aids to Navigation Post Hurricane Katrina



Head of Passes to Algiers Point

- <u>Pre Katrina</u>:

- 110 AtoN in place from Head of Passes to Algiers Point

- Post Katrina:
 - 36 (or 33%) AtoN Lights destroyed
 - Pilottown range structures destroyed
 - Cubits Gap range structures destroyed
 - All lighted buoys appeared to be on station
 - Remaining lights damaged to varying degrees



Aids to Navigation Post Hurricane Katrina



Algiers Point to Baton Rouge

- <u>Pre Katrina</u>:

- 167 AtoN in place from Algiers Point to Baton Rouge

- Post Katrina:

- 3 Buoys missing
- 4 Lights destroyed
- Most commercially powered lights extinguished and/or damaged



Aids to Navigation Status



Total Fixed AtoN Damaged or Destroyed

Hurricane Katrina - 258 Hurricane Rita -148

Total Range Structures Damaged or Destroyed

Hurricane Katrina - 93 Hurricane Rita - 25

AtoN Fixed by Private Contractor

Total - 30

AtoN Fixed by Coast Guard

Total - 594



Pollution Response Overview



Major Coastal Spills 6 (Over 100,000 gal)

Medium Coastal Spills 4 (Over 10,000 gal)

Minor Coastal Spills Estimated 143 (Under 10,000 gal)

Estimated total volume spilled for Major & Medium coastal 190,897 bbl (over 8 million gal)

> **Total Volume Recovered** 82,860 bbl



Pollution Response Overview



Estimated Total Volume Evaporated 39,759 bbl

Estimated Total Volume Naturally Dispersed 45,786 bbl

Estimated Burned Volume

94 bbl

Maximum Feet of Hard Boom Currently Deployed 30,000 feet

Pollution Responders Employed

750



Pollution Response: Murphy Oil





- Location: Meraux, LA
- Mile Marker: 87
- **Product:** Arabian Medium Crude
- Total discharged: 25,110 bbl
- Recovered Product: 17,891 bbl



Pollution Response: Murphy Oil





Oil severely impacted homes in St. Bernard Parish.



Pollution Response: Bass Enterprises South





- Location: Cox Bay, LA
- Mile Marker: 35
- **Product:** Heavy LA Sweet Crude
- Total Discharged: 90,000 bbl
- Recovered Product: 36,779 bbl



Pollution Response: Shell Nairn





- Location: Nairn, LA
- Mile Marker: 35
 - **Product:** Heavy LA Sweet Crude
- Total Discharged: 3,315 bbl
- Recovered Product: 255 bbl



Pollution Response: Chevron Pipeline – Empire Facility





- **Location:** Empire, LA
- Mile Marker: 30
 - Product: Heavy LA Sweet Crude / Diesel
- Total Discharged: 33,900 bbl
- Recovered Product: 1,784 bbl



Pollution Response: Chevron Pipeline – Empire Facility





In-Situ burn was conducted on 27 Oct 05 to remove oil from the marsh.



Pollution Response: Shell Pilottown





- Location: Pilottown, LA
 - Product: Heavy LA Sweet Crude
- Total Discharged: 25,435 bbl
- Recovered Product: 22,685 bbl



More than 5,000 commercial and recreation vessels were damaged or destroyed by Katrina

Within the SECTOR New Orleans AOR, more than 2,500 casualties of commercial fishing and industrial vessels have been catalogued





FEMA has obligated more than \$100 Million dollars for the removal of wrecks and marine debris



1 Million





1,000+ vessels were successfully salvaged by their owners

USCG coordinated the removal of over 400 vessels





USCG expects nearly 500 additional vessel removal operations over the next 4-6 months

Largest coordinated salvage operation in the history of the United States.





Coast Guard is also tasked with removing substantial volumes of debris that may potentially block navigable waterways





Many of these vessels and debris are in environmentally sensitive areas

NOAA

Aerial Photography

Collected 10,000 digital aerial images and partnered with private industry to make images available to the public

Used in response for

- damage assessments
- public information
- spill response prioritization
- search & rescue
- access routes for Navigation **Response Teams**

Will be used to update the official shoreline





NOAA Damage Assessment Imagery of Hurricane Katrina the thorithms Original Localeinte





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