PORTS SPECIALIST

FOCUS AREAS

- Post-Hurricane recovery of ports;
- Vessel salvage & marine debris;
- NOAA Portfields Initiative;
- Environmental impacts of LNG development & LNG traffic.

OUTCOMES

- Recovery:
  - Status whitepaper, numerous presentations, & website work;
  - Technical assistance to the Ports Association of Louisiana (PAL);
- Vessel salvage & marine debris:
  - NOAA MDP grant/LDNR removal ($100K + $250K);
  - CZ07 Paper/presentation;
  - GOM Synthesis (GEOG 7973);
- Southern LA Regional Portfields Project:
  - Liaison to PAL & Port of Greater Baton Rouge;
  - Strategic Business Plan for LA Ports ($600K EDA App.);
  - More…
- LNG:
  - TCS20 Panel/paper (May 2006);
- NEW! Fisheries Infrastructure.

http://www.laseagrant.org/adserv/ports.htm
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Louisiana Ports
Deep, Inland, Coastal & Emerging

Legend:
- Deep draft (6)
- Inland ports (14)
- Coastal ports (9)
- Emerging (10)
Hurricane Impacts to Ports

- **Ship channel closures**
  - Shoaling, underwater obstructions, debris
    - Est. 22M tons (55M yd$^3$) of debris (~20 WTCs)

- **Loss of communications**
  - Near total loss... website, email, phone, fax, cell

- **Loss of power**
  - Weeks/months...

- **Loss of manpower**
  - Almost 98% of Port of New Orleans employees evacuated

- **Loss of intermodal connections**
  - 2,500 rail cars affected, 250+ derailed
  - NOPB lines/interchanges only 90% by October 2005
  - Lack of truck drivers, re-establishing truck routes

- **Anarchy of citizens**
## Recovery/damages to ports (as of 7/06)

| PORT                                      | % RECOVERED OPERATIONS | DAMAGE EST. (DATE)
|-------------------------------------------|------------------------|---------------------
| Abbeville Harbor & Terminal Dist.         | 100% (NOV05)           | $200,000            |
| Greater Lafourche Port Commission        | 100% (OCT05)           | $7,000,000          |
| Plaquemines Port, Harbor & Terminal Dist. | N/A                    | $9,000,000          |
| Port of Iberia                            | 100% (OCT05)           | N/A                 |
| Port of Lake Charles                      | 100% (OCT05)           | N/A                 |
| Port of New Orleans                       | 70% (JAN06)            | $283,000,000        |
| Port of South Louisiana                   | 100% (OCT05)           | $2,000,000          |
| St. Bernard Port, Harbor & Terminal Dist. | 100% (JUL06)           | $15,000,000         |
| W. St. Mary Port, Harbor & Term. Dist.    | 100% (mid-OCT05)       | N/A                 |

1 Source PAL and Louisiana Sea Grant (NOV05)

2 Source DOTD (JUL06)
Quick Summary of LA Ports

- **Port of New Orleans**
  - 30% of port’s footprint was destroyed (largely downriver and along the IHNC);
    - France & Jourdan Rd. terminals heavily damaged (access rd. washes away);
    - 52M lbs of frozen chicken spoil, 50% of coffee in warehouses lost;
    - London Metal Exchange suspends certification (late 2005 – mid 2006);
  - $283M damages / 70% by May 2006;
    - Currently exceeds pre-Katrina ship calls.
France Road Terminal

Aerial View

Source: Port of New Orleans
France Rd. cont.

Access Road

Source: Port of New Orleans
Mandeville Street Wharf

Source: Port of New Orleans
Industrial Canal Breach

Source: Port of New Orleans
Louisiana Coastal Ports Extension Project

Navigation/tonnage exceed pre-Katrina/Rita levels (Mississippi & Calcasieu)

- **Port of New Orleans**
  - Steel imports along the Mississippi River
  - Ship calls exceeds pre-Katrina levels (27->30)

- **Port of St. Bernard**
  - Ship calls and demand for storage area exceeds pre-Katrina levels

- **Ethanol/ Bio-fuels. . .**
  - Port of Greater Baton Rouge (Shaw)
  - Port of Lake Providence (Co.)

- **Other. . .**
  - Port of Shreveport-Bossier (Steelscape)
  - Port of South Louisiana (Emergency storage)
Gulf of Mexico (GOM) Marine Debris Synthesis

Existing Data

- Marine Debris (NOAA-MDP)
- NML List (USCG)
- Sabine NWR Hazmat (USFWS)
- Calcasieu Lk. MPD (LSG)

Data Sources: NOAA, USCG, USFWS & Louisiana Sea Grant
Calcasieu Lake Marine Debris Project

- N=68;
- Calcasieu Lake, LA;
- Visual surveys w/ some SSS;
- Volunteer effort (fishermen);
- GEOG 4047 & 7973.

PARTNERSHIPS

- Grass-roots, volunteer-oriented effort;
- Multiples partnerships;
  - Feds- NOAA, USCG Auxiliary;
  - State- LDWF, LDNR, Calcasieu Parish Sheriff’s Office;
  - NGOs- CCA, LC Power Squadron;
  - Local support- Ship to Shore Co., Stine Lumber, Capt. Sammie Faulk, Lake Charles Pilots & more.
- Extensive media support;
- NOAA Contacts- Tim Osborn & Cliff Cosgrove.
NOAA GOM Marine Debris Project

- N~ 2,860+;
- AL, MS, and LA;
  - Near-shore waters;
  - Lake Borgne, LA;
- SSS surveys;
- Can derive volume estimates.

More information at [http://gulfofmexico.marinedebris.noaa.gov](http://gulfofmexico.marinedebris.noaa.gov) or speak with Paula (LA) or Shonda (MS/AL)
US Coast Guard “NMA List”

- N~525;
- Southeast LA;
- Stranded vessels or large debris items which “slipped through cracks”
- Visual surveys.

Source: US Coast Guard Non-Mission Applicable List (Public Version)
Explore how data was collected and role of GIS...

- Aerial survey; side-scan sonar (SSS); visual survey, etc.;
- Advantages, disadvantages, & quality of data;
- Discuss emerging data collection techniques for future consideration & utilizing fishermen to collect data;

Explore spatial relationships in available data...

- Produce high-quality maps of GOM debris data;
- Determine the influence of elevation, bathymetry, or population density in aggregating debris;

Offer lessons learned and management implications to inform future post-storm debris response.
Southern Louisiana Regional Portfields Initiative

- ~9 Southern Louisiana Ports:
  - Liaison to POGBR & PAL;

- Agency partners:
  - **Feds** - NOAA, NMFS, EPA, USACE, EDA, HUD, USFWS;
  - **State** - LDEQ, LDWF, LDED, DOTD;
  - **Regional** - RPC, BTNEP, LSG;
  - **Local** - Baton Rouge Brownfields, Baton Rouge Green.

- NOAA contacts - Kenneth Walker, Brent Ache, & Meredith Mendelson.
**Port of Greater Baton Rouge (POGBR)**
- Inventory of distressed riverfront property;
- Dredging of Baton Rouge Harbor (Devil’s Swamp);
- Directional/interpretive signage for port and locks;
- Stormwater Management & Drainage Improvements;
- Container-on- barge demonstration project.

**Ports Association of Louisiana (PAL)**
- **Strategic Business Plan for the Ports of Louisiana**
  - $100,000 (LDED- committed)
  - $65,000 credit for Capital Improvement Plan for Louisiana’s ports;
  - $35,000 (PAL);
  - ~$600,000 EDA pre-application
Future Plans

- Synthesis of GOM marine debris;
- Fisheries infrastructure;
  - Marine services centers, niche fishing ports;
- Re-visit LNG (traffic conflicts, marine mammal strikes);
  - Calcasieu Ship Channel (2-3 terminals);
  - Gulf of Mexico (16+ terminals):
    - 2 existing; 4 construction; 10 more approved.
- Ballast water & AIS (undergrad student).
QUESTIONS?

More information:

www.laseagrant.org/debris

www.laseagrant.org/adserv/ports.htm