Mitigation of the Human Dimensions of Spills in Coastal Louisiana: Collaboration Between NOAA's Office of Response and Restoration and Louisiana Sea Grant

Collaborative Meeting CRRC/Sea Grant/OR&R/USCG
Portland, ME
January 25, 2010





Human Dimensions

- What are human dimensions?
 - subsistence
 - natural resource valuation
 - risk communication
 - social impacts
 - coordination in response and restoration
 - environmental ethics



History of Human Dimensions

- 2003 Research and Development Priorities:
 Oil Spill Workshop
- 2006 Human Dimensions of Oil Spill Response Workshop
- Pilot Project



Problem

- Often spill response is judged a "success" by responders, but public does not perceive it that way.
- Projected increase in frequency and severity of oil spills
 - Natural disasters (e.g., hurricanes)
 - Subsidence
 - Aging infrastructure
- Need for greater focus on human dimensions in state and national response process



NOAA

- Stovepipes within NOAA
 - Little cross communication between operating branches
- OR&R
 - National Ocean Service
 - Environmental protection from spills
 - National level
- Sea Grant
 - Ocean and Atmospheric Research



Sea Grant

- Established 1966 by Congress (1968 in Louisiana)
- Natural resources (e.g., fisheries)
- Research, education and outreach to work towards coastal stewardship and sustainability
- Tourism and recreation
- Cultural ties to community



OR&R in Louisiana

- Structured response
 - Large amount of ship traffic
 - Natural disasters
 - High frequency of spills; ~3,000/yr
 - Experienced responders
- Housed in Sea Grant building on LSU campus



Pilot Project Objective

- Enhance communications between NOAA OR&R and Sea Grant.
 - Link national, state, and local levels
 - Intra-agency communication before (planning/drills), during (response), and after (restoration)
- Pilot for nation-wide Sea Grant/OR&R cooperation



LSU Project Team

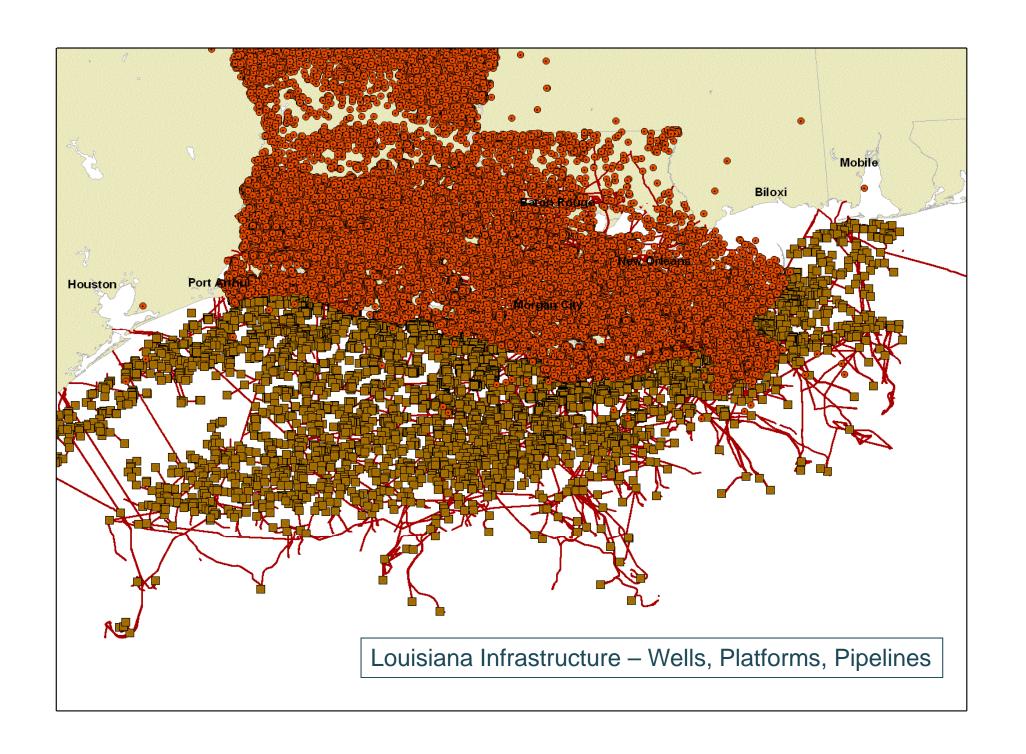
- Don Davis, Research and Development, Louisiana Oil Spill Coordinators Office (LOSCO) Human Dimensions 2006
- Chuck Wilson, Executive Director, Louisiana Sea Grant
- Mike Liffmann, Associate Executive Director, Louisiana Sea Grant



Pilot Location

- High probability of spill during study
- Well established spill response
- Need to work with community





Methodology Phase 1

- Institutional Review Board for the use of human subjects
- Met with Coastal LA Sea Grant agents and LA-based OR&R spill response and restoration employees (July-Dec 2007)
 - Visited each agent in his/her parish
 - Gathered information on resources (e.g., species of economic importance)
 - Synthesis report of feedback on project
 - Follow up and projections for where project was headed in near future





Questions For Agents

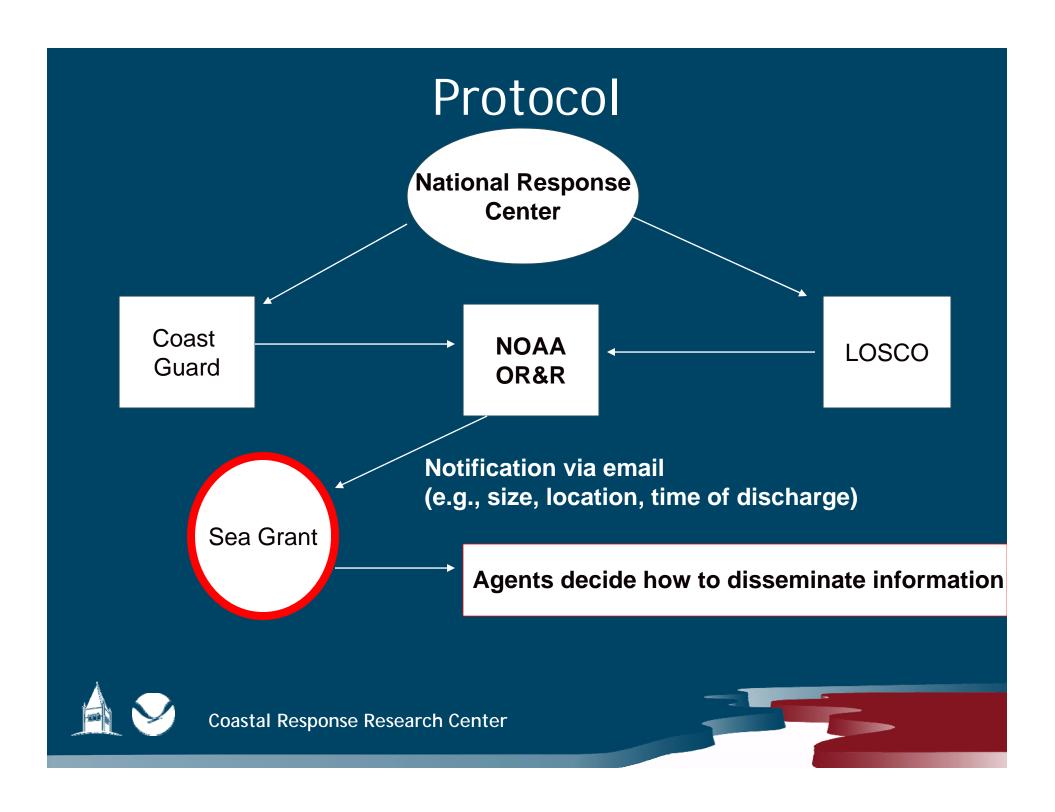
- Natural Resources
 - What natural resources are valued in the parishes where you operate?
 - Who is involved with these natural resources?
- Economics
 - Are there any residual economic effects that trickle down to employees?
 - How might major employers be affected by oil spills?
- Oil Spill information
 - How are people in this parish potentially affected during and after an oil spill?



Methodology Phase 2

- Collaborative meeting (June 2008)
- Discuss prospective interactions between Sea Grant and OR&R
- Port Fourchon
- Sea Grant quarterly meeting
- Meet and greet
- Discussion of protocol





Feedback

Spill Protocol

Education
Sea Grant ←→ OR&R
←→ Stakeholders

Planning and follow up Quarterly Meetings



Coastal Response Research Center

Applications: Two Spills

 Grand Isle: June 29, 2008 (observed) Crude Oil; unknown source Oiled 3-4 mi of coast Mississippi at New Orleans: July 23, 2008 Collision with chemical tanker Sant Turman •270,000 gallons of fuel oil Cameron Lake Lake Grand 1 Vermillon Atchafalaya 100 KM 100 Miles

Notification System in Action Grand Isle

- Size, discharge from what
- Notifications sent to agents
- Information passed on to Port Commissioners in Grand Isle and Port Fourchon
- Mississippi at New Orleans
 - Notifications sent on to agents
 - High media attention
 - Economic impacts due to channel closure, but low environmental impacts





Conclusions

- 50% of Population Lives in Coastal Regions
- Sea Grant and OR&R are Active in All Coastal Communities
- Apply OR&R and Sea Grant Partnership to All Coastal regions
- Will Help Decrease Human Dimension Issues Before, During and After Spill Events.



Coastal Response Research Center www.crrc.unh.edu

Heather Ballestero

http://crrc.unh.edu/students/index.html







