

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

Clean Gulf Preconference

October 28, 2008

Heather Ballestero

CRRC



Coastal Response Research Center

CRRC Overview

- NOAA's Office of Response and Restoration (OR&R)/UNH spill partnership in 2004
- Many research needs exist regarding spill response, recovery and restoration

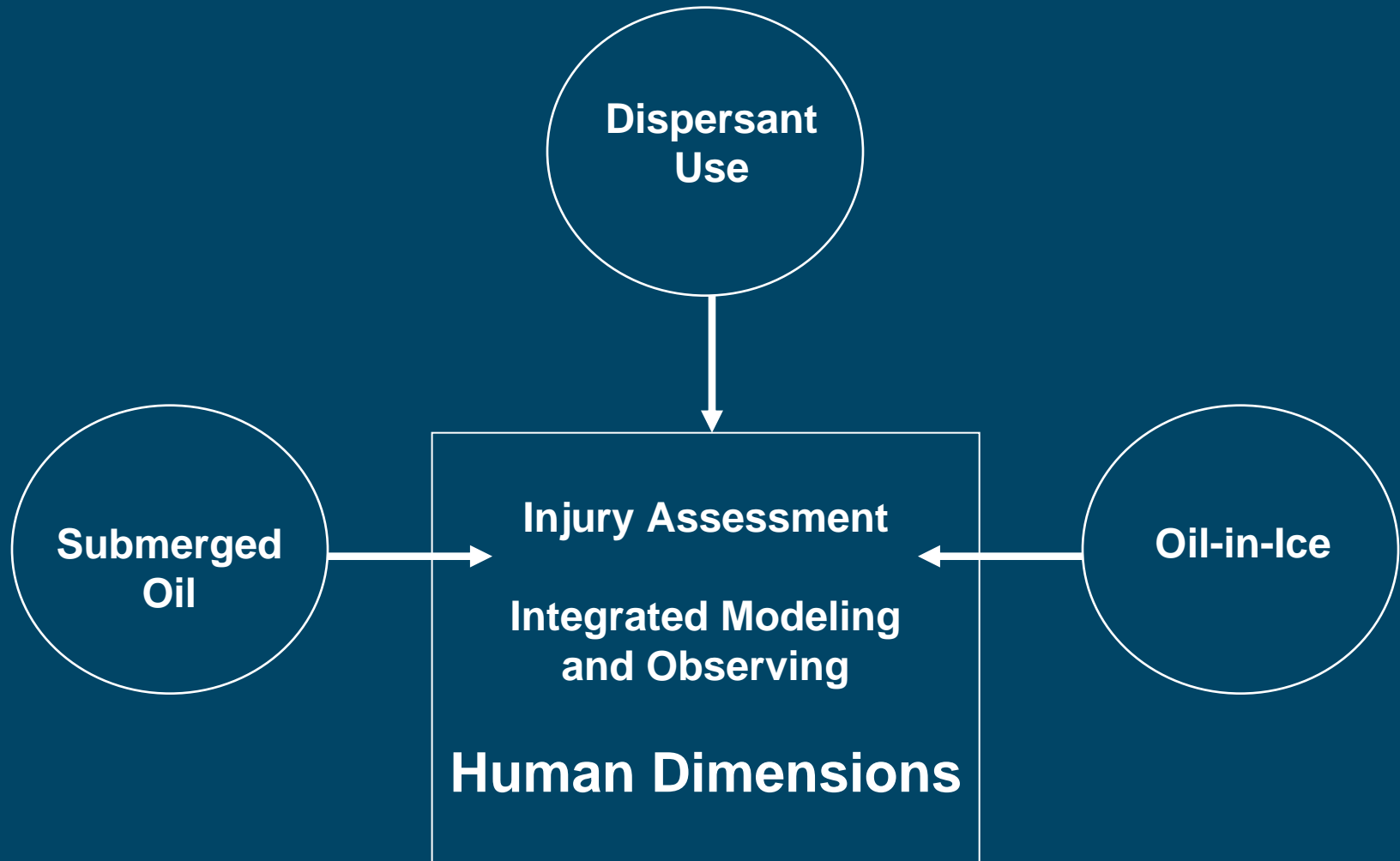


Specific CRRC Missions

- Conduct and oversee basic and applied research and outreach on spill response and restoration
- Transform research results into practice
 - NOAA Liaisons
- Educate/train students who will pursue careers in spill response and restoration



Focus Topics



Human Dimensions

- What are human dimensions?
 - Subsistence
 - Natural resource valuation
 - Risk communication
 - Social impacts
 - Coordination in response and restoration
 - Environmental ethics



Problem

- Often spill response is judged a “success” by responders, but public does not perceive that.
- 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



Emphasis for Human Dimensions of Oil Spills

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



NOAA Agencies

- Stovepipes within NOAA
 - Little cross communication between operating branches
- OR&R
 - National Ocean Service
 - Environmental protection from spills
- 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
- Sea Grant agents work with local community members



OR&R in Louisiana

- Structured response
 - High frequency of spills
 - Experienced responders
- Housed in Sea Grant building on LSU campus



Pilot Project Objective

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



Pilot Project Planning

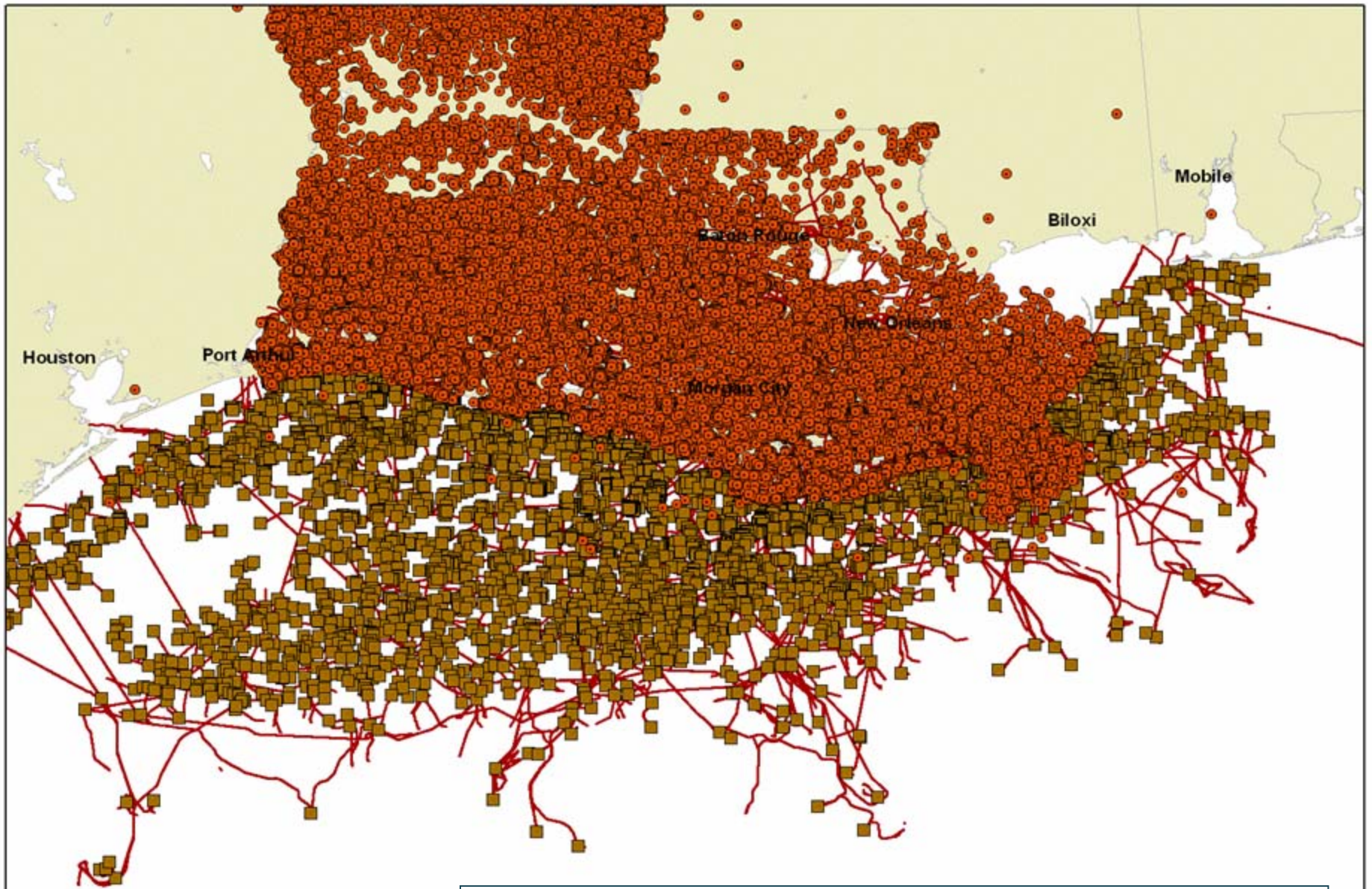
- Don Davis, Research and Development, Louisiana Oil Spill Coordinators Office (LOSCO)
- Chuck Wilson, Executive Director, Louisiana Sea Grant
- Mike Liffmann, Associate Executive Director, Louisiana Sea Grant
 - Worked at National Sea Grant Office 2007-2008



Pilot Location

- Louisiana has high frequency of spills
 - Natural disasters
 - High tanker traffic
- Well established spill response
- Need to work with community





Louisiana Infrastructure – Wells, Platforms, Pipelines

Compliments of Amy Merten, OR&R

Methodology

- 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?

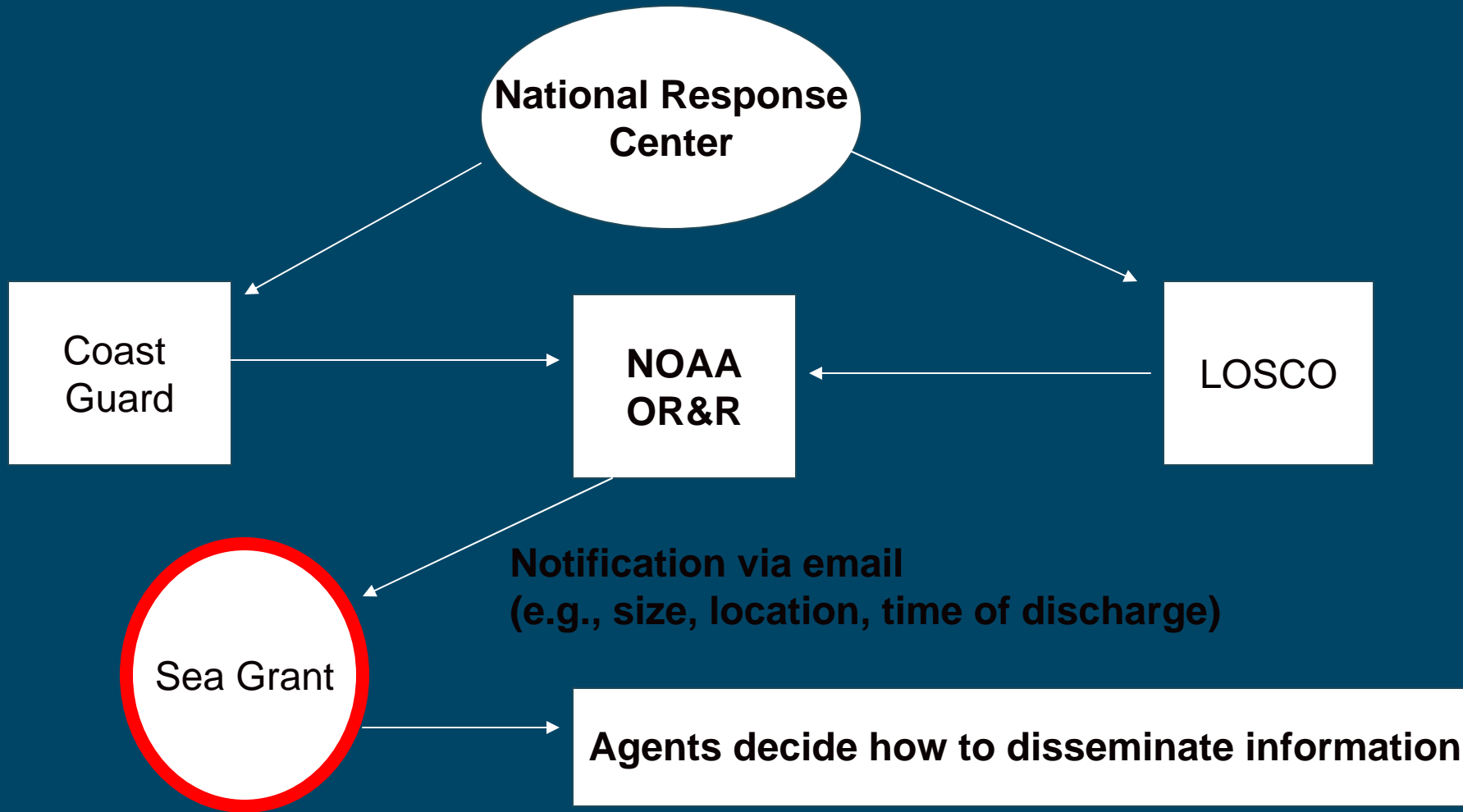


Methodology cont...

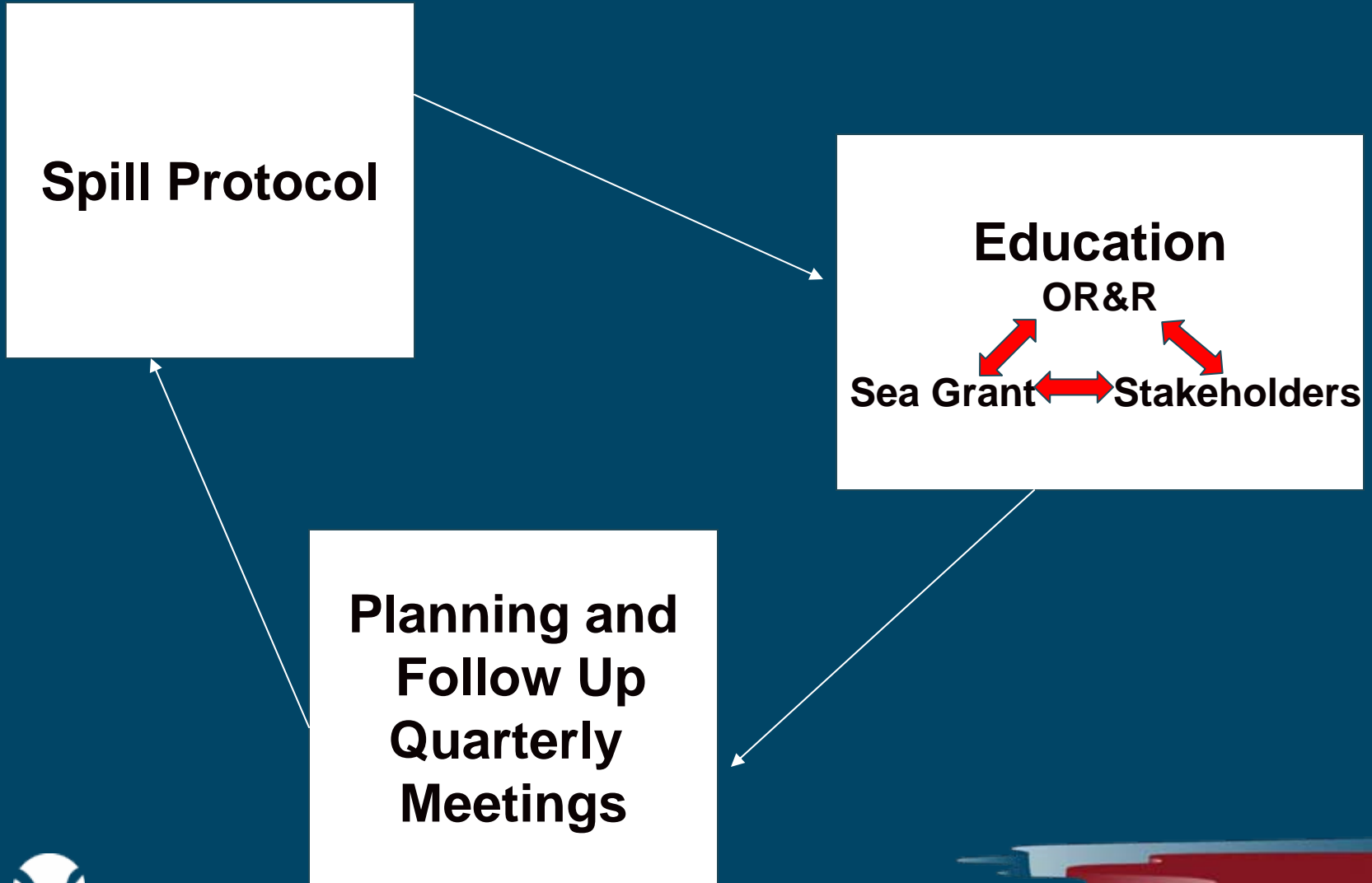
- Developed template for collaborative meeting (June 2008) discussing possible cooperative interactions between Sea Grant and OR&R
 - Port Fourchon
 - Sea Grant quarterly meeting
 - Meet and greet
 - Discussion of protocol
- Pilot for nation-wide Sea Grant/OR&R cooperation



Protocol



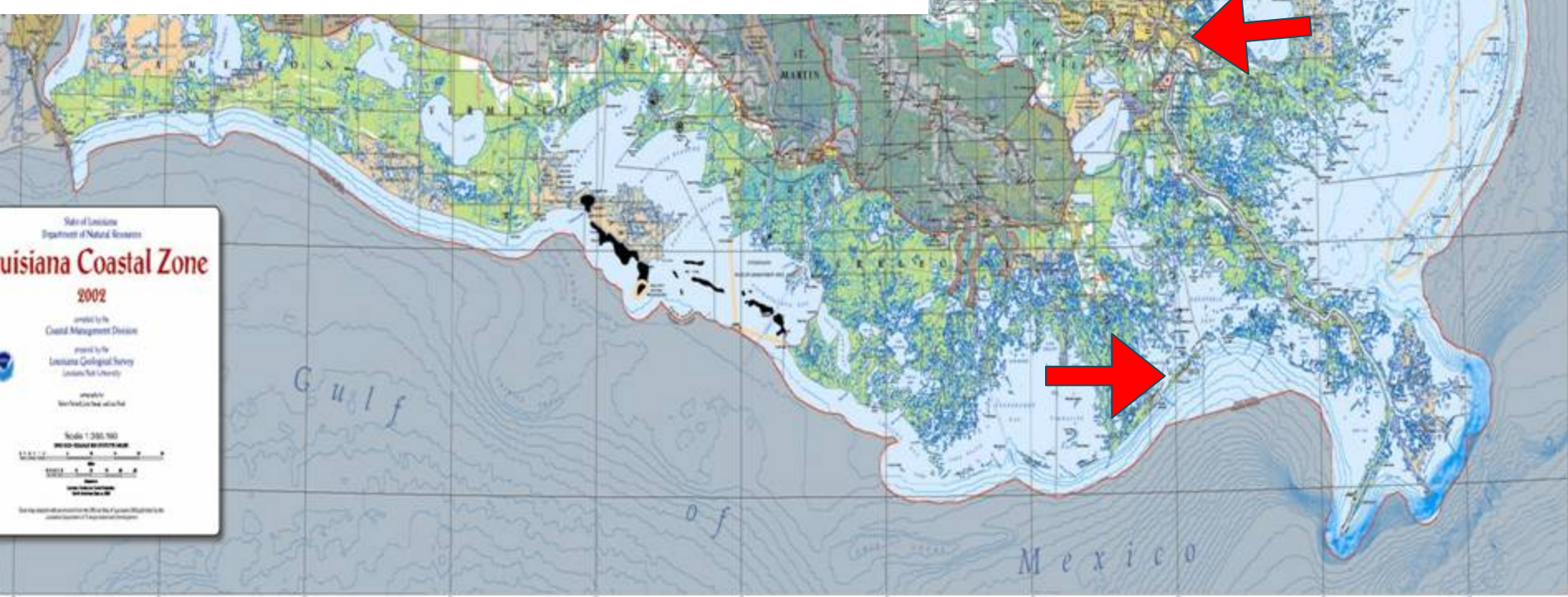
Feedback Loop



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
270,000 gallons of fuel oil; collision with chemical tanker



Notification System in Action

Grand Isle

- Size, discharge, location
- Notifications sent to agents
- Information passed on to Port Commissioners in Grand Isle and Port Fourchon
- Mississippi at New Orleans
 - Notifications sent to agents
 - High media attention so not as much involvement
 - Economic impacts due to channel closure, but low environmental impacts thus far



Conclusions

- 50% of Population Lives in Coastal Regions
- Sea Grant is 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.



Nasa.gov (http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=17439)

