

GULF OF MEXICO MARINE DEBRIS PROJECT: ADDRESSING THE IMPACTS ON COASTAL COMMUNITIES BY HURRICANES KATRINA AND RITA

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During the 2005 hurricane season, Hurricanes Katrina and Rita inflicted severe damage on the Gulf of Mexico coastal region and deposited huge amounts of debris over large areas of the Gulf coast. This submerged marine debris poses a persistent hazard to vessel traffic and can adversely affect commercially viable fishing grounds.

In an effort to restore fishing grounds and improve navigational safety, Congress directed the National Oceanic and Atmospheric Administration (NOAA) Office of Coast Survey (OCS) and Office of Response and Restoration (ORR) to survey and map the impacted Gulf coast areas. Survey work began in September 2006 in Alabama, Mississippi, and Eastern Louisiana and by the end of the first phase over 5,000 submerged potential debris items (referred to as contacts) had been identified, mapped, and posted on the project Web site <<http://gulfofmexico.marinedebris.noaa.gov/>> to advise fishers and boaters, and assist with marine debris removal.

In 2008 these efforts continued in Louisiana. NOAA's ORR and OCS cooperated closely with the United States Coast Guard (USCG), Federal Emergency Management Agency (FEMA), and Louisiana Department of Natural Resources (LDNR) to survey the majority of the offshore areas of Louisiana's coastline, map the new sonar contacts, and post them on the project Web site. Contacts considered a danger to navigation were listed as such and promptly reported to the USCG for inclusion in a Local Notice to Mariners.

The information gathered was publicized through the project's Web site, supported by NOAA's National Coastal Data Development Center in Stennis, MS. The site provides both static maps and GPS coordinates that can easily be downloaded and printed as well as an interactive mapping option where users can zoom in to a specific area and select a contact icon to access more information.

The project team, in close cooperation with Sea Grant, conducted an extensive outreach effort to make fishers and boaters aware of the survey and mapping efforts, and the contacts found. The outreach included; broadcast public service announcement on twelve local radio stations, including one broadcasting in Vietnamese; Web site ads in popular local Web sites linking to the project Web site; printed material; video clips; and person-to-person outreach by Sea Grant extension agents.

The project also developed a Marine Debris Dispersion Model to predict the location and relative density of marine debris following a major storm in the Gulf Coast region, and a Marine Debris Emergency Response Plan, which provides lessons learned from responding to marine debris dispersion after Katrina and Rita as well as practical recommendations for future response.

Major hurricanes will occur in the Gulf of Mexico and will create similar marine debris problems in the future. This project's experience suggests that; addressing marine debris should start early in the response process and will work best when federal, state, and local agencies cooperate closely on the various aspects of the response. Additionally, any response should address permitting and consultations as early as possible, and should cooperate with local agencies to tailor outreach efforts to best suit the local population.

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