

STUDY TITLE: Ethnic Groups and Enclaves Affected by OCS

REPORT TITLE: Offshore Oil and *Deepwater Horizon*: Social Effects on Gulf Coast Communities Volume I: Methodology, Timeline, Context, and Communities; Volume II: Key Economic Sectors, NGOs, and Ethnic Groups

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BACKGROUND: The U.S. Gulf of Mexico has been central to the history and development of the global offshore petroleum industry since 1947 when the first successful well was completed out of sight of land off the coast of Morgan City, Louisiana. In the Gulf, petroleum is stored under high pressure within a layered sedimentary basin. Successful extraction and development requires that the pressure be controlled, and, when that fails, blowouts sometimes occur. Still, the April 20, 2012 Macondo blowout was unprecedented in the history of the Gulf offshore industry, both for its size and for the amount of oil it released into the Gulf. Also, although thousands of wells have been drilled in the Gulf, in 2010 the *Deepwater Horizon* was one of only 33 rigs drilling in water deeper than 500 feet. Consequently, despite the knowledge and experience of the offshore petroleum industry, there was much uncertainty about the blowout and what to do about it.

The Gulf of Mexico is also home to several major estuaries and supports both commercial and recreational fishing. In addition, its beaches, coastal communities, and cities, such as New Orleans, attract millions of tourists each year. Its diverse population is as varied as its topography, made up of people whose ancestors have lived in the regions for hundreds of years, as well as immigrants who were drawn to the region as recently as 2005, when storms provided opportunities for cleanup and construction. This is also a region where disasters occur with some frequency, where human activities combine with events such as hurricanes and result in loss of life and property. The effects of the *Deepwater Horizon* disaster can only be understood in this context.

The *Deepwater Horizon* disaster officially began on April 20, 2010 with the blowout of the Macondo well in the U.S. Gulf of Mexico. The disaster caused the deaths of 11 people, physically injured 17 more, and released an estimated 4.9 million barrels of crude oil into the Gulf of Mexico more than 40 miles off the Louisiana coast. It occurred in a region experienced in natural disasters, so some of its effects were mitigated by the expertise and mechanisms in place throughout the region to manage them. The spill's impacts were heightened, however, by the fact that the region was still recovering from recent, severe hurricanes and flooding. In short, this disaster, laid upon those prior experiences, created a new set of actors, resources, and responses.

OBJECTIVES: The goal was to accurately describe and document how the *Deepwater Horizon* disaster was experienced and understood by the people it affected most directly as the events surrounding the spill unfolded.

The study focused on social effects, interpreted broadly to include impacts on household and community economies, social gatherings such as crab boils and fishing rodeos, social networks such as those among community-based organizations and large non-profit organizations, and interactions between the public and agencies involved in the spill response and recovery, including the cleanup and damage claims.

The study did not attempt to gather systematic data about household and business revenues and expenses or address the legal liability of any party for the economic harms reported to the team. While the study did not evaluate possible seafood safety and the health effects related to the spill, or the spill's ecological consequences on wildlife and fisheries, it did examine how these concerns affected people and the institutions of which they are a part.

DESCRIPTION: This study, conducted between April 2010 and December 2012, examines the social and economic effects of the disaster on the people and communities along the coasts of Louisiana, Mississippi, and Alabama. It focuses on the short-term effects that occurred in the first 20 months after the disaster began and provides the context within which those effects were experienced.

This research has included three ethnographers and seven community researchers who were "in the field" continuously between April 2010 and December 2011, one faculty member who alternated between the study areas and Tucson, Arizona, in three to four week rotations during this period, four faculty members and six university students who

each spent at least a month in the field gathering information about a specific community or economic sector, and five university students who provided logistic and office support. In the field, researchers participated in, and observed, local and regional meetings and festivals. They took photos of highway billboards and community activities, visited workplaces and homes, lived with local residents, and monitored local media output. They identified people who are experts in their communities, businesses, and organizations and talked with them, often on multiple occasions, to learn and record their perspectives. The researchers also worked closely with community leaders to identify data to help define, explain, and assess the impacts of the Deepwater Horizon and of the offshore oil and gas industry in general. The researchers developed this process to accurately describe how this disaster was experienced and understood by the people it affected most directly. In the office, students transcribed audio files and notes, created and managed databases, and gathered secondary data.

While some of the effects of this disaster were immediately obvious and readily documented, others emerged more slowly as the nature and scope of the event and its aftermath continued to unfold. The study sought a depth of understanding, particularly of the cumulative impacts of the disaster across economic sectors. The primary study area includes Terrebonne, Lafourche, and Plaquemines parishes, Louisiana; Harrison County, Mississippi; and Mobile County, Alabama with a study team committed to each. From east to west, the focal communities are Bayou la Batre, Alabama; east Biloxi, Mississippi; and the oil and gas and fishing communities of lower Plaquemines Parish, Larose, and Dulac, Louisiana. These communities include people in a wide range of situations, for example, families and households with some members who fish, others who work in oil, and others in retail, and this mix allowed the researchers to examine how the people who lived and worked in this region before, during, and after the disaster had managed through the first two years. The study focused on the short-term effects, those that occurred in the first 20 months after the disaster began, and the study provides the context within which those effects were experienced.

SIGNIFICANT CONCLUSIONS: The failure to distinguish this event from other regional disasters exacerbated, and in some cases created, some of its effects. The disaster did not generate the sorts of volunteer opportunities that follow hurricanes. The ability of individuals and communities to secure resources depended on their political and legal status. The situation was complicated because many residents earn their livelihoods on oil rigs and platforms or large fishing vessels, often far from the place they live, a situation exacerbated by coastal erosion and storms. Add that the disaster began during the worst recession the region had experienced in decades and followed years of unusual economic activity tied to post-hurricane rebuilding, and it is clear why neither residents nor the researchers could readily separate the effects of the disaster from the effects of other events. At the end of 2012, much remained unknown about health effects, the claims process, the condition of major Gulf fisheries, the fate of deepwater petroleum exploration and production and the offshore workforce, and more. Nevertheless, those in positions of responsibility, at the household, organization, and community level, had to continue to make decisions and to act on issues about which they lacked full understanding.

STUDY RESULTS: The report includes a detailed timeline of key events. The study concluded before many legal and financial claims had been settled, so much remained unknown.

The Deepwater Horizon spill affected people across the Gulf region. The economic effects were felt in the offshore petroleum industry, fishing and tourism industries, supporting industries, such as fabrication and shipbuilding, and the vast retail sector. Local and state governments and non-governmental and community-based organizations were affected by the loss of revenues and by the need to respond to the economic effects of the people in the region. Programs, such as BP's Vessels of Opportunity and claims processes, aiming to mitigate negative economic conditions, had mixed results. Over time, the effects on coastal communities diverged, depending on factors like location, whether oil came ashore, internal social and political dynamics, experience with oil spills and contamination from industry activity, community members' roles in the cleanup, the community's connections to regional, state, and national resources, and residents' ethnic makeup.

Within five days of the spill, all deepwater drilling in the Gulf had been suspended; this directly affected drilling companies, contractors, rig fabricators, and many others that provide the people, supplies, and equipment necessary for drilling. The explosion also affected the petroleum industry by raising questions about its overall role and performance, and accelerating safety reforms already underway. During the suspension, some companies transferred operations and employees overseas and to onshore fields, but many workers in more precarious positions, such as contract employees in temporary or hourly positions, lost their jobs.

The closure of Gulf fishing areas from central Louisiana to west Florida affected commercial and recreational fishermen and tourism. Some beaches were closed; fishing rodeos and festivals were cancelled. Media coverage exacerbated potential tourists' concerns. As the key industries of the region's economy faltered, so did many others. Retailers felt extensive social and economic effects, depending on type, location, and customer base.

As the disaster continued, social, psychological, and economic effects on coastal residents grew. Many residents turned to churches and non-profits, which typically provide post-disaster assistance. Those groups scrambled for resources and faced huge hurdles trying to respond. The ability to secure resources depended on many factors, including their livelihood strategies and political and legal status. Many households that relied on harvesting and selling seafood were forced to adopt alternative strategies when fishing areas were closed.

STUDY PRODUCTS: Austin, Diane; Marks, B.; McClain, K., McGuire, T., McMahan, B., Phaneuf, V., Prakash, P., Rogers, B., Ware, C., Whalen, J. 2014. *Offshore oil and Deepwater Horizon: Social effects on Gulf Coast Communities, Volume I: Methodology, Timeline, and Context.* U.S. Dept. of the Interior, Bureau of Ocean Energy

Management, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2014-617. 265 pp.

Austin, Diane; Dosemagen, S., Marks, B.; McGuire, T., Prakash, P., Rogers, B. 2014. Offshore oil and *Deepwater Horizon*: Social effects on Gulf Coast Communities, Volume II: Key Economic Sectors, NGOs, and Ethnic Groups. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2014-618. 207 pp.

A detailed timeline of key events.

The report's first volume begins with a summary of the major findings of the research. The summary includes references to sections throughout the report that contain information to support the findings. Next is a discussion of the approach and methodology of the study and the selection of the study communities. This is followed by a summary and then detailed timeline of key events in the unfolding disaster which triggered local effects. Specific dates and events are referred to throughout the report, but readers are encouraged to read the timeline to better understand the complicated and rapidly changing conditions under which people in the coastal communities were living and working during the study period. The next chapters establish the context within which this disaster occurred, and describe the communities that were the focus of the study, highlighting in each some of the locally-specific and synergistic effects of the disaster.

The second volume describes five key economic sectors in the region—offshore oil and gas, fishing, tourism, shipbuilding and fabrication, and retail—and summarizes how the disaster has impacted the people, businesses, and communities involved in each of those sectors. For each sector, readers will find a general introduction, a brief summary of the methodology used to gather the information upon which the analysis is based, and a brief history of the sector. These are followed by an outline of events that shaped that sector in the region, leading up to the explosion of *Deepwater Horizon* in April 2010, a summary of the immediate impacts, and a discussion of the issues that faced businesses and workers in the sector throughout 2011. The second volume includes chapters that take a closer look at the impacts of the disaster on non-governmental organizations (NGOs), the claims process, and the differential effects of the disaster according to ethnicity. The volume ends with a discussion of the ongoing uncertainty associated with this disaster more than two years after it began, and key research questions to be addressed in the coming years.

*P.I.'s affiliation may be different than that listed for Project Managers.