

On April 20, 2010, an explosion aboard the Deepwater Horizon (DWH) oil rig released approximately 3.19 million barrels (134 million gallons) of oil into the Gulf of Mexico. When the well was capped 87 days later, the focus turned to understanding how the oil spill had impacted the surrounding ecosystem and health of the communities living in the region.

Photo Credit: C-IMAGE

FROM DISASTER TO DISCOVERY:

THE VITAL ROLE OF RESEARCH IN RECOVERY

Shortly after the Deepwater Horizon oil spill began, BP committed \$500 million over a 10-year period to create an independent scientific research program dedicated to understanding the impacts of oil spills. The Gulf of Mexico Research Initiative (GoMRI) is run by an independent Research Board consisting of twenty science, public health, and administration experts and is chaired by Dr. Rita Colwell. GoMRI has supported research within five major research themes: physical distribution, chemical and biological degradation, environmental effects, technology development, and public health. GoMRI-funded research and results are published in peer-reviewed scientific journals with no requirement for approval.

GoMRI's Mission:

To improve society's ability to understand, respond to, and mitigate the impacts of petroleum pollution and related stressors of the marine and coastal ecosystems, with an emphasis on conditions found in the Gulf of Mexico. Knowledge accrued will be applied to restoration and to improving long-term environmental health of the Gulf of Mexico.

Who Does This Research?

Academic institutions, primarily in the Gulf states, in partnership with other organizations in the U.S. and abroad, are conducting this research. More than 278 institutions are involved in GoMRI, and the program has provided funding to scientists from 42 states, Washington D.C., Puerto Rico, and 17 countries. Proposals are solicited through a Request for Proposals (RFP) process and reviewed following the National Science Foundation's (NSF) merit review procedures. Five RFPs have been conducted and a sixth will be released in late 2016.

Where Can The Results Of This Funding Be Found?

All data collected through the initiative are shared openly and are discoverable through the Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC). To date, GRIIDC houses more than 1000 datasets, provided by more than 3200 researchers. In addition, more than 700 articles have been published in peer-reviewed scientific journals as a result of GoMRI funding.

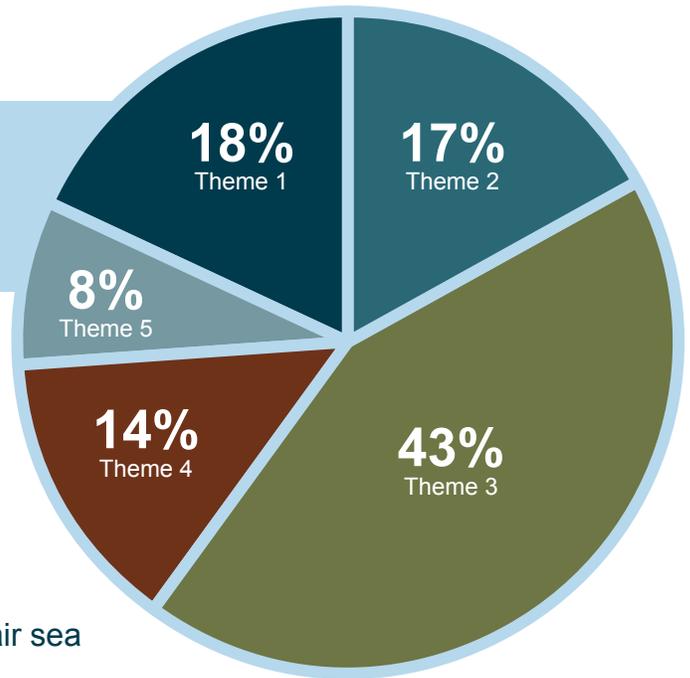
Is GoMRI Different From Other Response Efforts?

GoMRI is separate from the Natural Resources Damage Assessment (NRDA), the criminal case settlement, the RESTORE Act, and the National Academies of Sciences, Engineering and Medicine's Gulf Research Program. GoMRI is distinct among these other Gulf-based restoration efforts, in part because of its focus of the science of the spill. The research will help inform future restoration and mitigation efforts.

The GoMRI program has partnered with the four Gulf Sea Grant programs and the Smithsonian's Ocean Portal to help share this important work.

To learn more, visit <https://gulfseagrant.wordpress.com> and <http://ocean.si.edu/gulf-oil-spill>.

Total Funding 2010-2016:
\$353,000,000



The GoMRI program funds scientific research that addresses the following themes:

- 1 Physical distribution, dispersion, and dilution of petroleum (oil and gas), its constituents, and associated contaminants (e.g. dispersants) under the action of physical oceanographic processes, air sea interactions, and tropical storms.
- 2 Chemical degradation and biological degradation of the petroleum/dispersant systems and their subsequent interaction with coastal, open-ocean, and deep-water ecosystems.
- 3 Environmental effects of the petroleum/dispersant system on the sea floor, water column, coastal waters, beach sediments, wetlands, marshes, and organisms; and the science of ecosystem recovery.
- 4 Technology developments for improved response, mitigation, detection, characterization, and remediation associated with oil spills and gas releases.
- 5 Impact of oil spills on public health including behavioral, socioeconomic, environmental risk assessment, community capacity, and other population health considerations and issues.

Research Board Members

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Consortia

GoMRI has funded **15** research consortia to build capacity and encourage multi-disciplinary coordination of research activities in the Gulf region.

Alabama Center for Ecological Resilience (ACER)
 Aggregation and Degradation of Dispersants and Oil by Microbial Exopolymers (ADDOMEx)
 Center for Integrated Modeling and Analysis of Gulf Ecosystems (C-IMAGE)
 Consortium for Advanced Research on Transport of Hydrocarbon in the Environment (CARTHE)
 Consortium for the Molecular Engineering of Dispersant Systems (C-MEDS)
 Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE)
 Consortium for Resilient Gulf Communities (CRGC)
 Coastal Waters Consortium (CWC)
 Deepsea to Coast Connectivity in the Eastern Gulf of Mexico (DEEP-C)
 Deep-Pelagic Nekton Dynamics Consortium (DEEPEND)
 Dispersion Research of Oil: Physics and Plankton Studies (DROPPS)
 Ecosystem Impacts of Oil and Gas Inputs to the Gulf (ECOGIG)
 Gulf of Mexico Integrated Spill Response Consortium (GISR)
 Littoral Acoustic Demonstration Center - Gulf Ecological Monitoring and Modeling (LADC-GEMM)
 Relationships of Effects of Cardiac Outcomes in Fish for Validation of Ecological Risk (RECOVER)