



GULF OF MEXICO RESEARCH PLAN

Deepwater Horizon Oil Spill Research Needs Survey

PRELIMINARY RESULTS

The group that developed the Gulf of Mexico Research Plan (GMRP) has begun an effort to rapidly identify oil spill related research needs as an addendum to the GMRP. Phase one of this effort was to survey a small group of leaders in the research community (researchers, research administrators and research users) to identify economic, environmental and social research needs. The results of this survey are provided below. The next phase of this multi-phase effort is a comprehensive survey that will be sent to thousands of people within the research community. The GMRP website is: www.masgc.org/gmrp.

Table 1. Common themes from phase one of the Gulf of Mexico Research Plan Rapid Research Needs Survey for the Deepwater Horizon Oil Spill, number of times comments were mentioned in a theme and weighted score of theme.

Theme	Number of Comments			Weighted score*	
	Total	Immediate research need	Mid- to long term-research need		Additional research need
Communities	66	34	26	6	198
Ecosystem Impacts	56	33	19	4	170
Fisheries	35	18	17	0	127
Restoration Post-Spill	25	12	13	0	77
Tourism	18	13	5	0	56
Ecosystem Services	17	7	10	0	64
Impacts from Dispersants	13	9	3	1	40
Displaced People and Workers	12	4	6	2	35
Seafood Industry	11	6	5	0	36
Oil and Alternative Energy	10	5	5	0	24
Communication	8	1	2	5	15
Modeling and Tracking Oil	6	1	5	0	50
Impacts to Individuals	6	4	2	0	20
Social Networks and Systems	5	1	4	0	23
Policy	5	2	3	0	15
Human Health	4	1	1	2	10
Legal Research	4	2	0	2	8
Microbes Role	3	2	1	0	8
Impacts on Tax Base	3	0	2	1	7
Observation Systems	3	1	1	1	6
Methane	2	1	1	0	8
Perceptions of Oil Spill	2	2	0	0	8
Miscellaneous	2	2	0	0	6
Total	316	161	131	24	1011

* Weighted score is based on whether the research need within the theme was mentioned as the number 1, 2, 3 or additional priority. More weight was given for a number 1 priority than a number 3 priority.

SAMPLE OF RESEARCH NEEDS IDENTIFIED BY SURVEY RESPONDENTS

Communities

- Identify the most effective and efficient types of assistance to foster economic recovery
- Examine attitudes, perceptions and beliefs of resource-dependent communities to assist them in finding alternative livelihoods
- Determine the economic impact of the spill on the various coastal zone segments and economies
- Examine, record and document the intangible cultural heritage of displaced people
- Assess the current status and well-being, vulnerability and resilience of coastal communities

Ecosystem Impacts

- Estimate the extent and duration of environmental impacts to inform damage assessment efforts
- Examine the impacts of the spill on food webs and life histories (life stages and recruitment) of aquatic organisms
- Evaluate which floral and faunal communities are the most endangered due to the oil spill
- Determine the impacts to barrier island, water column, coastal, nearshore and deepwater habitats and organisms

Fisheries

- Assess the economic losses to commercial fishing interests
- Examine the impacts on commercial, for-hire and recreational fisheries if recruitment levels of targeted species are affected
- Determine the effects of oil and chemicals on fisheries to inform how to expedite reopening fisheries
- Estimate when different types of fisheries rebound to levels prior to the spill

Restoration Post-Spill

- Evaluate the effectiveness of different response and restoration activities to protect and foster recovery of habitats and species
- Examine the economic costs and time to restore seagrass beds, oyster beds and mangroves
- Conduct cost-benefit analysis of different clean-up and restoration activities

Tourism

- Assess the economic impact of the oil spill on beaches and beach resorts and losses to beach-oriented tourism
- Examine how the real or perceived degradation of the coast impacts tourism and sales tax revenues
- Determine the steps needed to recover from the impacts of the spill on beaches and beach resorts

Ecosystem Services

- Assess how the ecologic impacts relate to the economic impacts of the spill
- Predict the value of oil spill damages based on nonmarket non-use valuation
- Determine the value of ecosystem services in monetary and non-monetary terms based on impacted habitats

Impacts from Dispersants

- Evaluate the impacts of dispersants on natural resources in the water column, at depth, offshore, nearshore and along the coast and how it effects different life stages of finfish and shellfish
- Examine impacts of dispersants on the persistence of oil in ecosystems due to oil settling and being re-suspended

Displaced People and Workers

- Identify the costs and determine who pays the costs of displacing the coastal population
- Examine the decisions displaced coastal people make regarding the loss of livelihoods and subsistence resources
- Identify and monitor the impacts of change upon relocated coastal populations

Seafood Industry

- Determine how the increased cost of local seafood products and seafood safety impact eating habits of the region
- Assess the economic impact on the seafood dealers, restaurants and related industries that depend of fresh seafood

Oil and Alternative Energy

- Examine the change in attitudes, perceptions and beliefs of the public and elected officials regarding oil and gas versus alternative energy and how that was influenced by the spill and by the response of politicians
- Analyze the economic costs and benefits of fossil fuels (including the costs of spills) versus alternative and/or sustainable energy

Modeling and Tracking Oil

- Predict location and magnitude of oil spill and its impacts and include models of circulation and mass transport in surface and subsurface waters of the Gulf of Mexico
- Determine the fate, distribution and persistence of the oil based on the volume released and its characteristics