

Social Sciences FY13 & FY14 Plans for the Gulf of Mexico Region

Harry Luton
Senior Social Scientist
Office of Environmental Studies
Gulf of Mexico Region
New Orleans, Louisiana





Purpose of Session

Review Study Plans for FY 13 & 14

Evaluate Overall Studies Planning





Background Again

Socioeconomic Impact Assessment

Evaluate the difference between outcome with and without the proposed action





More Background

This is difficult because of:

The action is one in a series of similar actions

Large, complex, widely distributed petroleum industry

Large and varied region (5 states, includes great socioeconomic variability)

Lack of appropriate data

Basic study strategies

A focus on the industry itself (infrastructure, sectors, modeling)

A focus on the "dynamic baseline"

A focus on standard SIA topics

The Deepwater Horizon Oil Spill





More Background 2

These strategies are evolving

Last 5-10 years emphasis on:

focus on industry infrastructure and sectors

MagPlan issues

(in-house economic/demographic model)

A current shift (or evolution) in emphasis baseline (a geographic emphasis SIA topics





FY 2013

Environmental Justice and OCS Petroleum: A geo-spatial analysis

An Analysis of the Impacts of the Deepwater Horizon on the Seafood Industry

An Analysis of the Fiscal Impacts of the OCS Industry in the Gulf of Mexico

The Demographic Consequences of the Gulf of Mexico Offshore Petroleum Industry

Coastal Land Loss and the Oil and Gas Infrastructure

FY 2014

An Assessment of Transportation Infrastructure Usage by the OCS Oil and Gas Industry

Effects of the OCS Industry on Tourism in the Gulf of Mexico: Extensions of Previous Research

Social Impacts of the Deepwater Horizon Oil Spill on Coastal Communities Along the GOM (Phase II)

Subsistence Activities and Use in Coastal and Near Coastal Areas of the Gulf of Mexico





Proposed Studies FY 13

Environmental Justice and OCS Petroleum: A geo-spatial analysis

An Analysis of the Impacts of the *Deepwater Horizon* on the Seafood Industry

An Analysis of the Fiscal Impacts of the OCS Industry in the Gulf of Mexico

The Demographic Consequences of the Gulf of Mexico Offshore Petroleum Industry

Coastal Land Loss and Oil & Gas Infrastructure





- Environmental Justice considers whether or not low income or minority populations may be disproportionately and negatively affected by an action
- BOEM considers his question under NEPA
- BOEM has conducted 2 previous studies:
 - The first developed a method for mapping risk related to OCS infrastructure
 - The second applied it comparatively to types of oil development, risk over time, and subsistence land use
- Katrina-Rita changed population distributions significantly
- DWH raised EJ issues that were not previously considered



Environmental Justice and OCS Petroleum: A geo-spatial analysis

Relevance to BOEM

- Every BOEM Environmental Assessment considers EJ implications of an action
- The Gulf needs an approach that is applicable and that is based on current data

Objectives/Methods

- Compare changes in risk over time among coastal areas (relationships between population changes and affecting factors)
- Analyze the distribution of affecting factors with an emphasis on refining the relationships of risk to specific petroleum related infrastructures
- Develop a process and/or tools for applying the methodology to Gulf EISs

Cost

\$280-420



An Analysis of the Impacts of the *Deepwater Horizon* on the Seafood Industry

- DWH had immediate and significant impacts on the Gulf seafood industry
- Closures affected supply and the income of participants
 - Most notable for fishermen
 - Entire supply chain –oyster processors, retailers
- Safety concerns affected demand, at least in the short run
- Questions remain as to possible longer-term impacts such as from
 - Lingering changes in demand
 - Changes in the capitalization/organization fishing fleets
 - Changes in supply chain (e.g., enduring shifts to other sources)



An Analysis of the Impacts of the *Deepwater Horizon* on the Seafood Industry

Relevance to BOEM

- The DWH raised concerns in areas that were previously not an Agency focus—commercial fisheries is one.
- Support for more detailed EIS descriptions/analyses of Gulf fisheries
- Support for an Agency analysis of the consequences of large spills

Objectives/Methods

- Description and documentation of short and long-term responses to the spill and its aftermath
- A synthetic approach building on expertise and drawing on available datasets

Cost

\$240-360



An Analysis of the Fiscal Impacts of the OCS Industry in the Gulf of Mexico

- Regional fiscal effects are a staple of SIA
- New activities generate additional revenues but also additional demands
- BOEM assessments (in the Gulf and elsewhere) have not addressed regional fiscal effects
 - Indirect
 - Multitude of jurisdictions
 - Multitude of funding mechanisms
- Gulf studies have approached this issue
 - Regional impact studies (e.g., Port Fourchon)
 - Study to identify contributions and dispersal in Louisiana (closed without completion)
 - Ongoing study identifying and correlating measure of local fiscal health (indirect)



An Analysis of the Fiscal Impacts of the OCS Industry in the Gulf of Mexico

Relevance to BOEM

Support for regional-level analysis

Objectives/Methods

- Develop a literature-based description of the relevant fiscal effects and evaluation of estimation techniques
- Identify the direct and indirect fiscal effects on state and local government from OCS
- Pursue time series measures these were possible
- Analyze impacts for selected counties and public service institutions

Cost

\$280-420



The Demographic Consequences of the Gulf of Mexico Offshore Petroleum Industry

- The relationship between labor demand and demographic impacts is central to most SIA
- In the GOMR, the situation is different
 - There is no relationship an action (a sale) demographic change
 - The historical/long-term effects of the petroleum industry are large
- Demographic change is a critical driver of socioeconomic effects but the Gulf has addressed it only tangentially



The Demographic Consequences of the Gulf of Mexico Offshore Petroleum Industry

Relevance to BOEM

- This study will be used in support of GOMR projection modeling (MAGPLAN)
- It will be used to support our new Impact Area approach to assessments

Objectives/Methods

- To describe the relationships between OCS and demographic change
- To describe these relationships for new Impact Areas
- To develop valid estimators specifying OCS labor demand and demographic change

Cost

• \$240-360





- Coastal Louisiana is the epicenter of coastal land loss
- It is has the highest concentration of OCS-related infrastructure
- Hurricanes Katrina and Rita highlighted its exposure to land loss



Coastal Land Loss and the Oil and Gas Infrastructure

Relevance to BOEM

Support for baseline and cumulative assessment of program

Objectives/Methods

- Limited study from industry point of view
- Identification/analysis of measures of effects of storms/land loss on operations
- Identification and assessment of industry views and response planning

Cost

\$160-240





Proposed Studies FY 14

An Assessment of Transportation Infrastructure Usage by the OCS Oil and Gas Industry

Effects of the OCS Industry on Tourism in the Gulf of Mexico: Extensions of Previous Research

Social Impacts of the *Deepwater Horizon* Oil Spill on Coastal Communities in the Gulf of Mexico Region (Phase II)

Subsistence Activities and Use in Coastal and Near Coastal Areas of the Gulf of Mexico



An Assessment of Transportation Infrastructure Usage by the OCS Oil and Gas Industry

- BOEM has documented and described many important "industry sectors"
- Transportation has been part of earlier socioeconomic research
 - Early failed attempt to delineate the flow of goods
 - Truck traffic and Port Fourchon
- OCS-related transportation sectors (particularly trucking) are large with important socioeconomic consequences
- They are mostly undocumented



An Assessment of Transportation Infrastructure Usage by the OCS Oil and Gas Industry

Relevance to BOEM

This fills a significant gap in BOEM assessments of socioeconomic impacts

Objectives/Methods

- Describe and document OCS-related transportation sectors with an emphasis on the on-shore half of the intermodal system
- Describe OCS-induced demand on public infrastructure, particularly roads
- Develop estimates of flows of goods at selected ports, roads, and waterways

Cost

\$230-350



Effects of the OCS Industry on Tourism in the Gulf of Mexico: Extensions of Previous Research

- Past GOMR studies have not emphasized recreation and tourism
- The Deepwater Horizon oil spill heightened concerns about OCS effects
 - Accidents: the direct and indirect effects of spills
 - Normal operations: industrial traffic, noise, releases
- The Gulf has an ongoing study addressing direct and indirect effects of the spill



Effects of the OCS Industry on Tourism in the Gulf of Mexico: Extensions of Previous Research

Relevance to BOEM

Support for the assessment of potential effects of future OCS spills

Objectives/Methods

- Update and extend descriptions of current recreation and tourism industry
- Extend tools used to estimate scale of these industries and of the potential OCS impacts to them

Cost

\$160-240



Social Impacts of the *Deepwater Horizon* Oil Spill on Coastal Communities Along the U.S Gulf of Mexico (Phase II)

- The Deepwater Horizon may prove to be a watershed event in the Gulf
- Large spills are unusual, their consequences unique
- DWH has had significant socioeconomic effects but little "on-the-ground" documentation
- BOEM has had a study documenting socioeconomic effects since the spill
- The agency plans to continue this effort with some refinements



Social Impacts of the *Deepwater Horizon* Oil Spill on Coastal Communities Along the U.S Gulf of Mexico (Phase II)

Relevance to BOEM

- Critical to an analysis of potential effects of OCS oil spills, a basic public concern
- Support for baseline description of Gulf Coast states

Objectives/Methods

- To document mid- and long-term socioeconomic consequences of DWH
- Organized in phases; this phase is based on findings of first BOEM study
- Mixed methods: fieldwork and applied demography
- Focus on Louisiana/Mississippi with limited effort in Texas and Alabama

Cost

\$250-370



Subsistence Activities and Use in Coastal and Near Coastal Areas of the Gulf of Mexico

- Prior to Deepwater Horizon, Gulf Coast subsistence was recognized and undocumented
- Popular views of subsistence include the concept of need
- Social scientific approaches emphasize non-market based harvesting and use
- DWH heightened awareness of subsistence in both senses
- The Gulf Region has an ongoing exploratory study of subsistence



Subsistence Activities and Use in Coastal and Near Coastal Areas of the Gulf of Mexico

Relevance to BOEM

Supports baseline descriptions and assessment of effects

Objectives/Methods

- To describe the full range of subsistence activities along the Gulf coast from production to distribution to use
- To describe the scale of these activities
- To describe the participation in these activities and the value and meaning of these activities to the participants
- Collection and synthesis of formal expertise
- Collection and synthesis of information from participants
- Structured data gathering

Cost

\$290-440

