

## **Scoping Meetings**

# Gulf of Mexico Geological and Geophysical (G&G) Activities Programmatic Environmental Impact Statement (EIS)

- Tampa, Florida June 10, 2013
- Fort Walton Beach, Florida June 11, 2013
- Mobile, Alabama June 12, 2013
- Gulfport, Mississippi June 13, 2013
- Galveston, Texas June 17, 2013
- New Orleans, Louisiana June 19, 2013
- Silver Spring, Maryland June 20, 2013





### Co-Lead Agencies for the Programmatic EIS

#### **Bureau of Ocean Energy Management (BOEM)**

 A division of the Department of the Interior, BOEM is the Federal agency responsible for overseeing the safe and environmentally responsible development of energy and mineral resources on the Outer Continental Shelf (OCS).

# National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS)

 A division of the Department of Commerce, NMFS is the Federal agency responsible for the stewardship of the Nation's living marine resources and their habitat.





### **BOEM's Mandate**

#### **Congressional Mandate**

"It is hereby declared to be the policy of the United States that ... the Outer Continental Shelf is a vital national resource held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs."

Outer Continental Shelf Lands Act of 1954 43 U.S.C. 1332(3)





### National Environmental Policy Act (NEPA)

- Provides framework for protecting the environment
- Requires Federal agencies to consider the environmental impacts of their activities
- Identifies and assesses the reasonable alternatives to the proposed actions, which will avoid or minimize adverse effects
- Allows for public input to decisionmaking
- Assists decisionmakers in incorporating environmental and other technical information into programs
- Requires coordination with other Federal agencies with resource responsibilities





### Development of an EIS

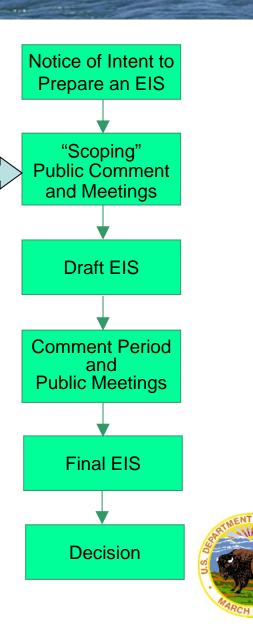
- Identify the purpose, need, and alternatives for the proposed action
- Identify impact-producing factors and potentially affected environmental and socioeconomic resources
- Describe the existing environment
- Layout the scenarios for analyses
- Assess and estimate the potential impacts of the proposed action and alternatives over the life of the project
- Consider potential cumulative impacts
- Develop mitigations to address the potential impacts
- Establish consultation with Federal and State agencies and entities with resource responsibilities



### **Environmental Impact Statements**

# Council on Environmental Quality (CEQ) regulations require

- "full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment";
- the analyses should not be "encyclopedic" but restricted to resources with the potential to be impacted; and
- information that is unavailable or conclusions that are uncertain are disclosed.





# Purpose of Scoping Meetings

- To receive comments on what you feel should be evaluated when looking at G&G activities in the Gulf of Mexico
- Gather input from
  - Federal, State, and local government agencies
  - Tribal government
  - Environmental and other interested organizations
  - General public
  - Industry





### Consultations



Federal Water
Pollution
Control Act

Marine Mammal Protection Act National Historic
Preservation Act

National Marine Sanctuary Act

**NEPA** 

Tribal Consultation

E.O. 12898: Environmental Justice

Clean Air Act



Coastal Zone Management Act Magnuson-Stevens Fishery Conservation and Management Act

Endangered Species Act

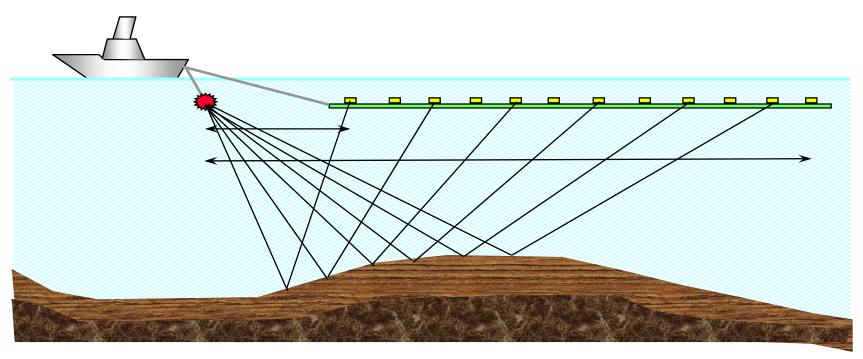
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# What is a Seismic Survey?



- Maps the surface and subsurface using sound waves that are reflected from contrasts in the earth.
- Characteristic sound waves are detected by receivers, and the reflected travel time and speed are then processed to help map geologic structures and stratigraphic features.





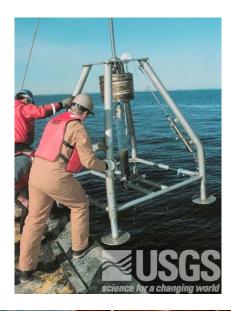
### Why are G&G Activities Conducted?

- Oil and Gas Exploration
  - Obtain data for oil and gas exploration and production
  - Identify possible seafloor or shallow-depth geological hazards
- Biological Resource and Submerged Cultural Resource Identification
  - Locate or avoid sensitive resources
- Renewable Energy Site Assessment
  - Locate sites for alternative energy structures associated with wind, ocean current, and wave-related energy production and transmission
  - Identify possible seafloor or shallow-depth geological hazards
- Marine Minerals Investigation
  - Locate potential sand and gravel sources for beach restoration and sand and gravel mining
  - Locate other mineral resources





### **G&G** Surveys





#### **Geophysical**

- 2D, 3D, and 4D Seismic
- Controlled Source Electromagnetic (CSEM)
- High-Resolution Seismic
- Aeromagnetic Surveys
- Nodes and Ocean Bottom Cable
- Vertical Seismic Profile (VSP)

#### **Geological**

- Deep Stratigraphic Test Wells
- Coring
- Shallow Test Drilling

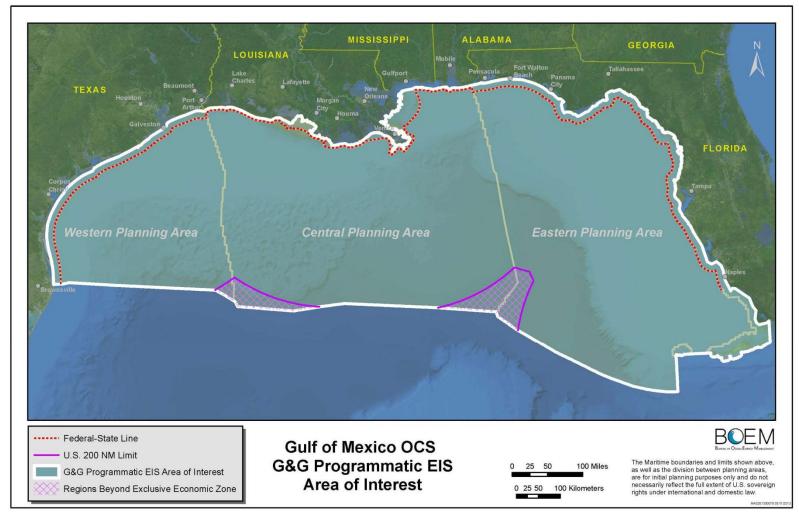
#### **Emerging Technology**

Marine Vibroseis





# **Area of Interest**







### **Purpose of the Programmatic EIS**

- Assess the potential environmental effects of multiple G&G activities on the Gulf of Mexico OCS and adjacent State waters (to the shoreline excluding estuaries). This effort may include modeling of takes from sound source impacts to marine mammals
- Determine the potential impacts to Gulf of Mexico resources and evaluate mitigation and monitoring measures that will reduce or eliminate the potential for impacts to the environment
- Provide the necessary information to fulfill agency rulemaking





# Need for the Programmatic EIS

BOEM and NMFS issue permits and/or authorizations under their respective authorities for G&G activities in the U.S. portion of the Gulf of Mexico.

- BOEM's G&G permitting responsibilities are authorized under the Outer Continental Shelf Lands Act, as amended.
- NMFS issues Incidental Take Authorizations (ITAs) under Sections 101(a)(5)(A) through (D) of the Marine Mammal Protection Act (MMPA). Under the MMPA (16 U.S.C. 1362 (13)), "take" means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.





# Potential Resources to Analyze

- Coastal Environments
- Coastal and Marine Birds
- Socioeconomic Issues
- Water and Air Quality
- Military Operations/Special Use Areas
- Fisheries and Essential Fish Habitat
- Endangered Species
- Archaeological Resources
- Recreational Use/Tourism
- Wetlands
- Potentially Sensitive Benthic Communities
- National Marine Sanctuaries
- What additional resources should be addressed in the Programmatic EIS?









# Potential Impacting Factors

- Active Acoustic Sound Sources
- Vessel and Equipment Noise
- Operational Wastes
- Test Drilling Discharges
- Air Emissions
- Vessel and Aircraft Traffic
- Trash and Debris
- Electromagnetic Emissions
- Commercial and Recreational Fishing
- Current and Future Renewable Energy Activities
- Seafloor Disturbance
- Additional Impacting Factors?







# **Developing Alternatives**

Gather public input on alternatives that will meet the purpose and need of the Programmatic EIS

- Alternative 1 No Action
- Alternative 2 The Proposed Action
- Other Alternatives
  - The proposed action with incorporation of a varying suite of mitigation measures and technologies that fulfill the purpose and need while ensuring that adverse effects are mitigated in accordance with NEPA requirements





### **Examples of Mitigation Measures**

For example, these are types of mitigation measures that could be analyzed to avoid or reduce impacts to resources, such as marine mammals:

- Ramp-up of acoustic sources
- Establish exclusion zones
- Passive acoustic monitoring to detect vocalizing marine mammals
- Protected Species Observers (marine mammals and sea turtles)
- Operational limitations in areas of high marine mammal density and/or in important marine mammal habitat
- Minimum separation distances for concurrent surveys
- Lowest practicable sound source level
- Avoidance of sensitive benthic communities





# **Tentative Schedule**

Notice of Intent	May	2013
Comment Period	<b>May-July</b>	2013
Scoping Meetings	June	2013
Draft Programmatic EIS Published	Mid	2014
<b>Comment Period and Public Meetings</b>	Mid	2014
Final Programmatic EIS Published	Early/Mid	2015
Record of Decision	Mid/Late	2015

Comment opportunities are in red.





### **Procedures for Submitting Comments**

- A station is set up with a microphone and court reporter who will be recording oral comments.
- Each attendee is allowed 3 minutes for submitting oral comments.
- Written comments may be left at the registration desk.





### How Do I Provide Scoping Comments?

- Comments must be received on or before July 9, 2013.
- Comments collected at the public scoping meetings may be oral or written (written comments may be left at the registration desk).
- Comments can be emailed to gomggeis@boem.gov.
- http://www.regulations.gov
  - Search for "Geological and Geophysical Exploration Activities on Federal and State Waters of the Gulf of Mexico" and click the "Comment Now!" button
  - Enter your information and comment and then click "Submit"
- Comments can also be mailed to

Mr. Gary D. Goeke
Chief, Environmental Assessment Section
Office of Environment (GM 623E)
Bureau of Ocean Energy Management
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394





# Comments

#### **WE NEED YOUR INPUT**



#### For more information:

http://www.boem.gov/GOM-G-G-PEIS/

#### To be added to our EIS mailing list:

https://www.data.boem.gov/homepg/data\_center/other/gmaillist/subscribe.asp

