



U.S. Department of the Interior Minerals Management Service



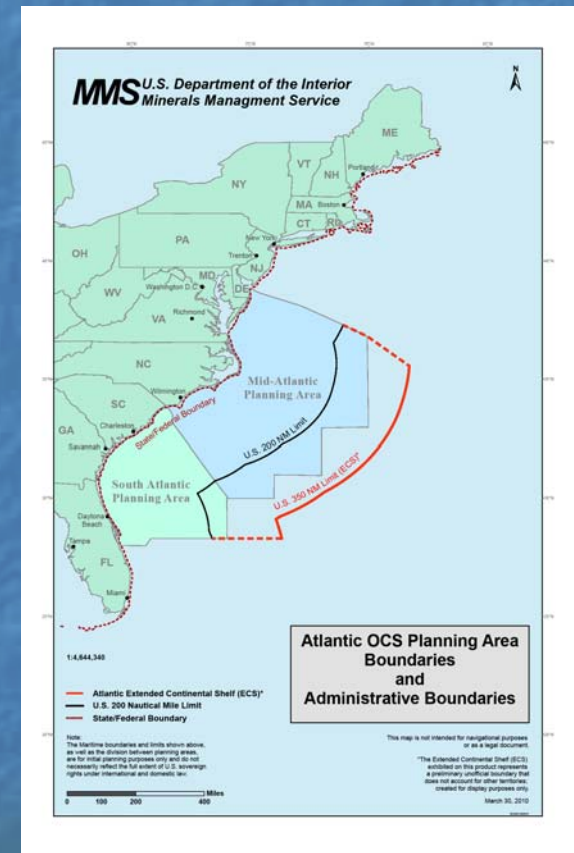
Scoping Meetings for the Atlantic Outer Continental Shelf Geological and Geophysical Environmental Impact Statement

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The Minerals Management Service (MMS) is a bureau of the Department of the Interior, whose mission is to manage the mineral and renewable energy resources of the Outer Continental Shelf (OCS) in an environmentally sound and safe manner, under authority of the Outer Continental Shelf Lands Act, as amended.

Purpose of Today's Meeting

- Share information on the purpose and process for preparation of the Atlantic OCS Programmatic Environmental Impact Statement (PEIS) for Geological and Geophysical (G&G) Activities
- Hear and record your views on the scope of the PEIS
- Comply with the National Environmental Policy Act

National Environmental Policy Act or NEPA

- Provides framework for protecting the environment
- Requires Federal agencies to consider environmental impacts of their activities
- Allows for public input to decisionmaking
- Assists decisionmakers in incorporating environmental information into programs

Purpose of the PEIS

- Assess potential environmental effects of multiple G&G activities on the Atlantic OCS
- Evaluate mitigation and monitoring measures to reduce or eliminate the potential for impacts to the environment
- Provide information and analyses to MMS and other agencies prior to decisions to authorize G&G activities

Need for the PEIS

- Potential renewable energy, sand and gravel, and oil and gas activities in the Mid- and South Atlantic OCS will require G&G surveys for site assessment, exploration, and other purposes
- MMS determined a PEIS would be required prior to authorizing any large-scale G&G surveys
- Preparation of the PEIS will help ensure compliance with NEPA and other applicable laws, such as the Endangered Species Act, Marine Mammal Protection Act, and the Coastal Zone Management Act

OCS Activities are Subject to Numerous Laws, Executive Orders, and Regulations



Marine Mammal Protection Act

Federal Water Pollution Control Act



National Historic Preservation Act

**E.O. 12898:
Environmental Justice**

NEPA & OCSLA

Clean Air Act

Coastal Zone Management Act

Magnuson-Stevens Fishery Conservation and Management Act



Endangered Species Act



NMFS and MMS Consultation

- NMFS has the primary responsibility for protecting marine mammals and their habitat
- MMS prepares a biological assessment and submits it to NMFS to aid in Marine Mammal Protection Act coordination
- NMFS prepares a decision and assists MMS in development of mitigations
- MMS incorporates the mitigations into the decision documents and relays them to the permittee
- NMFS places marine mammal observers onboard seismic vessels to ensure compliance

The MMS also undergoes a similar consultation process for fisheries and essential fish habitat

Environmental Impact Statements

Council on Environmental Quality (CEQ) regulations state that an EIS

“shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.”

And “shall be analytic rather than encyclopedic.”

Environmental Impact Statement Process

Notice of Intent to Prepare an EIS

“Scoping”
Public Comment
and Meetings

Draft EIS

Comment Period
and
Public Hearing

Final EIS

Record of Decision

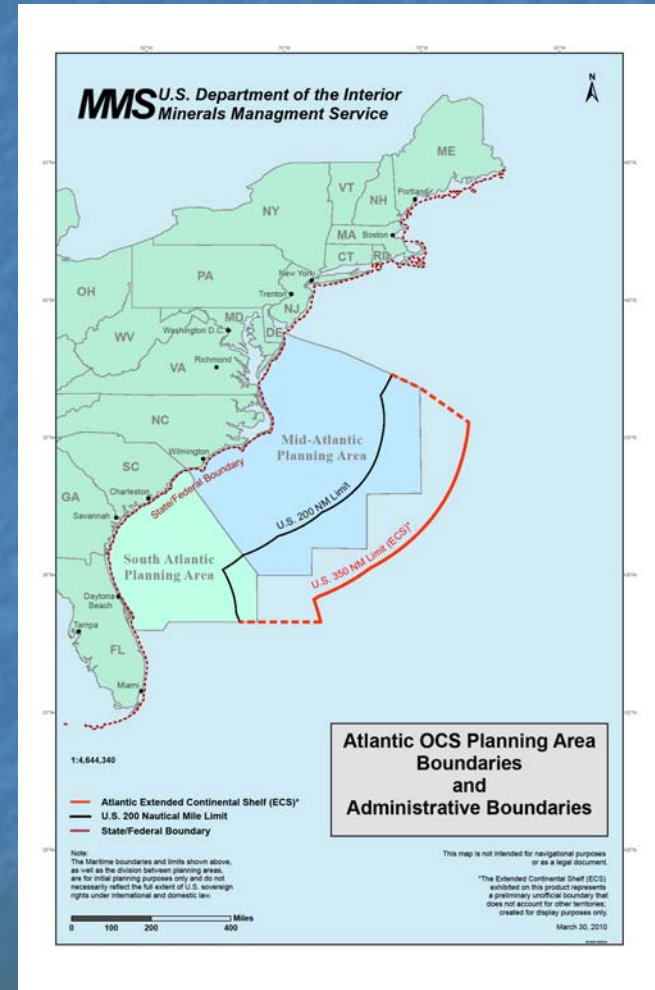


Development of an EIS

- Identify purpose, need, and alternatives for the proposed action
- Identify impact-producing factors and potentially affected environmental and socioeconomic resources
- Describe the existing environment
- Layout 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 potential impacts

Proposed Action

The proposed action to be addressed by the PEIS will encompass G&G operations under MMS authority in the Atlantic OCS associated with siting for renewable energy projects, marine minerals extraction, and oil and gas exploration that could take place over a period of many years.



Alternatives to be Considered in the PEIS

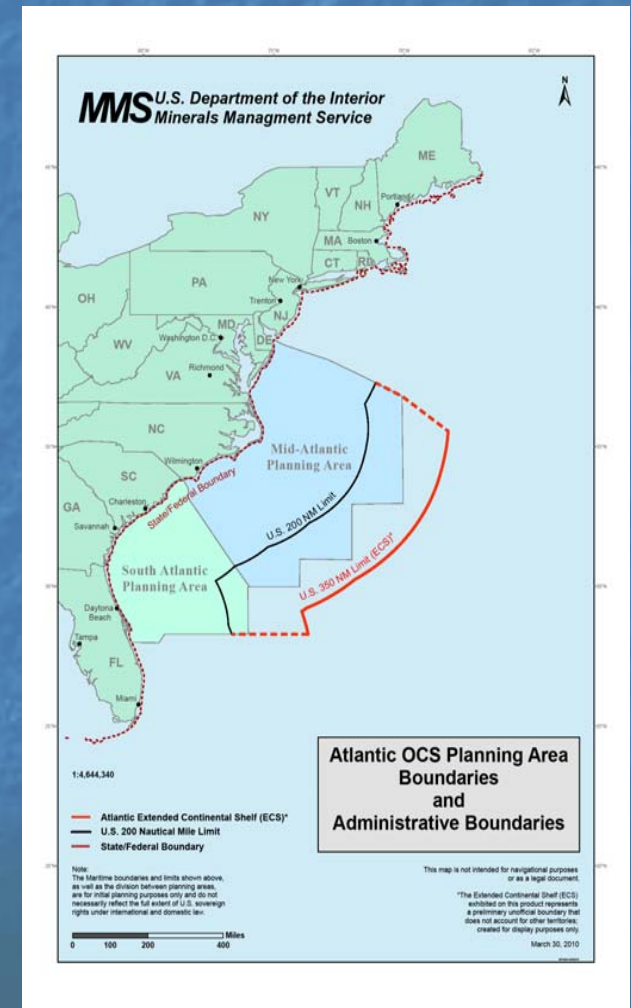
Alternative A – Analyze G&G activities out to the 200 nautical mile limit

Alternative B – Analyze G&G activities out to the 350 nautical mile limit

Alternative C – Analyze G&G activities with appropriate mitigations to reduce environmental impacts (e.g., ramp-up procedures, and safety zones)

Alternative D – Additional alternatives developed through the scoping period and early environmental analyses

Alternative E – No Action Alternative





Environmental Resources to be Examined in the PEIS

- Coastal environments
- Deepwater benthic communities
- Fisheries (fish resources and essential fish habitat)
- Coastal and marine birds
- Endangered species (marine mammals, sea turtles)
- Archaeological resources (historic and prehistoric)
- Socioeconomic issues

Additional resources to be addressed?



Potential Impacting Factors to be Examined in the PEIS

- Noise
- Test drilling/coring
- Operational wastes
- Air emissions
- Vessel traffic (supply vessels and helicopters)
- Trash and debris
- Seabed-impacting equipment (e.g., anchors, sensors, wire lines, cable lines, etc.)
- Electromagnetic emissions

Additional impacting factors?

Mitigation Examples

- Acoustic source has to be ramped-up from a low-intensity to operational level to allow marine mammals to leave the area
- Safety zones of 500 meters established around the acoustic source
- Marine Mammal Observers onboard to monitor the safety zones and shut-down if marine mammals come into the zone
- Marine Mammal Observer reports submitted to MMS every two weeks
- Final Marine Mammal Observer report and digital navigation data submitted to MMS at conclusion of the acquisition

Environmental Review of G&G Activities

Large

G
E
O
G
R
A
P
H
I
C

A
R
E
A

Small

Mid- and South Atlantic OCS
Programmatic EIS

Large-Scale Seismic Surveys
Supplemental EIS or EA

Small-Scale Surveys
EA

Site Specific
EA

An MMPA, ESA, or CZMA review would be required for each G&G permit application regardless of size.

Why are G&G Activities Conducted?

To Survey for

■ Renewable Energy Site Assessment

- Locating sites for alternative energy structures associated with wind, ocean current, and wave-related energy production and transmission (e.g., seismic, coring, etc.)

■ Marine Minerals Investigation

- Locating potential sand and gravel sources for beach restoration and sand and gravel mining (i.e., high-resolution seismic and coring)

■ Oil and Gas Exploration

- Obtaining data for oil and gas exploration and production (i.e., seismic, gravity, magnetics, and controlled source electromagnetics)
- Identifying possible seafloor or shallow depth geological hazards

■ Biological Resource and Submerged Cultural Resource Identification

- Locate or avoid sensitive resources (i.e., high-resolution seismic and coring)

Types of G&G Activities Requiring MMS Review

Geological

- Coring
- Shallow test drilling
- Deep stratigraphic test wells

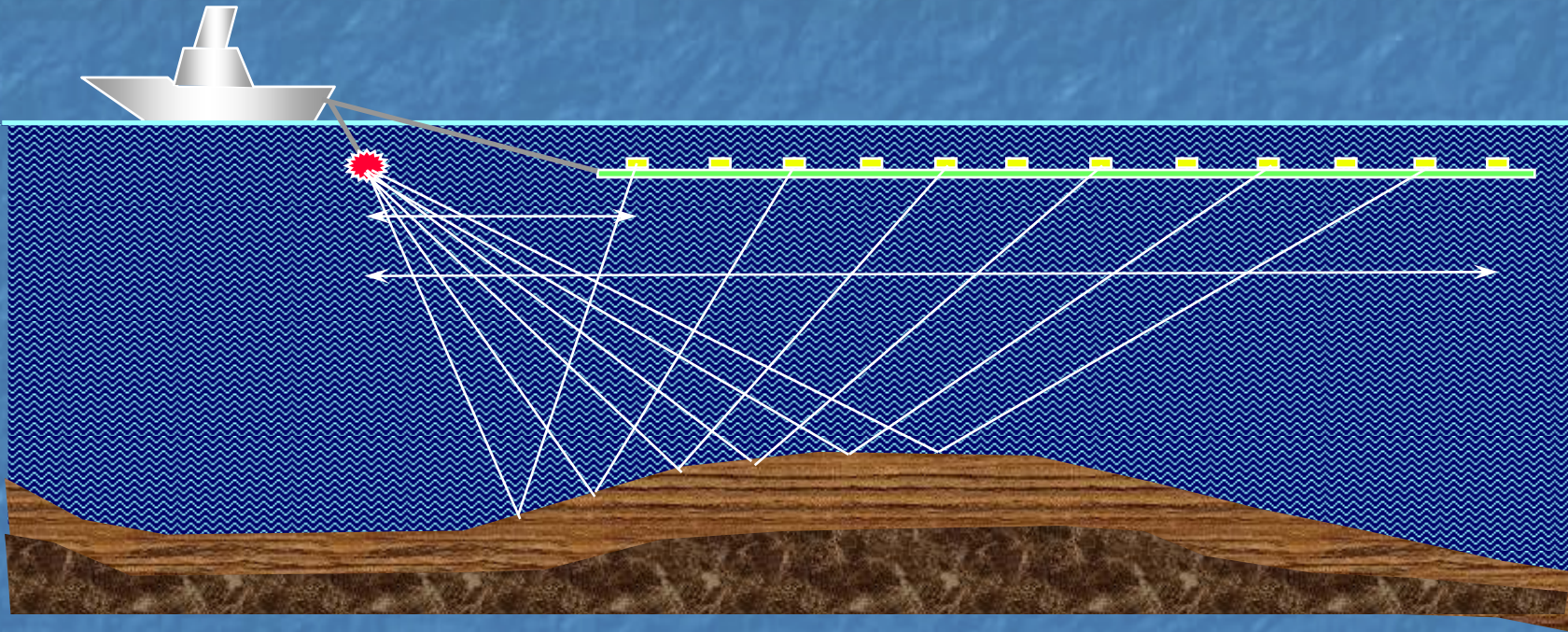
Geophysical

- 2D and 3D seismic
- Controlled source electromagnetic or CSEM
- Gravity and magnetics (sea and air)
- High-resolution seismic

What is a Seismic Survey?

A seismic survey is a program designed for mapping of the surface and subsurface using acoustically generated waves that are reflected from contrasts in the earth. Characteristic acoustic waves are detected by receivers, and the reflected travel time and velocity are then processed to help map geologic structures and stratigraphic features.

A 2D Marine Seismic Method



Birds Eye View

Atlantic G&G PEIS Process Tentative Schedule

Notice of Intent	January 21, 2009
<i>Federal Register</i> Notice	April 2, 2010
Reopening of Comment Period	
Scoping Meetings	April 2010
Draft PEIS Published	Late 2011
Comment Period and Public Hearings	Late 2011
Final PEIS Published	Early 2012
Record of Decision	Mid-2012

Comment opportunities are highlighted in red.

Procedures for Submitting Comments

- Two stations with a facilitator and court reporter are set up to collect oral comments.
- Each attendee submitting oral comments will be allowed 3 minutes to speak.
- Written comments may be submitted to a facilitator or court reporter.
- A separate station with two information officers is set up to answer questions related to G&G activities, biological resources, etc.

How Do I Provide Scoping Comments on the Atlantic G&G PEIS?

- Comments must be received on or before May 17, 2010.
- Comments collected at the public scoping meeting may be oral or written (may be left at registration desk)
- Comments can be e-mailed to: GGEIS@mms.gov
- Comments can be mailed to

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New Orleans, Louisiana 70123-2394



<http://www.gomr.mms.gov/homepg/offshore/atlocs/gandg.html>