



OCS Scientific Committee Orientation Meeting

February 8, 2012

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Chief Environmental Officer
Office of Environmental Programs



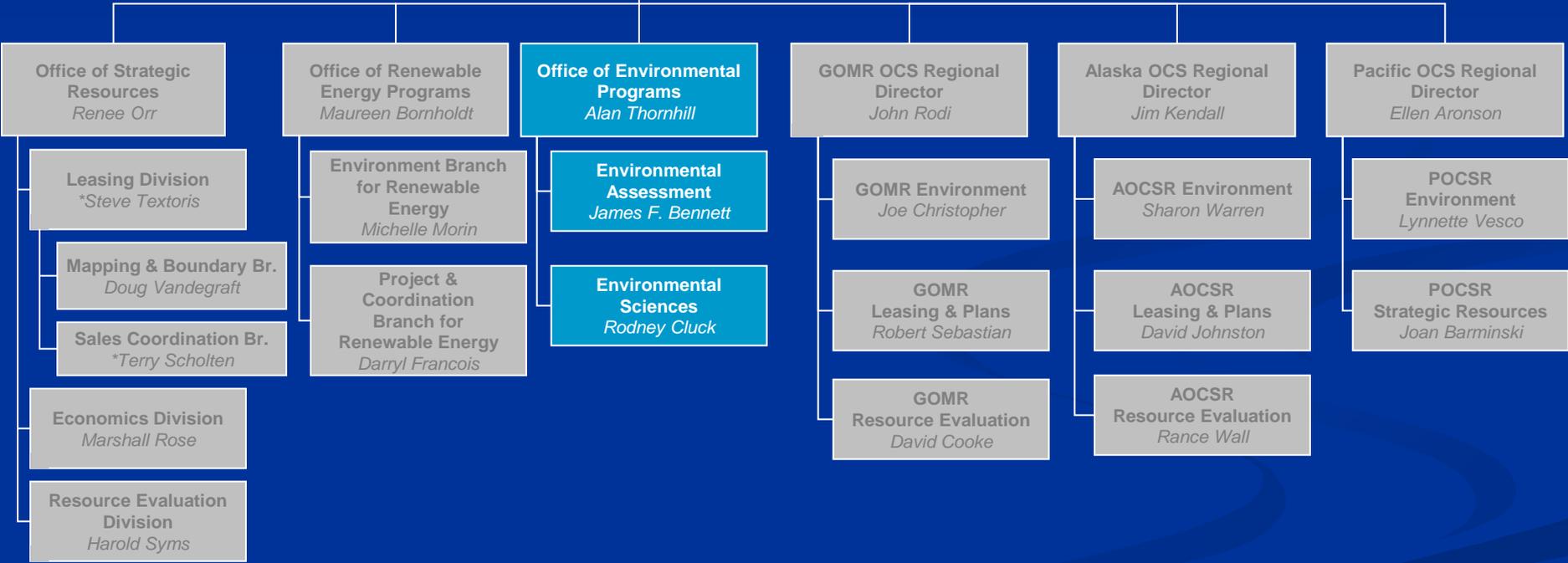
BOEM manages development of the nation's offshore resources in an environmentally and economically responsible way.

BSEE develops and enforces safety and environmental regulations.



Office of the Director
Tommy Beaudreau

Deputy Director, CFO
Walter Cruickshank



* Acting

BOEM Environmental Programs

Office of Environmental Programs

Led by the Chief Environmental Officer
Dr. Alan Thornhill

**Division of
Environmental Sciences**
Dr. Rodney Cluck

**Division of Environmental
Assessment**
Mr. Jim Bennett

Environmental Stewardship

Applied Science for Informed Decision Making

BALANCING:



- Nation's energy needs
 - Environmental sensitivity and marine productivity
 - Multiple use of sea and seabed



Drivers – Legal Mandates

- **Outer Continental Shelf Lands Act (OCSLA)**
Conduct activities on Federal Offshore lands so as to “prevent or minimize damage” to the environment.
- **2007-2012 Interior Strategic Plan**
“Manage or influence resource use to enhance public benefit, responsible use and economic value (energy).”
- **President’s National Ocean Policy**
Challenge: “Increasing energy supply while protecting the environment.”
- **Compliance with environmental statutes**
NEPA, ESA, MMPA, MSFCMA, CWA, CAA

Information Needs



National

- Partnerships: NOPP, NOAA, DOE, USGS, USFWS, EPA.....
- Five-year schedule

Pacific

- Developed/producing leases
- Renewable energy



Atlantic

- Sand and gravel
- Renewable energy

Gulf of Mexico

- Deepwater
- Active leasing
- Sand and gravel

Alaska

- Beaufort, Chukchi Sea exploration

*Department of
Defense (DOD)*

*U.S. Army Corps of Engineers
(USACE)*

*Department of Homeland
Security (DHS)*

*National Park
Service (NPS)*

Department of Interior (DOI)

*National Science
Foundation (NSF)*

Department of Commerce (DOC)

*Federal Maritime
Commission (FMC)*

Fish and Wildlife Service (FWS)

*Federal Energy Regulatory
Commission (FERC)*

*National Oceanic and Atmospheric
Administration (NOAA)*

*Environmental Protection
Agency (EPA)*

Department of Energy (DOE)

Bureau of Indian Affairs (BIA)

*Bureau of Ocean Energy Management
(BOEM)*

Bureau of Land Management (BLM)

U.S. Geological Survey (USGS)

*Bureau of Safety and Environmental
Enforcement (BSEE)*

Department of State (DOS)

Department of Transportation (DOT)

U.S. Coast Guard (USCG)

Outer Continental Shelf Lands Act (OCSLA)

Ocean and Coastal

Clean Water Act (CWA)

National Historic Preservation Act (NHPA)

Hydrographic Survey Improvement Act

National Marine Sanctuaries Act (NMSA)

Coast & Geodetic Survey Act of 1947

and Ready Reserve Fleet (RRF)

E.O. 12047
Protection and Restoration

Marine Protected Areas (MPAs)

Submerged Lands Act

Clean Air Act (CAA)

Coastal Barrier Resources Act

Rivers and Harbors Act of

Natural Gas Act (NGA)

Comprehensive Emergency Response, Compensation, and Liability Act of 1990 (CERCLA)

Coastal Zone Management Act (CZMA)

Authority

Energy Dependence

Safety Act

National Invasive Species Act

Oil Pollution Act of 1990 (OPA90)

Marine Plastic Pollution Research and Control Act (MPPRCA)

National Environmental Policy Act (NEPA)

Federal Power Act (FPA)

National Weather Service (NWS) Organic Act

1899

Marine Mammal Protection Act (MMPA)

Marine Security Act

Ocean Thermal Energy Conversion Act (OTECA)

Ocean Exploration and Research Act of 2009

Act

Research, and Sanctuaries

Integrated Coastal and Ocean Observing System Act

E.O. 13178 -

Magnuson Act of 1950

National Aquaculture Act

Western Hawaiian Islands Coral Reef Ecosystem Reserve

The Environmental Studies Program supports many programs in BOEM, BSEE and Other Regulatory Agencies

- Environmental Assessment
 - NEPA
 - Permits
- Marine Minerals Program
- Oil Spill Modeling Program
- Environmental Compliance

Goals of Environmental Assessment

- **Accurate Scientific Analysis**
- **Foster Better Decisions**
- **Public Disclosure and Involvement**
- **Focus on What is Affected**
- **Consider Cumulative Effects**
- **Consider Alternatives**
- **Identify and Assess Mitigation**
- **Adaptive Management**

Environmental Assessment Traditional Energy



Large

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Small



* also develop activity-specific NEPA documents (e.g., seismic surveys, explosive removals of platforms)

Renewable Energy Program

- **Energy Policy Act 2005 gave authority to DOI and Secretary delegated to BOEM**
- **Final Rule published in April 2009**
- **First Lease Issued – Cape Wind**
- **Moving forward in Maryland, Virginia, New Jersey, Delaware and Massachusetts**

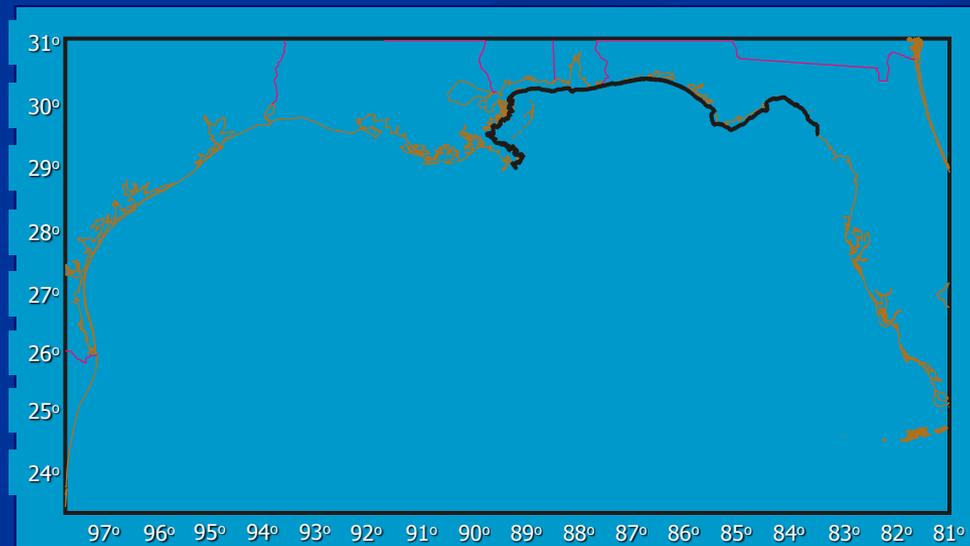


Oil Spill Modeling Program



Oil-Spill Risk Analysis estimates likelihood of spill occurrence and the transport and fate of spilled oil

Integrate results into NEPA, CZMA, ESA, CWA and other environmental reviews



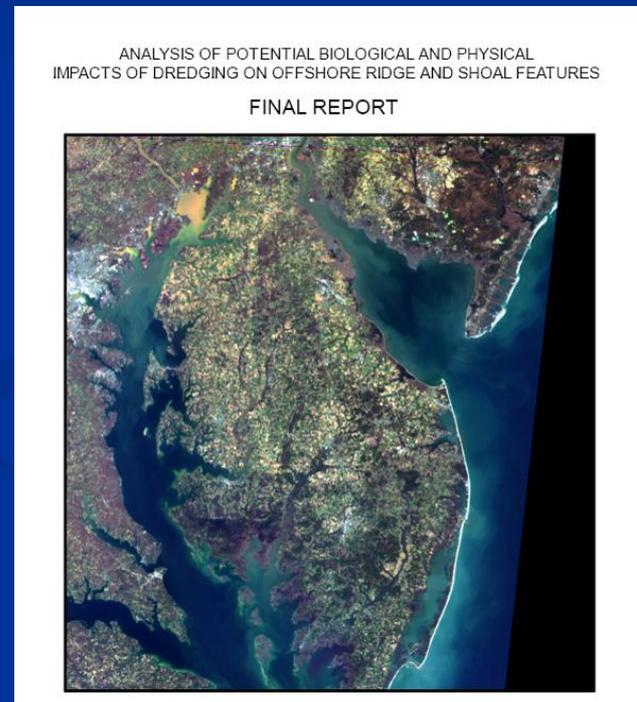
Marine Minerals Program

- 58 million cubic yards of OCS sand conveyed through 31 negotiated noncompetitive agreements
- Projects completed in Florida, Louisiana, Maryland, South Carolina and Virginia
- 180 miles of the Nation's shoreline have been replenished/restored



Environmental Studies in Support of Marine Minerals Program

- \$12 million spent on Environmental Studies
- More than 40 studies
 - Site- Specific and Programmatic
- 8 Ongoing programmatic studies
- Have been referenced or represented in:
 - International Studies
 - Nationwide Studies
 - Peer Reviewed Journal Articles
 - USACE Analysis and Research
 - FWS/NMFS documents
 - Master thesis and PhD dissertations
 - Conference Presentations/Proceedings
 - In-house documents



OCS Scientific Committee

- Federal Advisory Committee (FACA).
- Advises BOEM on the feasibility, appropriateness, and scientific value of the information provided by the ESP.
- Participates in an annual meeting to review Studies Development Plans.
- Includes specific sub-committees.

Annual ESP Process

- Cyclical Process—adaptive feedback-loop
 - Previous year's process overlaps with planning for upcoming years
 - BOEM Scientists will be writing Statements of Work and overseeing ongoing studies while preparing profiles for studies needed in upcoming years

Scientific and Scholarly Integrity

Scientific and scholarly information considered in Departmental decision making must be robust, of the highest quality, and the result of as rigorous scientific and scholarly processes as can be achieved.

Most importantly, it must be trustworthy.

Importance of Scientific & Scholarly Integrity Policy at DOI

“Because robust, high quality science and scholarship play such an important role in advancing the Department’s mission, it is vital that we have a strong and clear scientific integrity policy.”

Interior Secretary, Ken Salazar

Goals of the Policy

- DOI decisions are based on science and scholarship and are respected as credible;
- DOI science is conducted with integrity and excellence;
- DOI has a culture of scientific and scholarly integrity that is enduring;
- DOI scientists and scholars are widely recognized for excellence; and
- DOI employees are proud to uphold the high standards & lead by example.

Applies to All DOI Employees, Including Political Appointees

...as well as:

- contractors
- cooperators
- partners
- permittees
- leasees
- grantees
- and volunteers

when they engage in, supervise, manage, or influence scientific and scholarly activities, or communicate information about the Department's scientific and scholarly activities, or utilize scientific and scholarly information in making agency policy, management or regulatory decisions.



Principles and Expectations

- Define expectations of behavior for all and ensure training makes expectations clear
- Encourage the free-flow of information
- Establish transparency expectations
- Make scientific credentials part of hiring criteria
- Encourage scientists to communicate openly
- Reinforce principles of whistleblower protection
- Encourage scientists to engage with communities of practice
- Examine issues and correct any problems that arise
- Ensure best practices throughout the Department

Expect a culture of integrity—and contribute to making it a reality.

Future Ocean Energy Challenges

- Leasing in new areas, especially with limited baseline information
- Climate change and ocean acidification
- New Frontiers in Policy: Marine spatial planning
- Integrating new energy technologies, mainly renewables and alternate use (carbon sequestration)



www.boem.gov/studies

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