

Using Environmental Information in OCS Decision Making

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Our Organization(s)

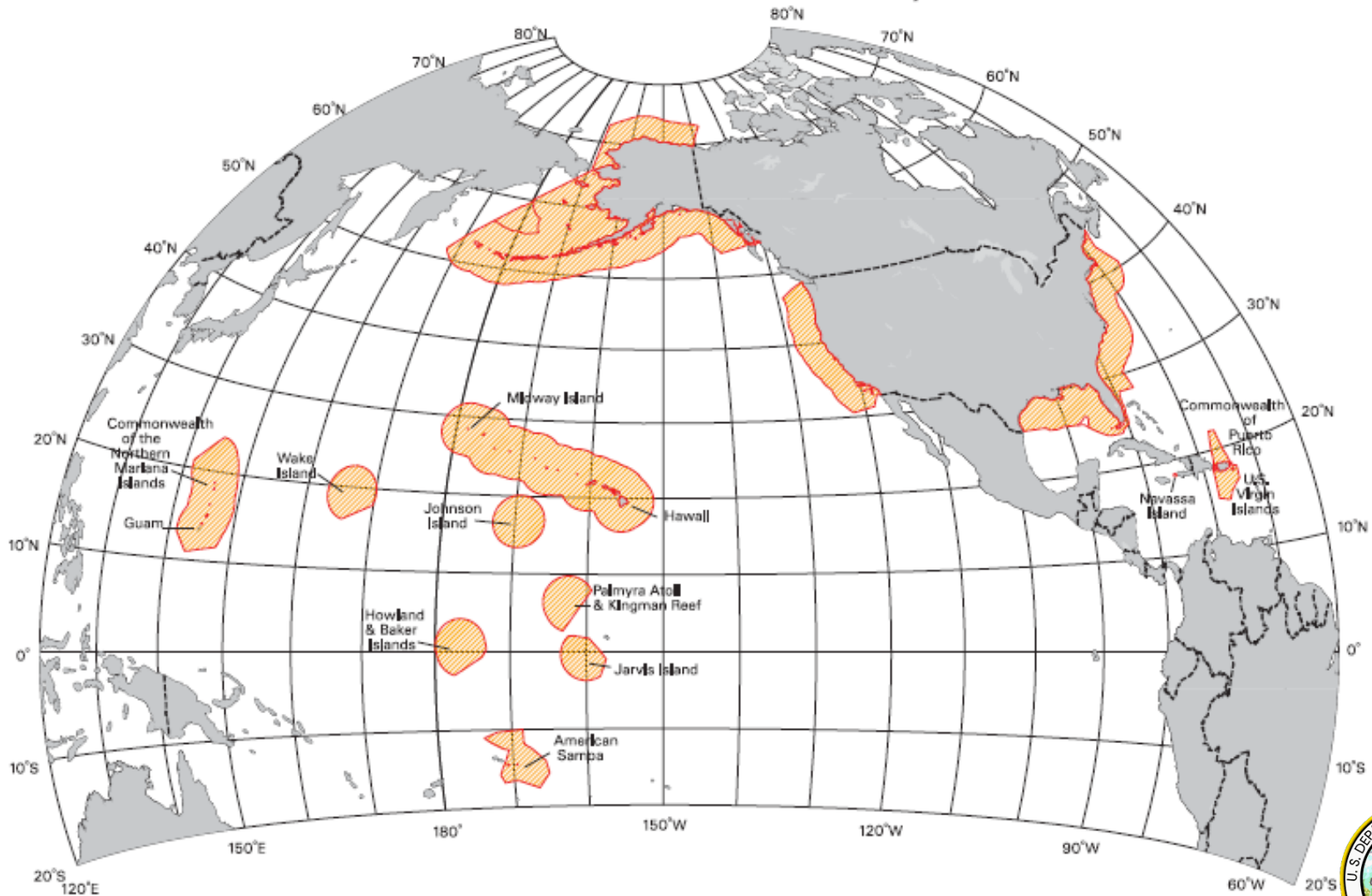


Manages development of the nation's offshore resources in an environmentally and economically responsible way

BSEE develops and enforces safety and environmental regulations.



Outer Continental Shelf (OCS)



1.7 Billion Acres (roughly the landmass of Australia)



***Department of
Defense (DOD)***

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

***Department of Homeland
Security (DHS)***

***Office of Naval
Research (ONR)***

***National Aeronautics and
Space Administration (NASA)***

Department of Interior (DOI)

***National Park
Service (NPS)***

***Federal Maritime Commission
(FMC)***

***National Science
Foundation (NSF)***

Department of Commerce (DOC)

***Federal Energy Regulatory Commission
(FERC)***

Fish and Wildlife Service (FWS)

***National Oceanic and Atmospheric
Administration (NOAA)***

Environmental Protection Agency (EPA)

Bureau of Indian Affairs (BIA)

Department of Energy (DOE)

Bureau of Land Management (BLM)

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

U.S. Geological Survey (USGS)

Department of State (DOS)

***Bureau of Safety and Environmental
Enforcement (BSEE)***

Department of Transportation (DOT)

U.S. Coast Guard (USCG)

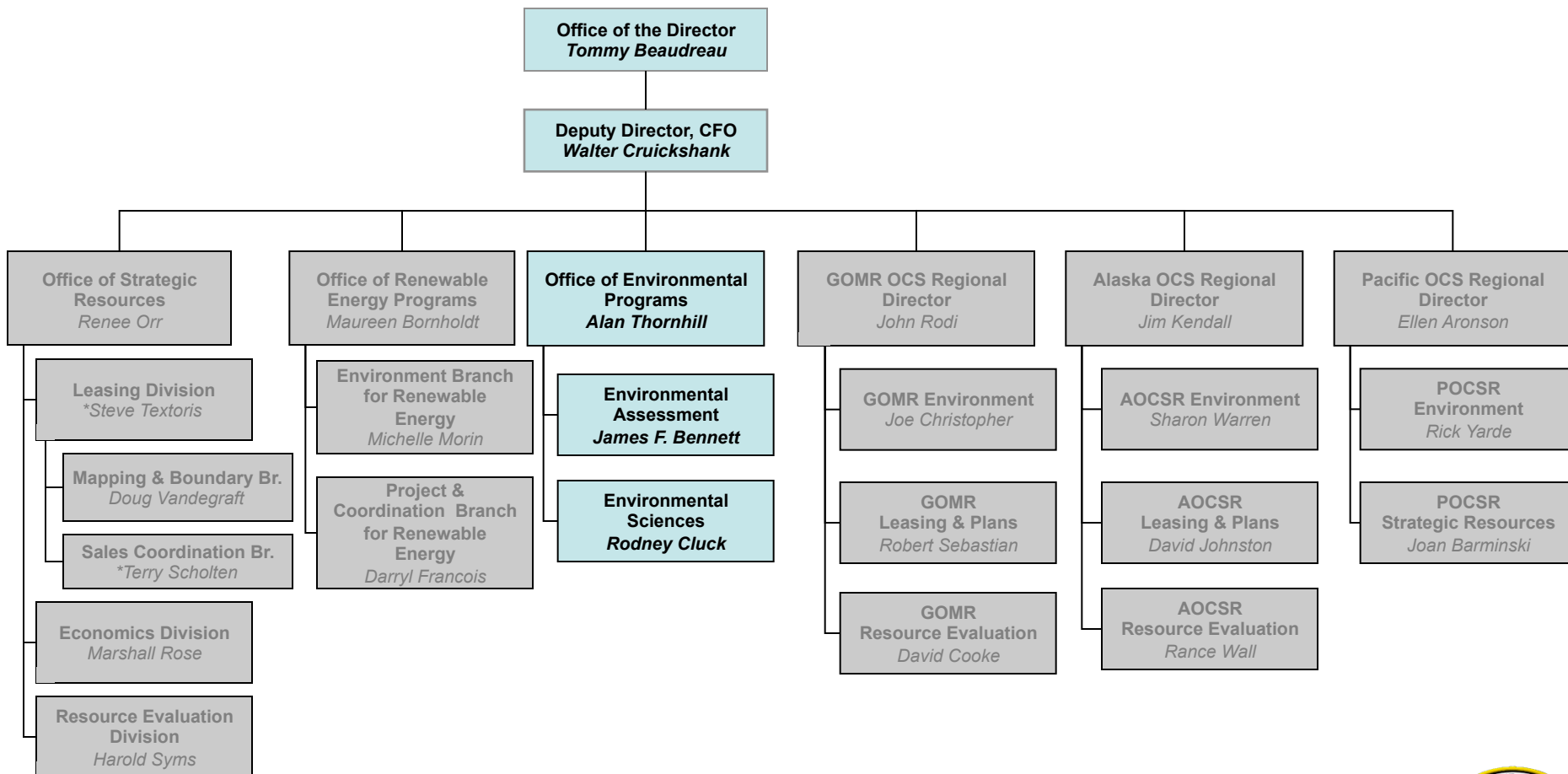


Outer Continental Shelf Lands Act (OCSLA)
National Wildlife Refuge System Administration Act (NWRSAA)
National Historic Preservation Act (NHPA)
Coast & Geodetic Survey Act of 1947
E.O. 13158 – Marine Protected Areas (MPAs)
Coastal Barrier Resources Act
Natural Gas Act (NGA)
National Invasive Species Act
National Methane Hydrate Research Act
Federal Power Act (FPA)
Marine Mammal Protection Act (MMPA)
Antiquities Act
Research Sanctuaries Act
[Ocean Dumping]
Magnuson Act

Ocean and Coastal Mapping, Hydrographic Survey, and Improvement Act
National Marine Sanctuaries Act (NMSA)
E.O. 13508 – Chesapeake Bay Protection and Restoration
Submerged Lands Act
E.O. 12962 – Recreational Fisheries, and E.O. 13474 – Amendments to E.O. 12962
Coastal Zone Management Act of 1990 (CZMA)
National Environmental Policy Act (NEPA)
OTEC) Research, Development, and Demonstration (RD&D) Ocean Act
Coral Reef Conservation Act (CRCA)
National Weather Service (NWS) Act
Ocean Exploration and Research Act
E.O. 13178 – Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve

Clean Water Act (CWA)
National Marine Sanctuaries Act (NMSA)
Clean Air Act (CAA)
E.O. 12962 – Recreational Fisheries, and E.O. 13474 – Amendments to E.O. 12962
National Environmental Policy Act (NEPA)
OTEC) Research, Development, and Demonstration (RD&D) Ocean Act
Marine Security Act
E.O. 13178 – Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve

Where's the Science?



Applied Science for Informed Decisions



Mission:

Provide the information needed to **predict**, **assess**, and **manage** impacts from offshore energy and marine mineral exploration, development, and production activities on human, marine, and coastal environments



ESP Authority and Scope

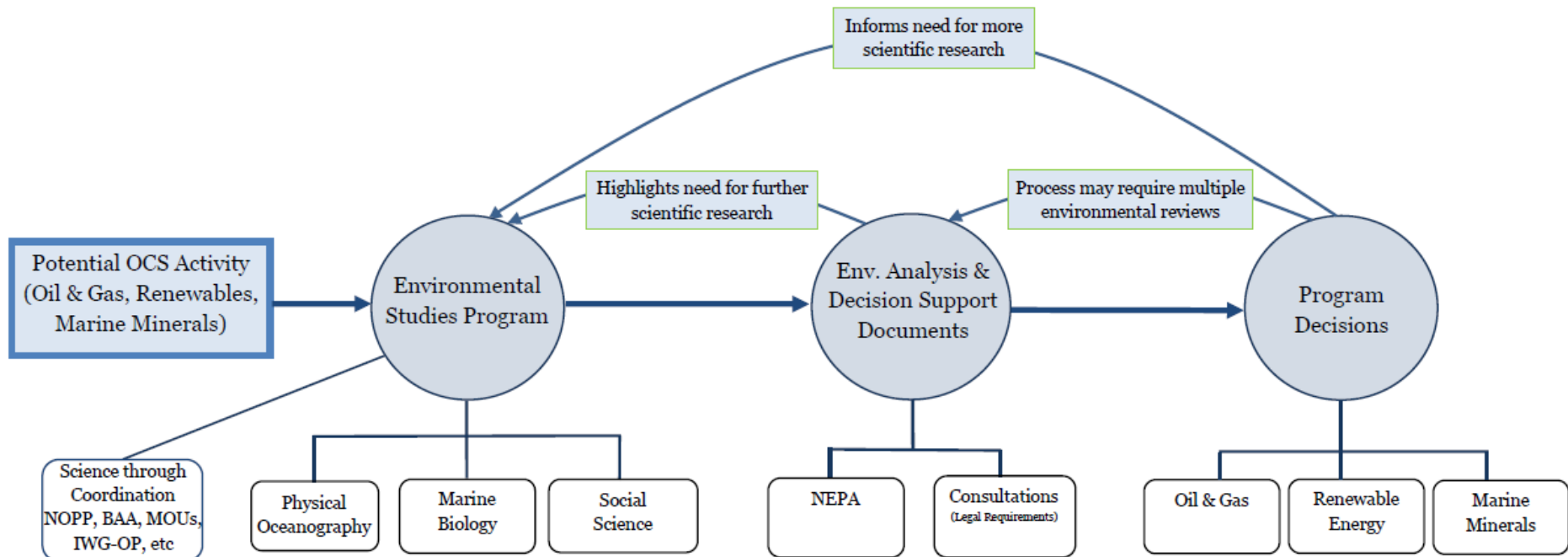
- Initiated in 1973 to support the U.S. DOI offshore oil and gas leasing program
- Statutory authorization:
 - Outer Continental Shelf Lands Act (OCSLA) and
 - Environmental Protection Act of 2005
- Section 20 of the OCSLA authorizes the ESP and establishes three general goals for the program...

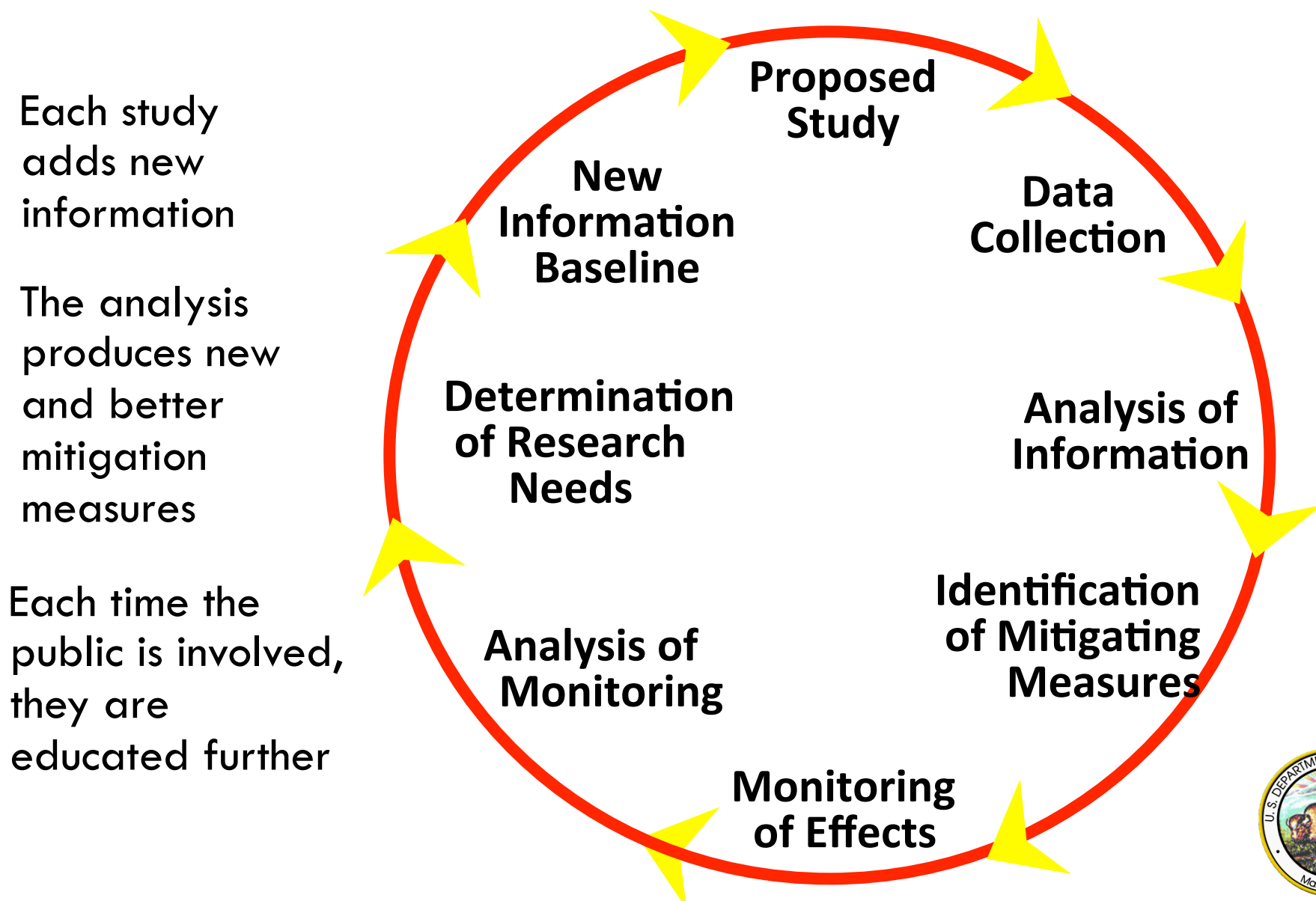


ESP Program Goals

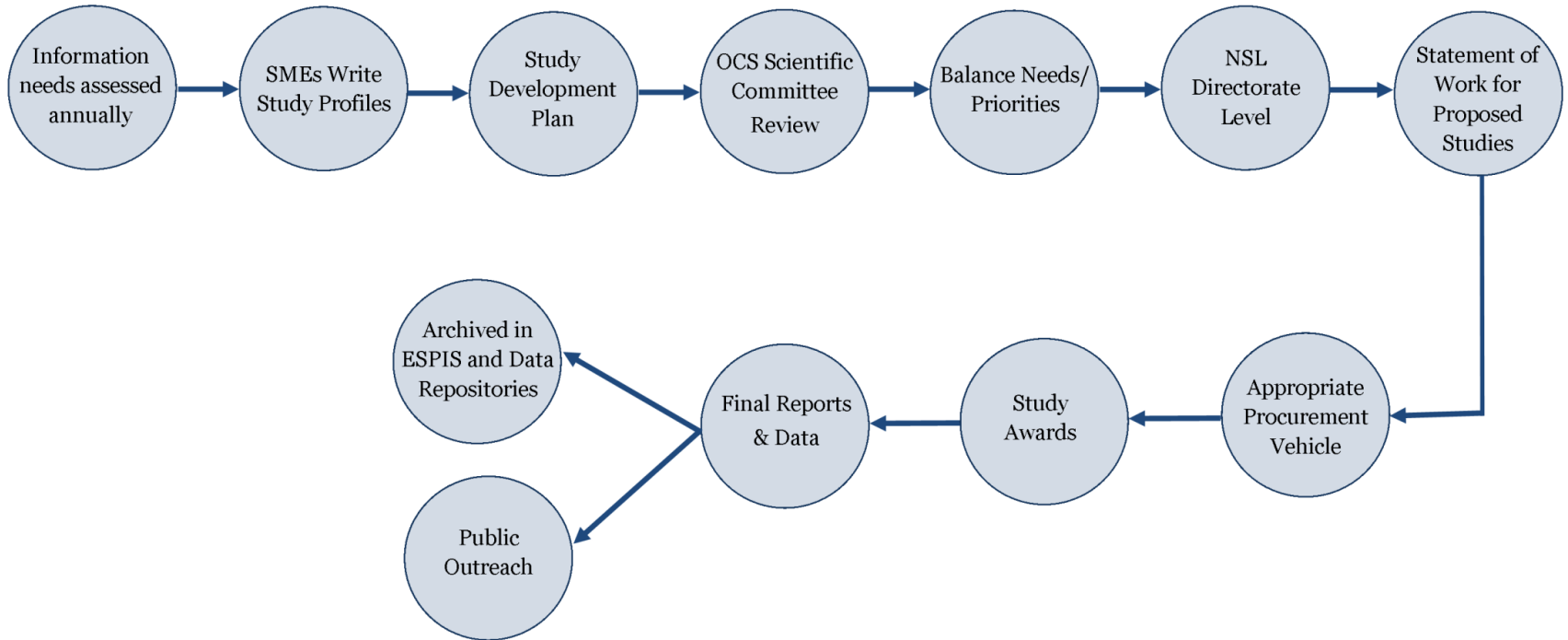
- 1) Establish the information needed for assessment and management of environmental impacts
- 2) Predict impacts on the marine biota; and
- 3) Monitor human, marine, and coastal environments







ESP Process Flow

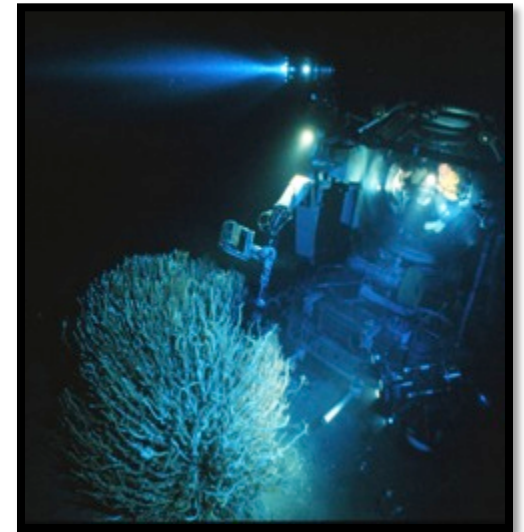


BOEM Environmental Studies Program (ESP) is dynamic and flexible to the changing information requirements. New information needs routinely arise outside the annual planning process and in response proposed studies are often added/deleted. This schema is a simplified version of the program process and does not entirely capture its complexity and variability.

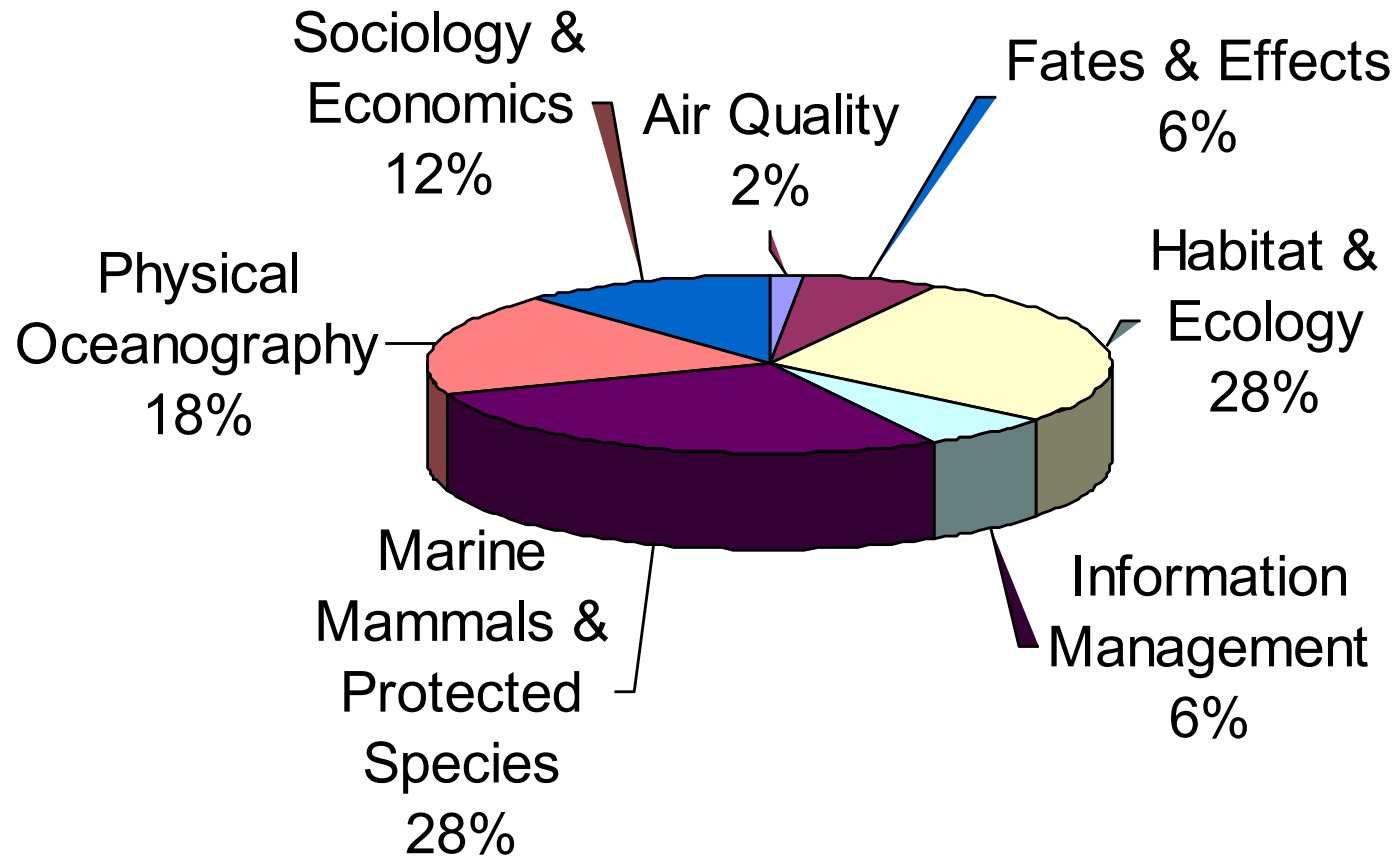


Funding Mechanisms:

- **Competitive Contracts**
- **Inter-Agency Agreements**
 - Partnering NOPP; NOAA; ONR;
NASA; NSF; USGS; FWS; NPS; DOE; etc.
- **Cooperative Agreements**
 - Coastal Marine Institutes (CMI)
 - Cooperative Ecosystem Studies Units (CESU)



Science Expenditures by Discipline 2007-2011



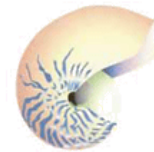
**Nearly 40 years of
Applied Environmental Research**

Partnering, Partnering, Partnering

Making the best use of our resources



Subcommittee on
Ocean Science and Technology
Interagency Working Group on
Ocean Partnerships



**Coastal
Marine
Institute**

University of Alaska & Minerals Management Service



Smithsonian
Institution



National
Oceanographic
Partnership
Program



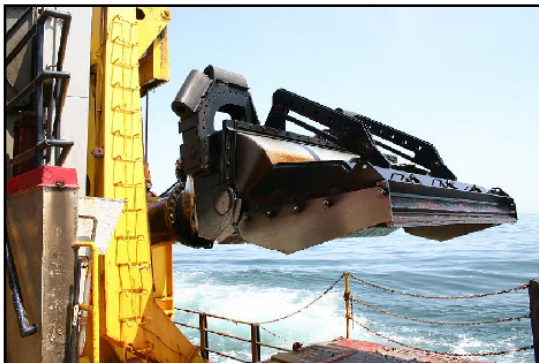
Use of Study Results

- Improving our understanding of the oceans and offshore environments
- Directing future research
- NEPA Analyses
- BOEM & Other Models
 - OSRA, Econ, Air Quality, Circulation
- Developing Mitigations
- Notices to Lessees (NTLs)

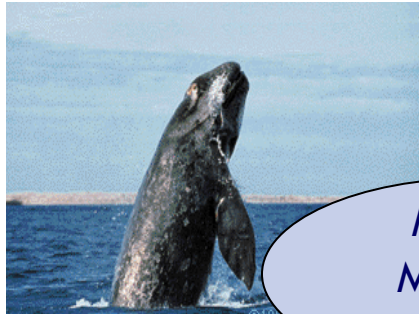


Marine Minerals Program

- The Outer Continental Shelf Lands Act (OCSLA) (43 U.S.C. 1331, et. seq.) provides the authority to manage minerals on the OCS
- 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 Consultations



Marine
Mammal
Protection Act

Federal Water
Pollution
Control Act



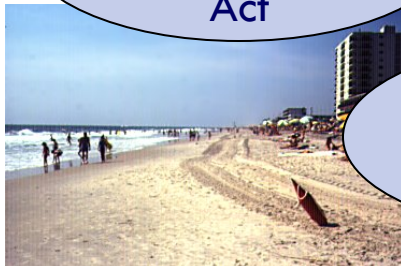
National Historic
Preservation Act

Migratory
Bird Treaty
Act

NEPA PROCESS

Clean Air Act

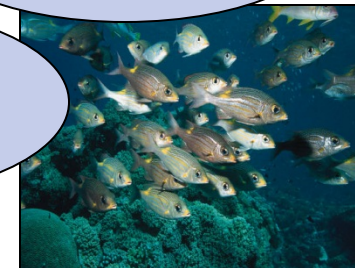
Coastal Zone
Management
Act



E.O. 12898:
Environmental
Justice

Endangered
Species Act

Magnuson-
Stevens Act



NEPA process coordinates compliance with other environmental requirements

NRDA's Technical Working Groups (TWGs) Utilized BOEM Scientists

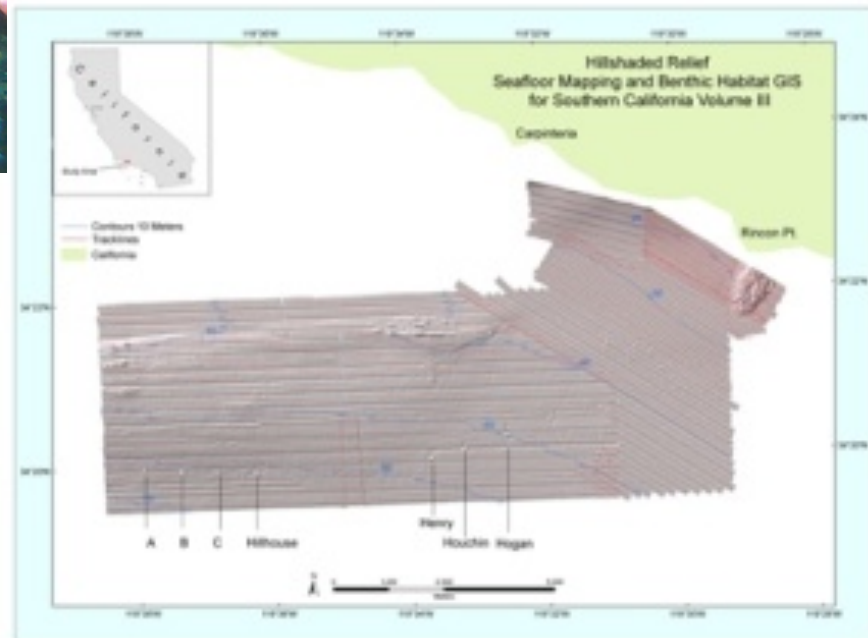
- Chemistry
- Water Column
- Shallow Subtidal Sampling
- Submerged Aquatic Vegetation
- Shoreline
- Birds
- Shallow-Water Coral
- Deepwater Coral
- Near-Shore Fish
- Off-Shore Fish
- Oysters
- Terrestrial and Aquatic Wildlife
- Mammals and Turtles
- Human Use
- Cultural Resources





BASELINE:

- Background for large Programmatic decisions.
- Establish parameters for required site-specific surveys.



SITE-SPECIFIC/Impact:

- Studies of local population distributions/animal behavior/site specific conditions inform evaluations of project applications.
- Fate and effect studies provide information for avoidance measures and mitigation.





MONITORING:

- Informs predictive models
- Basis for cumulative impact assessment
- Evaluates compliance
- Improves mitigation measures



- Federal Advisory Committee (FACA)
 - Annual Review of Studies Development Plans
 - Sub-committees
- Scientific Review Boards
- Collaboration with Federal Partners



“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

Policy in effect February 2011—goals are to ensure DOI:

- Decisions are based on science and scholarship are respected as credible;
- Science is conducted with integrity and excellence;
- Has a culture of scientific and scholarly integrity that is enduring;
- Scientists and scholars are widely recognized for excellence; and
- Employees are proud to uphold the high standards & lead by example.

Applies to EVERYONE!



- Environmental Studies Program Information System (**ESPI**S)
- www.marinecadastre.gov
- BOEM hosted meetings & workshops
- Participation and sponsorship of symposia and conferences
- Professional journal publications
- BOEM Ocean Science
- Education and outreach



Environmental Studies Program Information System Current Capabilities:

- Provides Access to Reports and Technical Summaries
- PDF documents over 3,300 to date. Nearly \$980M investment.
- In the process of improving ESPIS.

Query for ESPIS

Attn: Documents are in Adobe PDF format. Some files may contain attachments and/or comments and are best viewed with Adobe Reader Version 7.0 or higher which can be downloaded from [Adobe Reader](#).

The Bureau of Ocean Energy Management, Regulation and Enforcement strives to make all public data available as soon as it is releasable. If you do not find the data you are looking for, please check again the next business day since certain circumstances may delay the posting of data. We apologize for the inconvenience.

Data last updated on 4/25/2011 (CST)
and will be updated when new ESPIS documents become available.

Select Options Using the Checkboxes
Click the Links for Help on Each Selection

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<input type="checkbox"/> Publication Number:	<input type="text"/>
<input type="checkbox"/> Contract Number:	<input type="text"/>
<input type="checkbox"/> Contractor:	<input type="text"/>
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ESP Take Home Messages

- **Mission-focused:** Science to support stewardship of OCS resources
- **Rigorous:** Frequent and robust internal & external review
- **Responsive:** Adaptive approach to science and management
- **Participatory:** Coordination, Collaboration, and Leveraging
- **Forward-looking:** Anticipating future science needs

www.boem.gov/studies



Why this Workshop? Objectives & Outcomes

➤ **Objectives:**

- Identify gaps in our understanding of the effects of renewable energy development in Oregon.
- Identify feasible studies that could help plug those gaps (how ESP can help).

➤ **Outcomes:**

- A thorough review of the questions we are posing in breakout groups.
 - Are these the right questions?
 - Do we already have a start to answer them?
- A path forward!

