



Environmental Studies Program

Applied Science for Informed Decisions on Ocean Energy

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Environmental Studies Program ESP Mission



To 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.







Environmental Studies Program

- Initiated in 1973 to support the U.S. DOI offshore oil and gas leasing program.
- Statutory authorization derived primarily from the OCSLA and EPAct of 2005 which gave BOEM authority to regulate OCS Renewable energy projects.
- Section 20 of the OCSLA authorizes the ESP and establishes three general goals for the program...



Environmental Studies 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



Resources and Research Topics





OCS Scientific Committee (OCS SC)

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



Determining Priorities

- Mission relevance
- Scientific merit
- Technically feasible
- Timing
- Applicability
- Affordable



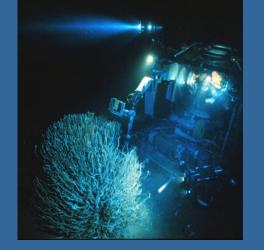


Funding Research

- 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)





ESP Information Sharing

- Environmental Studies Program Information System (ESPIS)
- Multipurpose Marine Cadastre (MMC)
- Professional Journal Publications
- BOEM Ocean Science
- BOEM Hosted Meetings & Workshops
- Participation and Sponsorship of Symposia and Conferences
- Education and Outreach



ESPIS

Environmental Studies Program Information System

 On-line system for accessing all completed ESP research report and technical summaries.

More than 2,000 .PDF documents available.



ESPIS Revamp: Project Goals

- Provide access to spatial data and information collected from environmental studies to the public
- Redesign ESPIS interface to enhance user friendliness and search capability
- Create a report generating capability
- Create linkage with the Multipurpose Marine Cadastre for displaying spatial data



Use of Study Results

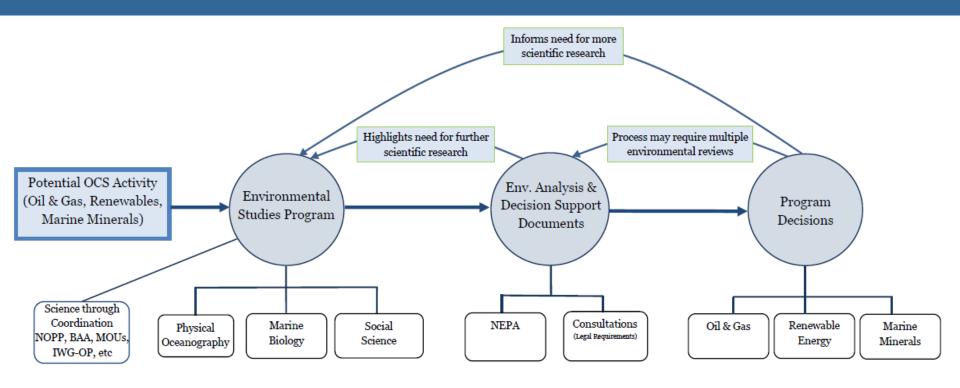
Internal

- NEPA Analyses
- Input to BOEM Models
 - OSRA, Econ
- Developing Mitigations
 - NTL Development and Modification
- Directing future research

External

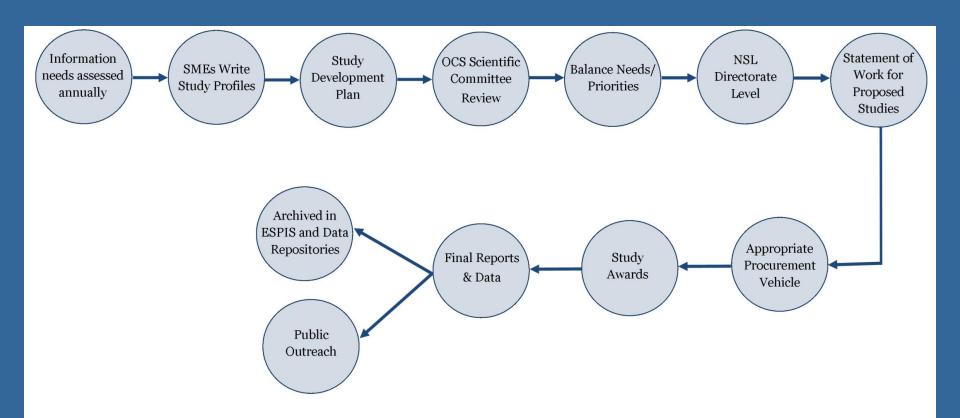
- Statutory Requirements
 - Endangered Species Act
 - Clean Air Act
 - Clean Water Act
 - Oil Pollution Act
 - Marine Mammal Protection Act
 - Magnuson-Stevens FisheryConservation and Management Act
 - National Historic Preservation Act
 - Coastal Zone Management Act
 - And.....

Applied Science for Informed Decisions





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.



Program Quality

- Information needs reviewed internally/externally
- OCS Scientific Committee
- External participation on proposal reviews
- Scientific/Quality Review Boards
- Peer reviewed literature
- OMB P.A.R.T Review



Moving Forward

- Build teams among NGOs, state, academic and Federal partners
- Focus on applied science as a priority for decision making
- Outreach to broaden awareness of ESP in the scientific community and partners
- Become recognized as leaders in applied ocean science



ESP Outreach

- Science Days
- NOPP Partnering for Ocean Science
- Public Affairs press releases, articles
- Marine Educators
- Support for National Ocean Science Bowl
- Conferences, meetings, workshops
- USA Science & Engineering Festival, BOEM booth
- Congressional briefing series
- Invitational talks at colleges/universities



Take Home Messages

- The ESP is Mission-focused
- Clear Goals & Clear Strategy
- Highly Participatory
- Frequent Internal & External Review
- Coordination, Collaboration, and Leveraging
- Quality Science for Bureau Mission
- The Landscape is Continually Evolving

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