

Environmental Studies Program: *Science for Decision-Making*

OCS SCIENTIFIC COMMITTEE

Hyannis, MA

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Energy Management, Regulation, and Enforcement
(BOEMRE)

Department of the Interior

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Goals of the Environmental Studies Program

Establish the baseline information needed for assessment of the human, marine, and coastal environments of the Outer Continental Shelf (OCS) and potentially affected coastal areas;

Predict impacts on the human, marine and coastal environments from OCS activities; and

Monitor human, marine, and coastal environments to provide time series and data trend information for identification of significant changes in the quality and productivity of these environments, and to identify the causes of these changes.

How Do We Work?

Competitive Contracts

Interagency Agreements

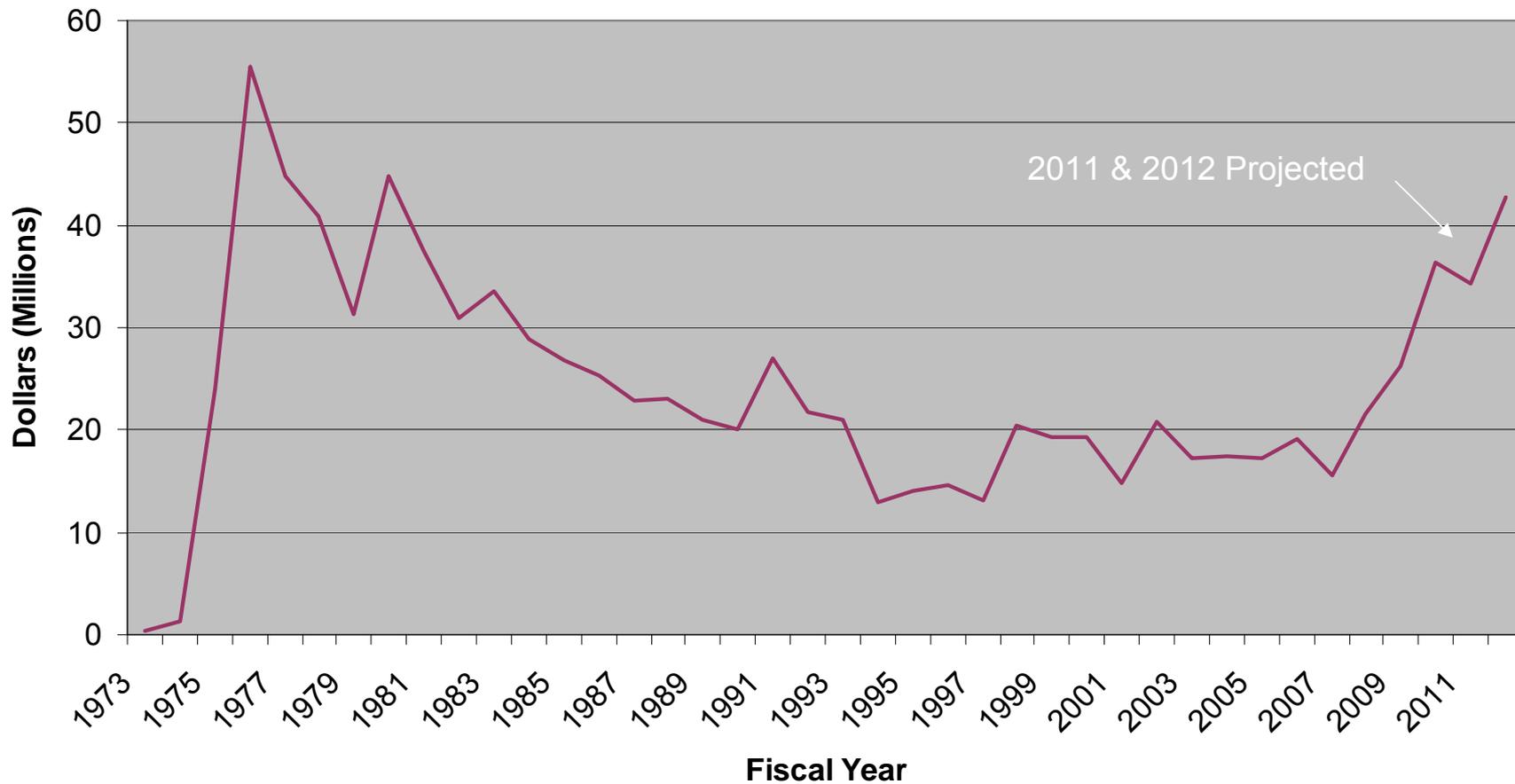
- **Partnering:** NOAA, Navy, NSF, USGS, FWS, NPS, DOE, etc.

Cooperative Agreements

- Coastal Marine Institutes (UA, LSU)
- Cooperative Ecosystem Studies Units
 - North & West Alaska, Pacific Northwest, Californian, Gulf Coast, North Atlantic Coast, Piedmont South Atlantic

ESP Yearly Expenditures 1973-2010

(2011 & 2012 Projected)



Challenges and Initiatives

NRDA process

USGS Arctic report

Scientific Integrity

Outreach/Education

CMSP

Data and Report Management

Science Dissemination



BOEMRE – NRDA Coordination

BOEMRE becoming increasingly involved with NRDA process

Initial resistance at TWG level fading due to increased top-down coordination

NOAA, DOJ, DOI & BOEMRE, scientific and legal staff met in early April to kick-start coordination

BOEMRE has redoubled efforts to join and participate with TWGs

Established lines of communication for when apparent overlap exists

BOEMRE sent a request to NRDA leadership outlining our information needs and a potential path forward to ensure effective coordination of study processes



DOI Scientific Integrity Policy

DOI published new policy on Jan. 28, 2011

Responsive to Presidential Memorandum, OSTP & DOI guidance

All Employees (career and political) fall under this policy

Agencies may adopt *in toto*, or adapt to specific needs

Policy covers the creation, use and dissemination of scientific results and scholarly endeavors

Policy includes procedures for reporting and investigating losses of integrity

Currently developing the implementation strategy and procedures

ESP Links to Education

Workings Groups

- Interagency Working Group-Ocean Education (IWG-OE)
- DOI STEM Education Strategic Planning Working Group

National Ocean Sciences Bowl

National Marine Educators Association

BOEMRE Kids Page



BOEMRE/FERC MOU

Signed in April 2009 to resolve jurisdictional question of lead federal agency over MHK development on OCS

MHK projects will require BOEMRE lease (siting) and FERC license (operations)

Issued joint guidelines in August 2009 to further explain roles of each agency in implementing the MOU

Currently coordinating to ensure an efficient process for authorizing MHK pilot projects

Partnerships – Workshops for Wind Energy Development

DOE-DOI MOU

2nd Quarterly meeting May 11, 2011

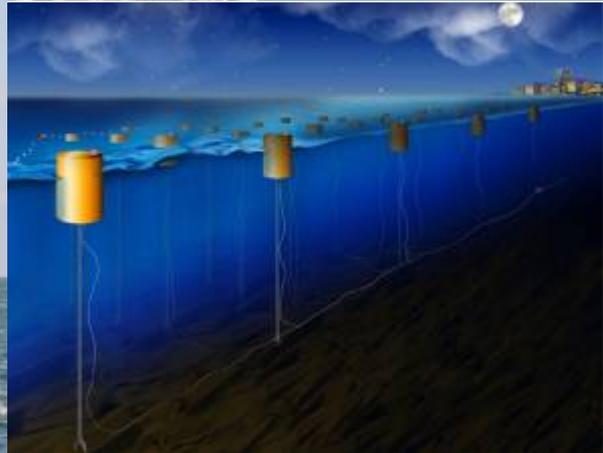
DOE led **Metocean Resource Assessment/Design
Conditions Workshop** June 23-24, 2011

BOEMRE led **Atlantic Wind Energy Workshop –
Environmental – Socioeconomic.** July 12-14, 2011

ORRAP **Wind Energy Workshop** May 24-25, 2011

FWS-BOEMRE **Marine Bird Workshop** June 21-23,
2011

Our Crowded Oceans



What is Coastal and Marine Spatial Planning?

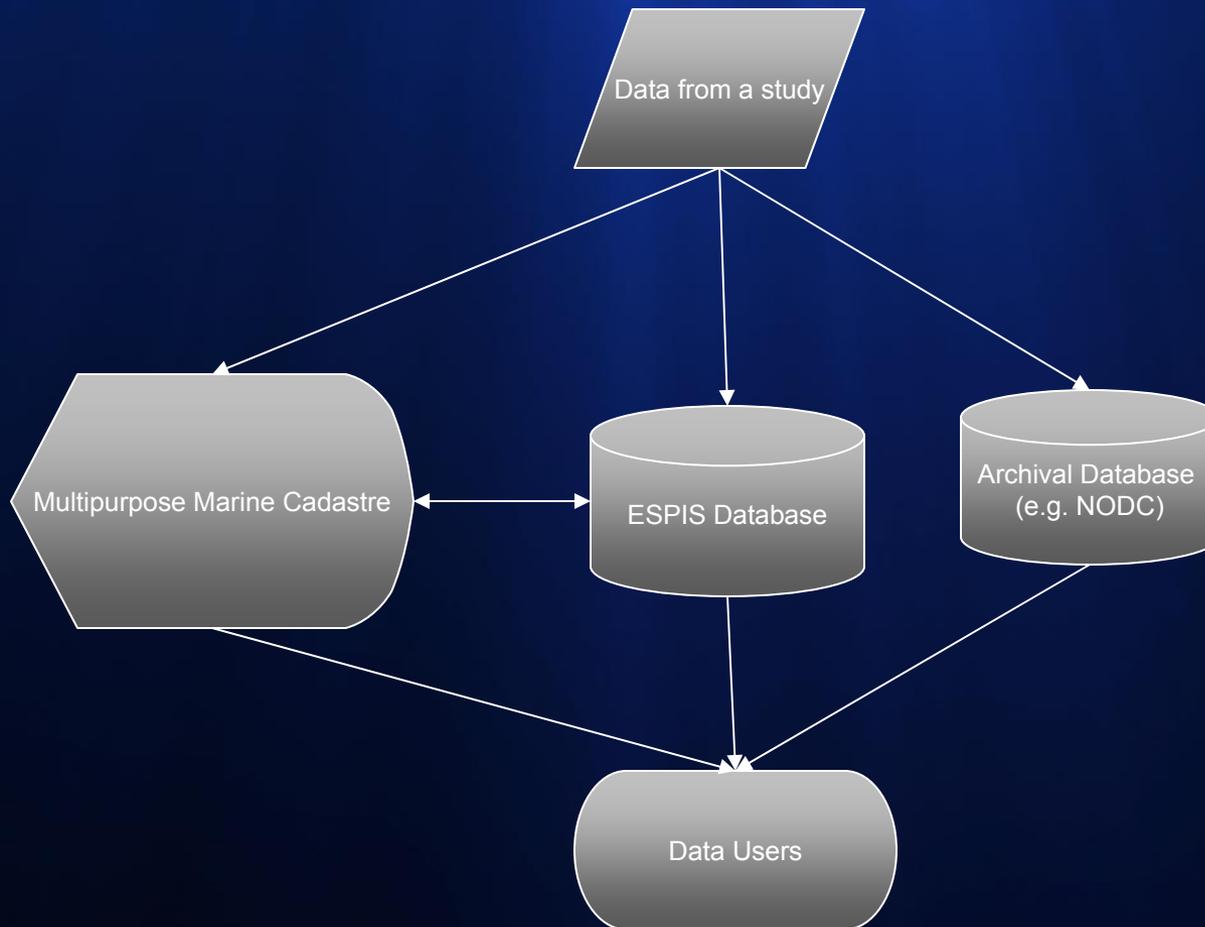
Coastal and Marine Spatial Planning (CMSP) is "a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of ocean, coastal, and Great Lakes areas."

(Exec. Order No. 13547, 75 Fed. Reg. 43023, (July 22, 2010))

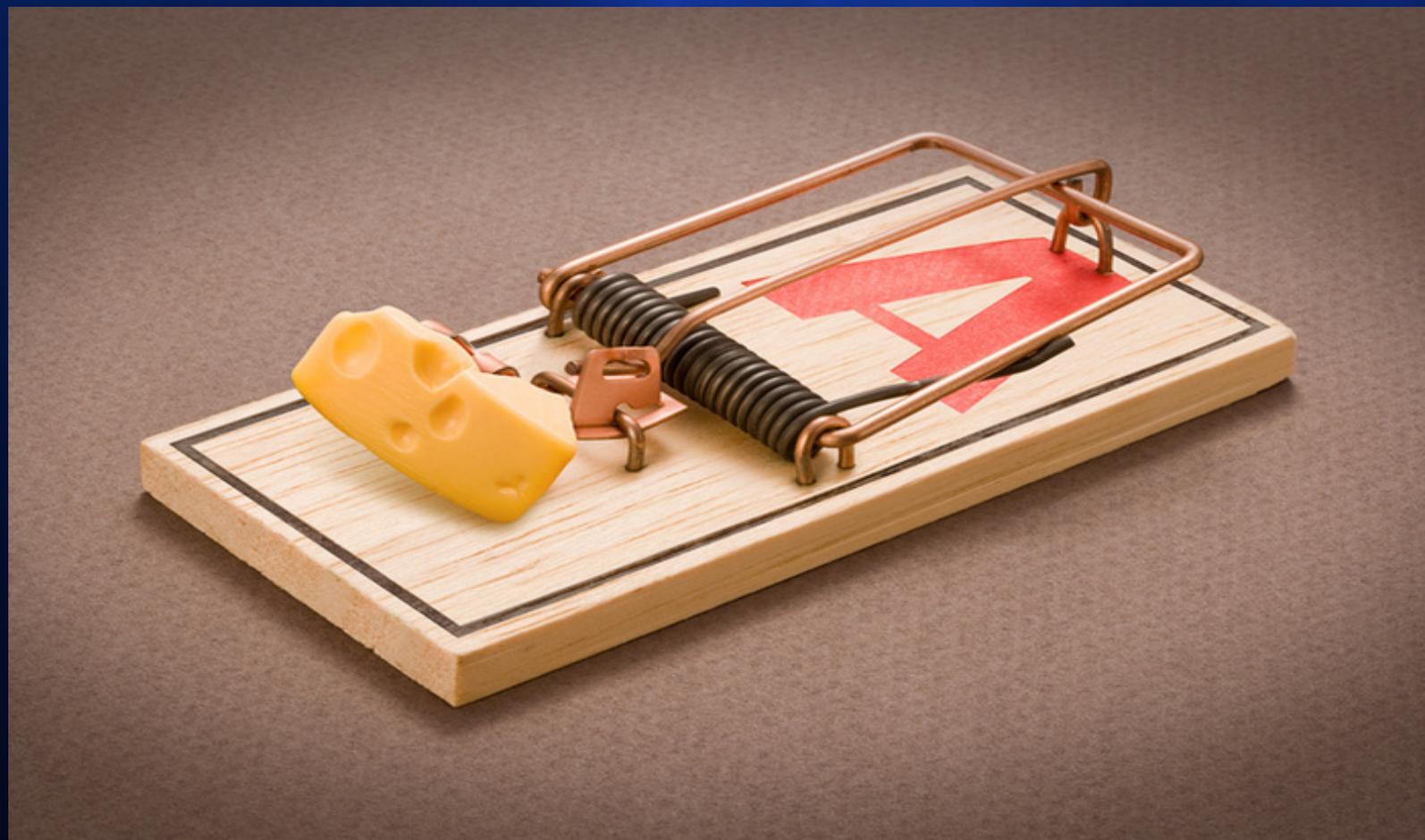
CMSP Aims to:

- reduce conflicts among uses
- reduce environmental impacts
- facilitate compatible uses
- preserve critical ecosystem services

ESP Data and Report Information Management



One Mousetrap!!!



What Kind of Scientific Studies can be viewed in the MMC?

Social Science

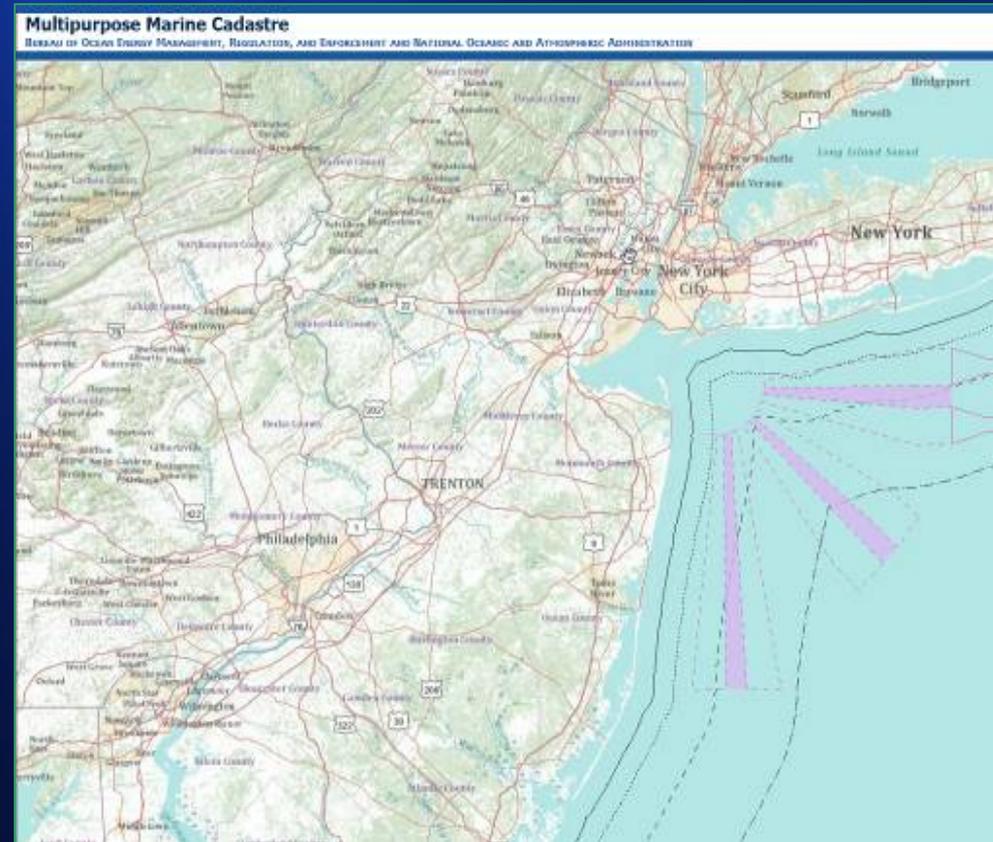
- Subsistence Use, Recreational Activities
- Space Use Conflict and Mitigation

Physical Science

- Seafloor Mapping

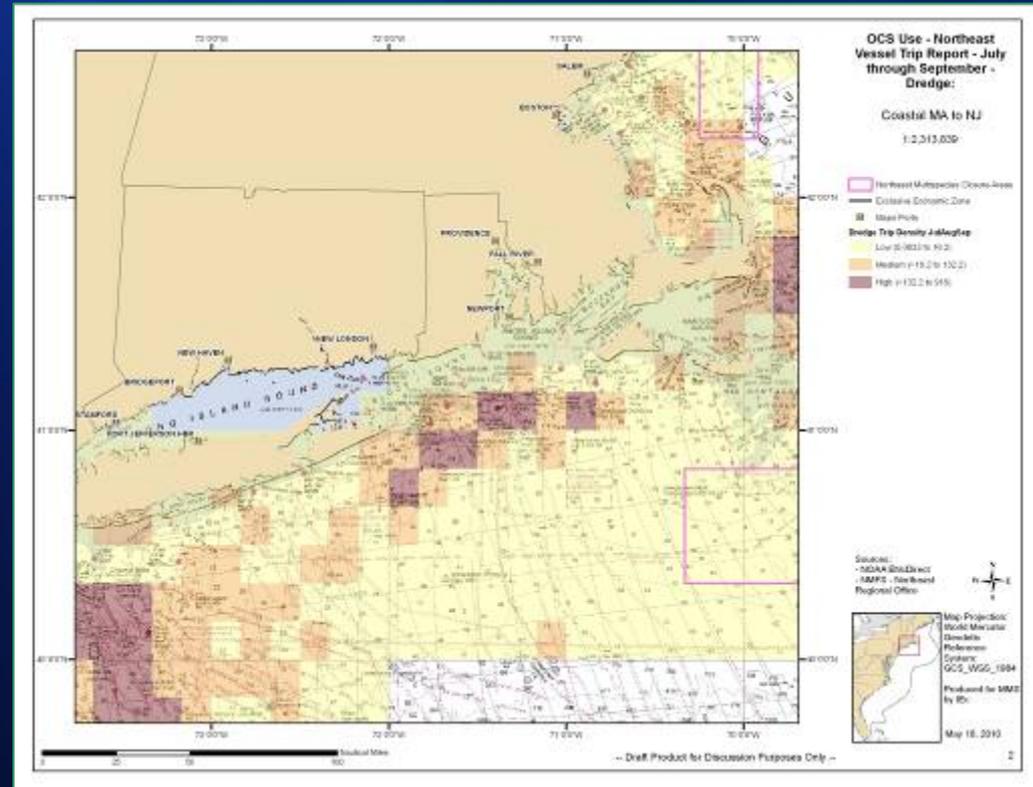
Biological Science

- Distribution, abundance, and ecology of fauna and flora
- Location of sensitive habitats



Identification of OCS Renewable Energy Space-Use Conflicts and Analysis of Potential Mitigation Measures

- Identify potential space-use conflicts
- Create a spatial database to assist in determining potential multiple use areas and future areas of conflict
- Identify potential mitigation strategies
- Identify opportunities for communication and cooperation among stakeholders



Fishing Vessel Trip Report- Northeast (July – Sep)

Cross Island Whaling Study

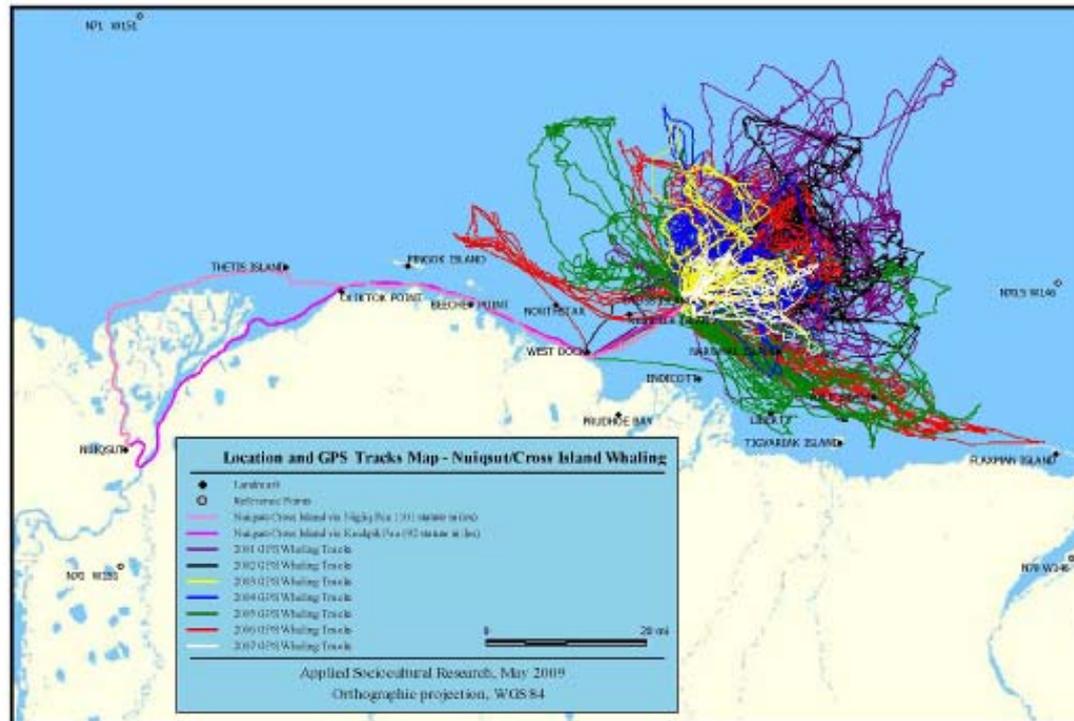
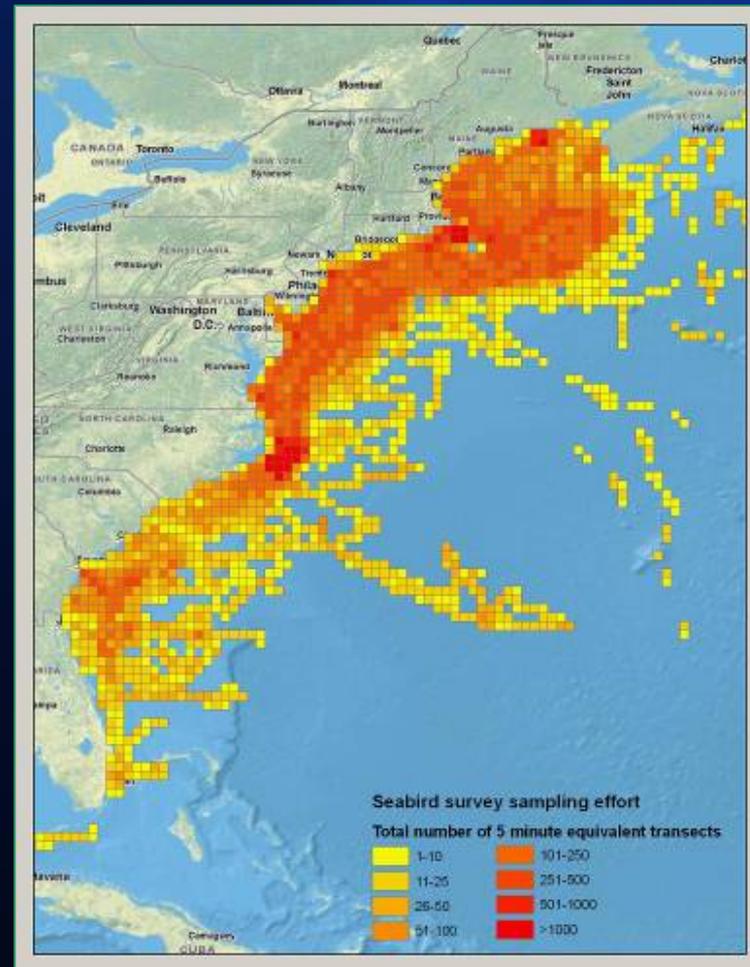


Figure 6: Nuiqsut/Cross Island Location and GPS Tracks Map, with Landmarks

Compendium of Avian Information, Comprehensive GIS Database, and Modeling of Seabird Distributions



Seabird Survey Sampling Effort

Potential for interactions between endangered and candidate bird species with wind facility operations on the Atlantic Outer Continental Shelf



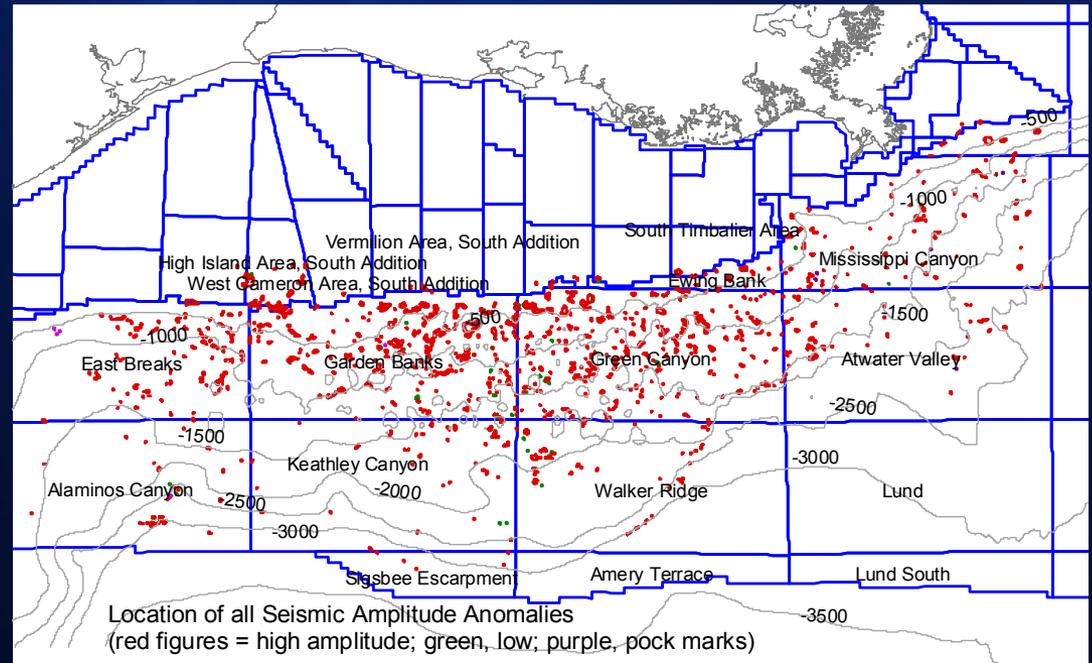
Studies of Ultra-Deepwater Sensitive Biological Communities in the Gulf of Mexico



Deepwater Corals



Chemosynthetic Communities



Science Dissemination

Maintain Scientific Integrity

Link existing tools through the internet
(ESPIS/MMC)

Improve ESPIS search capability

Improve data downloading capability

Ensure stakeholder access using the MMC viewer

One Mousetrap for users to locate scientific information, download data and conduct analysis!!

The Path Forward

Gulf of Mexico: Environmental Monitoring

Atlantic and Pacific : Baseline data and
predictive impact modeling

Alaska: Understanding Changing Conditions

Environmental Studies Program

Science for Decision-Making

The Path Forward: Public Outreach

ESP and BOEMRE's Office of Public Affairs

Managing ESP's Brand. Recognized for:

- **Applied Ocean Science for Decision-Making**
 - "Applied NSF"
- **Top Notch Scientists** with Specialized Skills
- Highest Levels of **Scientific Integrity**

THANK YOU !

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