**Interagency Partnerships: BOEM and OER**

**Motivation: Eager Partners**

Federal Mandates: Outer Continental Shelf Lands Act & Magnuson-Stevens Fishery Conservation and Management Act

Resource sharing allows both NOAA-OER and BOEM to fulfill their organizational objectives in addition to advancing scientific knowledge and increasing public awareness of deep ecosystems in U.S. waters

- **OER**
  - Unknown and Poorly Known Ecosystems
  - Baseline Habitat Characterization
  - Maritime Heritage
  - Implications for Ecosystem Management

- **BOEM**
  - Adaptive management
  - Discovery of sensitive resources
  - Evaluation of impacting sources
  - Refinement of avoidance policy

**Evolving Partnership: U-Boats to Deep Corals to ?**

- Indirect Lophelia I (2003-07) links

- NOPP
  - CHEMO III (2005-09)
  - Lophelia II (2008-12)
  - Mid-Atlantic Canyons (2011-13)
  - Next ??

- *USGS involvement since Lophelia II

**Types of Gulf of Mexico offshore oil and gas structures (BOEM)**

- 2011 map of deepwater oil and gas production platforms. Created by Skytruth using publicly available BOEM data.

**Goals and Objectives**

- Exploration and research to support OCS resource management decisions
- Discover and characterize deep habitats and biodiversity in areas of ongoing and in advance of potential energy development
- Expand knowledge of chemosynthetic and hard bottom habitats
- Discover and identify important cultural heritage sites

**Ocean Exploration Program Review - May 7-8, 2012**
**How We Operate**

- Competitive peer-review process
- ~50/50 cost-share
- OER responsibilities
  - Provide ship and submersible assets
  - Facilitate cruise planning
  - Support education and outreach
  - Support information management
- BOEM responsibilities
  - Lead for solicitation development
  - Manage competitive contract
  - Provide direct science funding to contractor
  - Coordinate and fund USGS participation

**Case Study: Lophelia II 2008-2012**

- Discover and characterize Gulf of Mexico deep coral
- 5 cruises in 5 years
- Project timeline began prior to Deepwater Horizon
- First post-DWH expedition to document deep sea benthic habitats showing signs of recent and severe impact
- Mississippi Canyon lease block 294/338 site became priority for follow-on NSF and NRDA funded research
- Highlighted in 2012 PNAS paper

**Case Study: Mid-Atlantic Canyons**

- Major exploration of Norfolk, Washington, Accomac and Baltimore submarine canyons
- 1st joint project outside of the Gulf of Mexico
- ‘New’ science team
- Complemented 2011 work with Okeanos Explorer mapping
- 2012 and 2013 shiptime challenges

**Partners**
**Strengths – Why it Works**

- Strong interpersonal relationships
- Complementary mission and objectives
- Started small and built over time
- Well-defined mode of operations
- Established mechanisms that minimize unnecessary bureaucracy
- Use of results -
  - Notice To Lessee No. 2009-G40
  - Avoidance distance doubled to 2,000ft for drilling discharges (Jan-2010)
  - Deepwater Horizon
  - Various NOPP and DOI awards

**Challenges**

- Increasing reliance on and availability of NOAA shiptime
- Availability of appropriate submersible platforms
- Differences between NOAA and UNOLS vessels
- Availability of experienced personnel
- Ability to capitalize on the successes

**Future Directions and Opportunities**

- Adapt model to other geographic areas:
  - Alaska & Arctic
  - International Collaboration
  - Integration of Extended Continental Shelf mapping data
- Complementary work in Northeast canyons