OER Priorities and Activities for FY 2015-2017

Meeting of the Ocean Exploration Advisory Board
San Diego, California
March 30-31, 2015
Overview

• OER Strategic Investment Areas
• FY15-17: Science & Technology Priorities
• FY15-17: Exploration & Expedition Priorities
• Systematic Telepresence-enabled Ocean Exploration
  • OET Nautilus
  • NOAA Ship Okeanos Explorer
• U.S. Interagency Extended Continental Shelf Project
• BOEM-USGS-OER Interagency Partnership
OER Budget: Strategic Investment Areas

**EVOLVE**
Science & Technology Advancement

**EXPLORE**
Expedition Mission Execution

**ENGAGE**
Education, Outreach, and Data Delivery
EVOLVE

Science & Technology Advancement

FY 15: New Science, Emerging Technologies, Cultural Assets
- Gulf of Mexico Bioluminescence – Tamara Frank
- Arctic Waver Glider Surveys – Phyllis Stabeno
- Search for the Lost Whaling Fleet – Jim Delgado
- Pulley Ridge Mesophotic Corals - John Reed
- OER / BOEING / Sanctuaries USS Independence AUV Mapping
- *EX D2* manipulator arm and sample collection demonstration

FY 16-17: Arctic Science; Sensor & Technology Demonstration
- Glacier Bay Deep Corals (FY16 Rhian Waller)
- High Arctic Exploration & Science (FY15 OER FFO)
- Sensor Demonstration / Integration with ROVs, AUVs (CIOERT)
- ROV flyaway system requirements specification setting
- NOAA – NASA Sensor DemonstrationPartnering*

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OER Priorities: FY15 – FY17

**EXPLORE**

**Expedition Mission Execution**

**FY 15:** Transition from Caribbean / Atlantic to Pacific
- Gulf of Mexico (OET) and Caribbean (EX)
- Eastern Pacific & southern California (OET)
- CAPSTONE: Central Pacific & Hawaiian Monuments (EX)
- Pulley Ridge Mesophotic Corals (CIOERT)
- Central & Western Pacific ECS Mapping (UNH / UNOLS)

**FY 16-17:** Eastern, Central, and Western Pacific
- Costa Rica – Mexico – California Margin (FY16 OET)
- Central & Western Pacific Monuments / Sanctuaries (FY16 EX)
- Central Pacific ECS Mapping (FY16 UNH / Ron Brown)
- East Pacific Rise - CA Sanctuaries - Pacific Northwest (FY17 OET)
- Central Pacific Monuments / Sanctuaries (FY17 EX)
Ocean Exploration Trust’s *Nautilus*

**FY 15**
- Gulf of Mexico
- Galapagos
- South/Central California

**FY 16**
- Costa Rica
- Mexico
- Gulf of California

**FY 17**
- East Pacific Rise
- California Sanctuaries
- Pacific Northwest
**NOAA Ship *Okeanos Explorer***

**FY 15: 175 DAS in Caribbean and Pacific**
- Puerto Rico expedition underway
- Pacific Campaign (CAPSTONE): 4 legs totaling 76 DAS
  - 30 DAS provided by other NOAA programs
  - Includes work in recently expanded monument
  - Initial testing of physical sampling capabilities

**FY 16: ~195 DAS in Central and Western Pacific**
- Focus on 3 marine monuments and 1 marine sanctuary
- NOAA Fleet Council considering shiptime requests
- Innovative approach to shiptime requests sets new standard for cross-NOAA collaboration
- 94 DAS requested by other NOAA programs

**FY17: TBD but likely ~ 195 in Central Pacific**
- Focus on 2 marine monuments, 1 marine sanctuary and the Phoenix Islands Protected Area

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FY15-17 Idealized Prospective NOAA Ship *Okeanos Explorer* Shiptrack

- Mariana Trench MNM
- Papahānaumokuākea MNM
- Pacific Remote Islands MNM
- Phoenix Islands Protected Area
- NMS American Samoa; Rose Atoll MNM
**U.S. ECS Project:**
**Transition from Data Collection to Analysis**

**FY 15**
- Central Pacific Mapping: 30 DAS R/V *Kilo Moana*
- Western Atlantic Mapping: 30 DAS R/V *Marcus Langseth*
- Opportunistic Central Pacific mapping *Okeanos Explorer*
- Regional Analyses of the Bering Sea, Mendocino Ridge, and Atlantic Margin

**FY 16**
- Central Pacific Mapping: ~25 DAS NOAA Ship *Ron Brown*
- Additional Atlantic cruise is TBD
- Opportunistic Western Pacific mapping *Okeanos Explorer*
- Additional Regional Analyses

**FY17**
- TBD Mapping Cruises and Regional Analyses
- Opportunistic Central Pacific mapping *Okeanos Explorer*
FY15-17
• Pending Gulf of Mexico RESTORE Act Proposal includes funding for USGS, BOEM, and OER
• 3-year proposal focused on deep coral habitats in review at Department of Interior (DOI)
• Decision expected ~ May 2015

FY17 - TBD
• On January 15, 2015 DOI announced the 2017–2022 Outer Continental Shelf Oil and Gas Leasing Draft Proposed Program
• Draft includes areas within the BOEM Mid and South Atlantic Planning areas
• Preliminary discussions are underway about a partnership in the Mid and South Atlantic
• Potential for announcement to be developed in FY16 with initial field work in FY17
Questions?

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