



Ocean Exploration
and Research

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**

OER Priorities: FY15 – FY17

EVOLVE

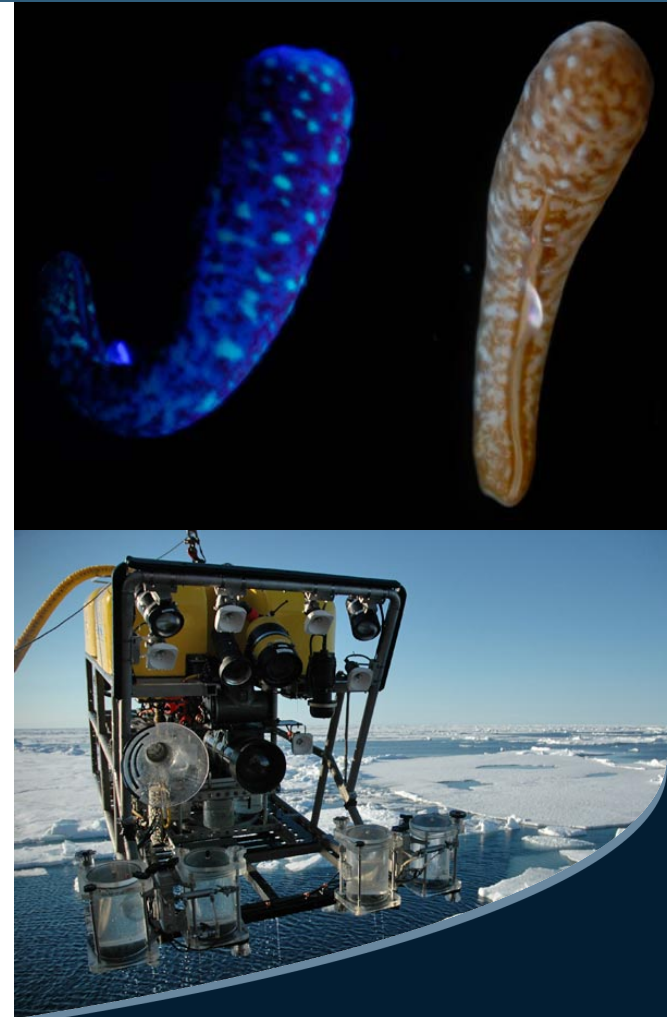
Science & Technology Advancement

FY 15: New Science, Emerging Technologies, Cultural Assets

- Gulf of Mexico Bioluminescence – Tamara Frank
- Arctic Waver Glider Surveys – Phyllis Staben
- 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 Demonstration Partnering*



OER Priorities: FY15 – FY17

EXPLORE

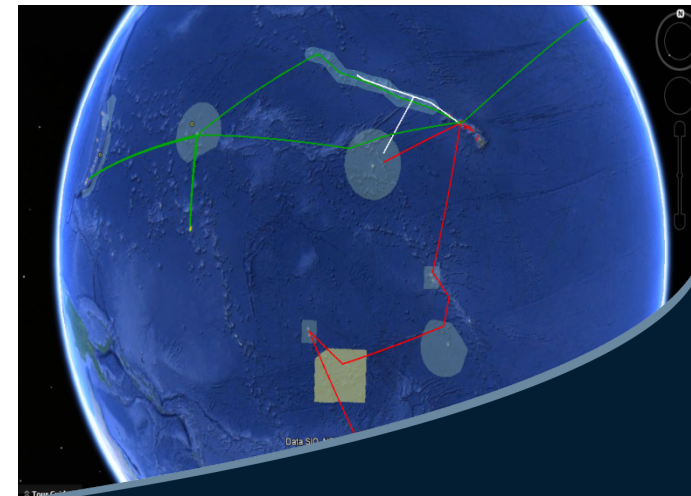
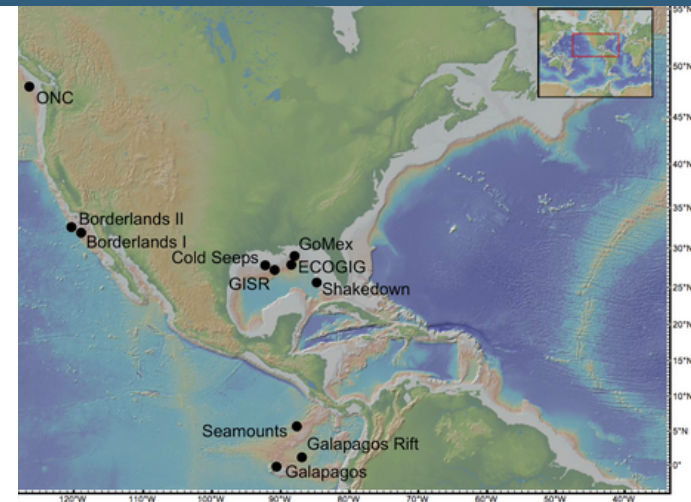
Expedition Mission Execution

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

FY17

- East Pacific Rise
- California Sanctuaries
- Pacific Northwest



NOAA Ship *Okeanos Explorer*

FY 15: 175 DAS in Caribbean and Pacific

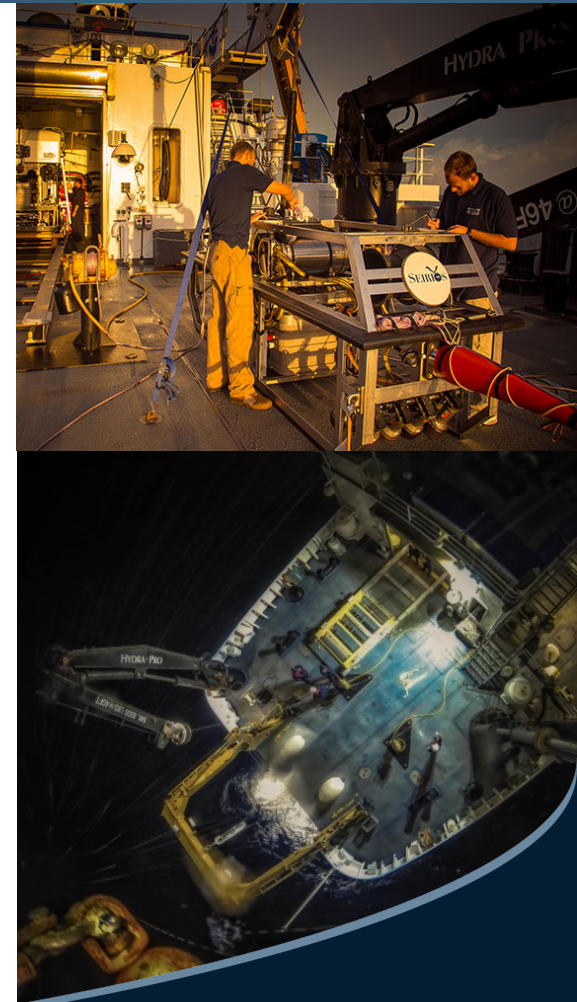
- Puerto Rico expedition underway
- Pacific Campaign (CAPSTONE): 4 legs totaling 76 DAS
 - 30 DAS provided by other NOAA programs
 - Includes work in recently expanded monument
 - Initial testing of physical sampling capabilities

FY 16: ~195 DAS in Central and Western Pacific

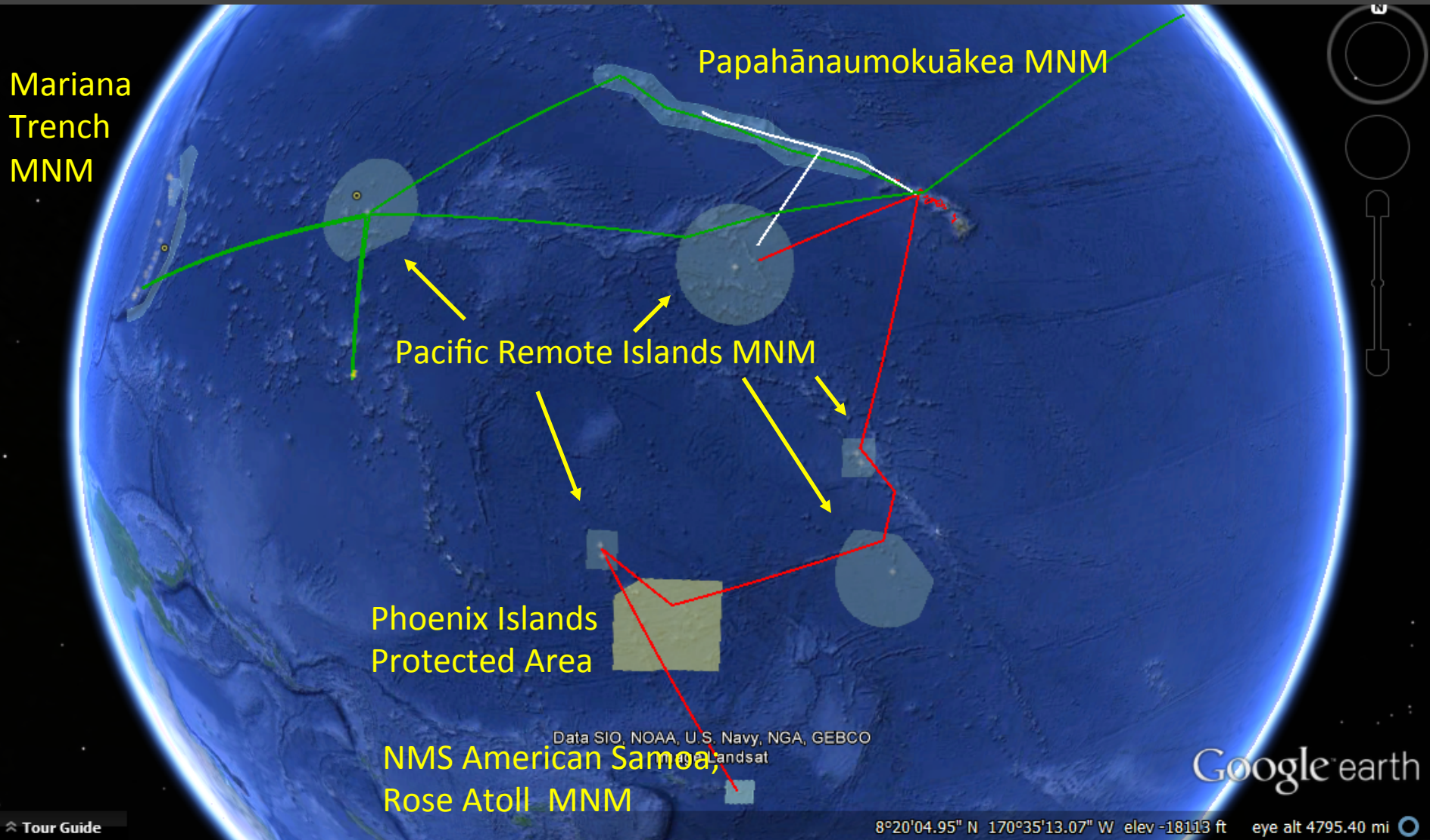
- Focus on 3 marine monuments and 1 marine sanctuary
- NOAA Fleet Council considering shiptime requests
- Innovative approach to shiptime requests sets new standard for cross- NOAA collaboration
- 94 DAS requested by other NOAA programs

FY17: TBD but likely ~ 195 in Central Pacific

- Focus on 2 marine monuments, 1 marine sanctuary and the Phoenix Islands Protected Area



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



U.S. ECS Project: Transition from Data Collection to Analysis

FY 15

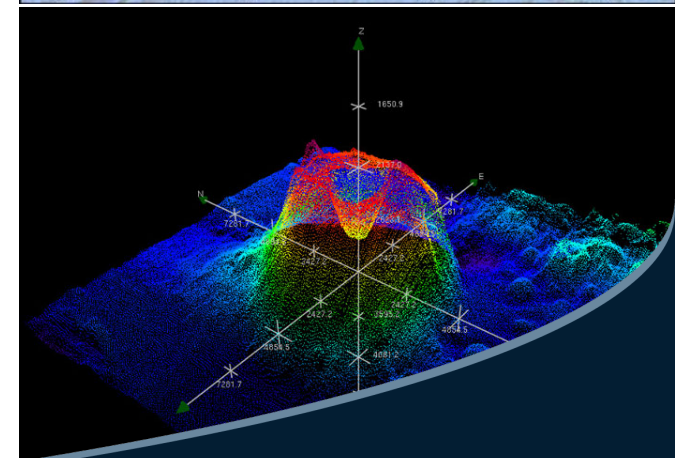
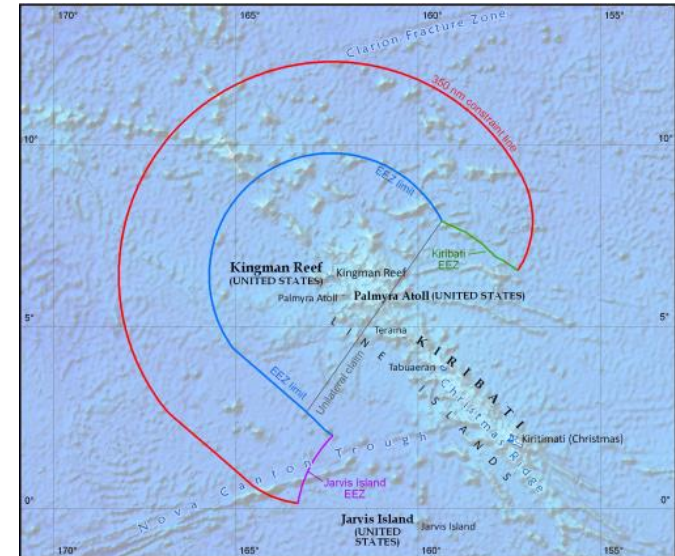
- Central Pacific Mapping: 30 DAS R/V *Kilo Moana*
- Western Atlantic Mapping: 30 DAS R/V *Marcus Langseth*
- Opportunistic Central Pacific mapping *Okeanos Explorer*
- Regional Analyses of the Bering Sea, Mendocino Ridge, and Atlantic Margin

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*



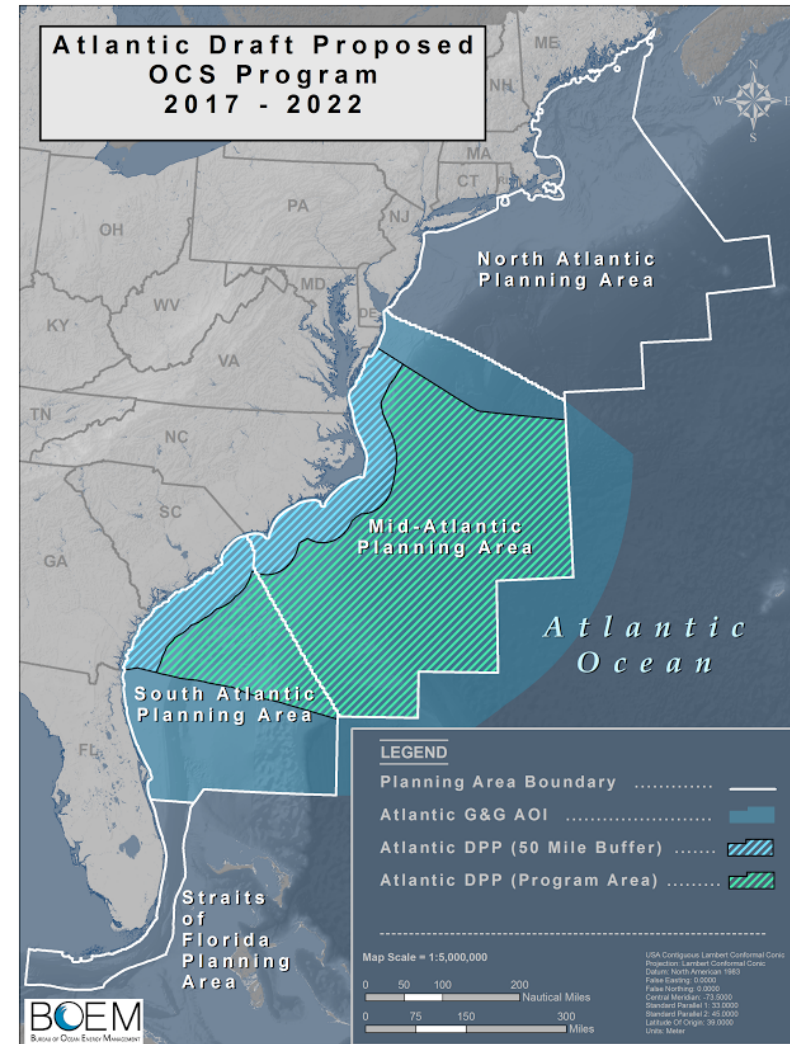
Interagency Partnerships: BOEM-USGS-OER

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





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Questions?

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