PMEL Ecosystem Research Overview

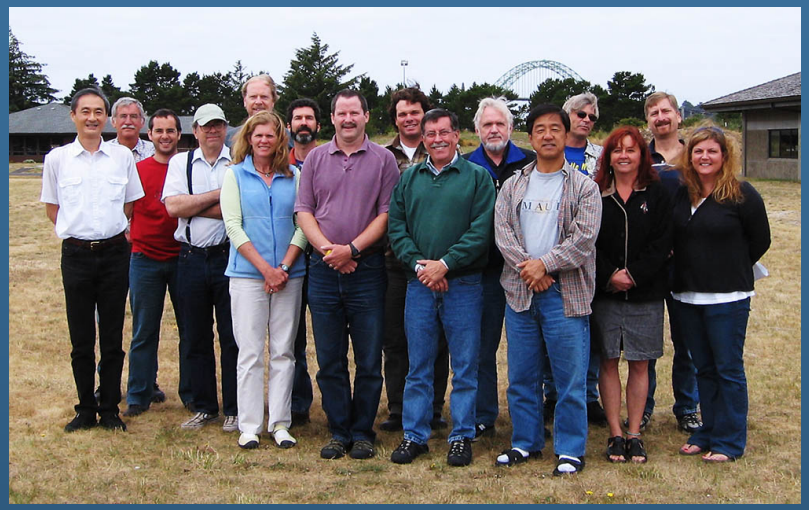
Ecosystem Mission Goal : Protect, Restore, and Manage Use of Coastal and Ocean Resources Through Ecosystem Approaches To Management

This Mission Goal is structured into 7 activities:

- Ecosystem Research
- Ecosystem Observations
- Aquaculture
- Coastal and Marine Resources
- Corals
- Fisheries Management
- Habitat

Ecosystem research at PMEL is focused in the…

Ocean Environment Research Division



65 Employees (23 Federal; 42 Cooperative Institute)
24 Principal Investigators (8 Federal; 16 Cooperative Institute)

OERD is home to three programs:
Ecosystems & Fisheries-Oceanography Coordinated Investigations (EcoFOCI)
VENTS
National Center for Tsunami Research (NCTR)

PMEL Ocean Environment Research Division

Research in Support of NOAA's Ecosystem and Weather/Water Goals

Accomplished through:

- Scientific leadership at the national and international levels
- Understanding and supporting NOAA's research objectives
- Effective planning and execution of ship/shore-based ops
- Long-term program planning and execution
- Investment and development of new technologies

Indicators of Performance and Quality, 2004-2007 

	Pubs	*Proposals*
NCTR	34	8
EcoFOCI	56	47
Vents	86	30

Ecosystem Research
- and -
Ecosystem Observations

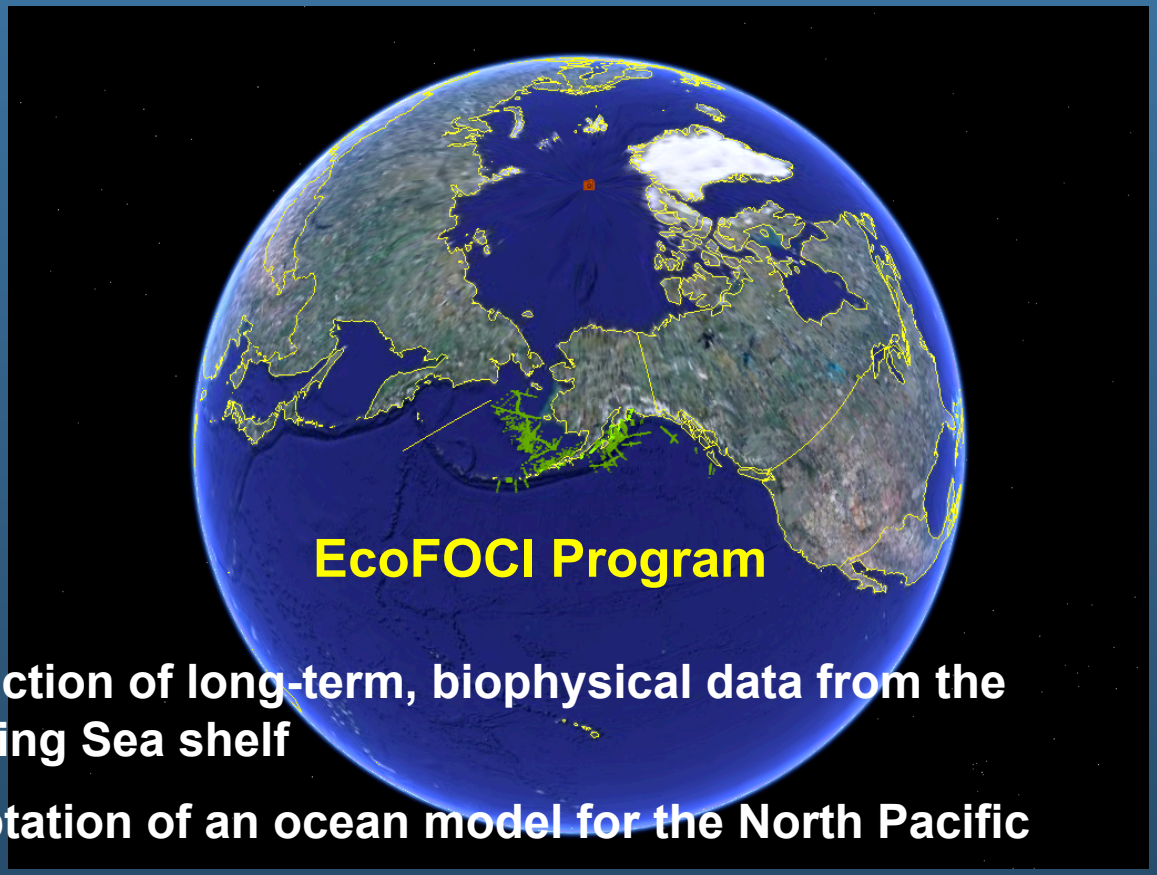
Outcomes:

- Healthy and productive coastal and marine ecosystems that benefit society

- A well-informed public that acts as a steward of coastal and marine ecosystems

Ecosystem Observations

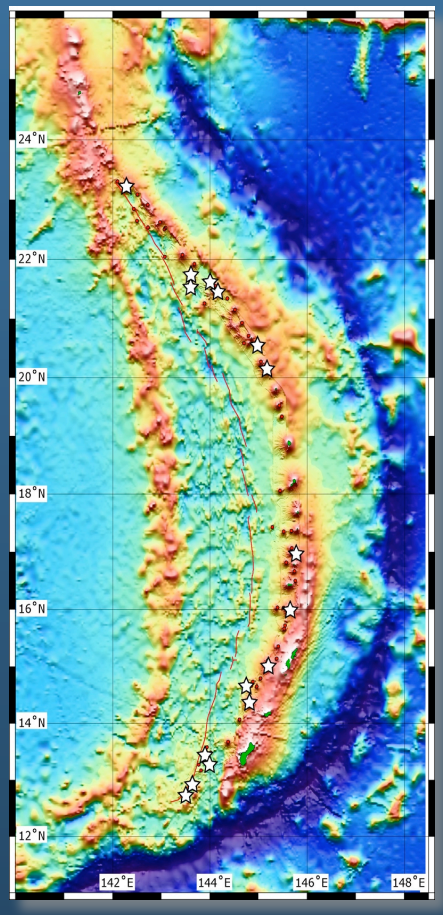
Provides observations, assessments, and ecological forecasts…



- **Collection of long-term, biophysical data from the Bering Sea shelf**
- **Adaptation of an ocean model for the North Pacific**
- **Evaluation and selection of climate model projections**
- **Completion of first ecosystem study of Aleutian Islands**
- **Pollock quota reduction for 2008**

Ecosystem Research

Provides scientific information and tools for ecosystem management…



Vents

- **Detection and characterization of deep volcanic eruptions and hydrothermal events**
- **Understanding the ecosystem impacts of submarine volcanic and hydrothermal heat and chemical fluxes**
- **Exploration in the time domain using time-series based tools to forecast ephemeral volcanic events**
- **Develop sensor systems and arrays for the purpose of effectively making large-scale ocean physical and biological ecosystems observations**

's are locations of active submarine volcanoes along the Mariana Arc