



Federal–State Collaboration for Offshore Renewable Energy

Lisa Gilbane

BOEM–Oregon OCS Renewable Energy Task Force Meeting

Portland, Oregon

June 26, 2014



- **We collaborated early** *in the planning process for ocean energy*
 - Joint identification of need for seafloor information
 - Led to a 2010 collaborative effort to conduct a **regional benthic assessment**
- **We continue to collaborate** *as needed throughout the process*
 - Joint discussion of need to examine research efforts
 - Led to a 2012 collaborative effort to convene an **Oregon science conference**



Source: Woods Hole
Oceanographic Institute





- **Title: Benthic Communities near Potential Renewable Energy Sites Offshore the Pacific Northwest**

- 2010-2014

- *Principal investigators:*

- Lisa Gilbane
- Sarah Henkel
- Chris Goldfinger

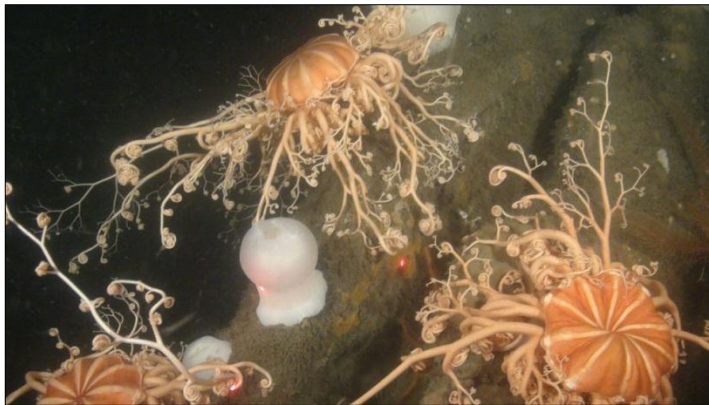


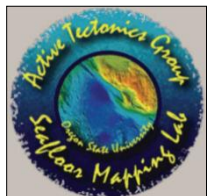
- *Scientific review group:*

- U.S. Environmental Protection Agency
- U.S. Geological Survey
- National Oceanic and Atmospheric Administration



Project Components & Sites





Mapping New Areas of the Seafloor

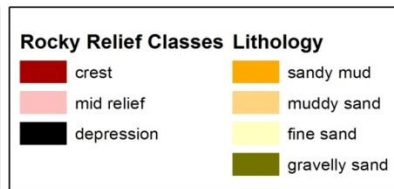
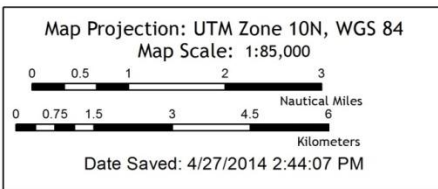
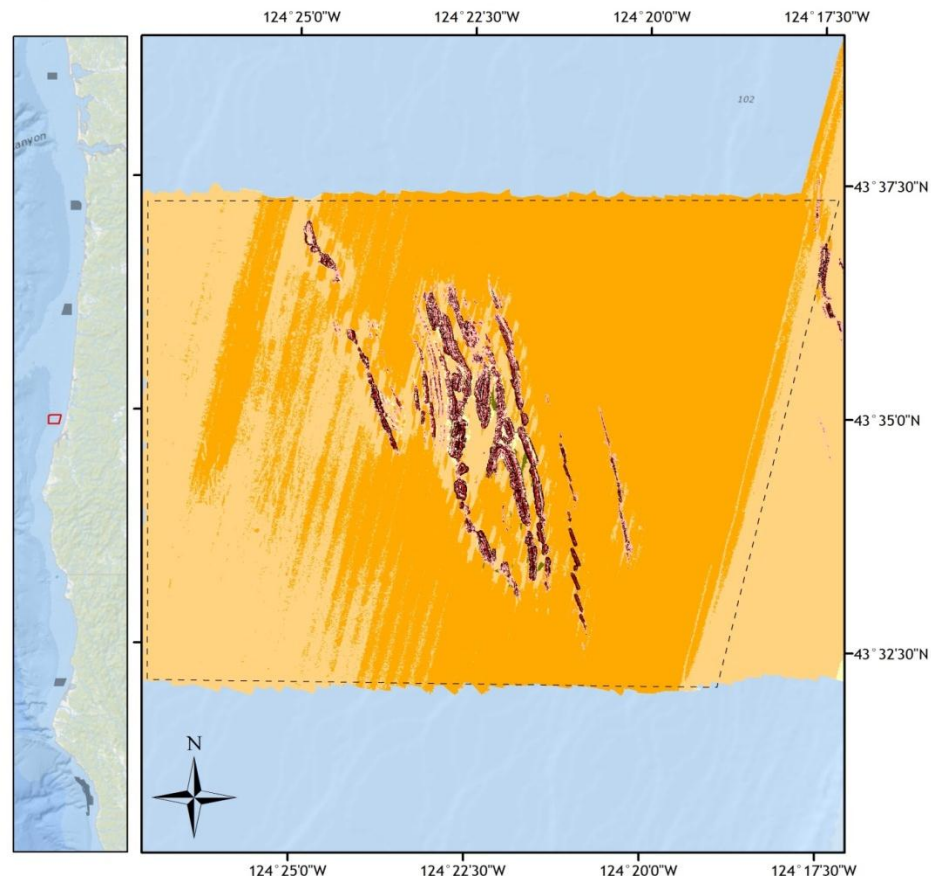
Sharing Vessels

- Oregon state agencies
- NSF Ocean Observing Initiative
- NOAA Ocean Explorer
- U.S. Geological Survey

Results of Collaborations

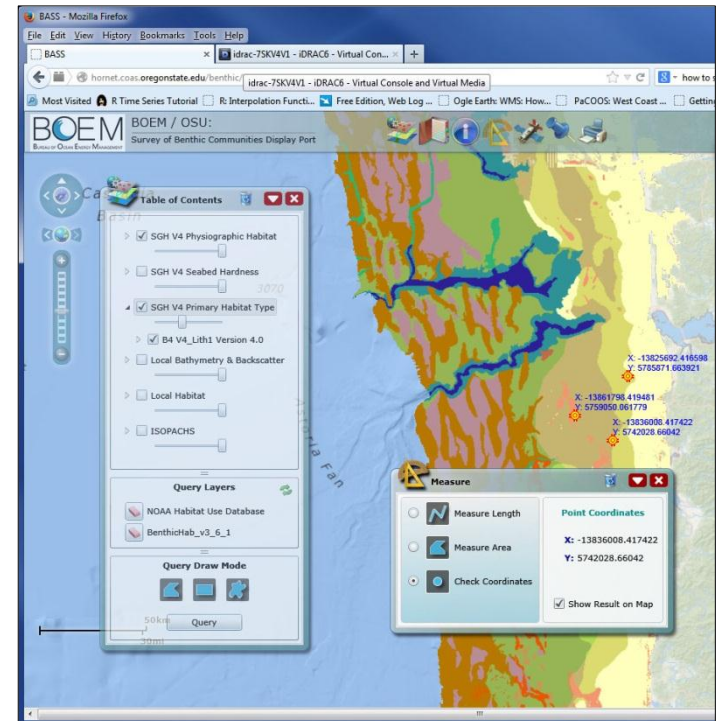
- Added 50% to Oregon seafloor maps
- Saved \$150 K toward future modeling efforts

Supervised Classification of Seabed Habitat at: Silt Coos, OR



Benefits of Collaborating

- Monetary savings
- Increased data collection
- Allowed model development for corals
- Improved the sampling design to be compatible with previous work
- Resulted in products useful to other state and federal researchers





- **Title: Oregon Marine Renewable Energy Environmental Science Conference**
- 2012-2013
- *Steering committee:*
 - George Boehlert
 - Caren Braby
 - Ann Bull
 - Mary Elaine Helix
 - Sarah Henkel
 - Paul Klarin
 - Donna Schroeder



- **Open session** (100+ attendees)
- **Experts workshop** (40+ scientists and managers)
- **Identified and prioritized research needs**
 - Baseline information and siting studies
 - Impact studies
 - Long-term monitoring studies
- **Proceedings published**

<http://www.data.boem.gov/PI/PDFImages/ESPIS/5/5255.pdf>

<http://hmsc.oregonstate.edu/rec/sites/default/files/boem-oregonmreconfprocfinal041413.pdf>



Benefits of Collaborating

- More comprehensive understanding of existing research
- Synergistic planning for future needs
- Leveraged time and effort among coordinators
- Subsequent research efforts
 - Oregon seabird tagging
 - Wave energy depletion
 - EMF effects on crab harvest





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For an overview of selected BOEM research informing renewable energy offshore Oregon, go to:

www.boem.gov/Oregon

