Planning for Marine Reserves in Oregon

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Seafloor Mapping Workshop

In June 2005, Governor Kulongoski directed OPAC II to implement the 2002 OPAC I recommendation that Oregon should *"establish a limited system of marine reserves in order to test and evaluate their effectiveness in meeting marine resource conservation objectives".*

This presentation outlines OPAC's approach and challenges in fulfilling that assignment, and the role that Seafloor Mapping can play in achieving our goals and objectives.

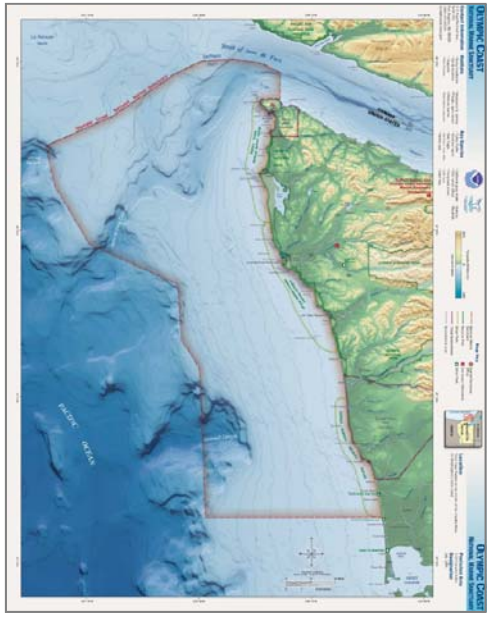
Definitions

- A marine protected area or “MPA” is

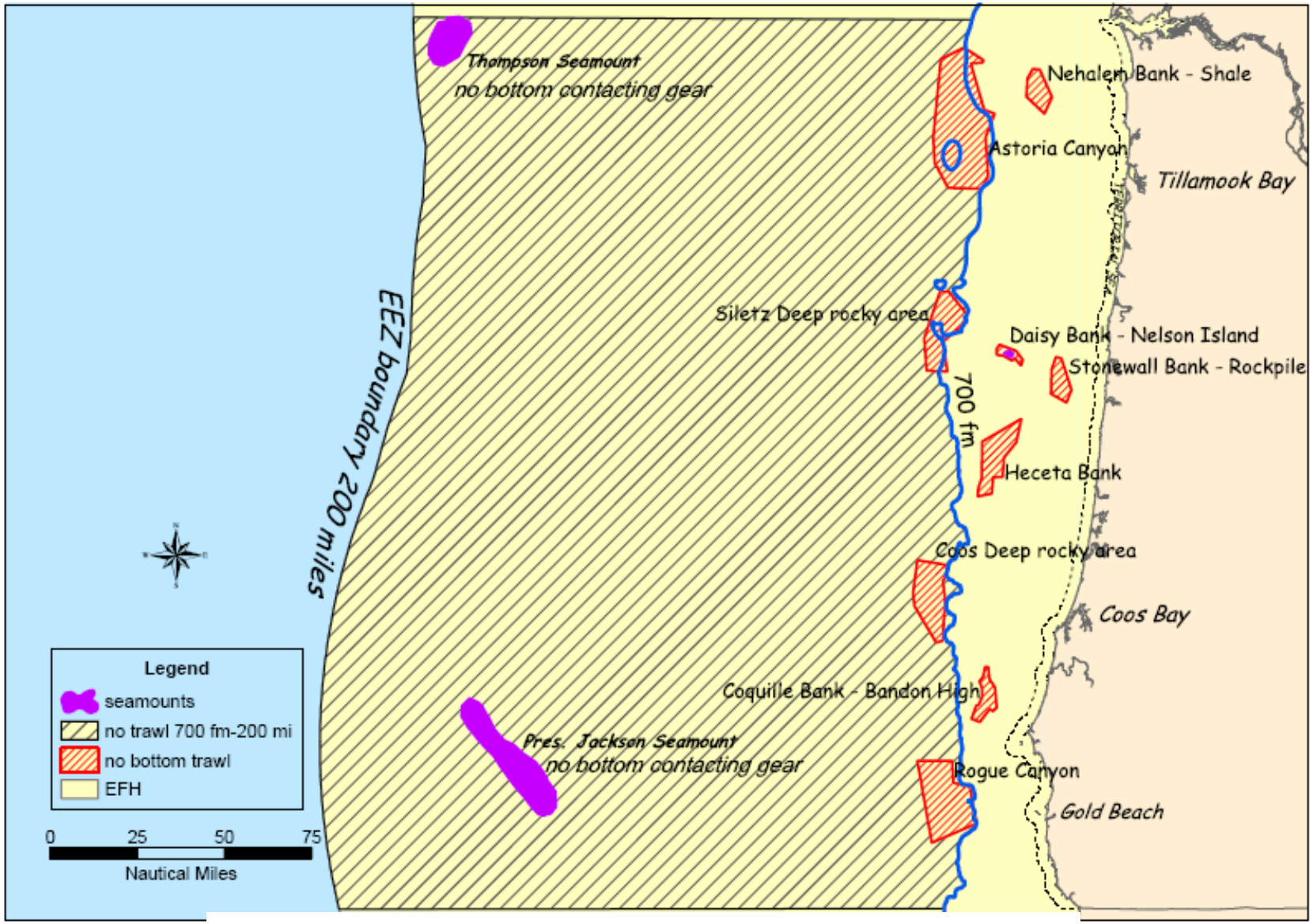
  “…any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein.”

  Presidential Executive Order 13158 (2000)

- *Example*: Olympic Coast National Marine Sanctuary (1994)



Minimization of Fishing Impacts on EFH
No Bottom Trawl Areas



Oregon Department of Fish and Wildlife, Marine Resources Program 6/29/05

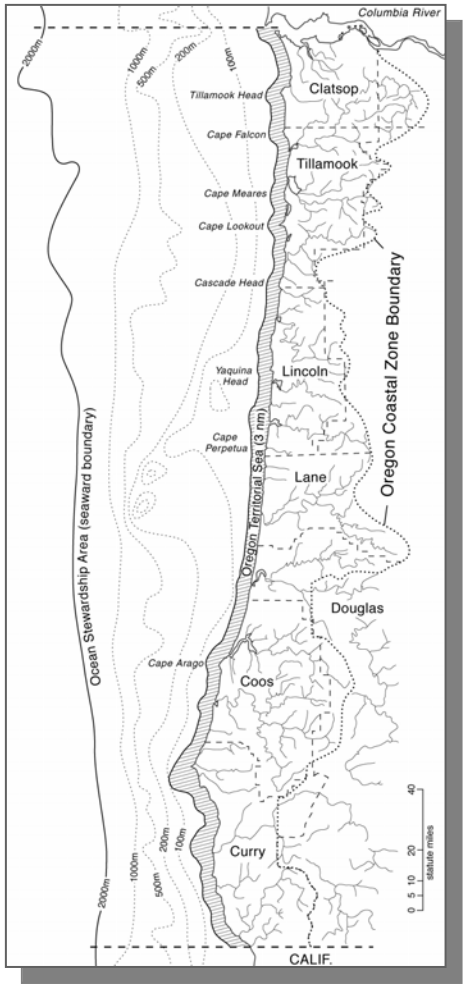
Definitions

- In Oregon, a marine reserve is...

  an area within the territorial sea or adjacent rocky intertidal area that is protected from all extractive activities, including the removal or disturbance of living and non-living marine resources, except as necessary for monitoring or research to evaluate reserve condition, effectiveness, or impact of stressors such as climate change.

  (OPAC-adopted definition, June 2007, subject to revision)

  Marine reserves are thus a special, highly restrictive type of MPA.



Oregon Marine Reserve Planning

Policy Basis

- Statewide Planning Goal 19: Ocean Resources (1976, amended in 2000)
- Oregon Coastal Management Program (1977)
- Oregon Ocean Management Task Force (1987)
- Ocean Resources Management Plan (1990)
- Ocean Resources Management Act establishes OPAC and adopts 1990 plan (1991)
- Territorial Sea Management Plan (1994)

Oregon Marine Reserve Planning

Sequential Activities 1

OPAC I

- Gov. Kitzhaber requests OPAC assess MPA needs for Oregon (2000)
- OPAC I – Developed a recommendation for a “limited system” of marine reserves (Aug 2002)
- Gov. Kitzhaber supports/directs OPAC to implement Marine Reserves (Dec 2002)

OPAC II

- OPAC reconstituted by State Legislature (Jun 2003)
- OPAC hiatus (Jun 2003-Jun 2005)

OPAC's 2002 Marine Reserve Recommendation

- "Establish a **limited system of marine reserves** in order to test and evaluate their effectiveness in meeting marine resource conservation objectives"
- "Before designating any specific marine reserves, acquire additional information, conduct additional study, analysis, and deliberation through an open, public process"
- Recommended…
  - overall System Goal and Objectives
  - a two-phase, several-year planning process
  - state core funding
- No recommendation
  - on specific reserve areas or sites
  - about the use of marine reserves as fisheries management tool

Oregon Marine Reserve Planning

Sequential Activities 2

- Gov. Kulongoski initial charge to OPAC II (Jun 2005)
  - Implement this Marine Reserve recommendation
- OPAC developed/adopted a two-phase MR planning process envisioned by OPAC I (Jan 2007)
- Governor redirects OPAC to focus on fast-tracking “heritage reserves” concept (Apr 2007)
- OPAC adopts Marine Reserve goal/objectives (Jun 2007)
- OPAC asks Sea Grant to conduct a “listening and learning” outreach effort (Feb-Mar 2008)
- Report on outreach at March 28, 2008 OPAC meeting
- Reserve nomination process due to begin in Apr 2008

What role does Seafloor Mapping play in this process?

- What is the goal for Oregon marine Reserves?
- What are the specific objectives for Oregon Marine Reserves?
- **Oregon's Marine Reserve Goal:**

  Protect and sustain a limited system of ecologically-special places in Oregon's Territorial Sea to conserve marine habitats and biodiversity; provide a framework for scientific research and effectiveness monitoring; and avoid, to the extent practicable, potential adverse social and economic effects on ocean users and ocean-dependent communities.

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What are OPAC's Marine Reserve Objectives?

1: Protect areas within each biogeographic region… including areas of high biodiversity & special natural features.

2: Protect key types of marine habitat in multiple locations along the coast to enhance resilience of nearshore ecosystems to natural and human-caused impacts.

3: Site marine reserves … by avoiding, to the extent practicable, potential adverse social & economic effects.

4: Use the marine reserves as ecological reference areas [for] research and monitoring … support of adaptive management.

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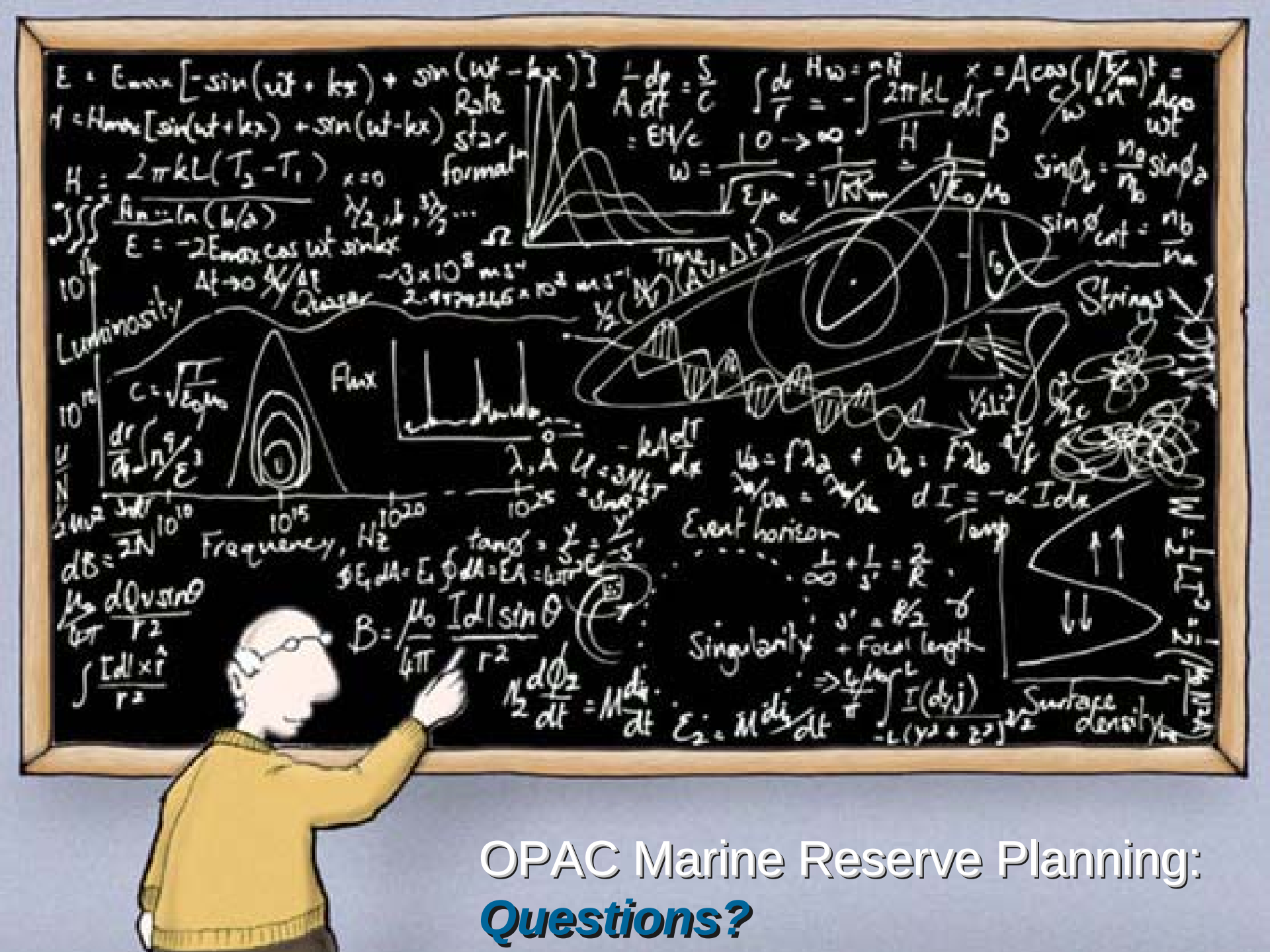
Eight Key Types of Marine Habitat for Oregon Marine Reserves

Rocky intertidal	
Soft bottom subtidal	0-25 meters
	greater than 25 meters depth
Hard bottom subtidal	Low topographical relief (0-25 m)
	High topographical relief (0-25 m)
	Low topographical relief (over 25 m depth)
	High topographical relief (over 25 m depth)
	Kelp forest

Why Important? Only about 5 percent mapped at high resolution…

What role does Seafloor Mapping play in this process?

- **Available seafloor mapping** will play some role in planning and designating Marine Reserves – we will work with what we have, including local knowledge of key areas.
- **New seafloor mapping** will play an important role as part of reserve baseline research, future monitoring and evaluation of reserve condition, effectiveness relative to areas outside a reserve, and long-term resiliency to change.


Luminosity
Flux
Frequency, Hz
Strings
Event horizon
Singularity
Temp
Surface density
OPAC Marine Reserve Planning:
Questions?