BOEM
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OCS Scientific Committee Meeting
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Proposed FY 2015 Studies – Pacific Region

Page	Discipline	Title	Rank
69	BIO	Data Synthesis and High-resolution Predictive Modeling of Marine Bird Spatial Distributions on the Pacific OCS	1
71	BIO	BOEM-MARINe (Multi-Agency Rocky Intertidal Network)	2
73	BIO	Synthesis of Pacific Platform Research	3
75	FE	Consequences of Ocean Energy Projects to Productivity and Trophic Structure in Marine and Coastal Habitats	4
77	FE	Watersipora II: Biological Oceanographic Connectivity of Southern California Reefs and Manmade Structures	5
79	**SE**	**Refining Maps of Ocean Use Compatibility and Cumulative Impacts for Ocean Energy Projects**	**6**
81	BIO	Cross-shelf Habitat Suitability Modeling	7
83	FE	Predicting and Detecting the Effects of Climate Change and Ocean Acidification Using Long-term Ecological Data	8

PO= Physical Oceanography
PS = Protected Species
FE = Fates & Effects
SE = Social & Economic
BIO= Biology
OT = Other

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Refining Maps of Ocean Use Compatibility and Cumulative Impacts for Ocean Energy Projects

BOEM Information Need:

- Mapping current uses of ocean space is a critical first step of CMSP
- Simple maps of general use patterns often omit clarifying details that may be important to interpretation and use of data layers

Relationship to Other BOEM-supported Research:

- Completed Study: *Identification of Outer Continental Shelf Renewable Energy Space-Use Conflicts and Analysis of Potential Mitigation Measures*
- Completed Study: *Bayesian Integration for Marine Spatial Planning and Renewable Energy Siting*
- Ongoing Study: *Pacific Regional Ocean Uses Atlas*
- Mapping efforts by the States of Oregon and California

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Refining Maps of Ocean Use Compatibility and Cumulative Impacts for Ocean Energy Projects

Study Objective:

Enhance maps of existing ocean uses, particularly commercial fishing, specifically for decisions regarding ocean energy projects

REMI MATHIS

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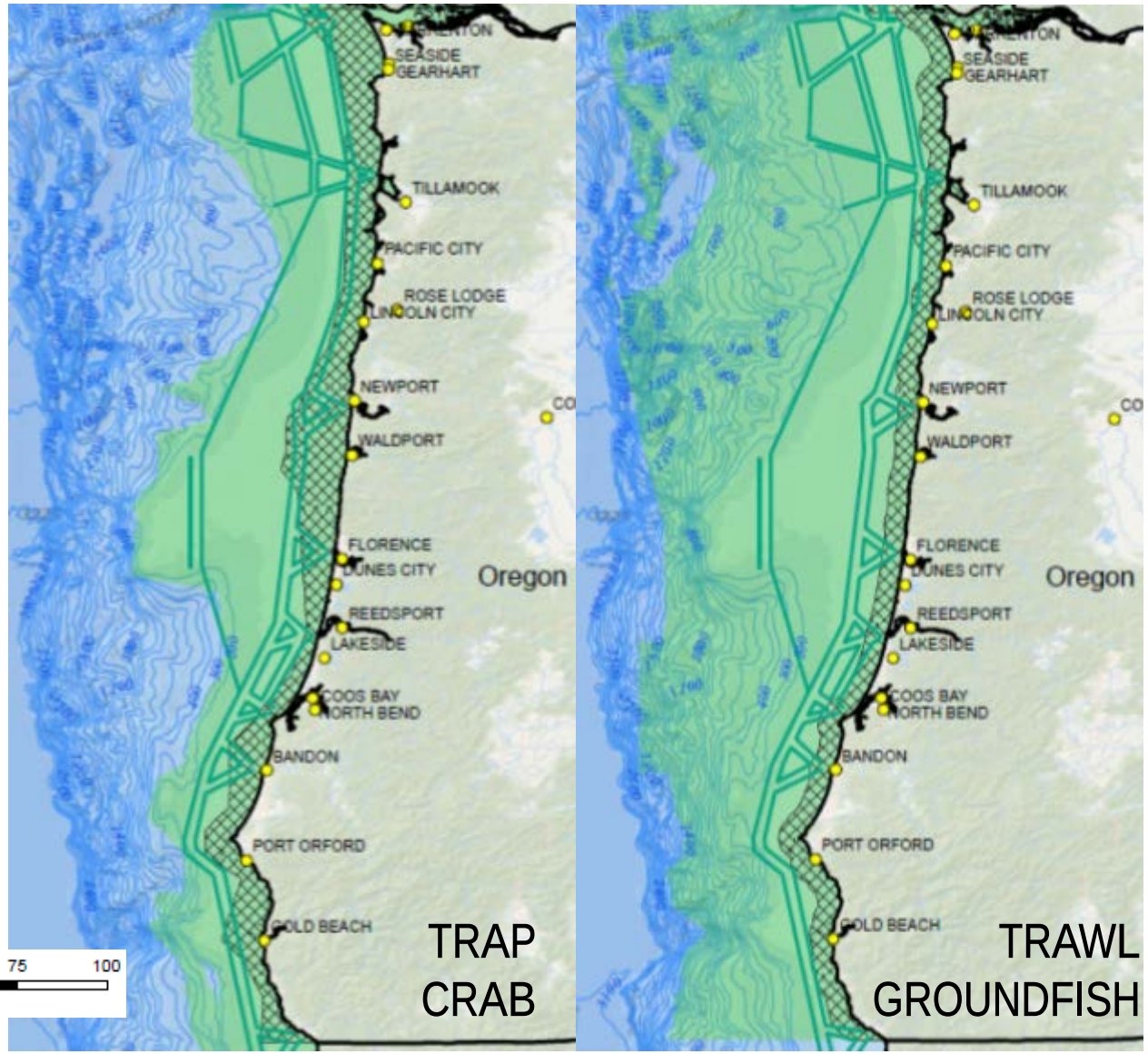
Refining Maps of Ocean Use Compatibility and Cumulative Impacts for Ocean Energy Projects



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Refining Maps of Ocean Use Compatibility and Cumulative Impacts for Ocean Energy Projects

Study Methods:

1) **Synthesize information**
   - Maps, metadata, interviews, published and grey literature
   - Describe compatibility among user groups

2) **Identify gaps, collect new information on behavior**
   - Describe nature of interactions
   - Update compatibility descriptions and spatial data layers

3) **Identify gaps, collect new information on impacts**
   - Using compatibility descriptions, update cumulative effects analysis of multiple ocean uses

4) **Create new scripts or formulae that link revised use and cumulative impact data layers with other georeferenced data**
   - Determine important correlates of use and impact patterns with physical, biological, or economic variables
   - Spatial statistics, multiple regression models, etc.

Specific Feedback Sought from Scientific Committee:

1) Focus the scope of work: What are important tradeoffs between geographic scope (one or all planning areas) versus summarizing and analyzing a comprehensive suite of ocean uses (commercial fisheries only or all uses) and potential impacts?

2) Are there new or particularly useful methods available for proposed spatial analysis or linking data layers together?