

The Hawaii Ocean Uses Atlas

*Collecting expert community knowledge on ocean uses
through participatory mapping*



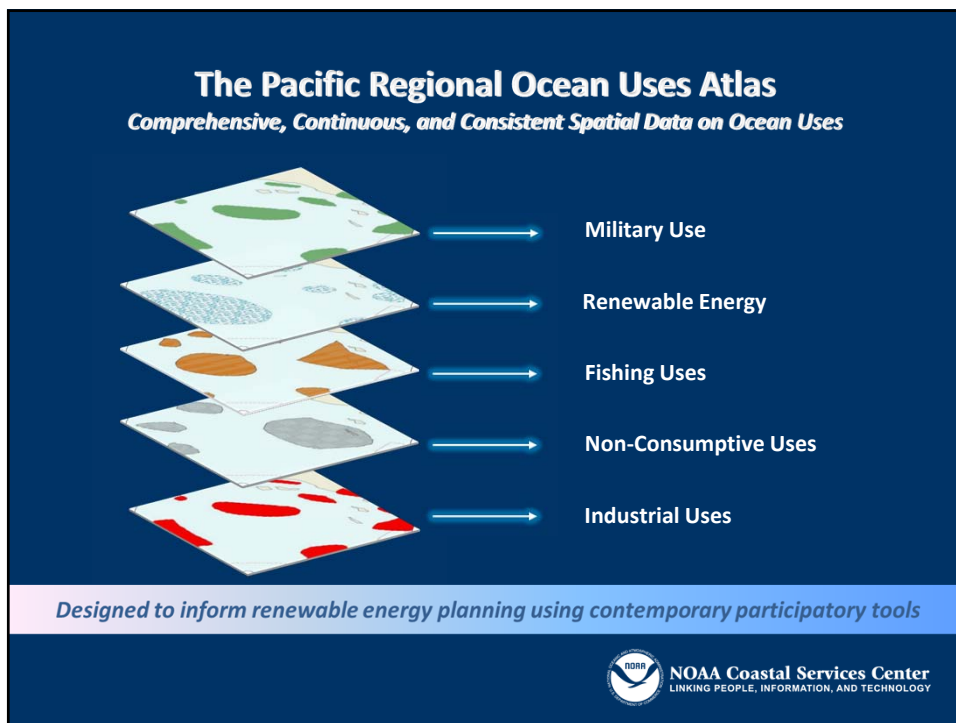
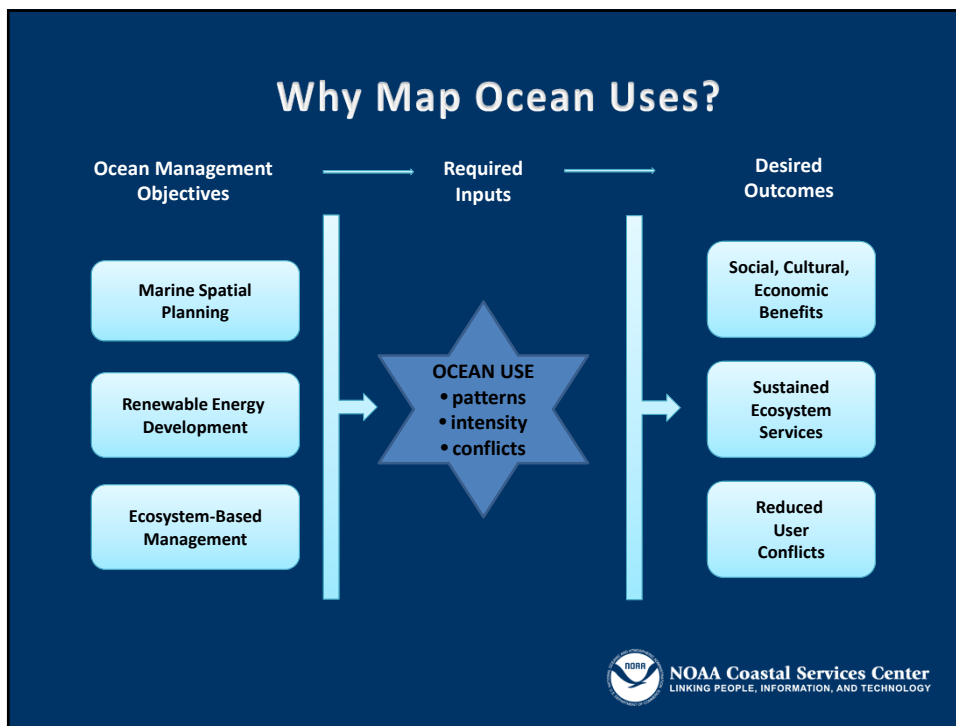
Mimi D'Iorio
NOAA's Ocean Use Mapping Coordinator



Goals for Today

- Share details about the project, methods and products
- Consider opportunities to support state and local needs
- Discuss ideas for communication and outreach strategies
- Seek recommendations for workshop logistics (where, when)
- Identify and offer guidance on sensitive issues or concerns





Project Details

PURPOSE: To enhance ocean planning for offshore renewable energy development and inform other ocean planning strategies that require insight to ocean use activities

GOALS: To collect spatial data on the full range of human uses of the ocean through consultation with experts, community stakeholders, and cultural use practitioners; to create data and analysis tools to assist in understanding use patterns, hotspots, conflicts and compatibilities

GEOGRAPHY: The Outer Continental Shelf areas off the states of Washington, Oregon, and Hawaii, with some additional mapping in state waters in select areas

Capturing spatial knowledge on non-consumptive, fishing, industrial and military uses



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Participatory Mapping (pGIS)

- Adapts historically proven social science methods
- Collects expert knowledge using consistent, repeatable, reliable methods
- Engages communities and stakeholders to help solve planning challenges



Modern spatial tools capturing community perspectives on ocean uses



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Previous Efforts

Virginia's Atlantic Coast Recreational Use Mapping Project (2012)

- NOAA ROP grant to MARCO, Virginia CZM
- MARCO Regional Ocean Planning Portal & VA Coastal Zone Program

The STEER Coastal Use Mapping Project (2012)

- NOAA-CRCP, USVI DPNR
- St Thomas East End Reserve Management Plan Review

Hawaii Coastal Use Mapping Project (2010-11) : Hawaii & Maui

- Hawaii DAR, TNC, NOAA-CRCP, PSC, PIRO, PIFSC
- Conservation Action Planning & Priority Site Assessment

New Hampshire & So. Maine Ocean Uses Project (2010)

- UNH & NOAA's Office of Response & Restoration
- Spill of National Significance Drill in Portland, ME

The California Ocean Uses Atlas Project (2008-09)

- MCBI, Resources Legacy Fund, Moore Foundation
- California MLPAI MPA Designation Process



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Target List of Uses

- | | |
|----------------------------|---|
| Industrial/Military | <ul style="list-style-type: none"> • Commercial Shipping • Designated Dumping & Outfall Sites • Dredging Operations • Mariculture • Military Operations & Ordnance Disposal • Deep Sea Mining and Mineral Extraction • Renewable Energy • Underwater Pipelines • Underwater Telecommunication & Power Cables |
| Fishing | <ul style="list-style-type: none"> • Commercial Dive Fishing • Commercial Fishing from Shore • Commercial Fishing: Benthic Mobile & Fixed Gear • Commercial Intertidal Harvest • Commercial Pelagic Fishing • Commercial Seaweed Harvest • Recreational Dive Fishing • Recreational Fishing from Boats • Recreational Fishing from Shore • Recreational Intertidal Harvest • Subsistence Fishing & Harvest |
| Non-Consumptive | <ul style="list-style-type: none"> • Beach Use • Cultural Use Areas • Motorized Boating • Paddling • Permanent Research Areas • Sailing • Surface Board Sports • SCUBA/Snorkeling • Swimming • Tide Pooling • Tourism Cruise Ships • Wildlife Viewing |



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Workshop Strategy



- Identify experts
- Convene workshop(s)
- Break into groups
- Facilitate mapping exercise
- Encourage dialogue
- Record & evaluate

- ❖ Redundancy
- ❖ Data Validation



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Mapping Exercise



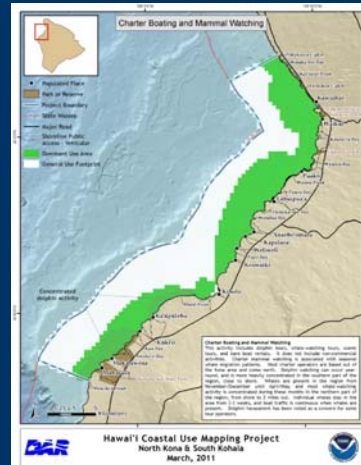
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Types of Ocean Use Data

General Use Footprint : Areas in which the use is known to occur with some regularity (over the past 3-5 years), regardless of its frequency or intensity.

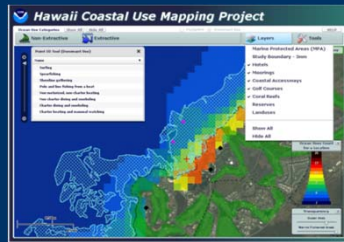
Dominant Use Areas: Areas routinely used by most users most of the time (within the seasonal patterns for that use).

Supplemental Qualitative Data: Additional spatial or non-spatial information on use patterns that is important to understand use variability. (e.g seasonality, pulse events, diurnal variations)



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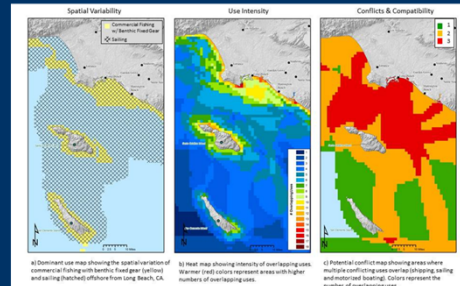
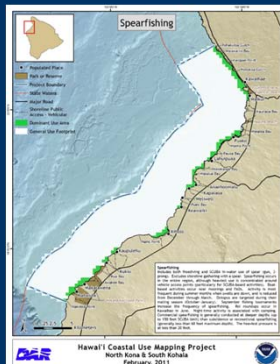
Products & Tools



GIS Data and Services

Cartographic Products

Analysis of Use Conflict



a) Dominant use map showing the spatial variation of commercial fishing with boating (yellow) and sailing (purple) offshore from Long Beach, CA. b) Heat map showing intensity of overlapping uses. Warmer (red) colors represent areas with higher numbers of overlapping uses. c) Potential conflict map showing areas where multiple conflicting uses overlap (sailing and commercial boating). Colors represent the number of overlapping uses.

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Timeline



Washington State
Workshops - April 2013
Washington Products - June 2013
Draft Data Validation planned for Summer 2013

Oregon State
Workshops completed Spring 2013
Draft Data Validation planned for Fall 2013

State of Hawai'i
Fall 2013 – Summer 2014
Workshops planned for Spring 2014

Final Project Data and Deliverables
Due to BOEM by June 2015



Right Now...

- ❖ Consulting with potential partners
- ❖ Connecting with data providers
- ❖ Communicating with other project leads
- ❖ Planning outreach to user groups & stakeholders
- ❖ Refining workshop strategy & mapping approach
- ❖ Seeking guidance from community leaders and champions



Planning & scoping underway – Workshops targeted for Spring 2014



How can you help?

- ❖ Consideration of partnership (in-kind)
- ❖ Project communication & outreach
- ❖ Participant selection and invitation
- ❖ Identification of venues & workshop locations
- ❖ Guidance on modifying strategy to address local needs



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