The Hawaii Ocean Uses Atlas
Collecting expert community knowledge on ocean uses through participatory mapping

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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
**Why Map Ocean Uses?**

Ocean Management Objectives → Required Inputs → Desired Outcomes

- Marine Spatial Planning
- Renewable Energy Development
- Ecosystem-Based Management

OCEAN USE
- patterns
- intensity
- conflicts

Desired Outcomes:
- Social, Cultural, Economic Benefits
- Sustained Ecosystem Services
- Reduced User Conflicts

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**The Pacific Regional Ocean Uses Atlas**

*Comprehensive, Continuous, and Consistent Spatial Data on Ocean Uses*

- Military Use
- Renewable Energy
- Fishing Uses
- Non-Consumptive Uses
- Industrial Uses

*Designed to inform renewable energy planning using contemporary participatory tools*
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 use 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

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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

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Modern spatial tools capturing community perspectives on ocean uses
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

- 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

Target List of Uses

Industrial/Military
- Commercial Shipping
- Designated Damping & Outfall Sites
- Dredging Operations
- Mariculture
- Military Operations & Ordnance Disposal
- Deep Sea Mining and Mineral Extraction
- Renewable Energy
- Underwater Pipelines
- Underwater Telecommunication & Power Cables

Fishing
- 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
- Beach Use
- Cultural Use Areas
- Motorized Boating
- Paddling
- Permanent Research Areas
- Sailing
- Surfboard Sports
- SCUBA/Snorkeling
- Swimming
- Tide Poolsing
- Tourism Cruise Ships
- Wildlife Viewing
**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**

![Mapping Exercise Image]

(NOAA Coastal Services Center)

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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**
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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