



# **Fourth Renewable Energy Task Force Meeting**

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- Hawaii Lease Requests
- Overview of the Competitive Leasing and Planning Process
- Call Area Presentation and Discussion
- BOEM Community Outreach Efforts



# Unsolicited Lease Requests

Offshore Oahu



### **AW Hawaii Wind, LLC (AWH)**

- Two proposed areas for lease
  - AWH Oahu Northwest Project
    - 12 miles northwest of Kaena Point
  - AWH Oahu South Project
    - 17 miles south of Diamond Head
- Each project describes ~400 MW generation
- 51 turbines
- ~600 feet tall

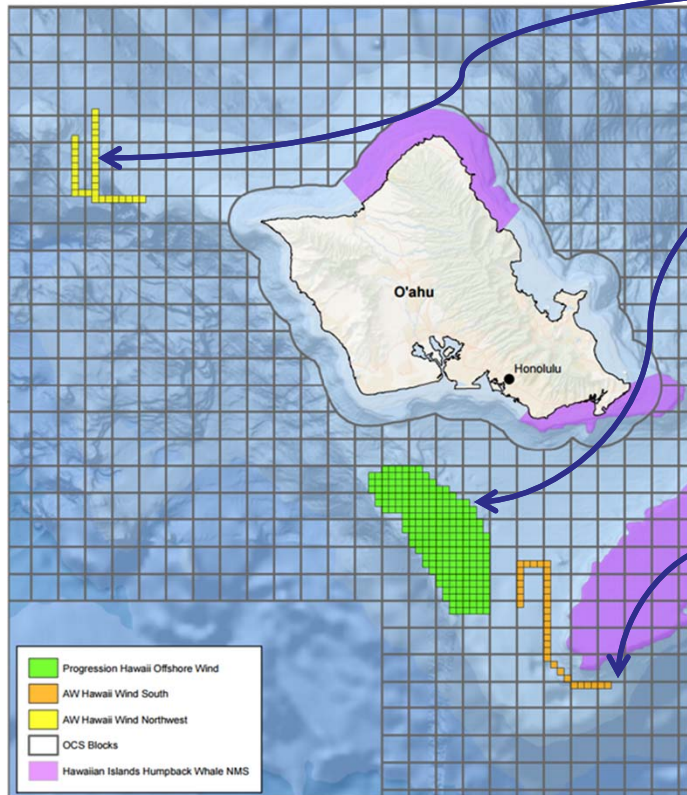
### **Progression Hawaii Offshore Wind Inc. (Progression)**

- One proposed area
  - Progression South Coast of Oahu Project
    - 9 miles southeast of Barber's Point
- ~400 MW
- 40-50 turbines, sited 1-1.5 miles apart
- ~600 feet tall

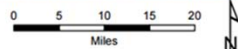


# Areas Proposed for Lease

BOEM Bureau of Ocean Energy Management  
Pacific Outer Continental Shelf (OCS) Region  
Hawaii Unsolicited Lease Requests



Coordinate System: WGS 84: UTM Zone 4N  
Document Path: H:\GIS\Maps\Hawaii\Hawaii (All Projects) (OCS Blocks) (4-1-16).mxd



- AWH's request to lease for the Oahu Northwest Project
- Progression's request to lease for the South Coast of Oahu Project
- AWH's request to lease for the Oahu South Project





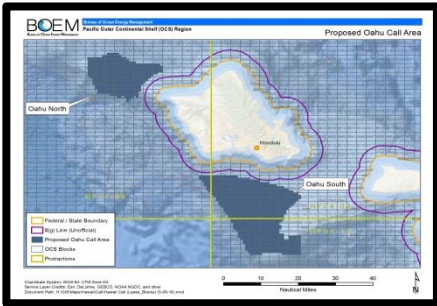
# Overview of the BOEM Leasing Process





# Renewable Energy Leasing Process

## Planning and Analysis



- Intergovernmental Task Force
- **Call for Information & Nominations (Call)**
- Area Identification
- Environmental reviews

## Leasing



- Publish leasing notices
- Issue lease(s)

## Site Assessment



- Site Characterization
- Site Assessment Plan (SAP)

## Construction and Operations



- Construction and Operations Plan (COP)
- Facility Design Report & Fabrication and Installation Report
- Decommissioning



Multi-Year Process



- Task Force Collaboration
- Input to Federal Register Notices
- Area Identification
  - Designation of Wind Energy Areas (WEAs)
  - Environmental Review Performed on Areas Identified





- Proposed Sale Notice (PSN)
  - 60 day public comment period
- Final Sale Notice
  - Must be issued 30 days prior to the auction
- Auction
- Lease Issuance
- Site Assessment Plan
- Construction and Operations Plan



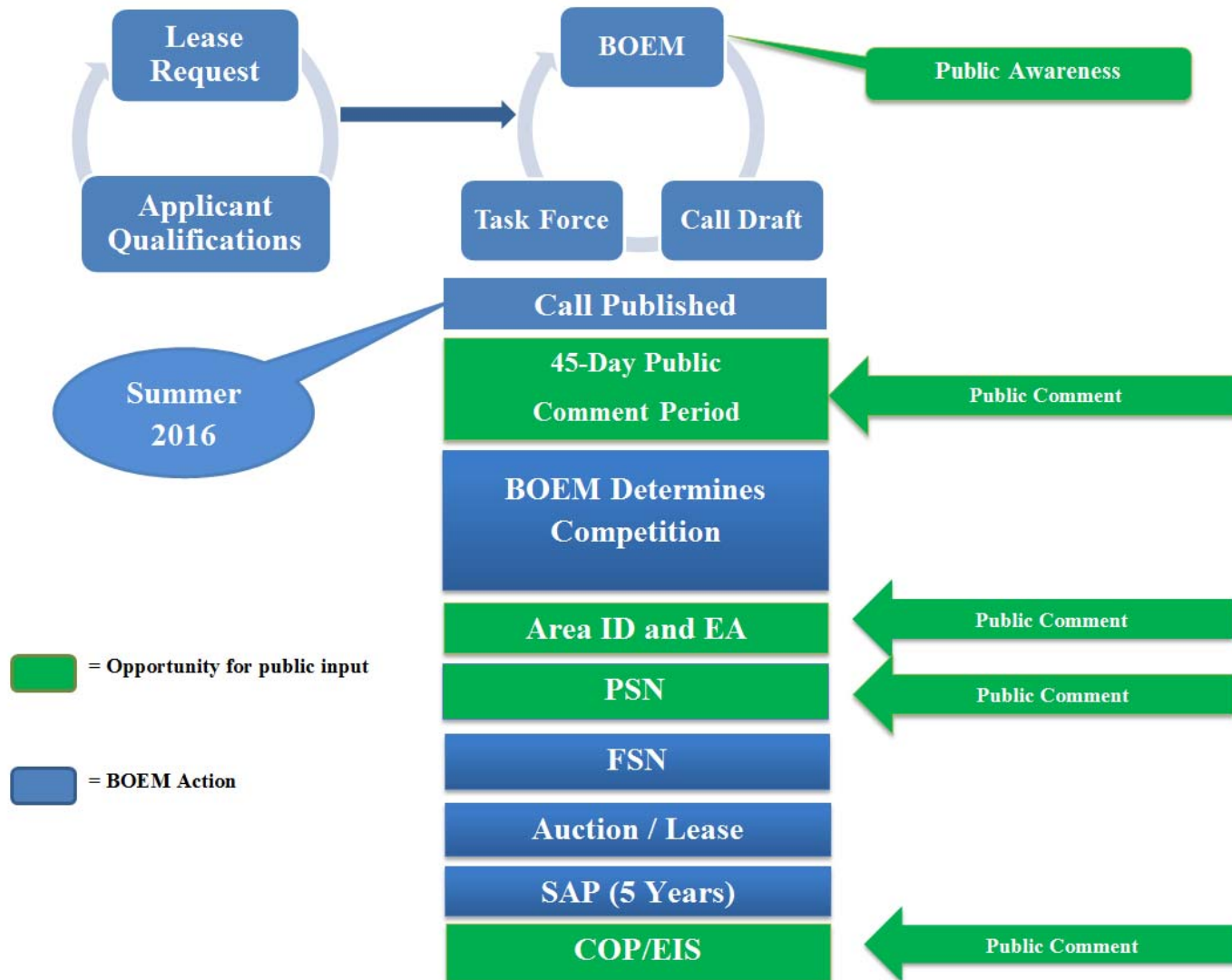
- 12 months to develop a Site Assessment Plan
  - Describe site characterization
    - How lessee would measure the distinct character of a site (e.g., surveys of coral reefs, shipwrecks, marine mammals)
  - Describe proposed activities to measure the wind resource (e.g., meteorological buoy)
- Once approved, 5 years to conduct activities described in the SAP



- Lessee to develop a Construction and Operations Plan (COP) that describes construction and operations of an offshore wind facility.
- Once the COP is approved, lessee submits Facility Design Report and Fabrication and Installation Report prior to constructing facilities



# Overview of the Competitive Leasing Process





# Questions?

Up Next: Call Area Briefing



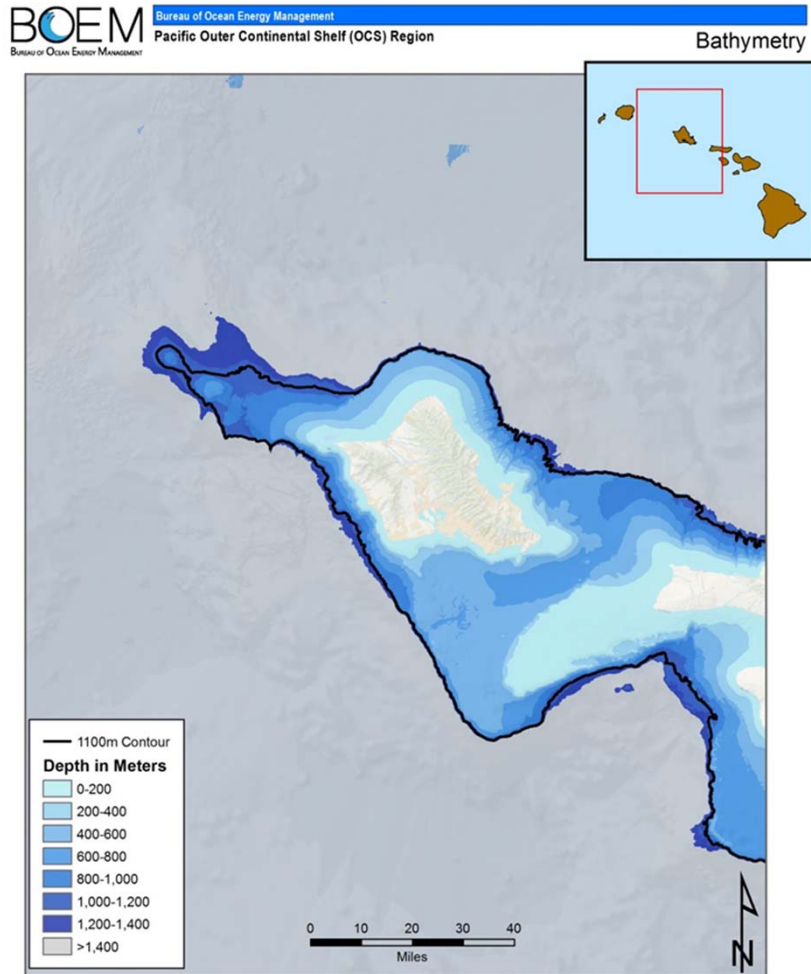




# Oahu Call Area Briefing

Determining Suitable Areas





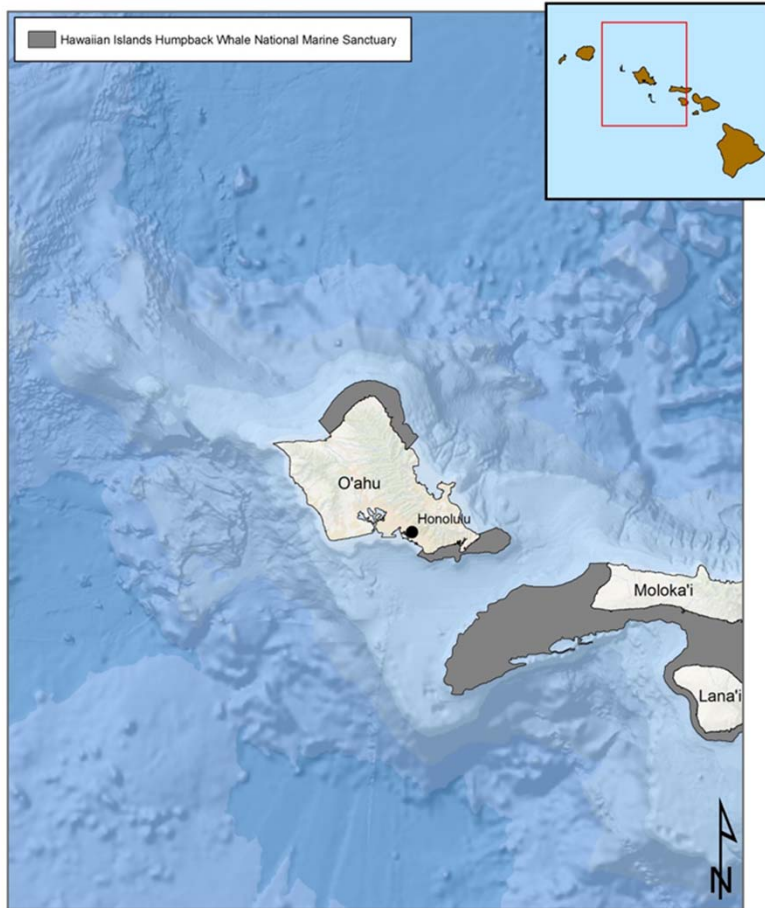
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Service Layer Credits: Esri, DeLorme, GEBCO, NOAA NGDC, and other  
Document Path: H:\GIS\Maps\Hawaii\Call\Hawaii Call (Bathymetry) (2-24-16).mxd

Bathymetry Data from 50 Meter Bathymetry Grid  
Hawaii Mapping Research Group  
University of Hawaii at Manoa  
<http://www.soest.hawaii.edu/HMRG/multibeam/bathymetry.php>

## Feasible Depths

- Theoretically, the engineering can accommodate any depth
- 1,100 meters is the practical limit

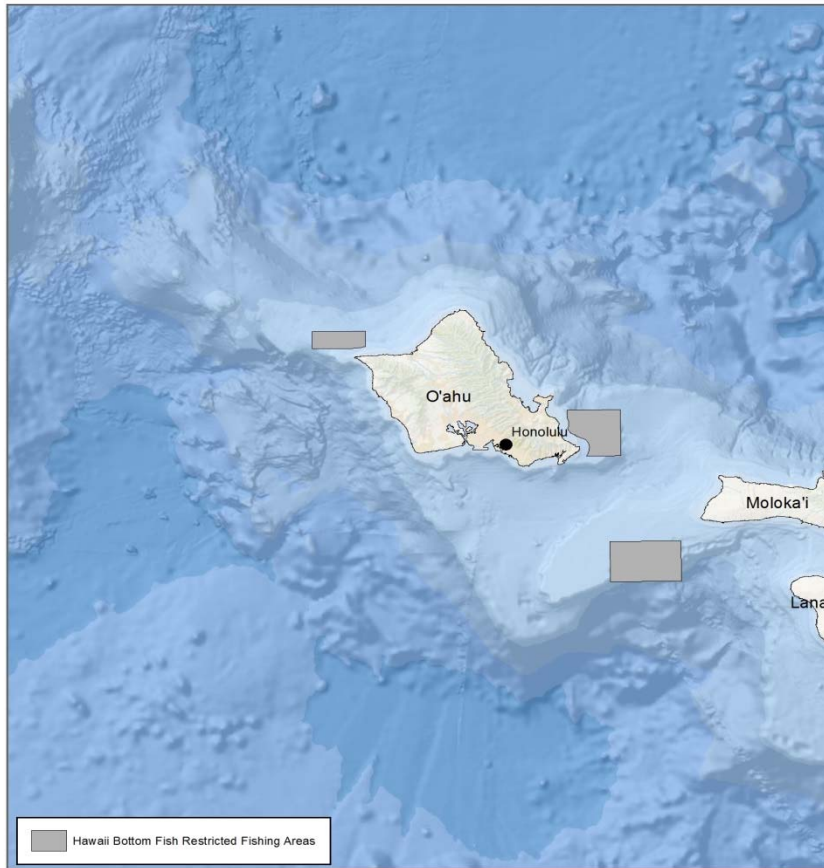




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Service Layer Credits: Esri, DeLorme, GEBCO, NOAA NGDC, and other  
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Hawaiian Islands  
Humpback Whale  
National Marine Sanctuary



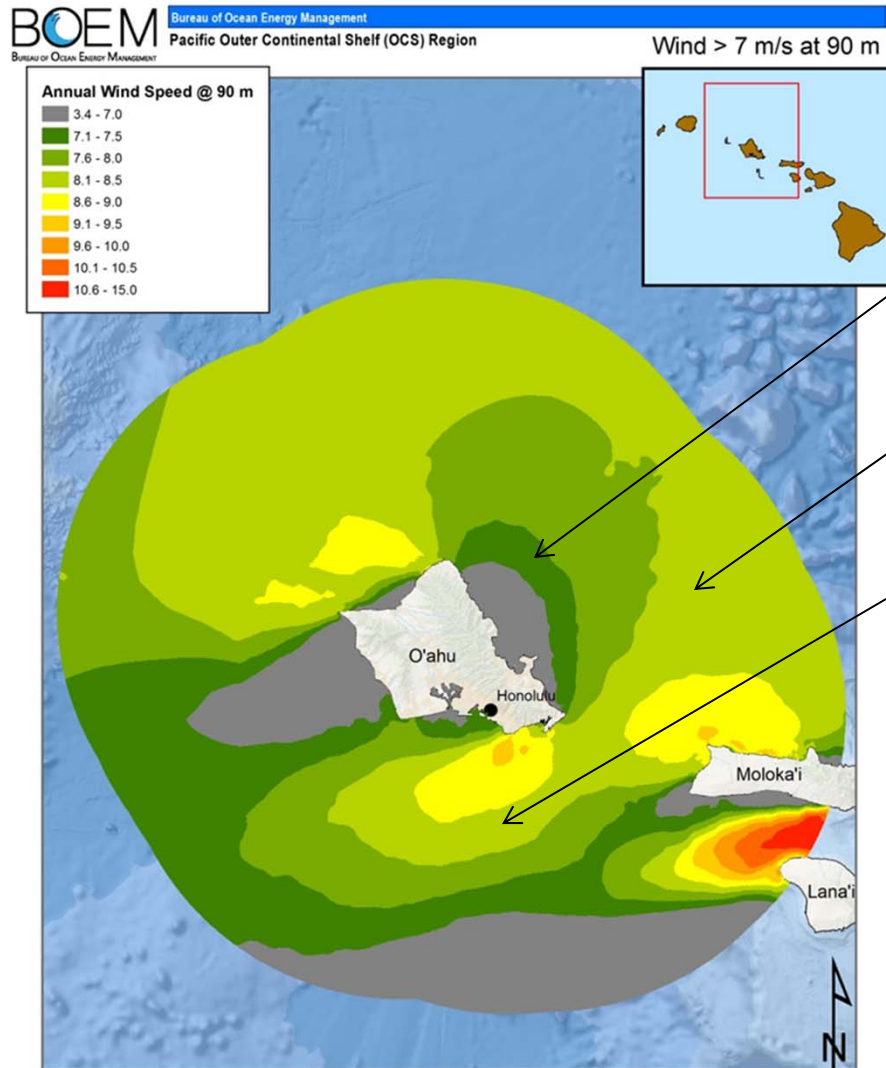


Coordinate System: WGS 84: UTM Zone 4N  
Document Path: H:\GIS\Maps\Hawaii\Hawaii (Fishing Restrictions) (4-11-16).mxd

- Areas protected by the State of Hawaii
- Hawaii Bottomfish Restricted Fishing Areas -- as determined by the Division of Aquatic Resources, Department of Land and Natural Resources







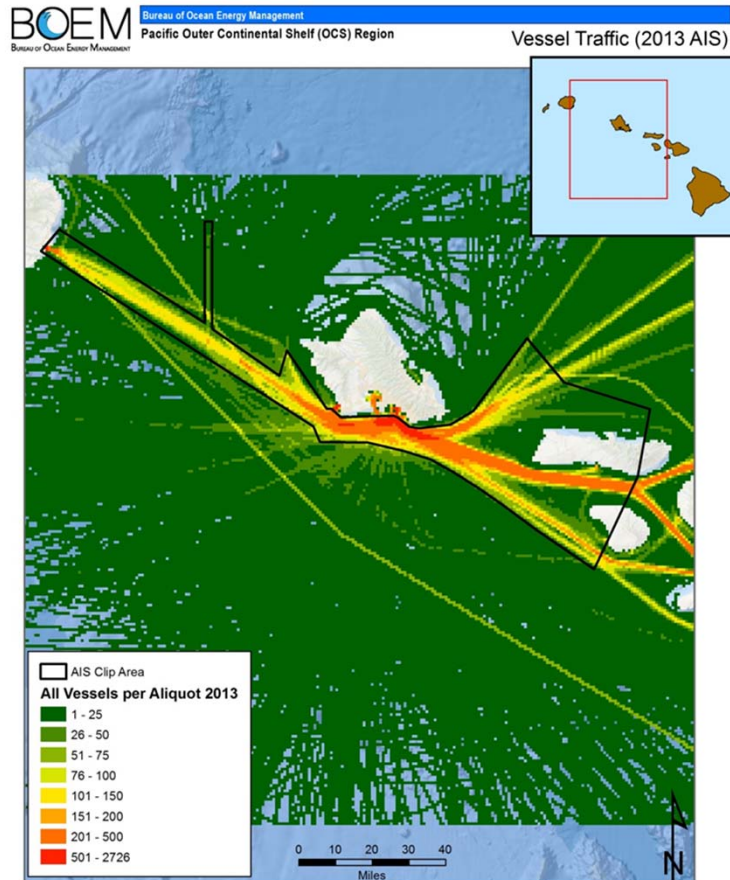
**Green:** evaluation of wind resource begins at 7 meters per second (m/s)

**Light Green:** ideal wind is above 8.0 m/s

**Yellow:** Leasing is proposed in areas of wind speeds in the 8.5-9.0 m/s range







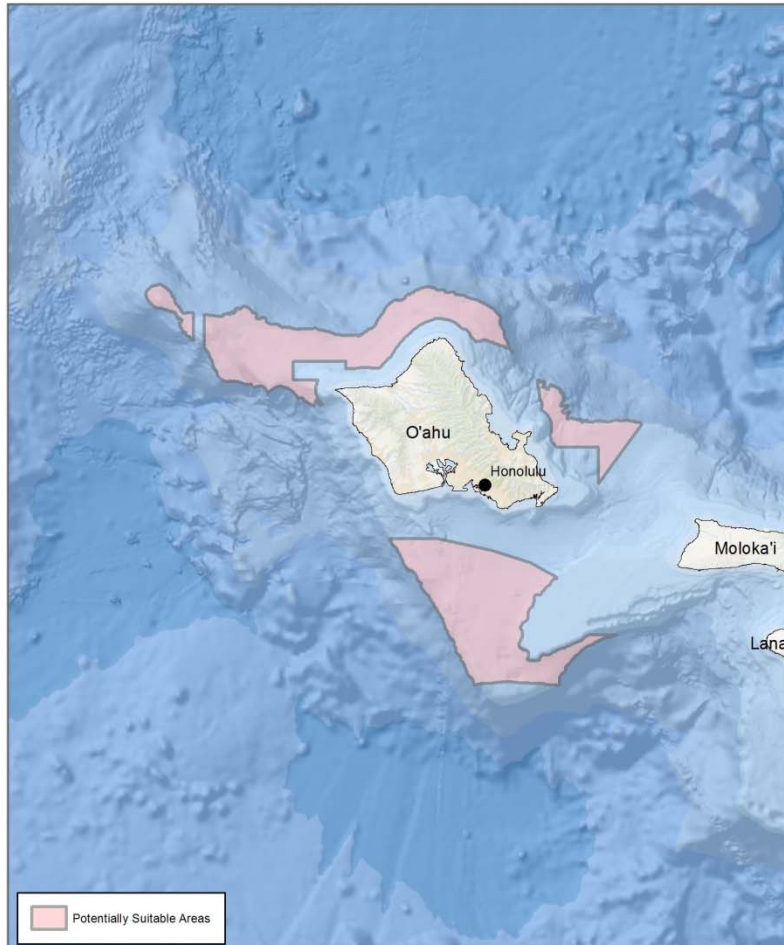
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Service Layer Credits: Esri, DeLorme, GEBCO, NOAA NGDC, and other  
Document Path: H:\GIS\Maps\Hawaii\Call\Hawaii Call (AIS) (2-24-16).mxd

Automatic Identification System (AIS) data downloaded from <http://marinecadastre.gov/aiss/>  
Point data was converted to tracks, and then summarized by BOEM aliquot (1200m x 1200m). Color represents the number of AIS vessels traveling through an aliquot in 2013.

## Vessel Traffic:

- Automatic Identification System (AIS) Data
  - Ships > 300 Gross Tons
- BOEM Aliquots (1200 x 1200 meters) color coded:
  - Red = High Traffic
  - Yellow = Moderate Traffic
  - Green = Low Traffic



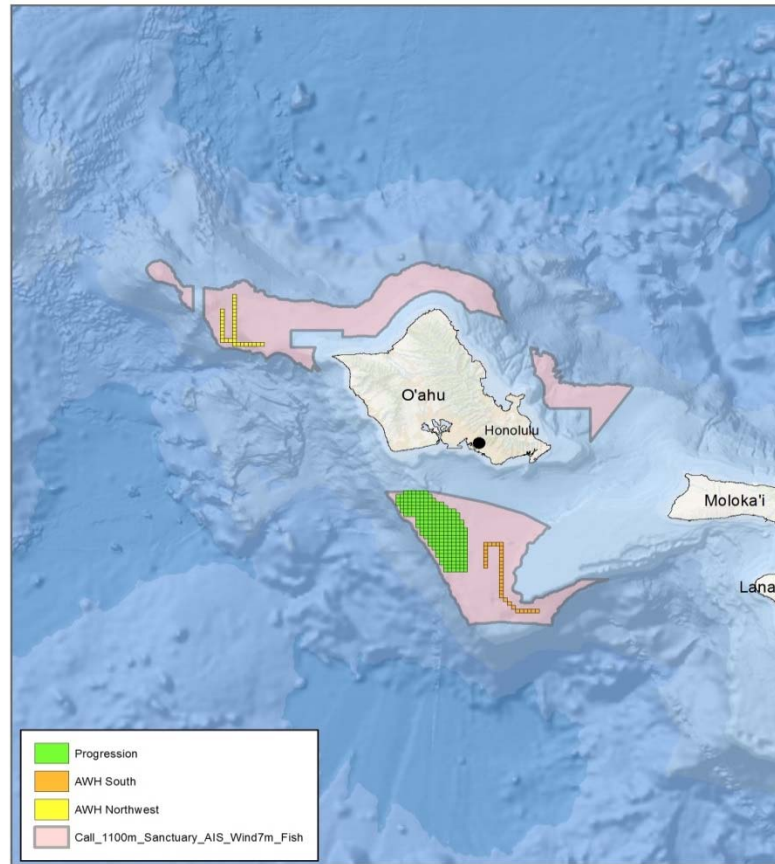


Coordinate System: WGS 84: UTM Zone 4N  
Document Path: H:\GIS\Maps\Hawaii\Hawaii (All Projects) (3-8-16).mxd

Areas remaining after consideration of:

- Water Depth
- Marine Sanctuary
- Bottomfish Restricted Fishing Areas
- Vessel Traffic
- Wind Speed





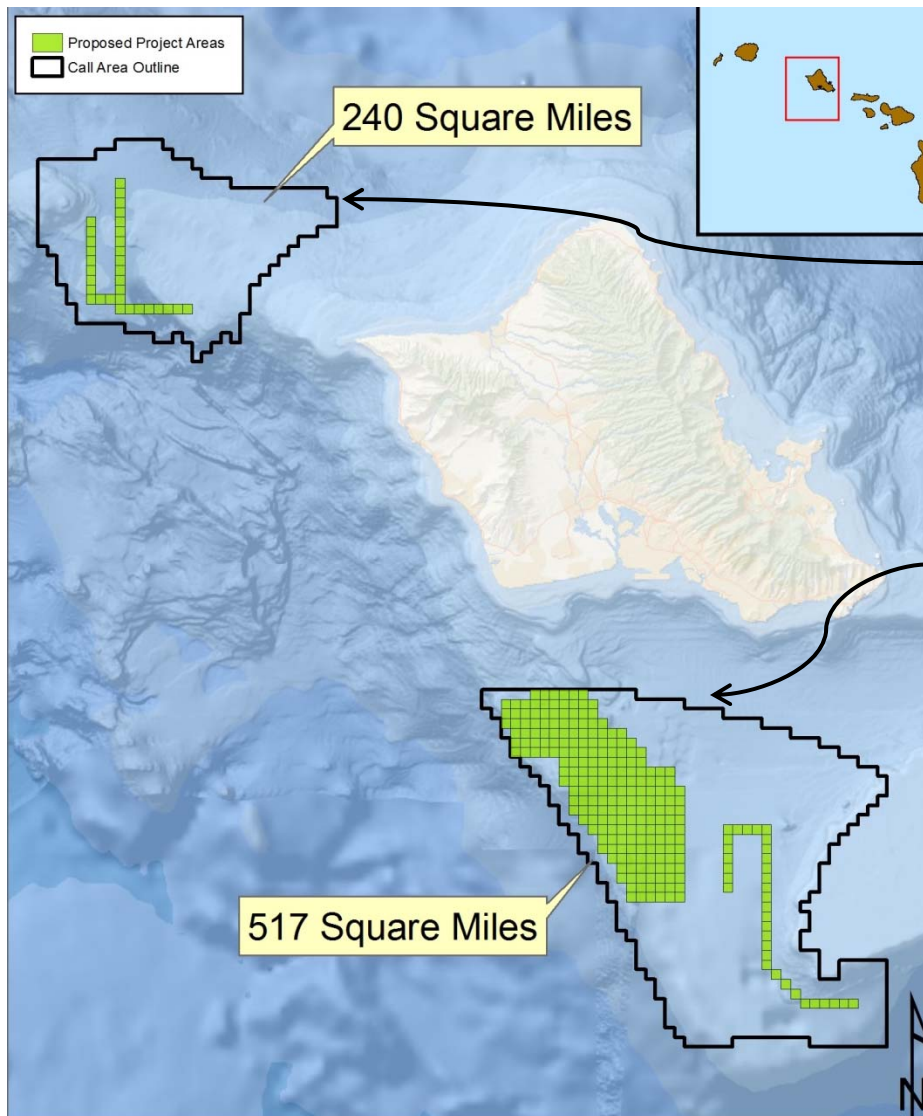
Coordinate System: WGS 84: UTM Zone 4N  
Document Path: H:\GIS\Maps\Hawaii\Hawaii (All Projects) (3-8-16).mxd



- Selected the large contiguous areas to allow for maximum flexibility during Area Identification





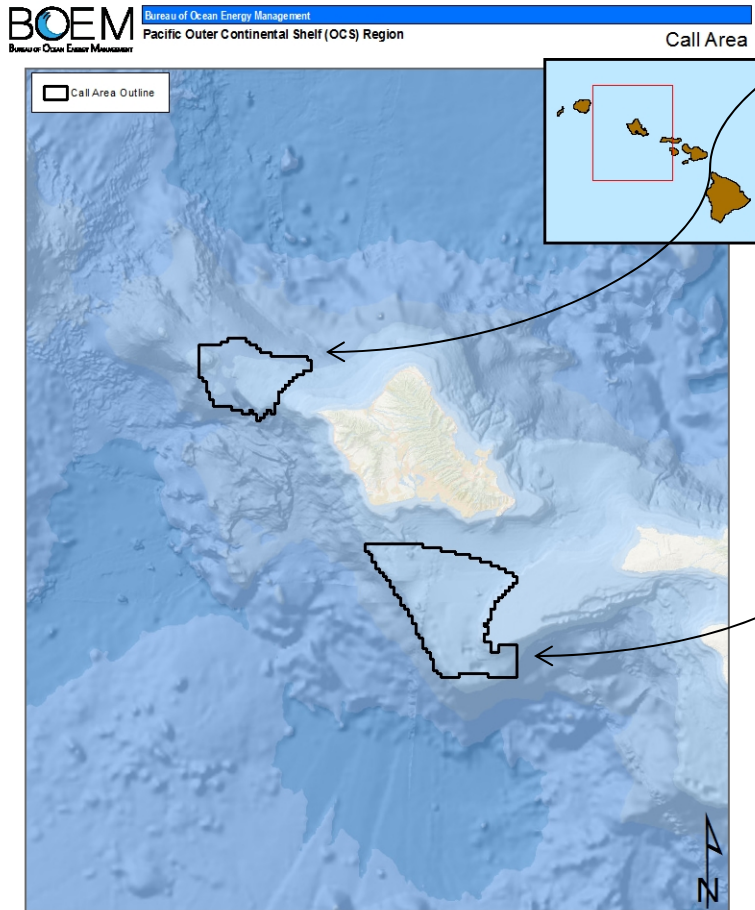


Two non-contiguous areas, one  
**“Oahu Call Area”**

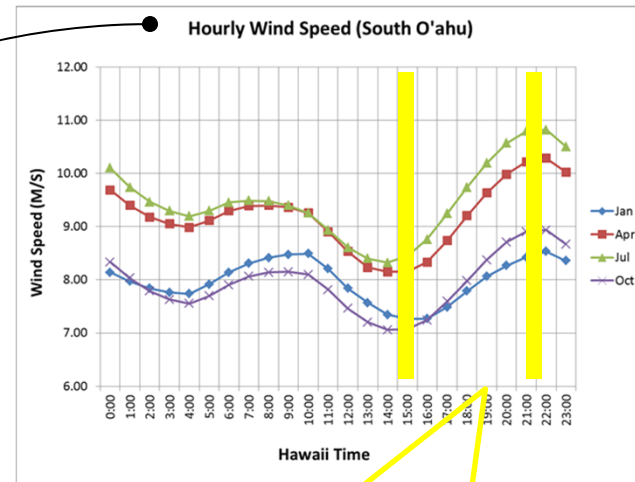
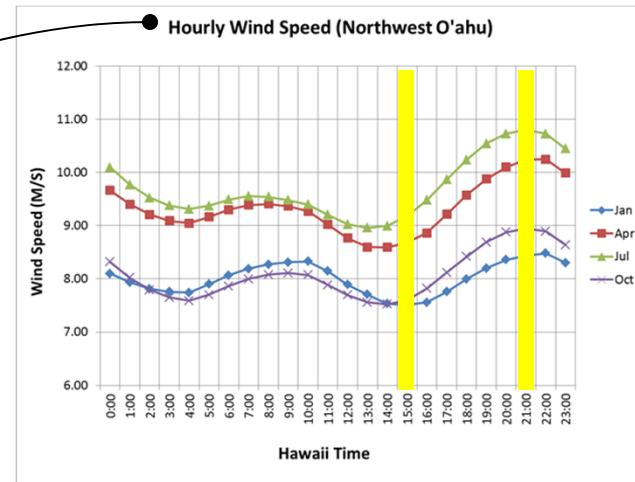
1. Oahu North
  - West of Kaena Point
  - 240 square miles
  - Closest to shore: 8 miles
2. Oahu South
  - South of Barber’s Point
  - 517 square miles
  - Closest to shore: 8 miles



# Wind Ramps Up As Sun Sets



Coordinate System: WGS 84 UTM Zone 4N  
Service Layer Credits: Esri, DeLorme, GEBCO, NOAA NGDC, and other  
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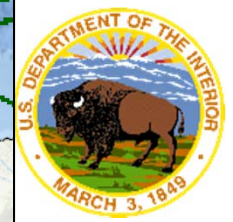
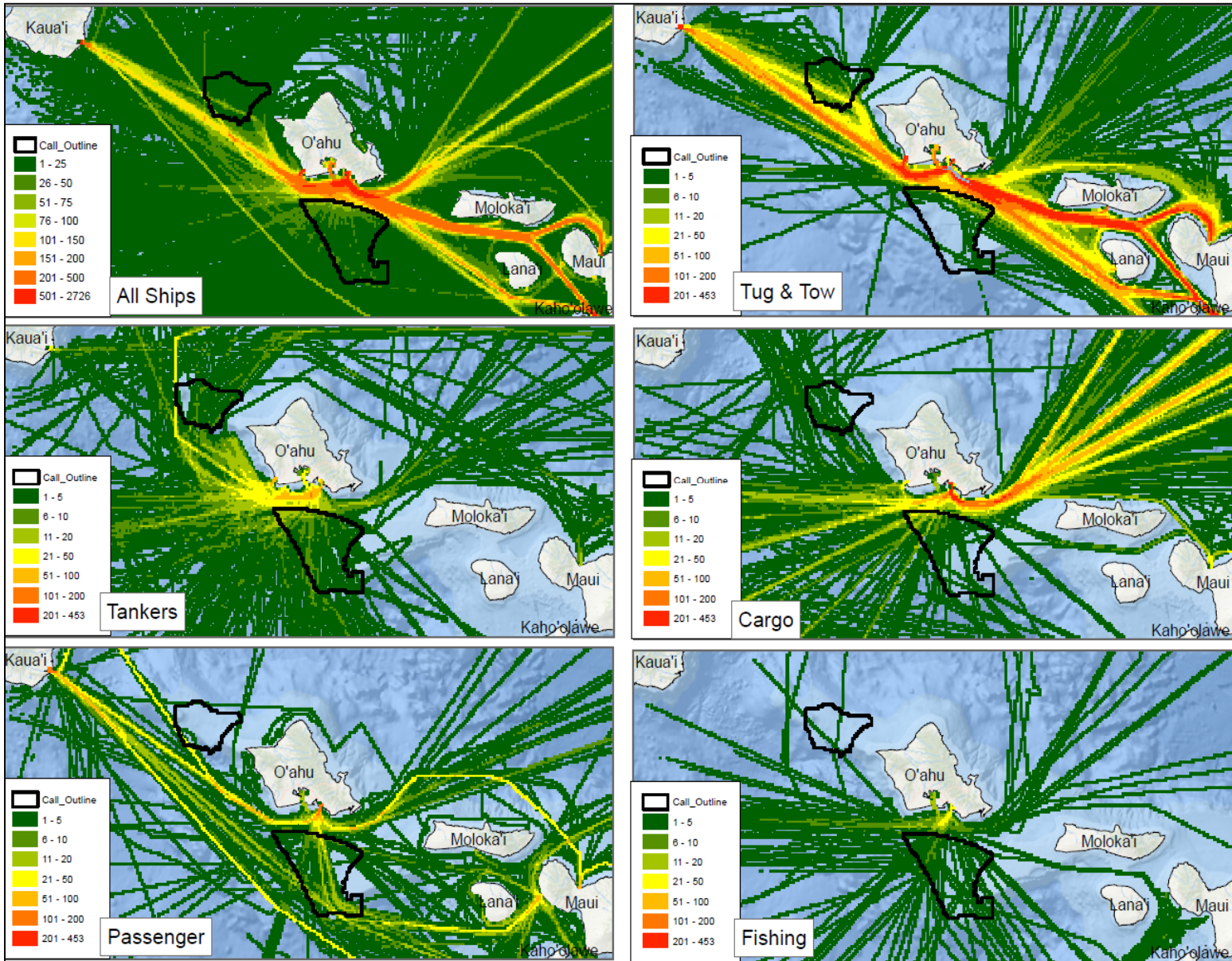


Winds increase between 3pm-9pm





# Breakout by Vessel Type



## Questions on the Call Area?

Up Next: BOEM Community  
Engagement Efforts





Community Engagement

# BOEM Meets the Community



- Stakeholder outreach is a priority for BOEM
- Eight local community groups to date
- More on the way
- Objectives:
  - increase awareness of BOEM leasing process
  - provide information on how to provide input to the BOEM leasing and NEPA processes
- Plan to identify issues relating to multiple ocean uses and environmental and cultural resource concerns

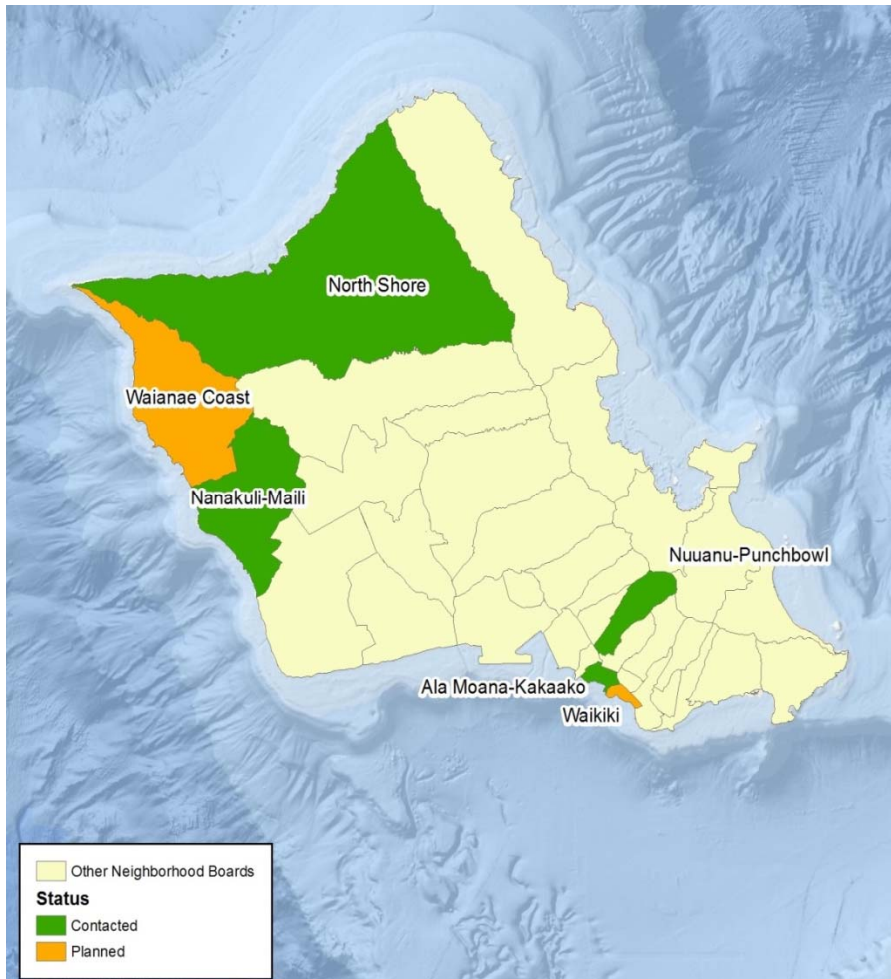




## Who has BOEM met?

- Aha Moku
- Surfrider, Oahu Chapter
- Ala Moana Neighborhood Board No. 11
- Nanakuli-Maili Neighborhood Board Chair
- Ulupono Initiative
- Western Pacific Regional Fishery Management Council
- North Shore Neighborhood Board Chair
- Blue Planet Foundation





- Contact made with Neighborhood Board Commission (NBC)
- Through the NBC, BOEM reached out to Neighborhood Board (NB) Chairs on:
  - North Shore
  - Leeward side
  - Honolulu Areas
- Presented at NB No. 11, Ala Moana, on April 26, 2016.
- Will present at Nuuanu-Punchbowl NB No. 12 on June 21, 2016.





# Questions?

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