



U.S. Navy Northwest Training & Testing (NWTT)

Update for:

Olympic Coast National Marine Sanctuary (OCNMS) Advisory Council

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NWTT Environmental Planning Projects



- Support sustainable Navy at-sea training & testing requirements in the Northwest into the foreseeable future:
 - All Navy at-sea range complexes complete similar analyses & permitting
- NWTT Environmental Impact Statement (EIS):
 - In accordance with National Environmental Policy Act (NEPA)
 - Projects address other regulatory requirements, including 5-year reauthorizations under Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA), and National Marine Sanctuaries Act
- NWTT EIS Project History:
 - Phase 1 EISs for Northwest Training Range Complex (NWTRC) and NUWC Keyport Range Complex Extension were completed in 2010 & 2011
 - Phase 2 combined EISs into NWTT EIS which was completed with Record of Decision in November 2016
 - Phase 3 NWTT EIS planned for kick off in summer 2017
- In addition to renewing 5-year authorizations, updated EISs address adjustments to Navy activities; increases/decreases and additions/deletions based on changing mission requirements

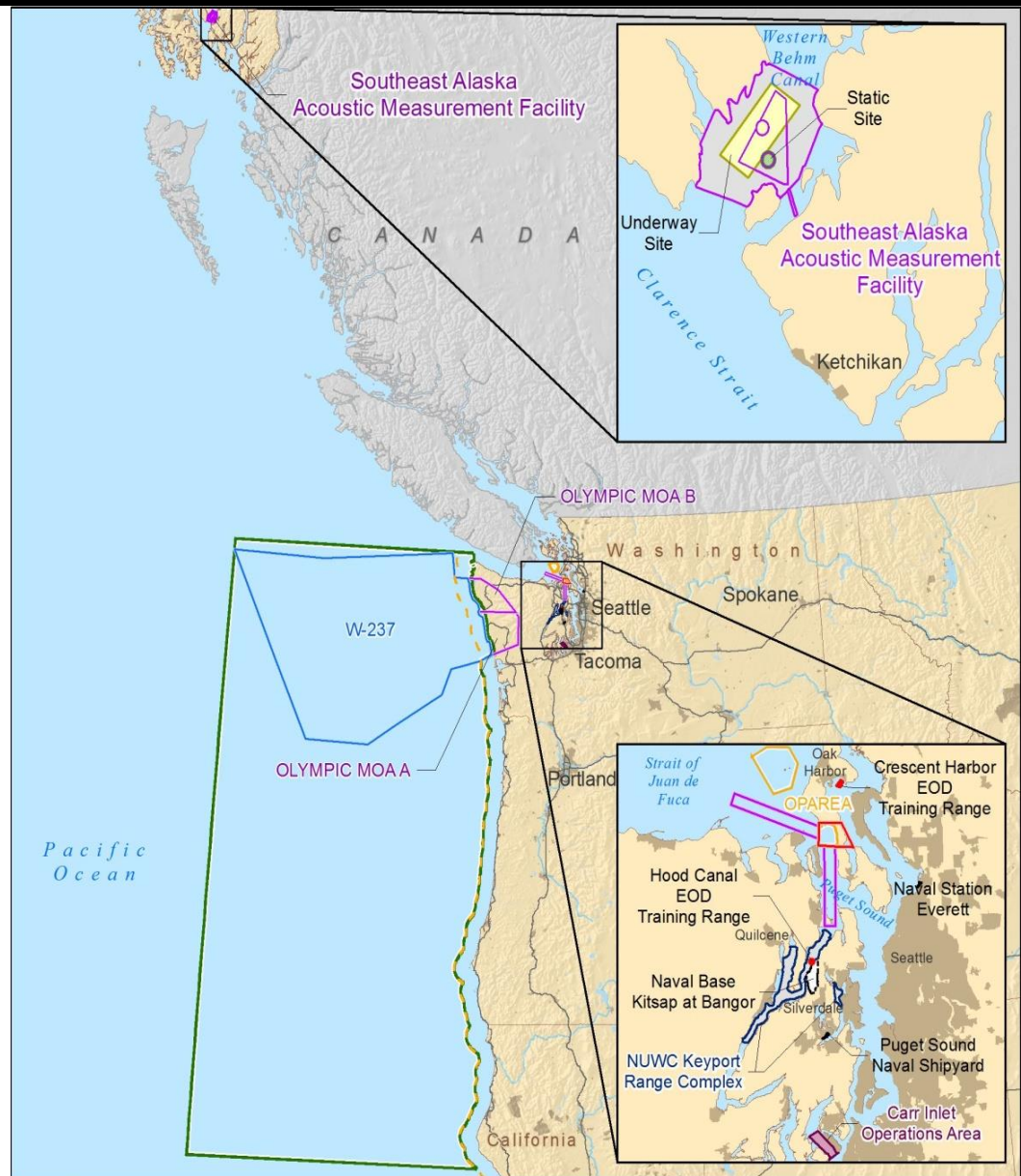


Phase 2 NWTT EIS Study Area



1. Inland Waters Area
2. Offshore Area
3. Southeast Alaska Acoustic Measurement Facility

** Expected to be the same for Phase 3 EIS*

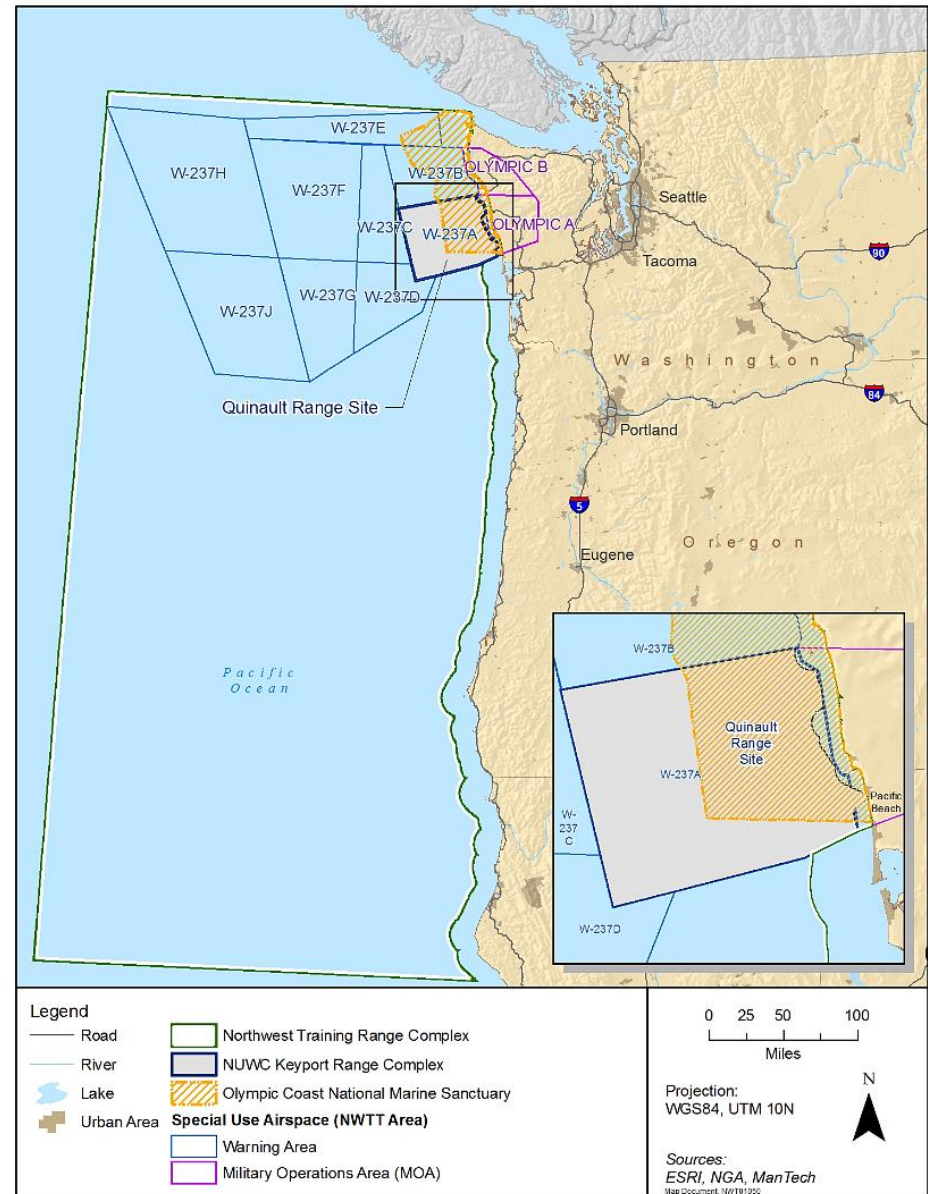




NWTT Activities in OCNMS



- Only activities authorized by OCNMS regulations:
 - Training with various sonar systems
 - Testing activities within Quinault Range Site
 - Aircraft overflights in Warning Area 237 (W-237) and Olympic Military Operations Areas above authorized flight levels
 - No use of explosives occurs in OCNMS
- Location of OCNMS is identified on Navy scheduling program & other planning tools
- Most Navy activities occur outside OCNMS; less than 2% of training and 15% of testing may occur in OCNMS





NWTT EIS – Phases 2 & 3



- Phase 2 NWTT EIS documents available at nwtteis.com, including:
 - National Marine Fisheries Service (NMFS) MMPA Letter of Authorization
 - NMFS MMPA Final Rule
 - NMFS Biological Opinion (ESA authorizations)
 - U.S. Fish and Wildlife Service Biological Opinion
 - National Marine Sanctuaries Act Section 304(d) consultation documents:
 - Sanctuary Resource Statement for potential impacts on OCNMS resources (combined consultation and analysis by Navy & NMFS)
 - OCNMS Recommended Alternatives
 - Navy & NMFS responses to Recommended Alternatives
- Phase 3 NWTT EIS concept:
 - Same geographic area as Phase 2 EIS
 - Similar activities analyzed with adjustments for new mission requirements
 - Supplemental EIS being considered
- Phase 3 EIS schedule:
 - Notice of Intent & scoping period ~ summer 2017
 - Draft EIS release & comment period ~ early 2019
 - Final EIS release ~ summer 2020 (current authorizations expire in Nov 2020)



Navy Marine Species Monitoring Program



- To better understand the marine environment in which we operate, the Navy sponsors research and partners with universities, research institutions, and laboratories around the world
- Tied to Navy training & testing MMPA permits is our **Integrated Comprehensive Monitoring Program**:
 - Overarching framework for Navy monitoring program (Atlantic & Pacific)
 - Scientific Advisory Group: Team of experts in marine mammal research, ecology, acoustics, and monitoring
 - Guides investment by establishing top-level goals for use in prioritizing projects
 - Adaptive management involves Navy, NMFS and other agencies/organizations
 - Add to the overall scientific knowledge base of marine species
 - Monitor and assess the effects of Navy activities on marine species



Studies in the Northwest



Offshore Area:

- Passive Acoustic Monitoring (2004-2017):
 - NOAA, Northwest Fisheries Science Center (2014-2017)
 - Scripps Institution of Oceanography (2004-2015)
- Satellite tag (short & long-term) tracking (2010-2017):
 - Southern Resident killer whales (*NW Fisheries Science Center, NMFS*)
 - Offshore killer whales (*Cascadia Research Collective*)
 - Blue whales (*Oregon State University*)
 - Fin whales (*Oregon State University, Cascadia Research Collective*)
 - Humpback whales (*Oregon State University, Cascadia Research Collective*)
 - Gray whales (*Cascadia Research Collective & Oregon State University*)
 - Sea Lion Tagging (NMFS & WDFW)
- Distribution, Abundance, Seasonality & Density (2016-2017):
 - Chinook Salmon – Modeling Distribution Offshore (*NWFSC*)
 - Marbled Murrelet Offshore Surveys



Studies in the Northwest



Inland Waters Area:

- Distribution, Abundance, Seasonality, & Density (2012-2017):
 - Aerial Surveys for Marine Mammals (*HDR & Smultea Environmental Sciences*)
 - Harbor Seal Density and Abundance in Hood Canal (*Clymene Enterprises, National Marine Mammal Laboratory, WDFW, Smultea Environmental Sciences, HDR, SAIC, & Navy*)
 - Sea Lion Tagging (*NMFS & WDFW*)
 - Seal & Sea Lion Regional Haulout Aerial Surveys (*WDFW*)
 - Seal & Sea Lion Haulout Counts at 4 Navy bases (*Navy*)





Blue & Fin Whale Satellite Tagging



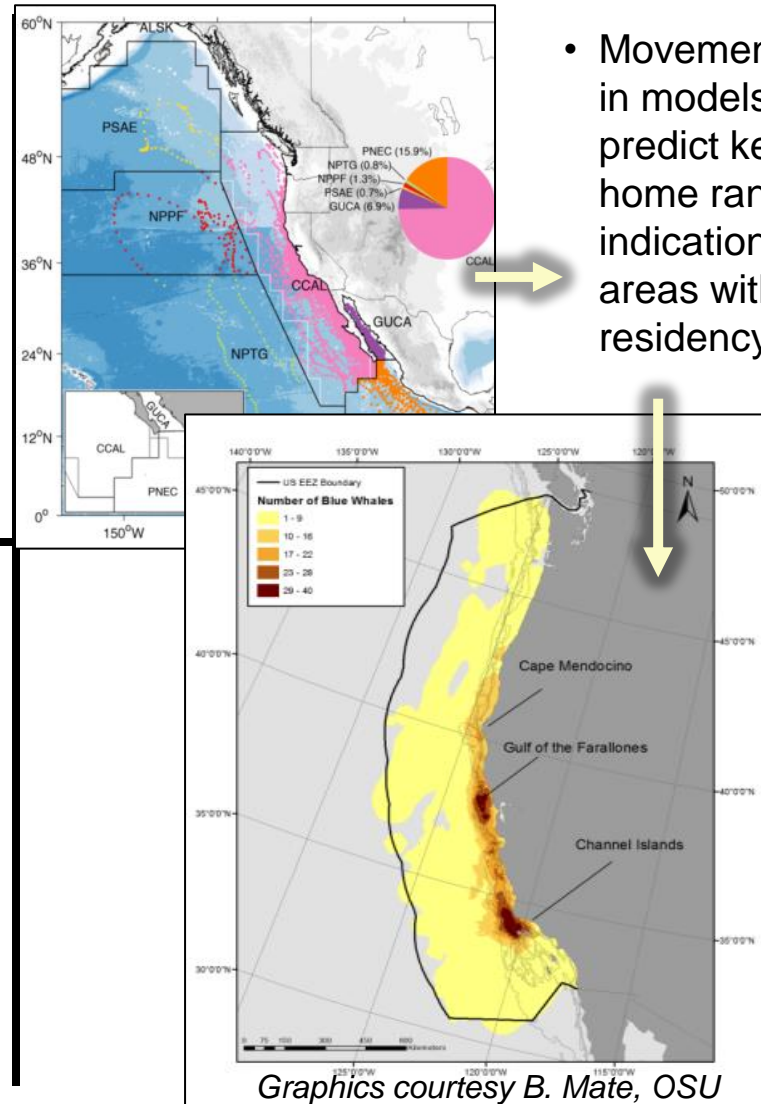
Performer: Oregon State University (OSU)

- Determine whale distribution and habitat use through deployment of location satellite tags
- Determine whale behavior changes by deploying Advanced Dive Behavior tags



- Conduct historical analysis comparing previous tag data (1994-2009) with 2014-2015

Graphics courtesy B. Mate, OSU

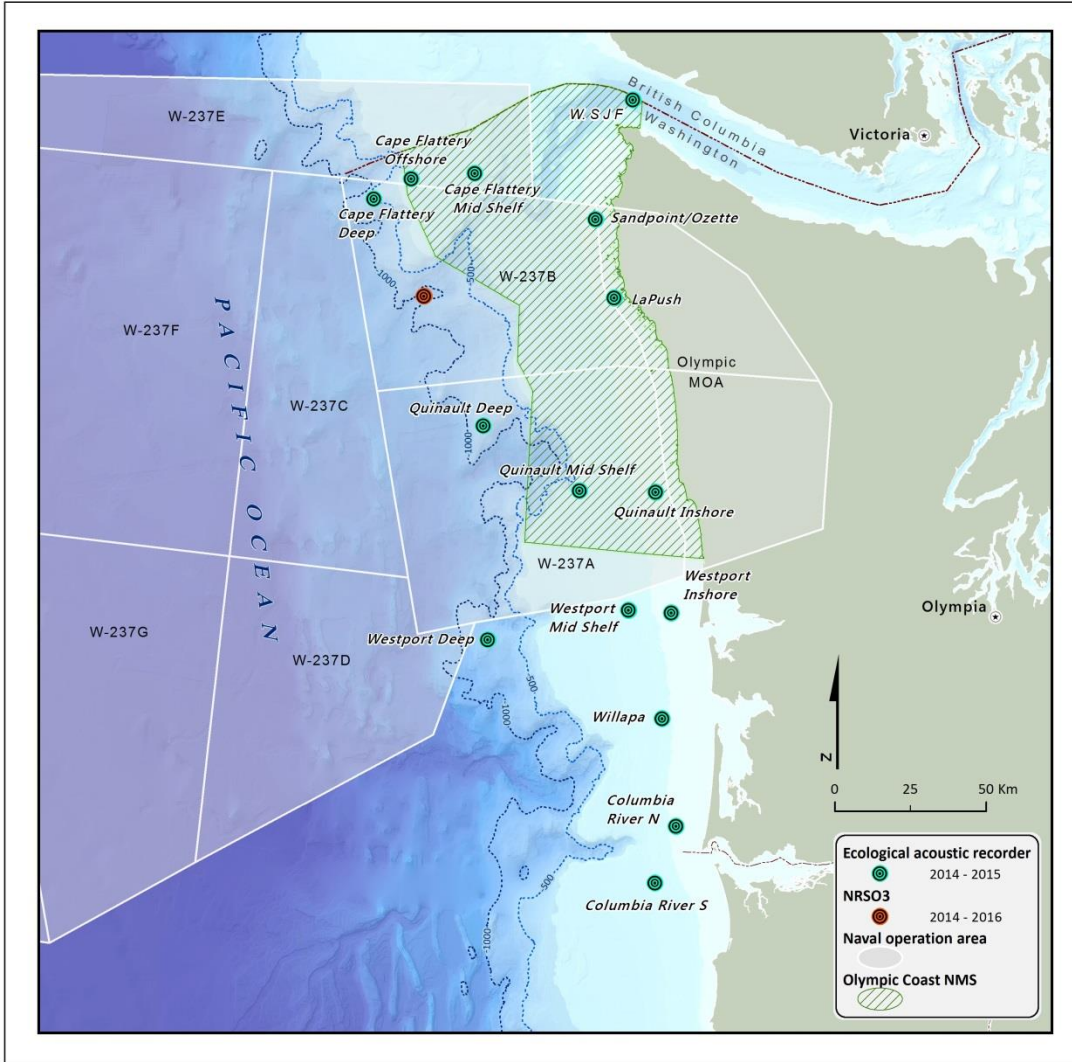




Southern Resident Killer Whales (SRKW)



Performer: Northwest Fisheries Science Center (NWFSC)



- Determine the spatial winter distribution of SRKW in the offshore (coastal) waters
- NWFSC will use existing passive acoustic data and satellite tag tracks to model & map seasonal and annual probability of occurrence in offshore waters, including those in OCNMS



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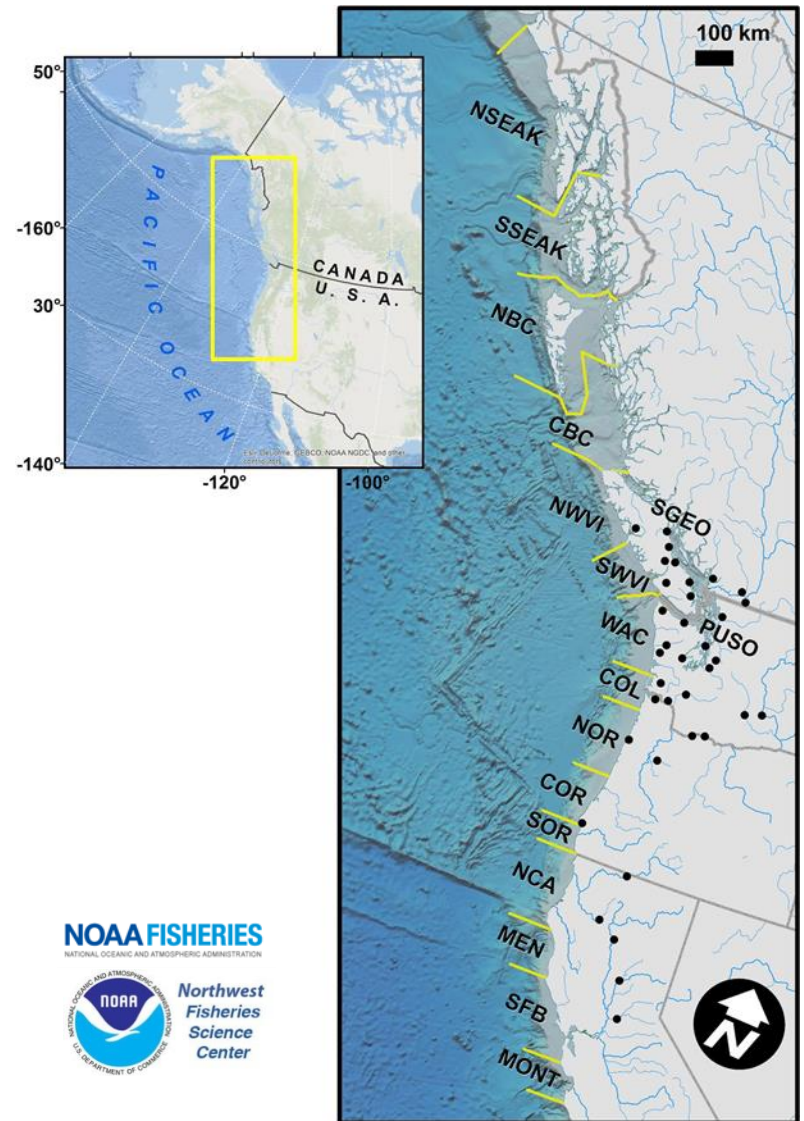


Chinook Salmon



Performer: Northwest Fisheries Science Center (NWFSC)

- Model the seasonal distribution of Chinook salmon stocks in coastal waters (Southeast Alaska to California)
- Overlaps with SRKW range
- Address the variability between runs (spring Chinook vs fall Chinook)
- Multi-year (integrate 15 years of data)
- Address seasonality in seasons not yet studied (winter and spring), which are important for SRKW



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Northwest
Fisheries
Science
Center



Tracking Sea Lions with Satellite Tags



Performer: Alaska Fisheries Science Center (NMFS) & Washington State Department of Fish & Wildlife

Inland & Offshore Coastal Waters:

- Determine time hauled out vs in water
- Determine foraging locations & dive depths
- Determine distribution offshore



Photo courtesy of Steve Jeffries, Washington Department of Fish & Wildlife

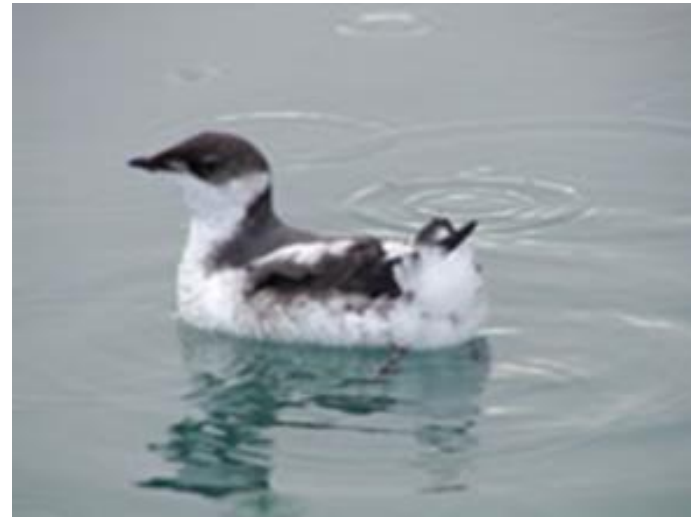
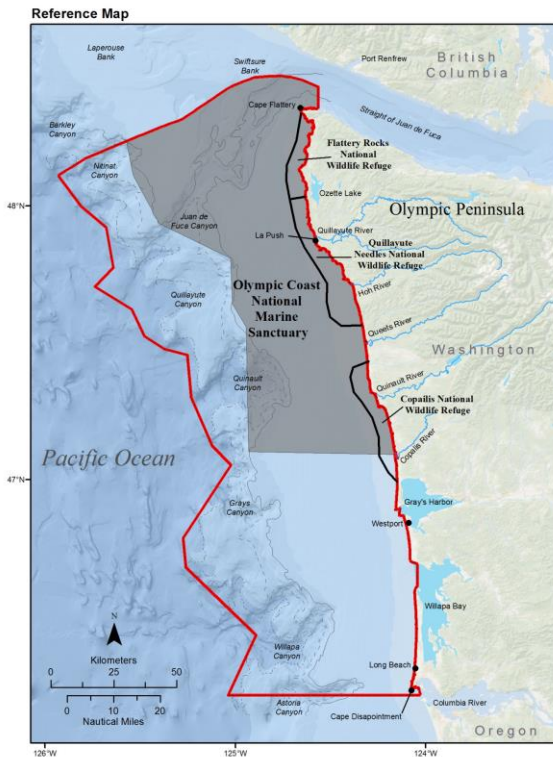




Marbled Murrelet



- Supplements existing Puget Sound marbled murrelet density surveys (adds spring surveys to existing winter surveys)
- Adds offshore distribution/density survey as part of leveraged project





Navy Monitoring Reports

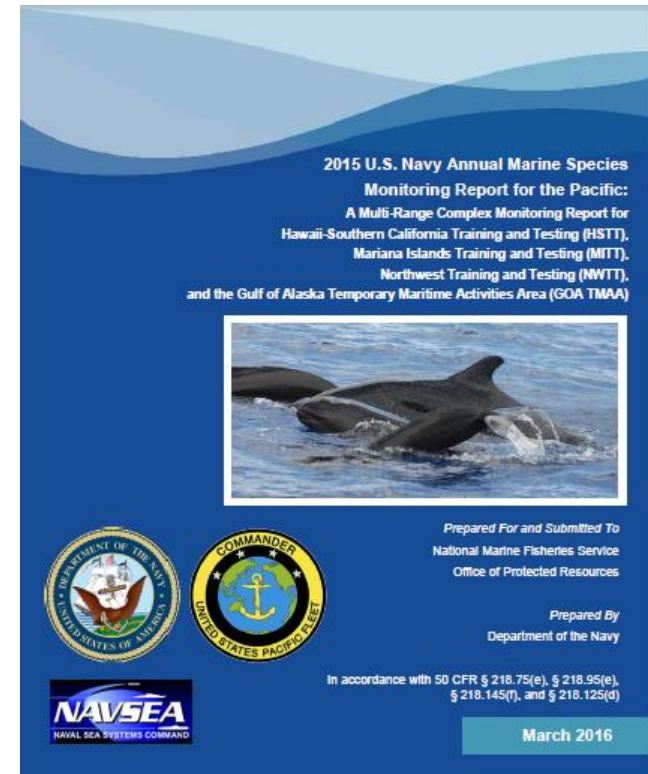


Annual monitoring reports and associated technical reports posted to U.S. Navy's public Monitoring website:

<http://www.navy-marinespeciesmonitoring.us/>



- Under “Reading Room”, then under “Pacific Documents”, then under “NW Training Range Complex”





Questions & Discussion?

