

## **Part Five Appendix B: Map Designations**

The map information and data contained and referenced herein, designate areas within the territorial sea that are subject to section B.4., Resource and Use Inventory and Effects Evaluation and Special Resource and Use Review Standards. The maps delineate areas within the territorial sea based on the resources and uses present within them, and to which the review standards apply.

### **Territorial Sea Plan Resources and Uses Area Map Designations:**

The area descriptions below apply to the map designations incorporated into Part Five, Appendix B.

**Renewable Energy Permit Area (REPA)**: these areas are delineated sites for which there is an existing authorization for the development of renewable energy testing, research or facilities. Applications for renewable energy facilities within a REPA must comply with the terms and conditions required by the regulating agency authorization for the site. The total area of renewable energy facility sites authorized as REPA may not exceed two percent of the territorial sea (25.2 sq. miles or 19 sq. nautical miles). Based on the map designations in Appendix C, the REPA is 1 square mile (less than 1 sq. nautical miles) covering 0.08% of the territorial sea.

REPA units: 1 through 2.

**Renewable Energy Facility Suitability Study Area (REFSSA)**: an area wherein there may be ecological resources, or activities relating to commercial fishing sectors, recreational fishing, or individual ports. Renewable energy facilities may be sited within a REFSSA. Renewable energy facility development in these areas is anticipated to have the lowest potential adverse effects on inventoried marine resources and uses within state waters. A renewable energy facility proposal in a REFSSA must comply with Part Five, paragraphs B.4.a through f., and section C, and the applicable regulatory and proprietary requirements of state and federal agencies. The total area for REFSSA may not exceed five percent of the territorial sea (63 sq. miles or 47.5 sq. nautical miles). Based on the map designations in Appendix C, the REFSSA are 15 square miles (11 sq. nautical miles) covering 1% of the territorial sea.

REFSSA units: 1 through 4.

**Resources and Uses Management Area (RUMA)**: an area wherein there are important or significant ecological resources or areas that are economically important to commercial fishing sectors, recreational fishing, or individual ports. Renewable energy facilities may be sited within a RUMA. Under some circumstances there is a potential for renewable energy facility development to have significant adverse effects on inventoried marine resources and uses within these areas. A project proposal for MRE development in a RUMA must demonstrate that the project will have no significant adverse effects on inventoried marine resources and uses as determined by the standards for protecting those resources and uses in that area. Based on the map designations in Appendix C, the RUMA are 127 square miles (96 sq. nautical miles) covering 10% of the territorial sea.

RUMA units: 1 through 22.

**Resources and Uses Conservation Area (RUCA)**: an areas wherein there are important, significant, or unique (ISU) ecological resources, or an area that is of significant economic importance to commercial fishing sectors, recreational fishing, or individual ports. A renewable energy facility could be sited within a RUCA, though there is a high potential that most types of MRE development projects would have significant adverse effects on inventoried marine resources and uses within the area. A project proposal for MRE development in a RUCA must demonstrate that the project will have no reasonably foreseeable adverse effects on inventoried marine resources and uses as determined by the standards for protecting those resources and uses in that area. Based on the map designations in Appendix C, the RUCA are 909 square miles (686 sq. nautical miles) covering 72% of the territorial sea.

RUCA units: 1 through 16

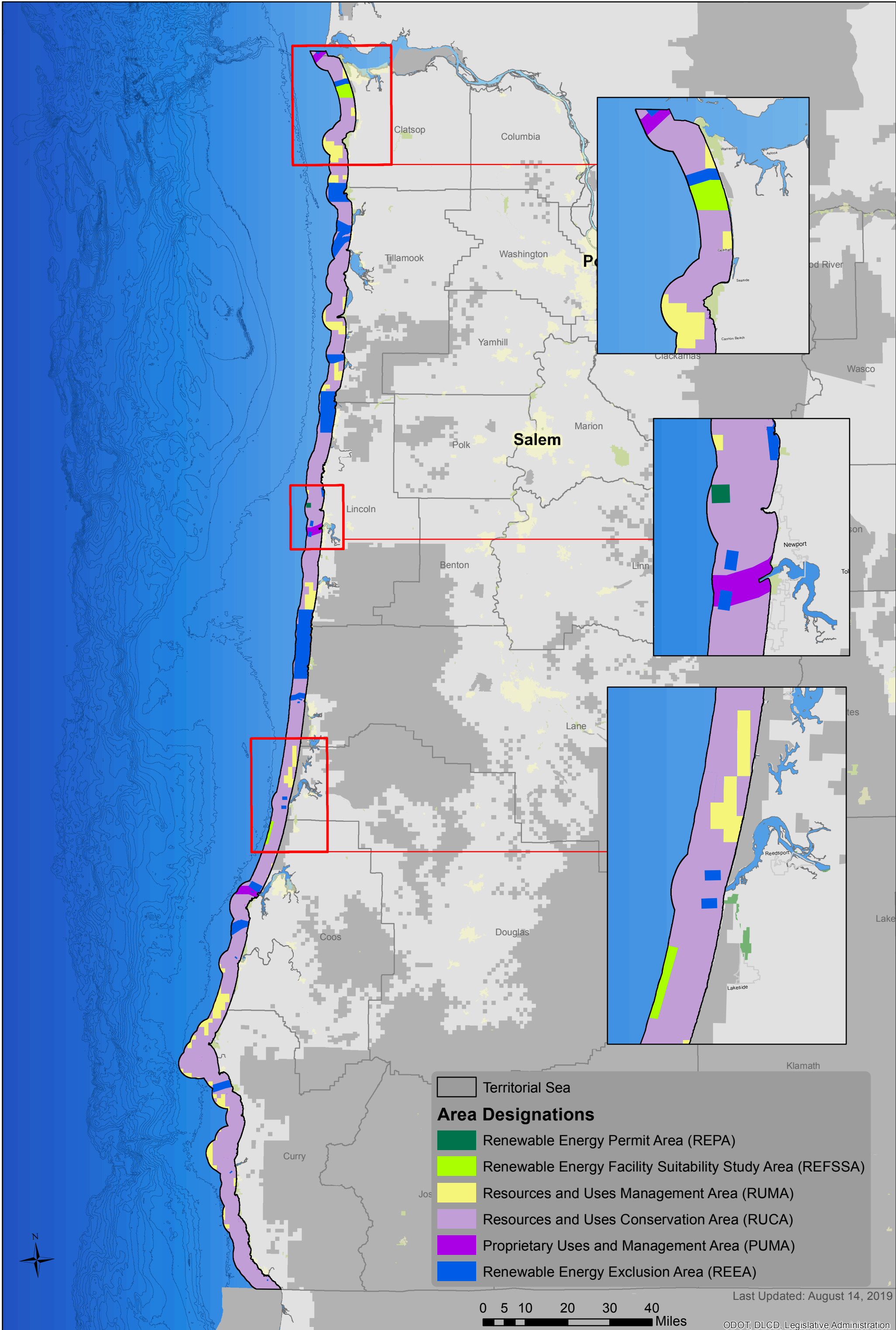
**Renewable Energy Exclusion Area (REEA)**: special management areas. These areas contain permitted or managed uses that have some form of exclusive right or authority to exclude, restrict or control other uses in that area. Examples of these types of authorizations including: undersea fiber optic or scientific instrumentation; cable corridors; dredge material disposal sites, and marine reserves and marine protected areas. Regulating agencies will not accept Applications for MRE development within a REEA. Based on the map designations in Appendix C, the REEA are 170 square miles (128 sq. nautical miles) covering 14% of the territorial sea.

REEA units: 1 through 25

**Proprietary Use and Management Area (PUMA)**: areas wherein there are authorized uses and special management designations. These areas are subject to some form of authority to restrict or control other uses. Examples of these types of authorizations include navigation channels and pilotage safety corridors. Regulating agencies will not accept renewable energy facility MRE applications in these areas unless the use is legally permissible and, complies with the authorized use of the area. Based on the map designations in Appendix C, the PUMA are 26 square miles (20 sq. nautical miles) covering 2% of the territorial sea.







PUMA units: 1 through 3

# Territorial Sea Plan Part Five Appendix B - Plan Map



## Territorial Sea Plan Part Five

### Plan Map Area Designation: Area Unit Identification Index

<b>Area Designations</b>	
<b>AreaType</b>	
	Renewable Energy Permit Area (REPA)
	Renewable Energy Facility Suitability Study Area (REFSSA)
	Resources and Uses Management Area (RUMA)
	Resources and Uses Conservation Area (RUCA)
	Proprietary Uses and Management Area (PUMA)
	Renewable Energy Exclusion Area (REEA)

The area designation units are numbered sequentially from north to south for each area type.

REPA Unit identification: REPA 1

REFSSA Unit identification: REFSSA 1 through REFSSA 2

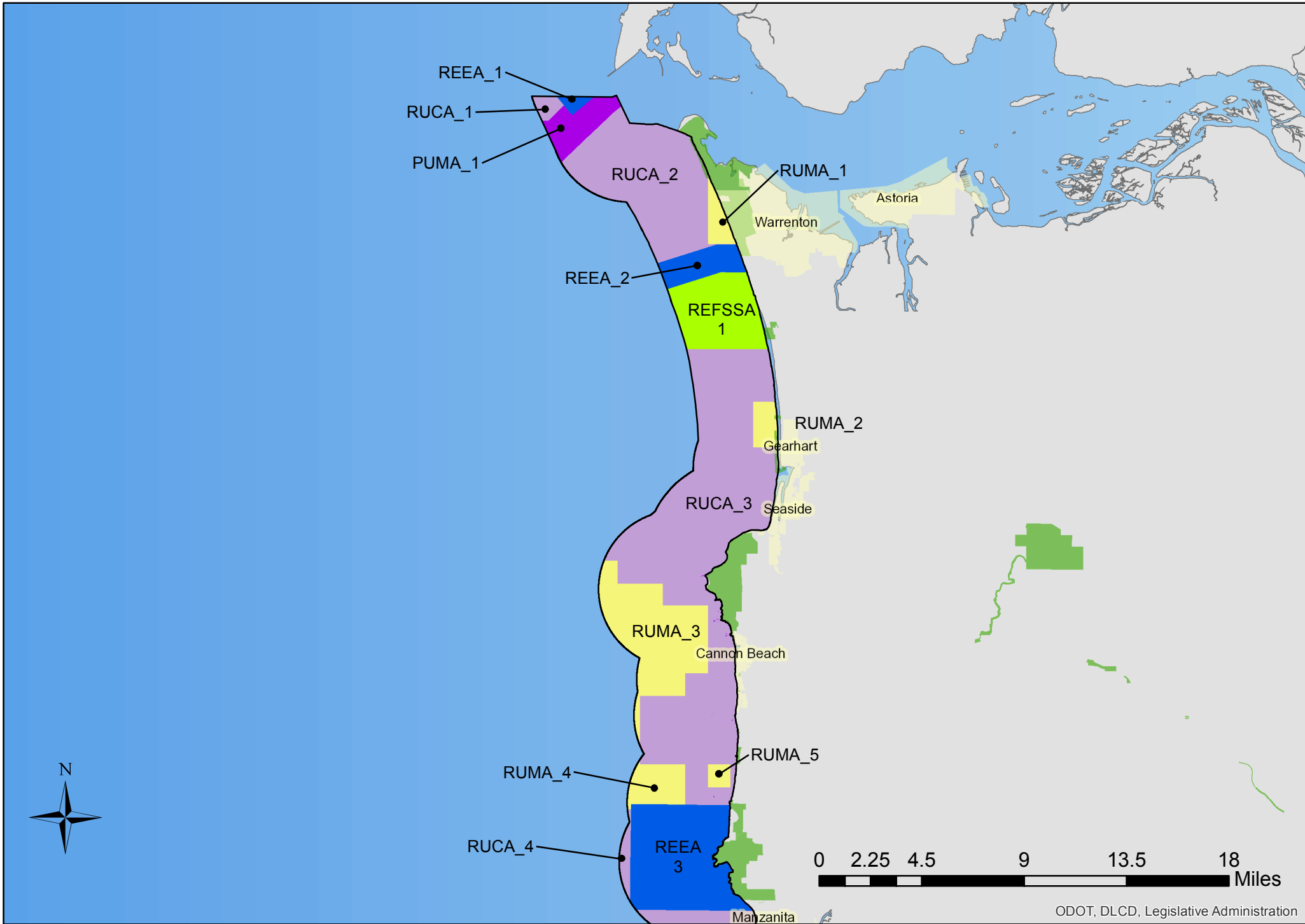
RUMA Unit identification: RUMA 1 through RUMA 22

RUCA Unit identification: RUCA 1 through RUCA 16

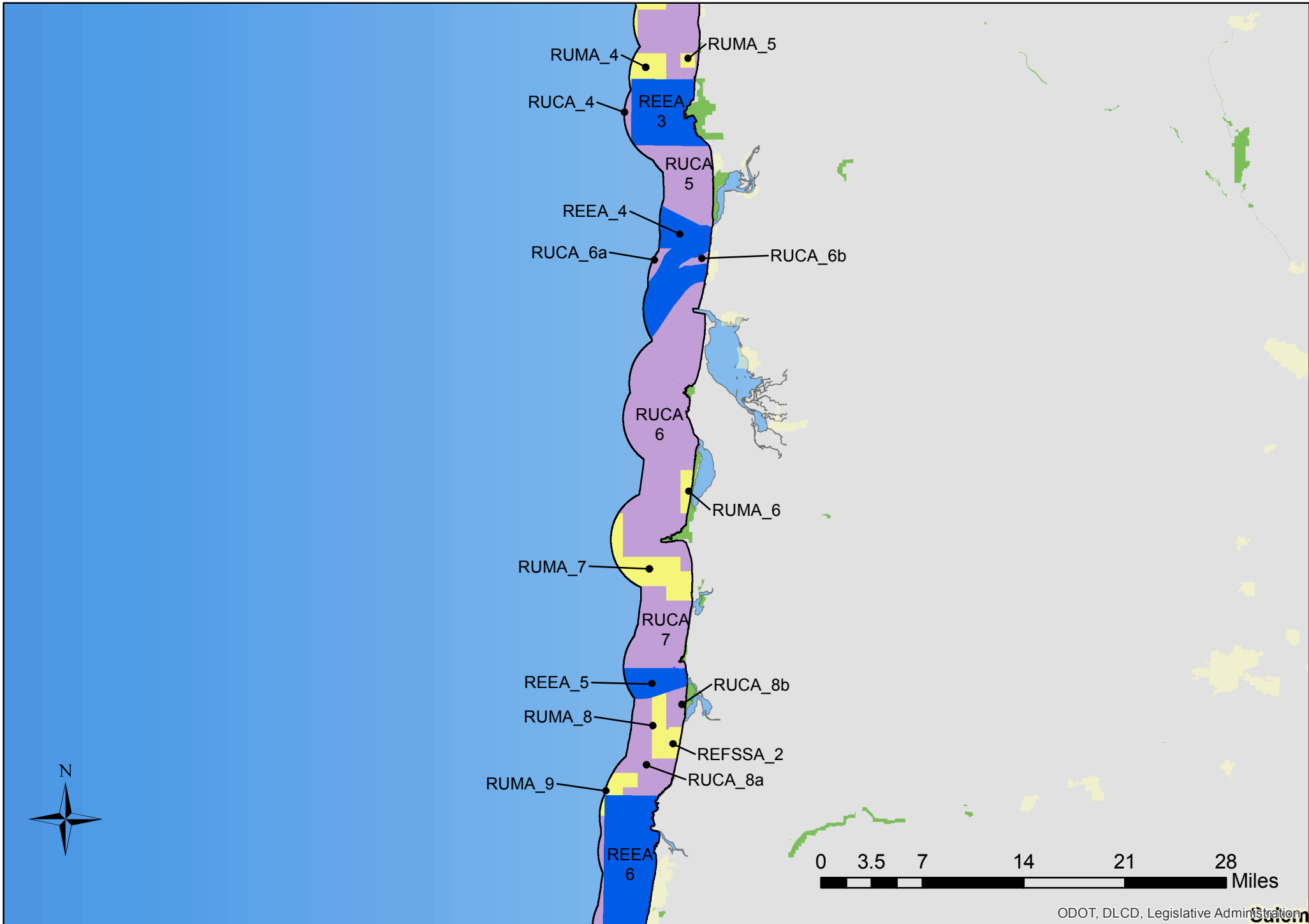
PUMA Unit identification: PUMA 1 through PUMA 3

REEA Unit identification: REEA 1 through REEA 25

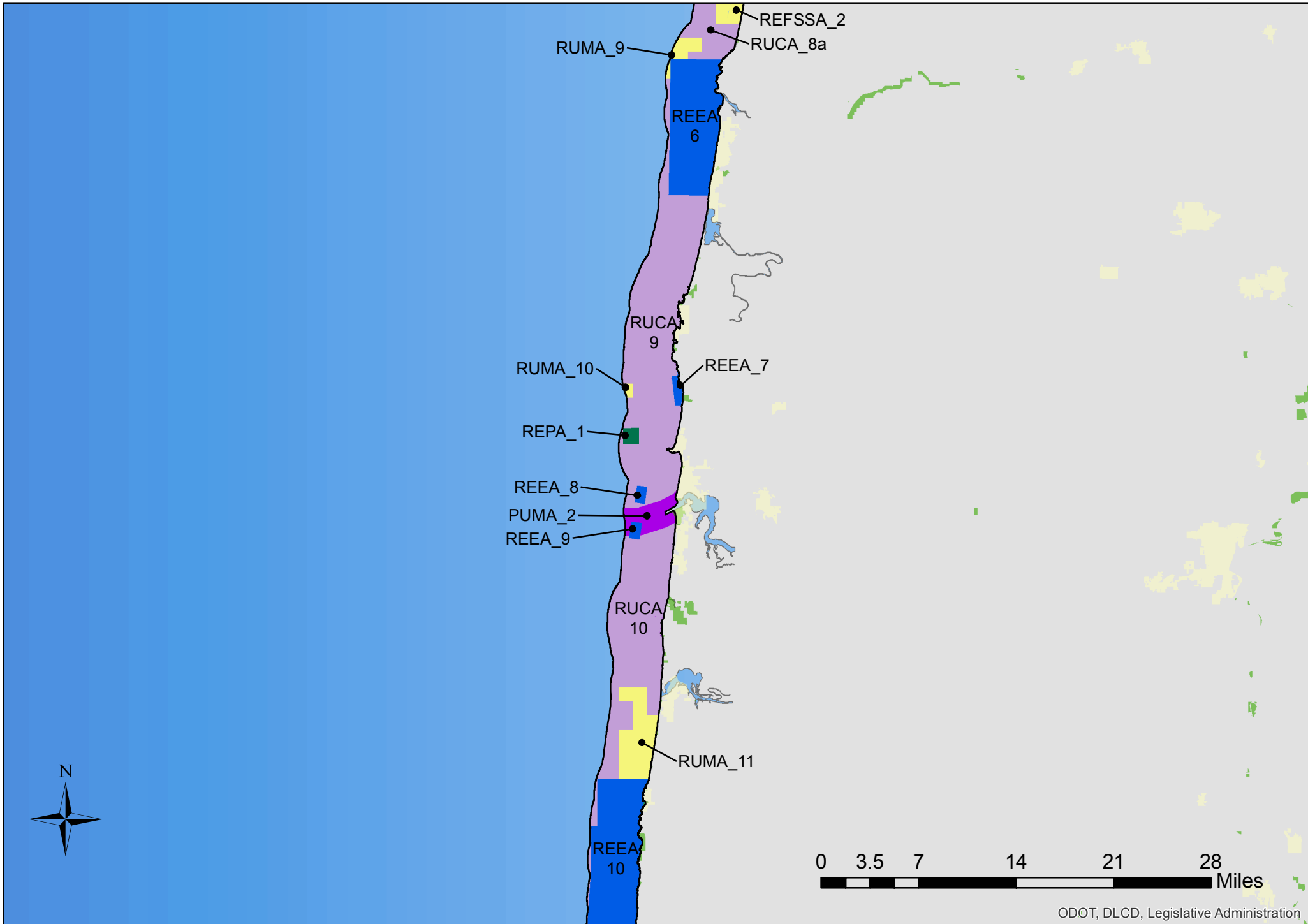
# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



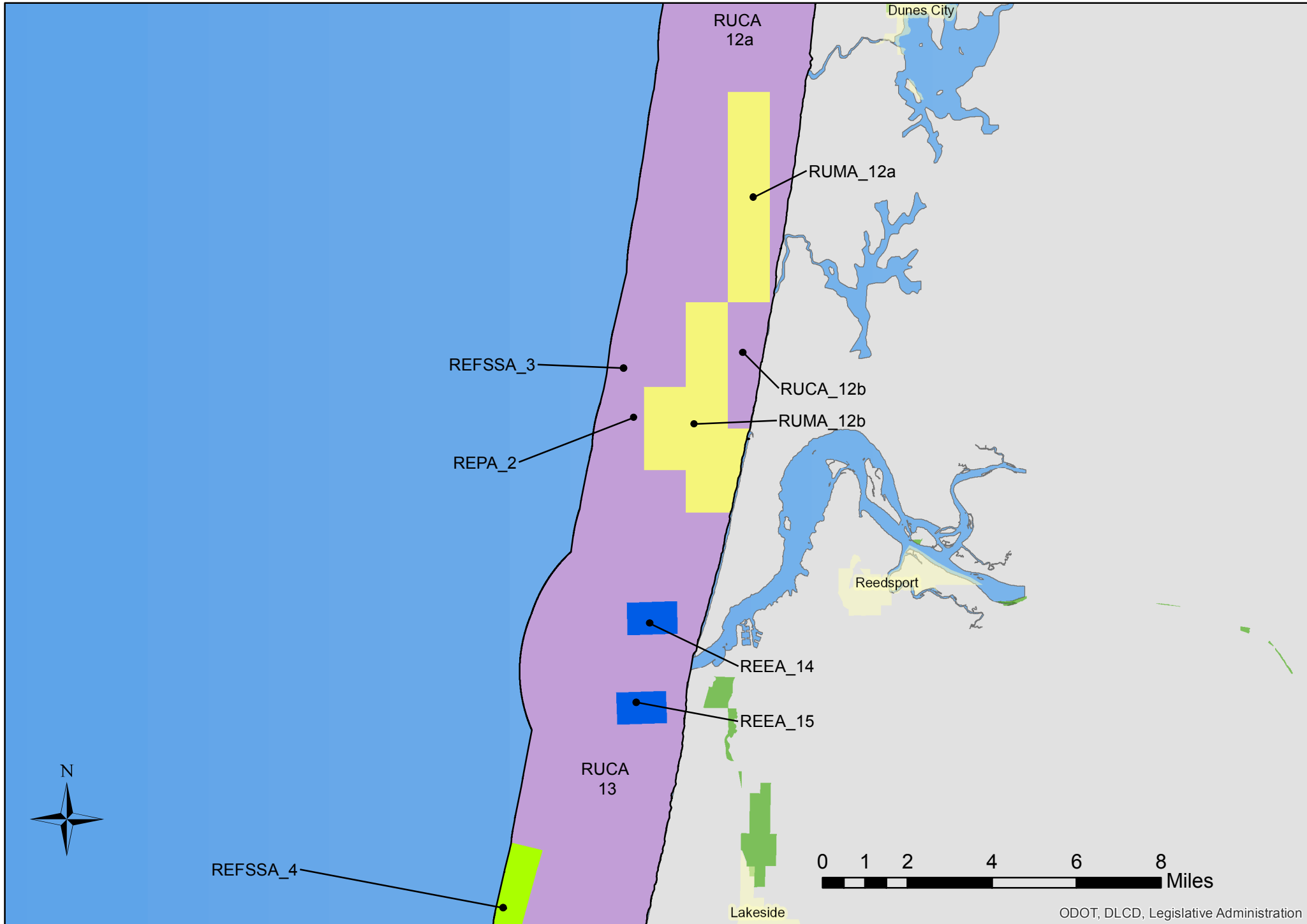
# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



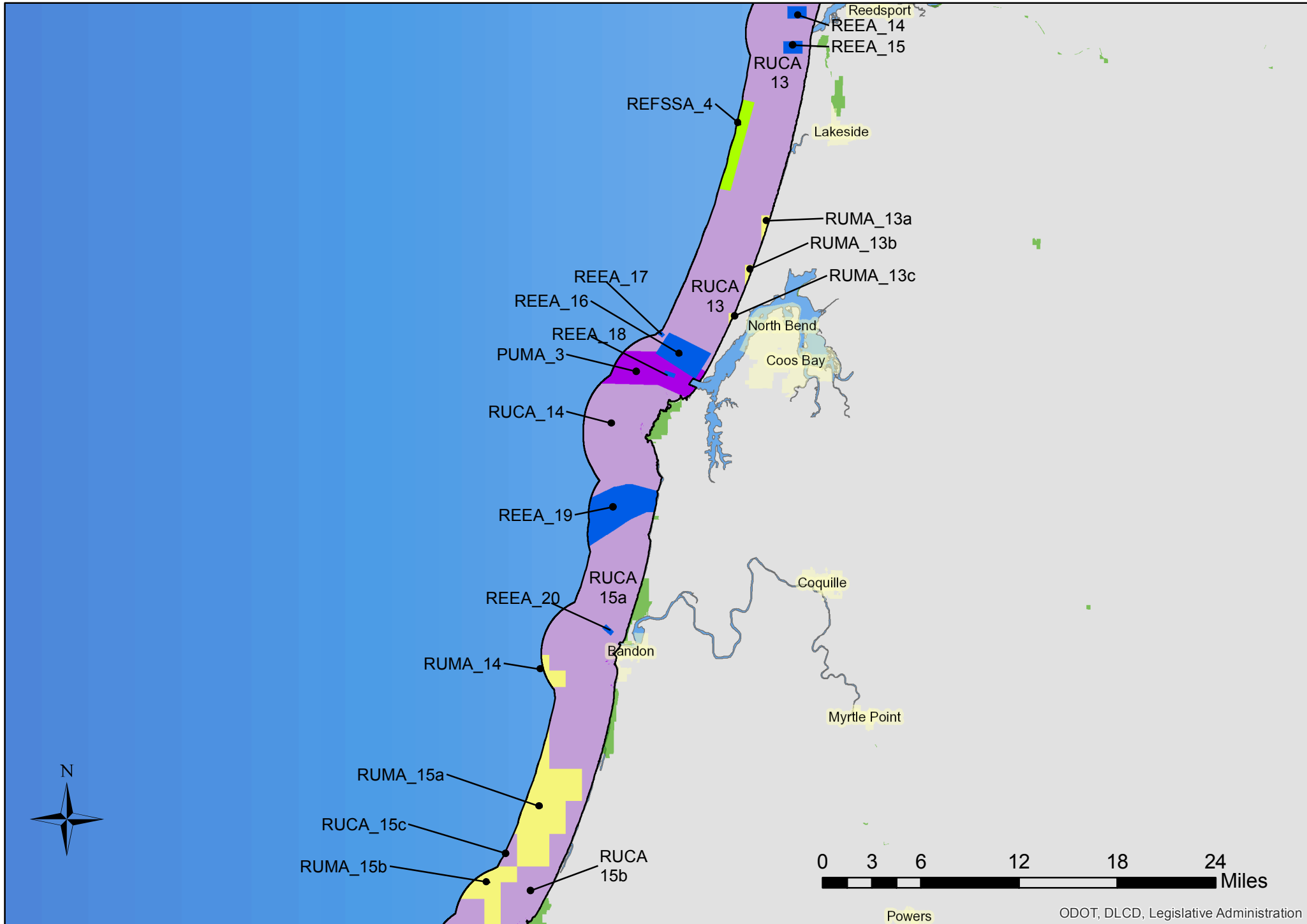
# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



# Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



## Territorial Sea Plan Part Five: Resources and Uses Inventory Data Sets

The geospatial data sets for marine resources and uses listed below were used as the basis for delineating the areas that form the Territorial Sea Plan Part Five Plan Map.

### Beneficial Uses Data Sets

- Dredge Material Disposal
- Commercial Shipping Lanes
- Coastal Discharge Outfalls
- National Wildlife Refuges
- NNMREC Test Site
- Submarine Cables
- State Marine Managed Areas
- FERC Preliminary Permits
- Tugboat Towlanes
- Ocean Recreation
- Navigational Aides
- Nearshore Research Inventory
- Visual Resource Management Class Map

### Ecological Resources Data Sets

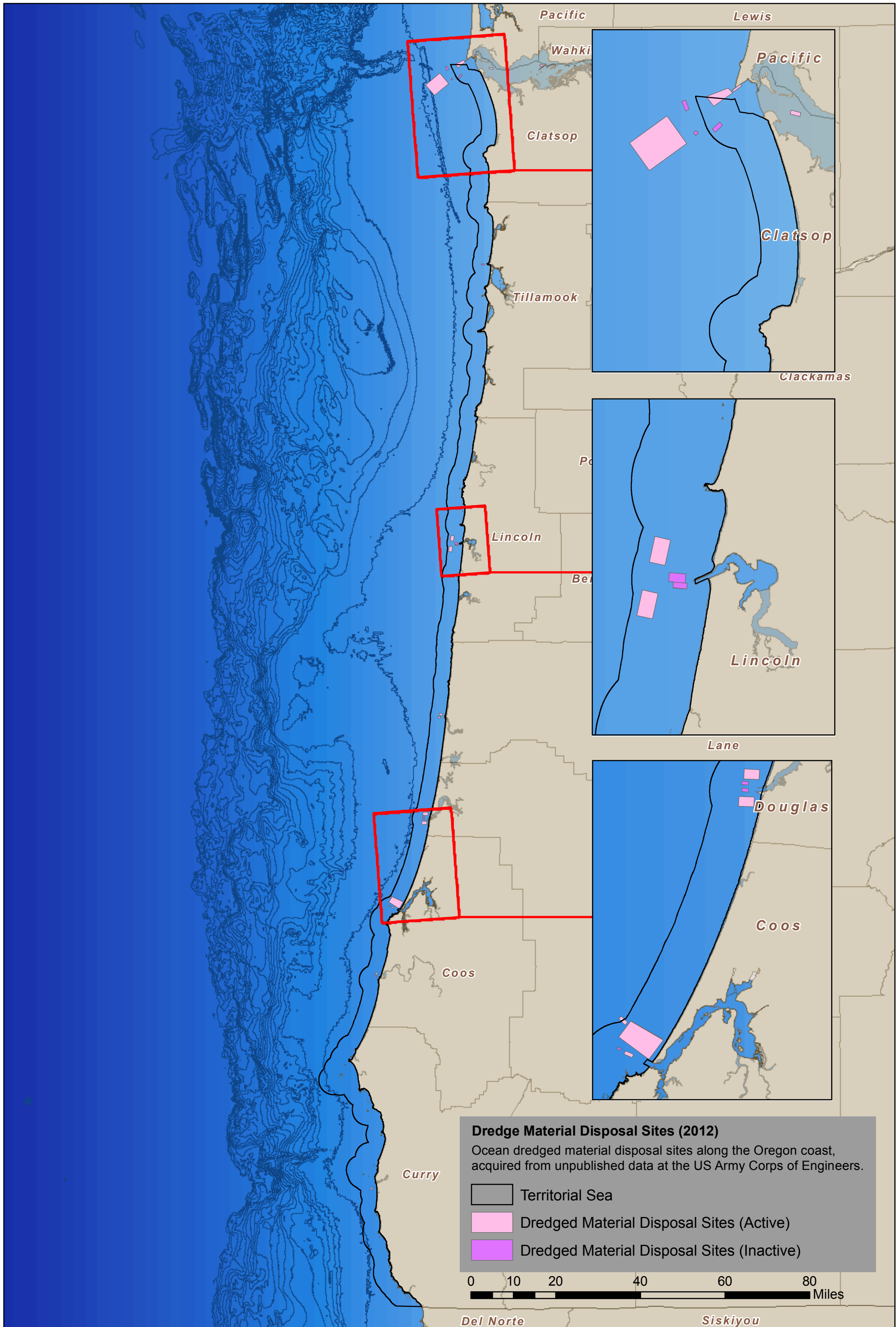
- Canopy Kelp Beds
- Subtidal Rocky Reef
- Rocky Shores Habitat
- Pinniped Haulouts
- Steller Sea Lion Critical Habitat
- Nesting Seabird Colony Locations
- Western Snowy Plover Habitat
- Ecological Hotspots
- Gray Whale Foraging
- Marbled Murrelet Foraging

### Fisheries Use Data Sets

- Multi-sector Area Fishing Grounds Value Maps
- Dungeness Crab Fishing Grounds Port Value Maps
- Dungeness Crab Fishing Grounds Statewide Value Maps

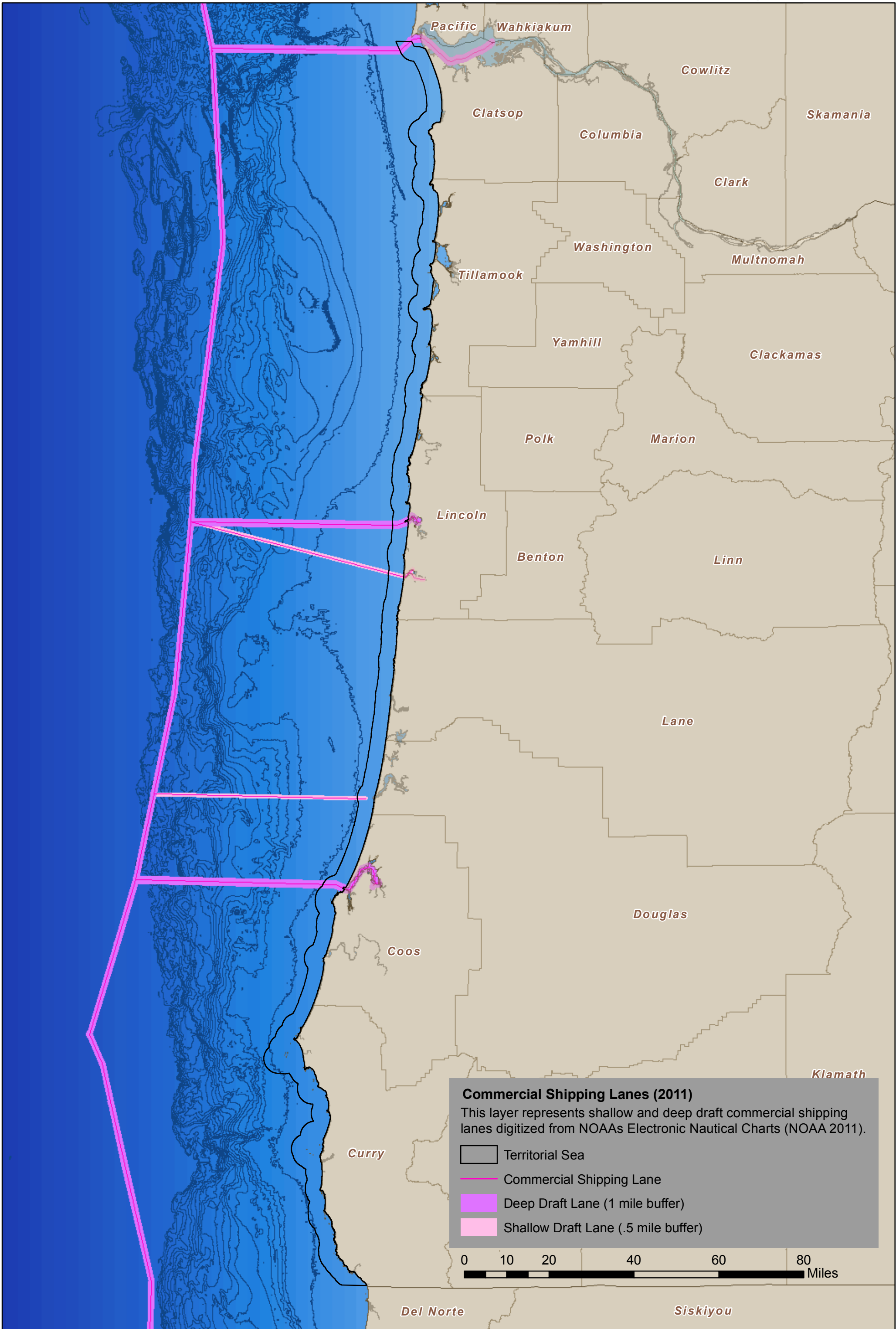
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Dredge Material Disposal



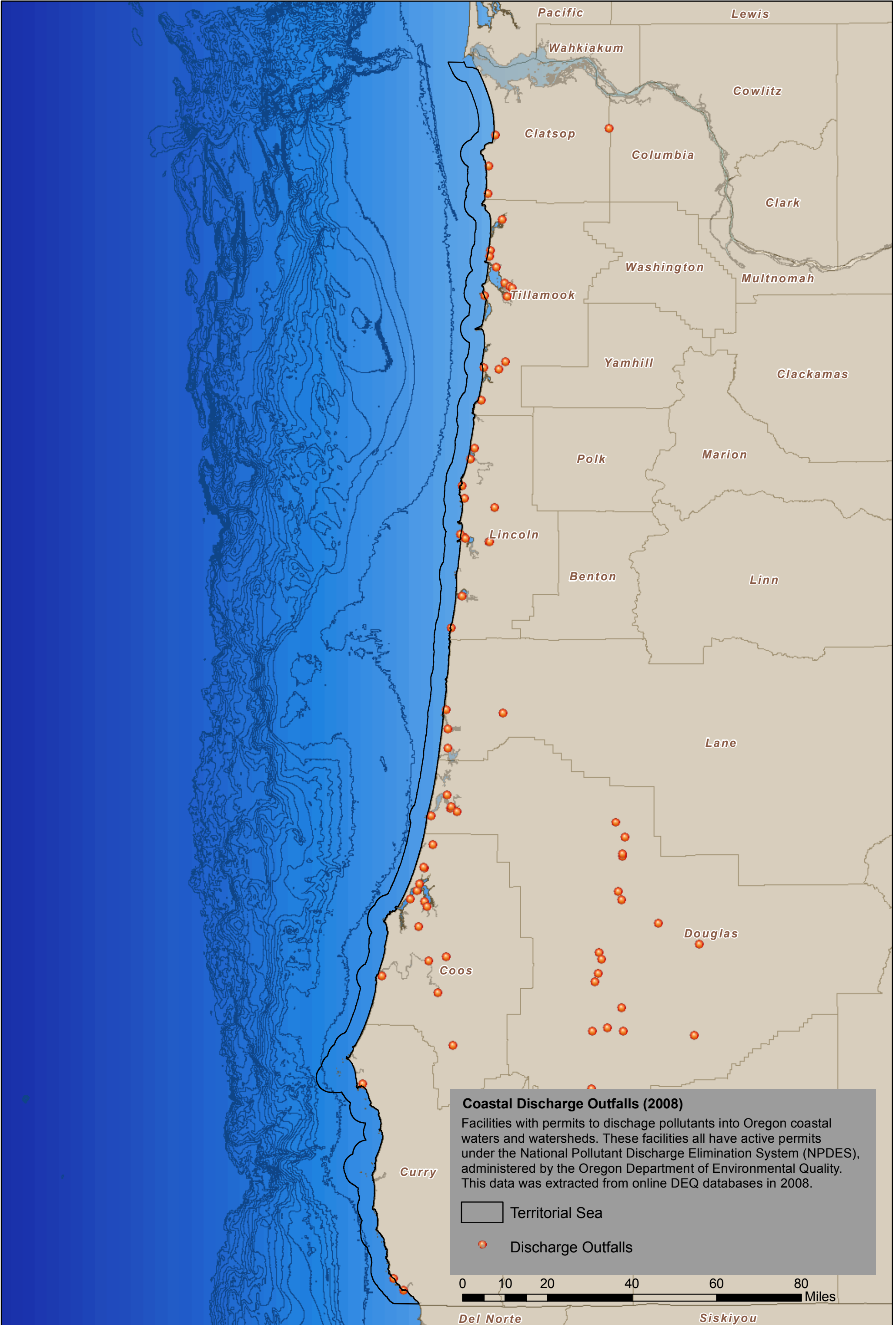
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Commercial Shipping Lanes



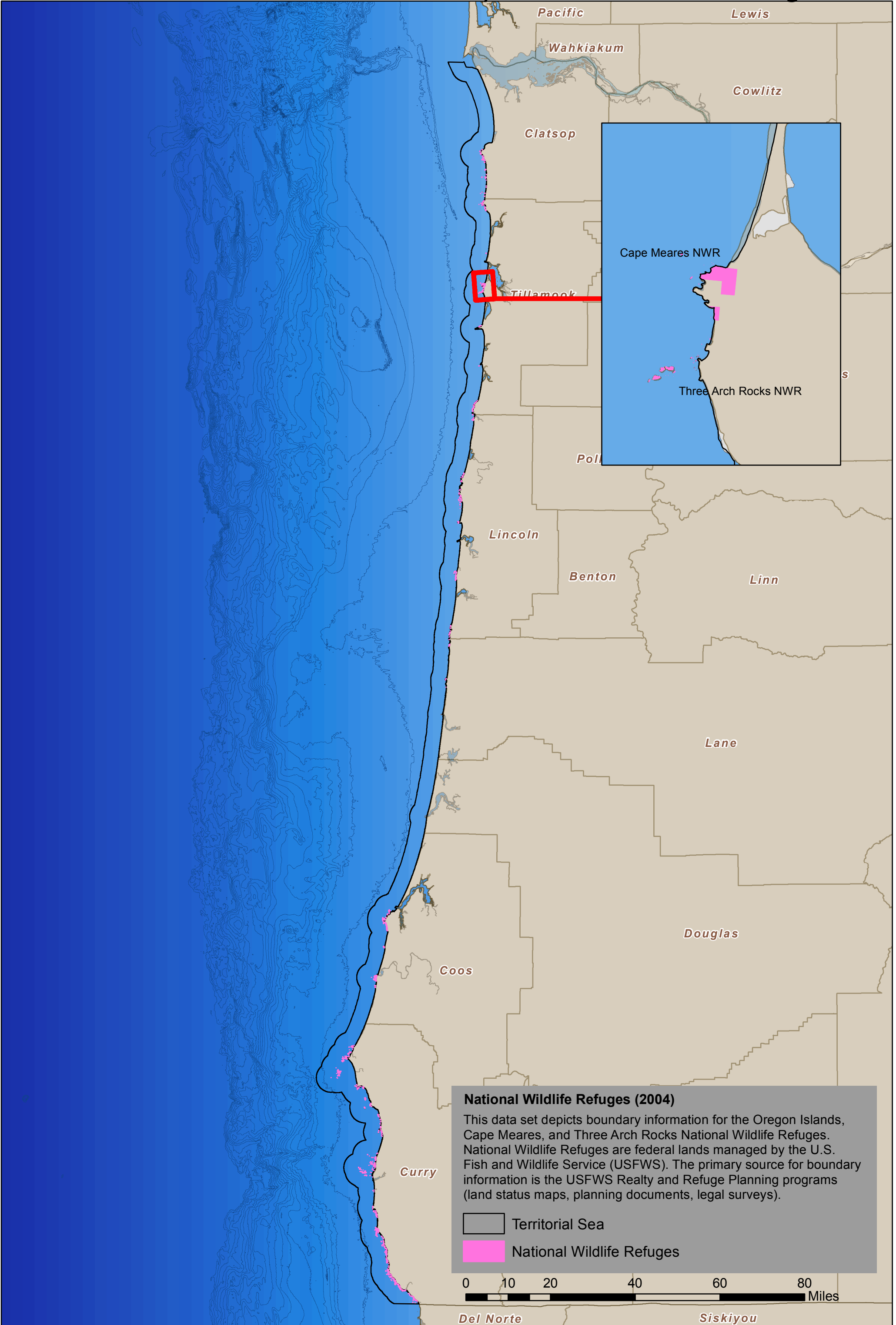
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Coastal Discharge Outfalls



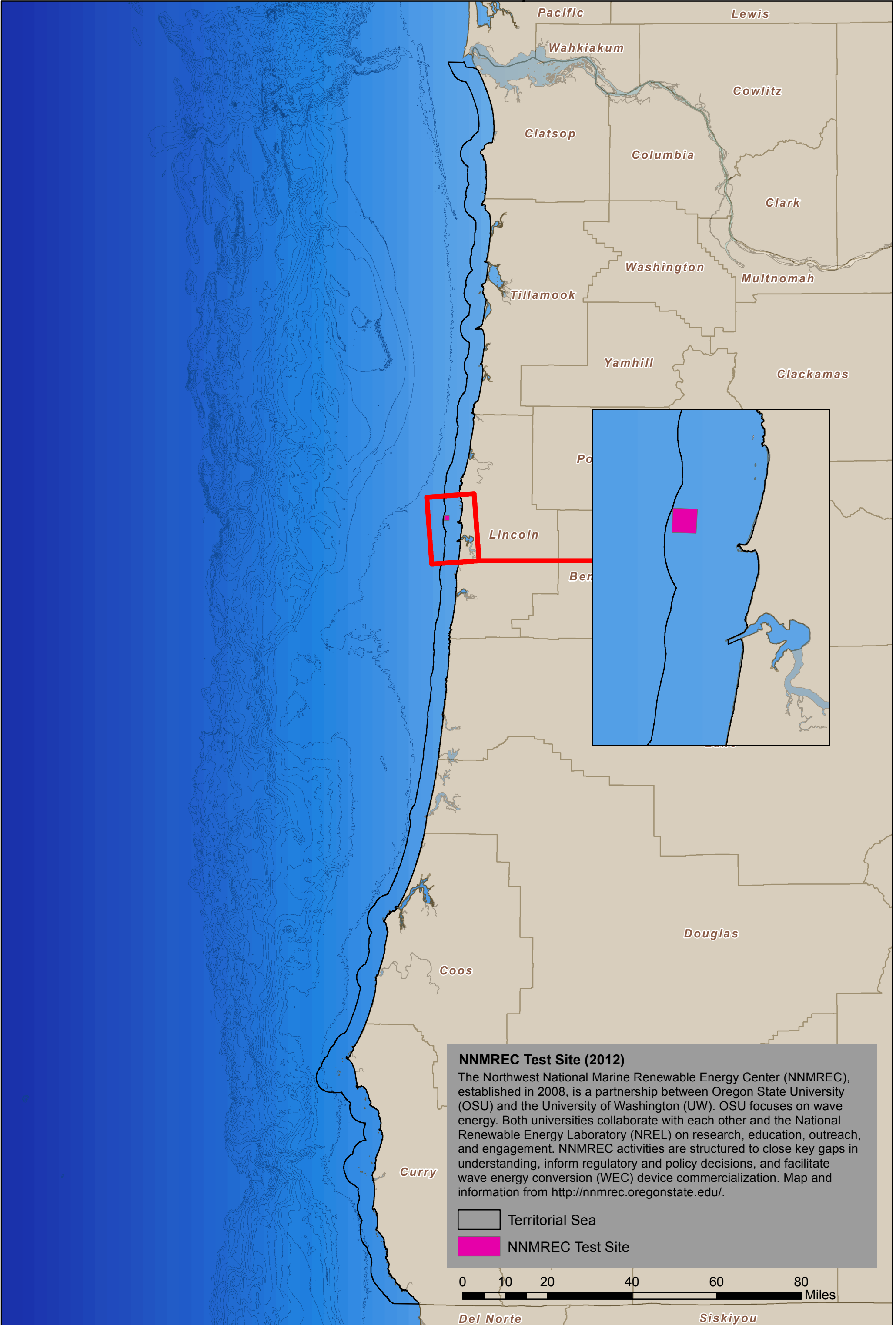
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - National Wildlife Refuges



# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - NNMREC Test Site



### NNMREC Test Site (2012)

The Northwest National Marine Renewable Energy Center (NNMREC), established in 2008, is a partnership between Oregon State University (OSU) and the University of Washington (UW). OSU focuses on wave energy. Both universities collaborate with each other and the National Renewable Energy Laboratory (NREL) on research, education, outreach, and engagement. NNMREC activities are structured to close key gaps in understanding, inform regulatory and policy decisions, and facilitate wave energy conversion (WEC) device commercialization. Map and information from <http://nnmrec.oregonstate.edu/>.

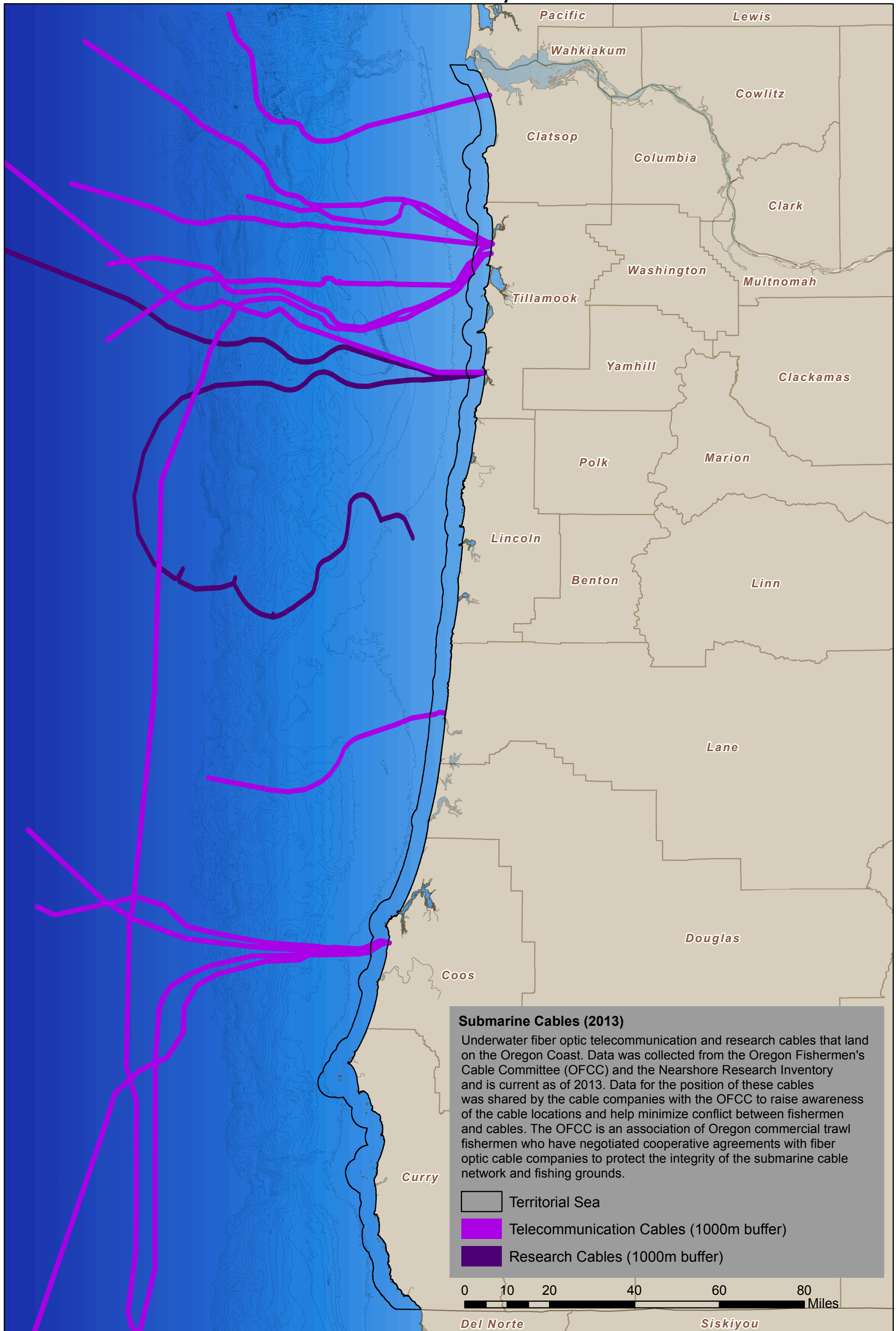
Territorial Sea

NNMREC Test Site

0 10 20 40 60 80 Miles

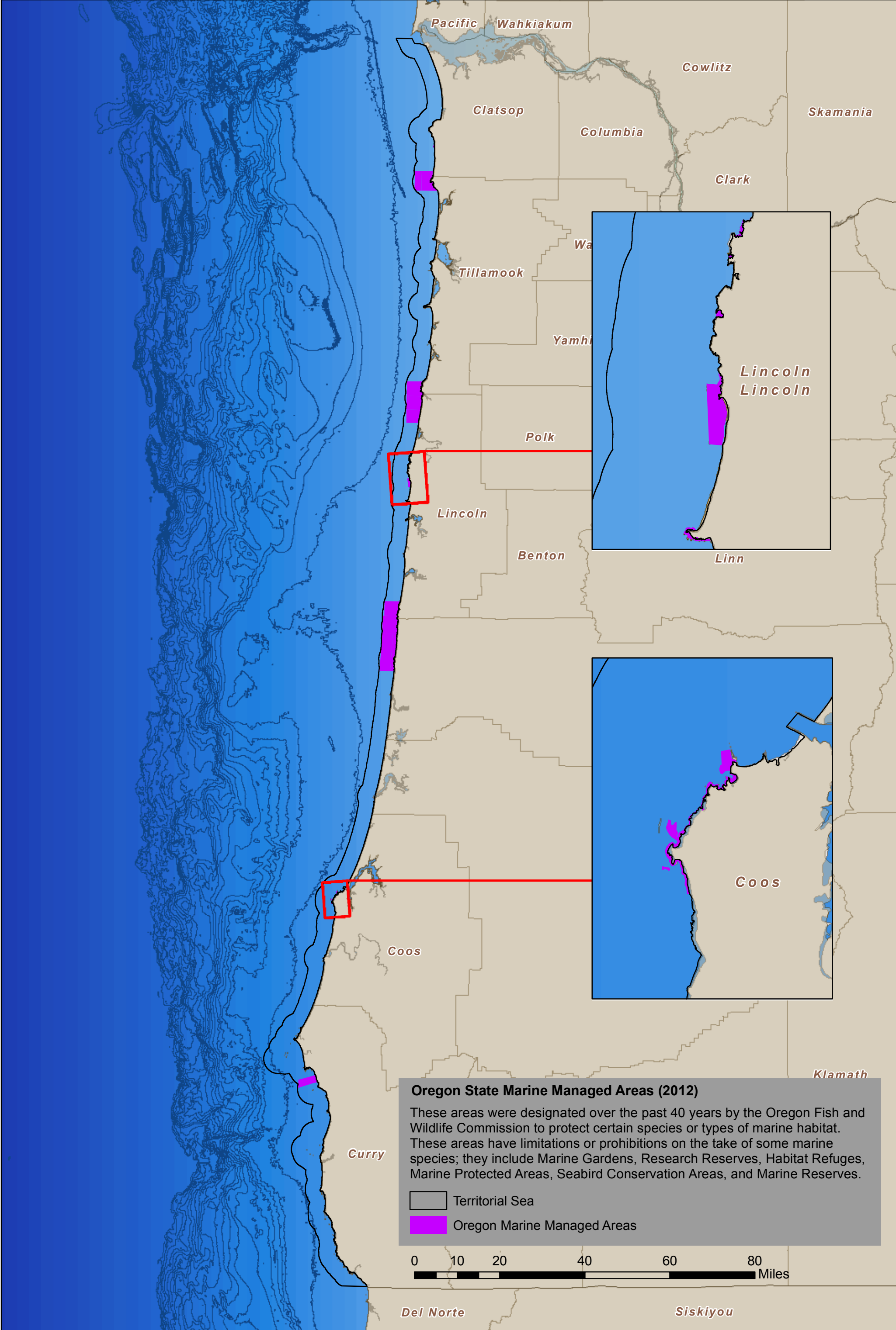
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Submarine Cables



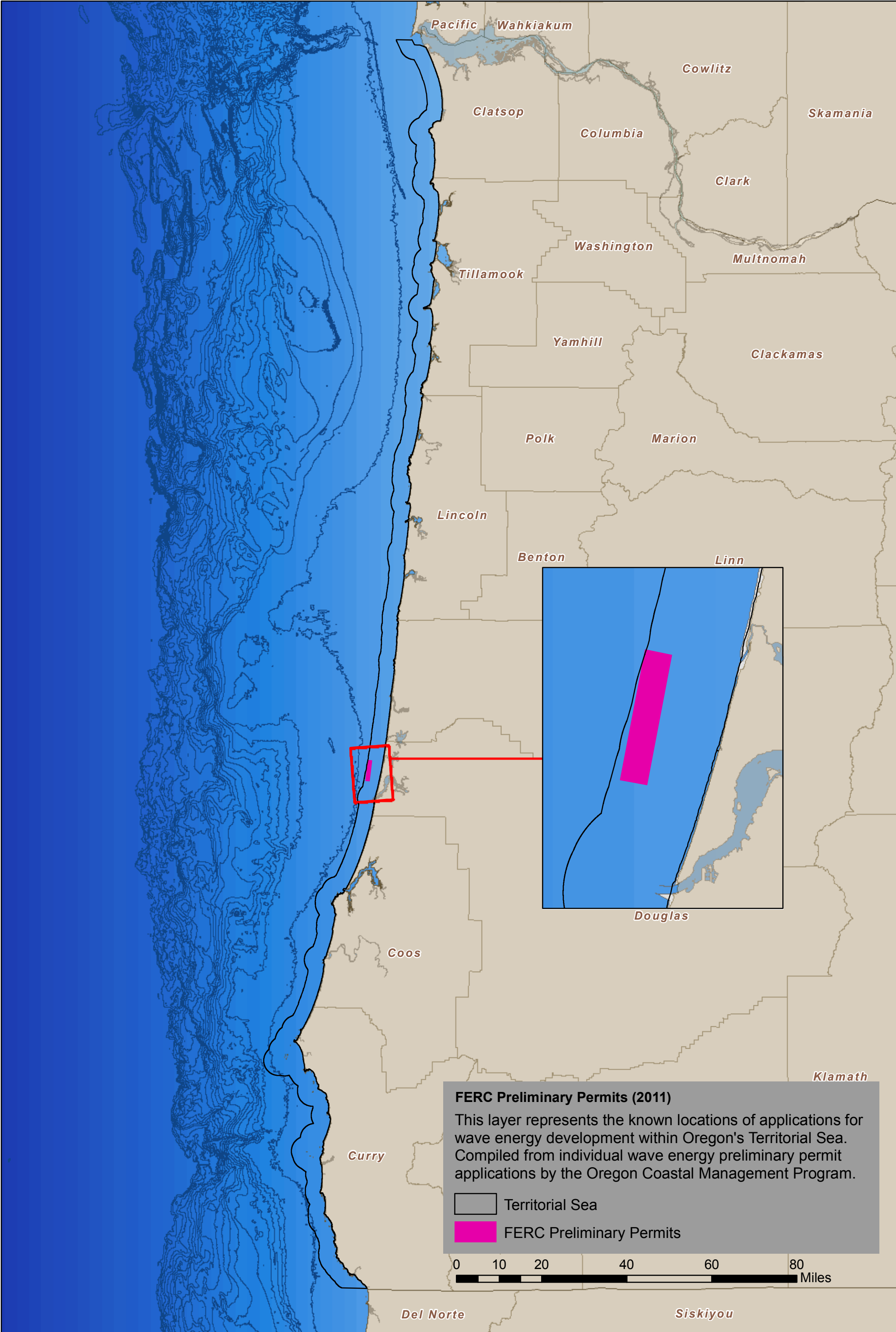
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - State Marine Managed Areas





# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - FERC Preliminary Permits



### FERC Preliminary Permits (2011)

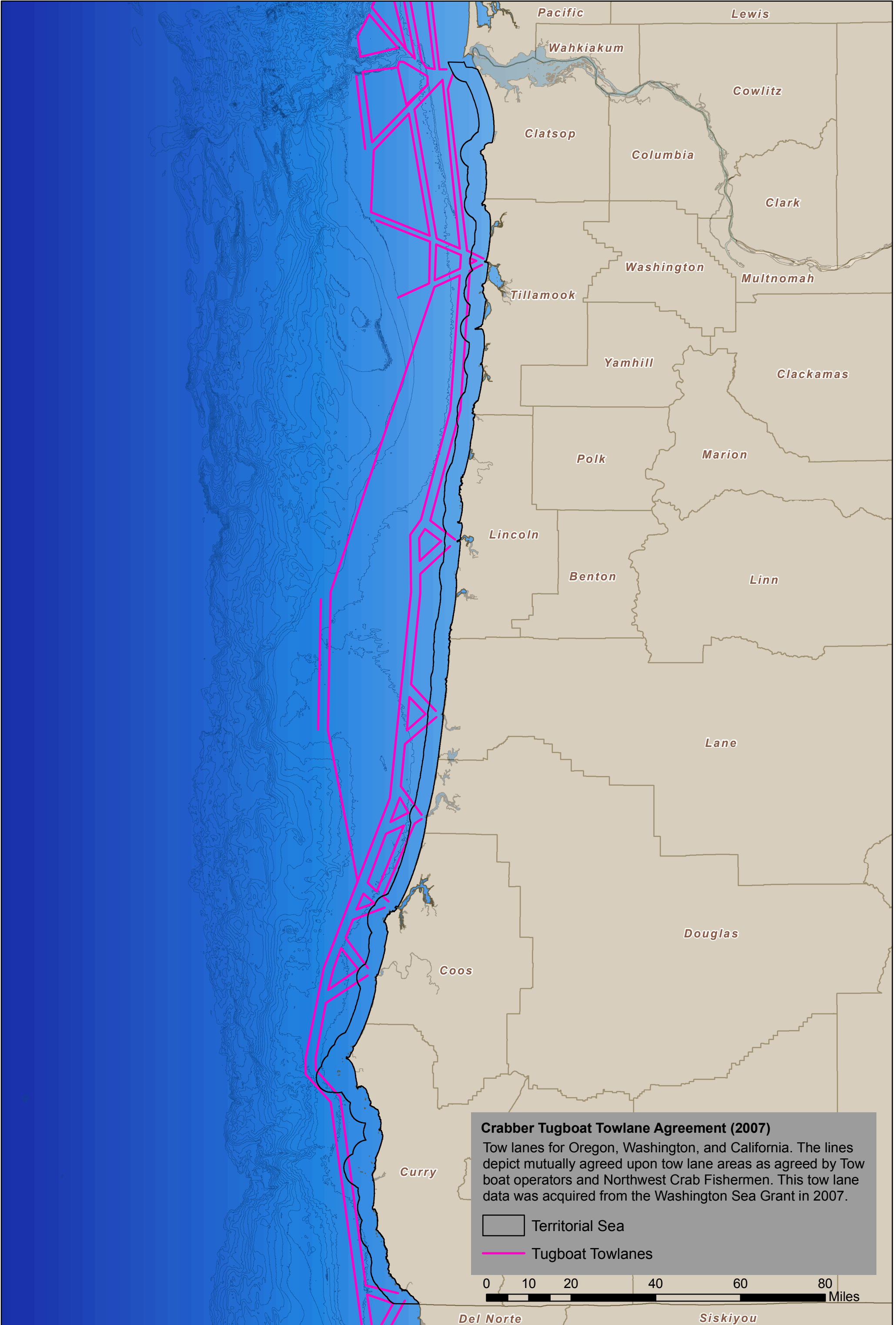
This layer represents the known locations of applications for wave energy development within Oregon's Territorial Sea. Compiled from individual wave energy preliminary permit applications by the Oregon Coastal Management Program.

-  Territorial Sea
-  FERC Preliminary Permits

0 10 20 40 60 80 Miles

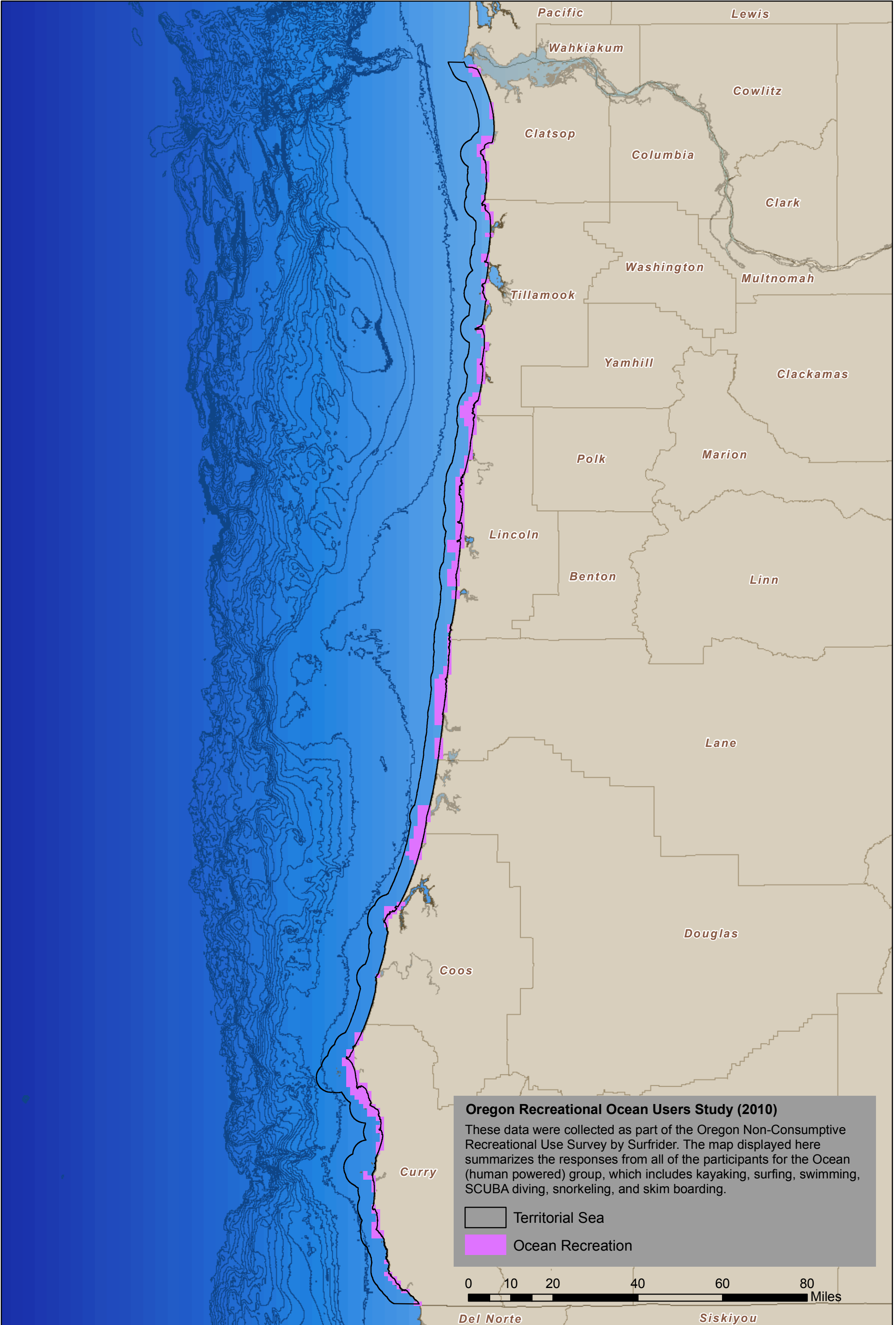
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Tugboat Towlanes



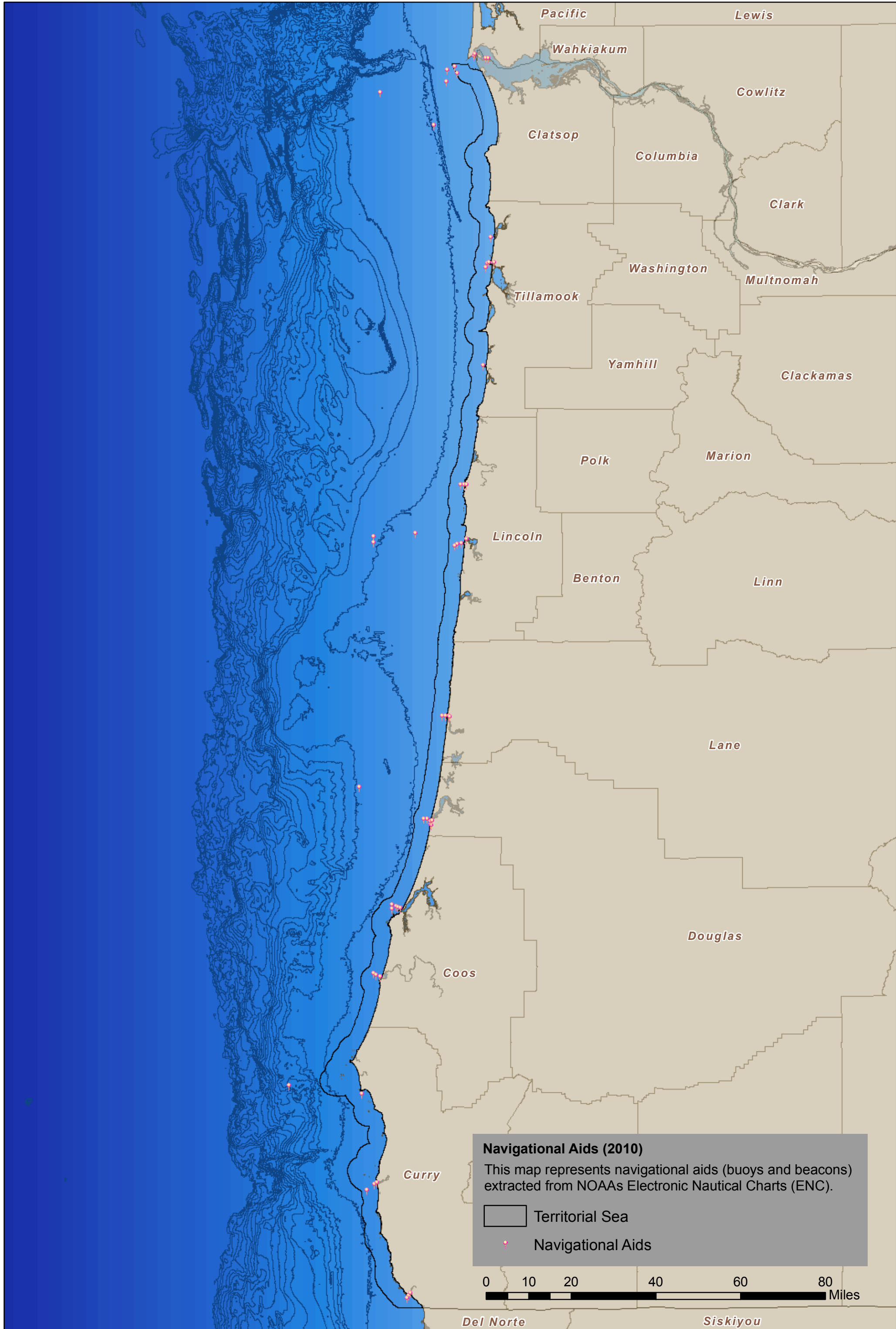
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Ocean Recreation



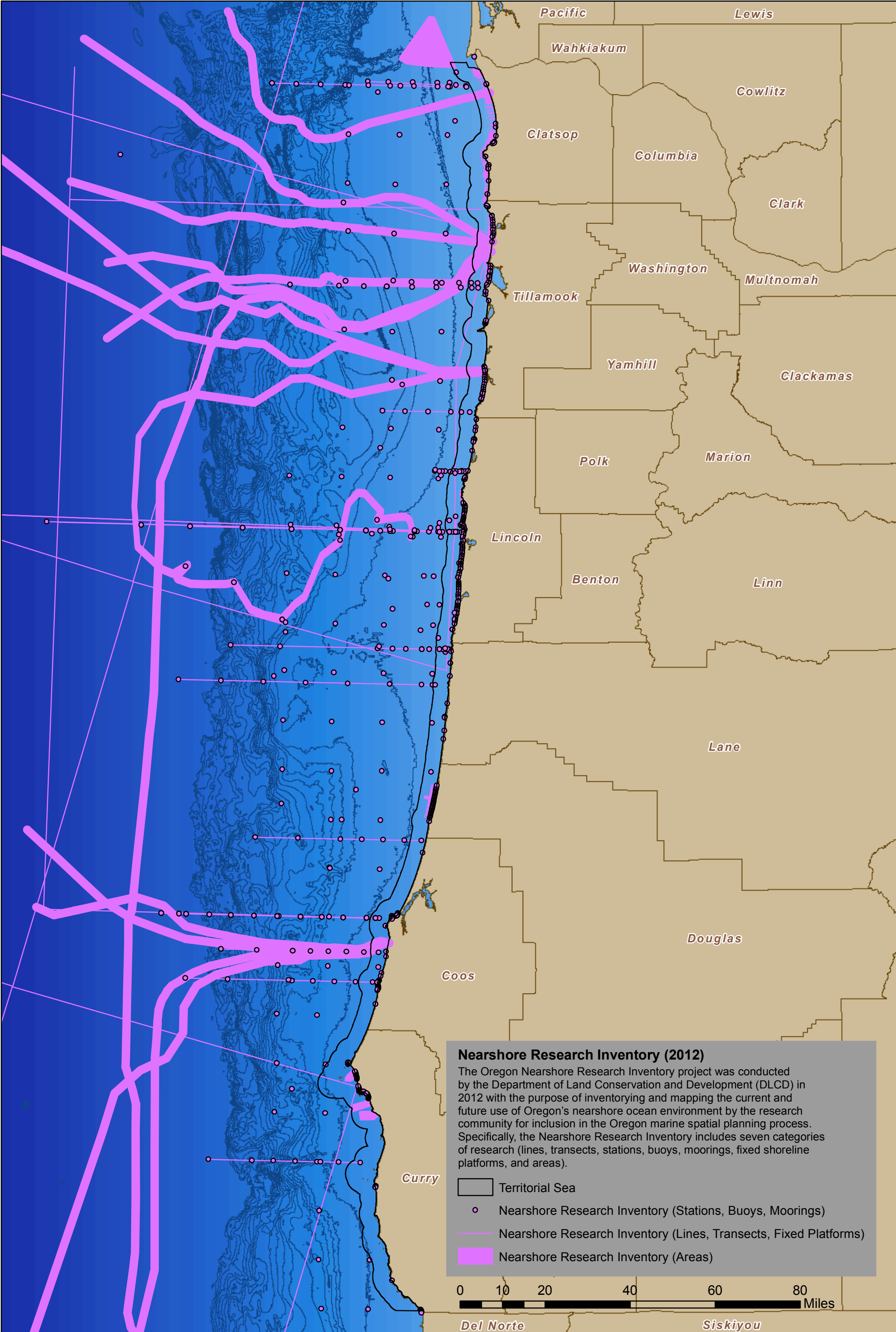
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Navigational Aids



# Territorial Sea Plan Part Five Appendix B - Plan Map

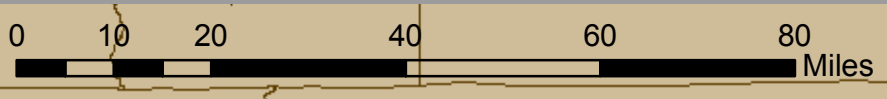
## Beneficial Uses Resource Inventory - Nearshore Research Inventory



**Nearshore Research Inventory (2012)**

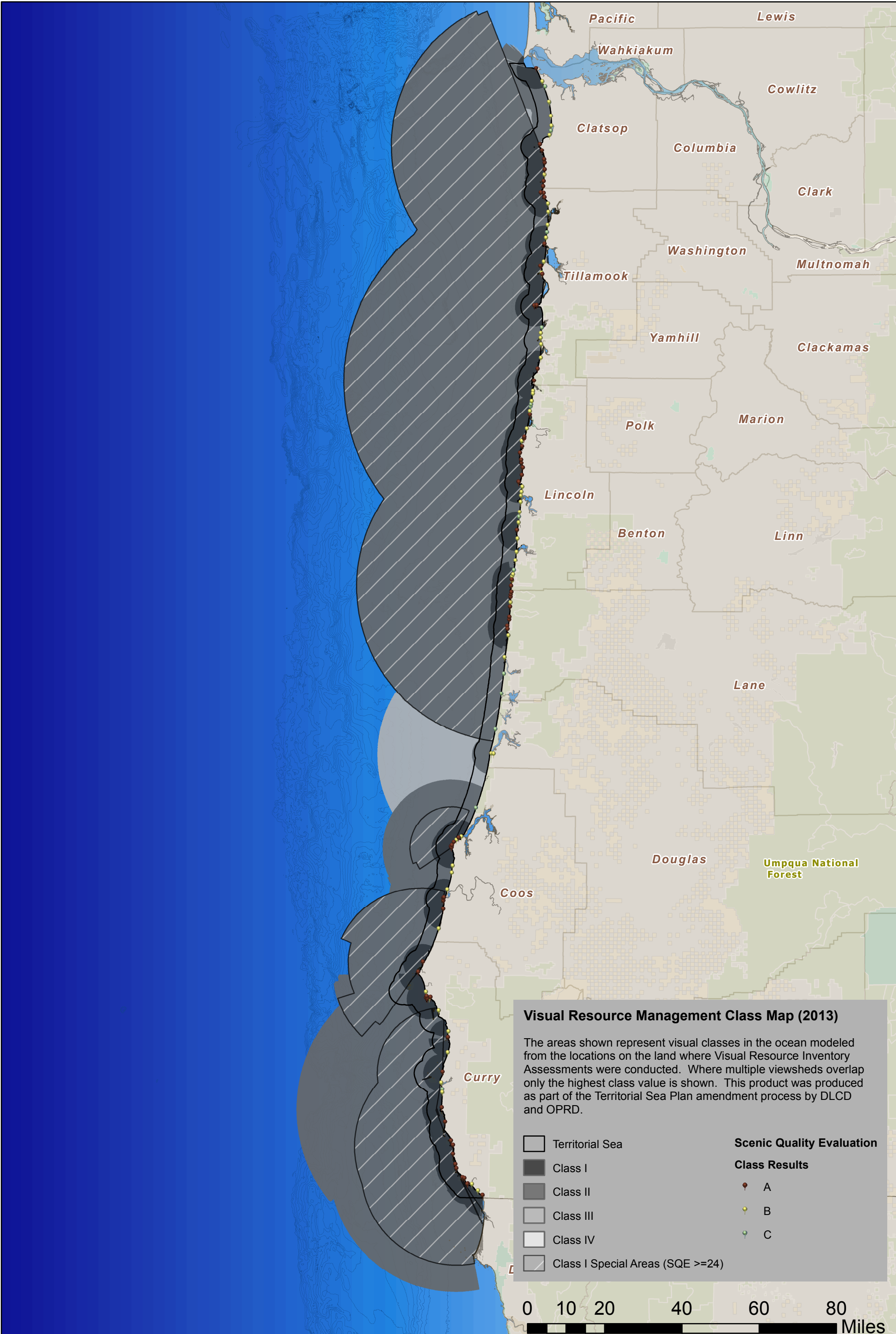
The Oregon Nearshore Research Inventory project was conducted by the Department of Land Conservation and Development (DLCD) in 2012 with the purpose of inventorying and mapping the current and future use of Oregon's nearshore ocean environment by the research community for inclusion in the Oregon marine spatial planning process. Specifically, the Nearshore Research Inventory includes seven categories of research (lines, transects, stations, buoys, moorings, fixed shoreline platforms, and areas).

- Territorial Sea
- Nearshore Research Inventory (Stations, Buoys, Moorings)
- Nearshore Research Inventory (Lines, Transects, Fixed Platforms)
- Nearshore Research Inventory (Areas)



# Territorial Sea Plan Part Five Appendix B - Plan Map

## Beneficial Uses Resource Inventory - Visual Resource Class Map



**Visual Resource Management Class Map (2013)**

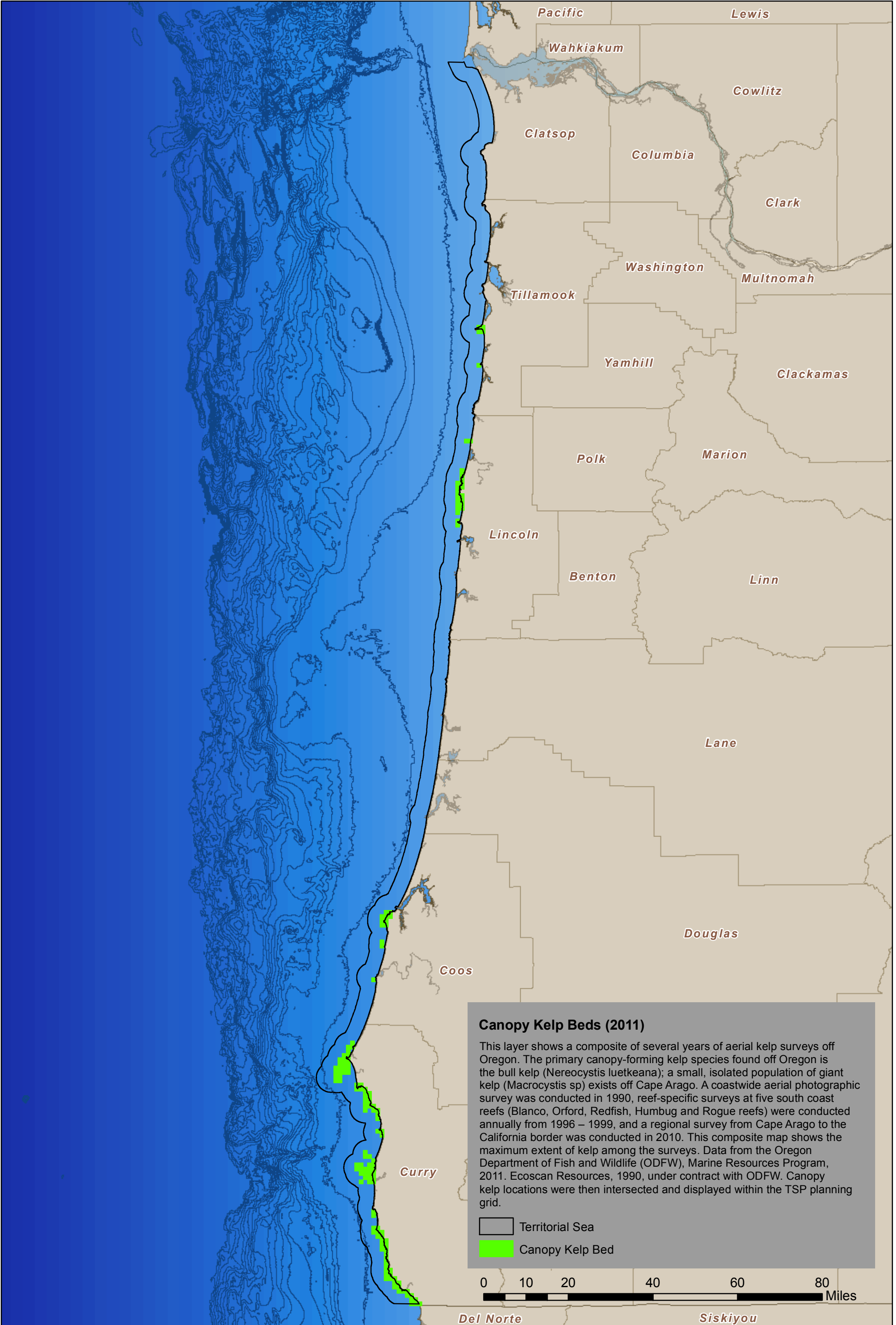
The areas shown represent visual classes in the ocean modeled from the locations on the land where Visual Resource Inventory Assessments were conducted. Where multiple viewsheds overlap only the highest class value is shown. This product was produced as part of the Territorial Sea Plan amendment process by DLC and OPRD.

Territorial Sea	<b>Scenic Quality Evaluation</b>
Class I	<b>Class Results</b>
Class II	A
Class III	B
Class IV	C
Class I Special Areas (SQE >=24)	

0 10 20 40 60 80 Miles

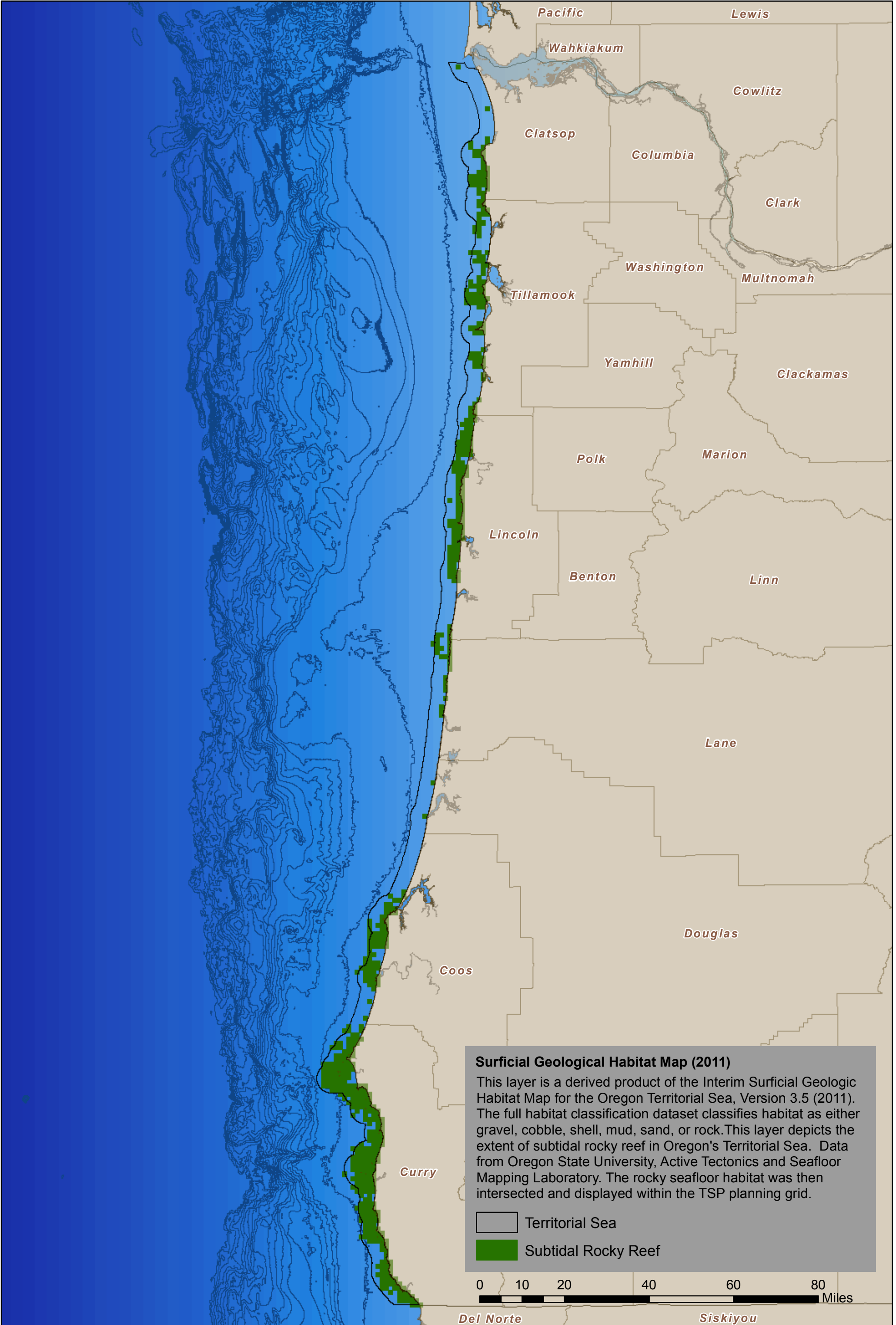
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Canopy Kelp Beds



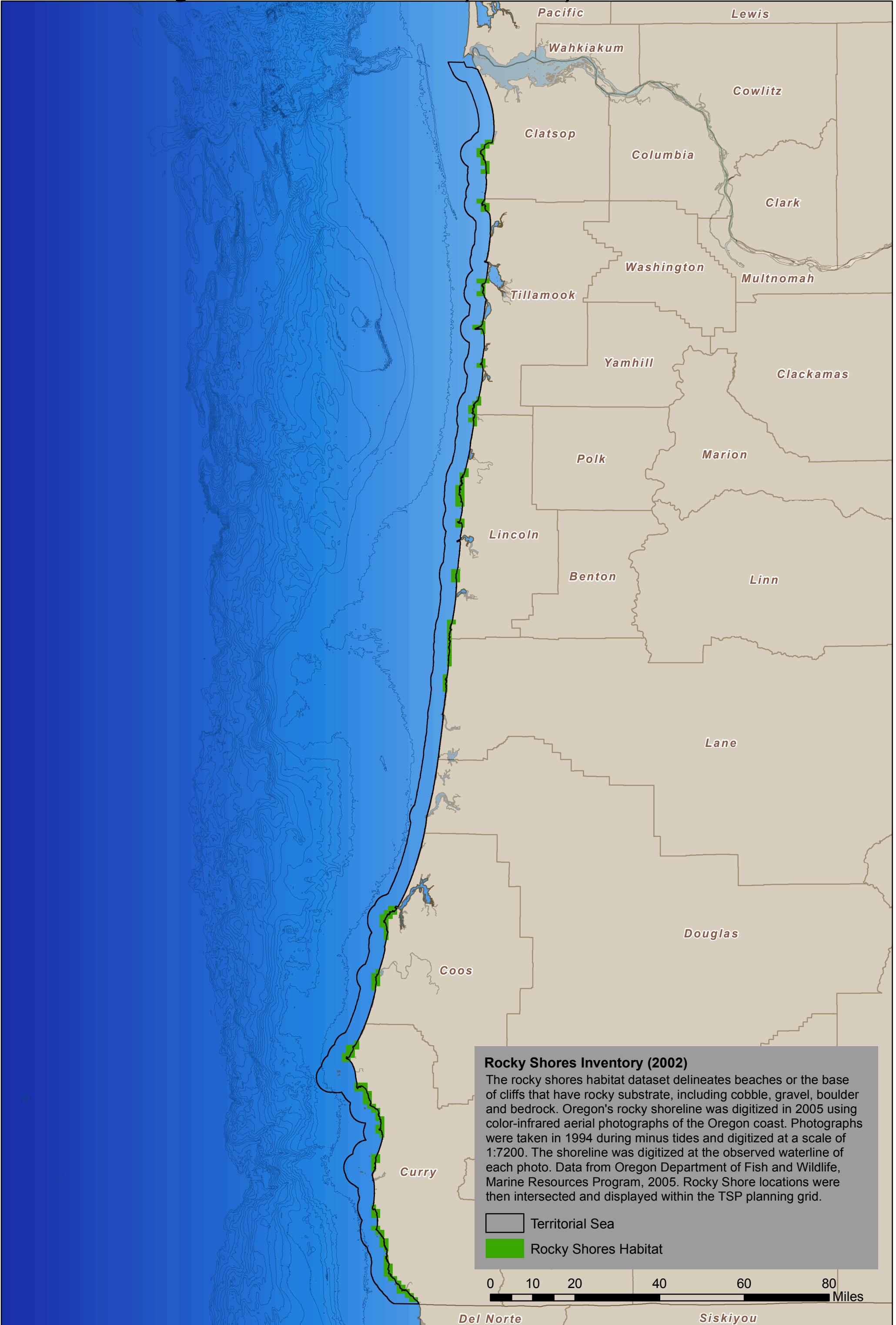
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Subtidal Rocky Reef



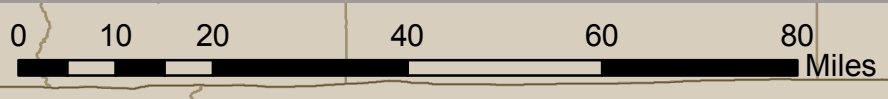
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Rocky Shores Habitat



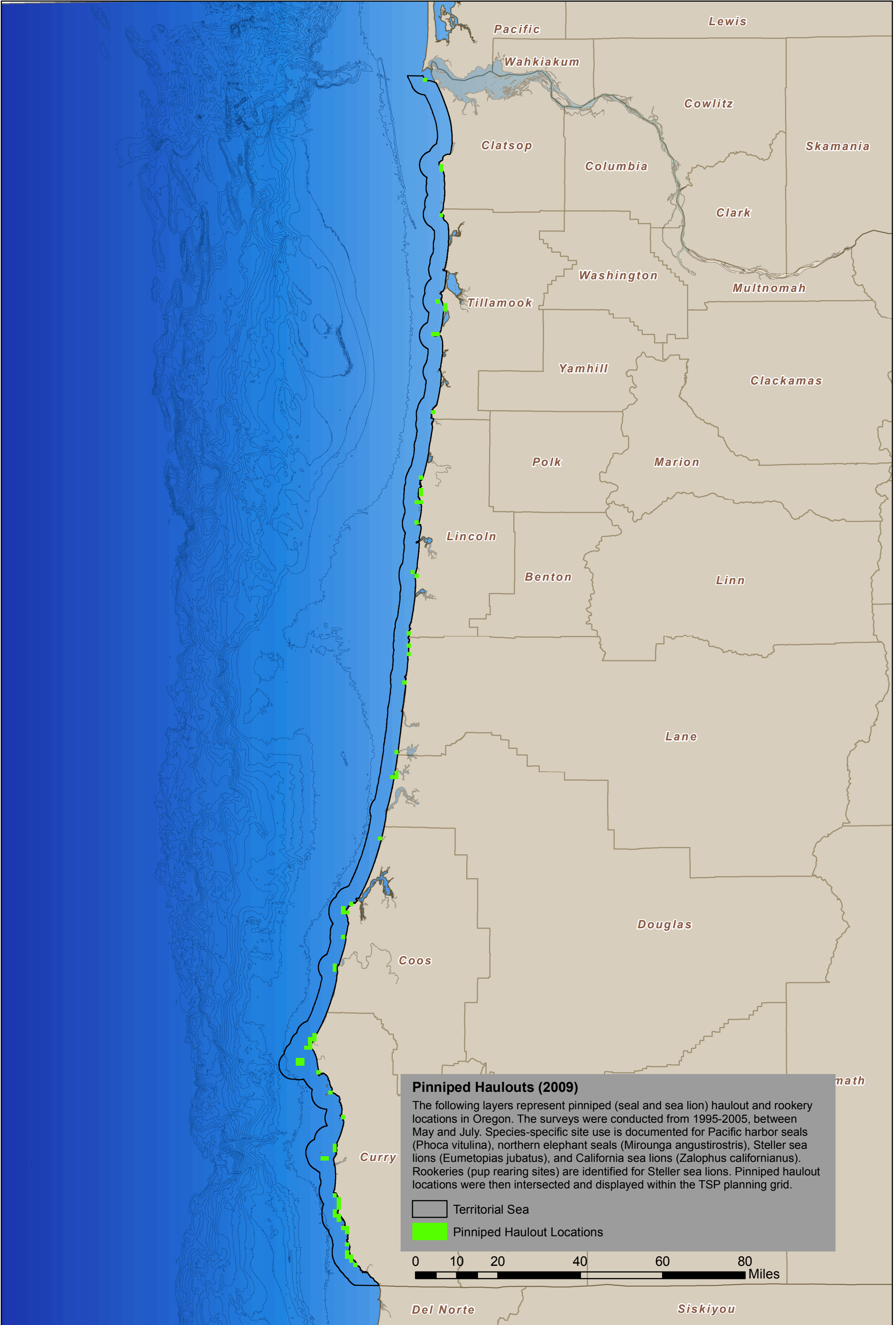
**Rocky Shores Inventory (2002)**  
The rocky shores habitat dataset delineates beaches or the base of cliffs that have rocky substrate, including cobble, gravel, boulder and bedrock. Oregon's rocky shoreline was digitized in 2005 using color-infrared aerial photographs of the Oregon coast. Photographs were taken in 1994 during minus tides and digitized at a scale of 1:7200. The shoreline was digitized at the observed waterline of each photo. Data from Oregon Department of Fish and Wildlife, Marine Resources Program, 2005. Rocky Shore locations were then intersected and displayed within the TSP planning grid.

□ Territorial Sea  
■ Rocky Shores Habitat



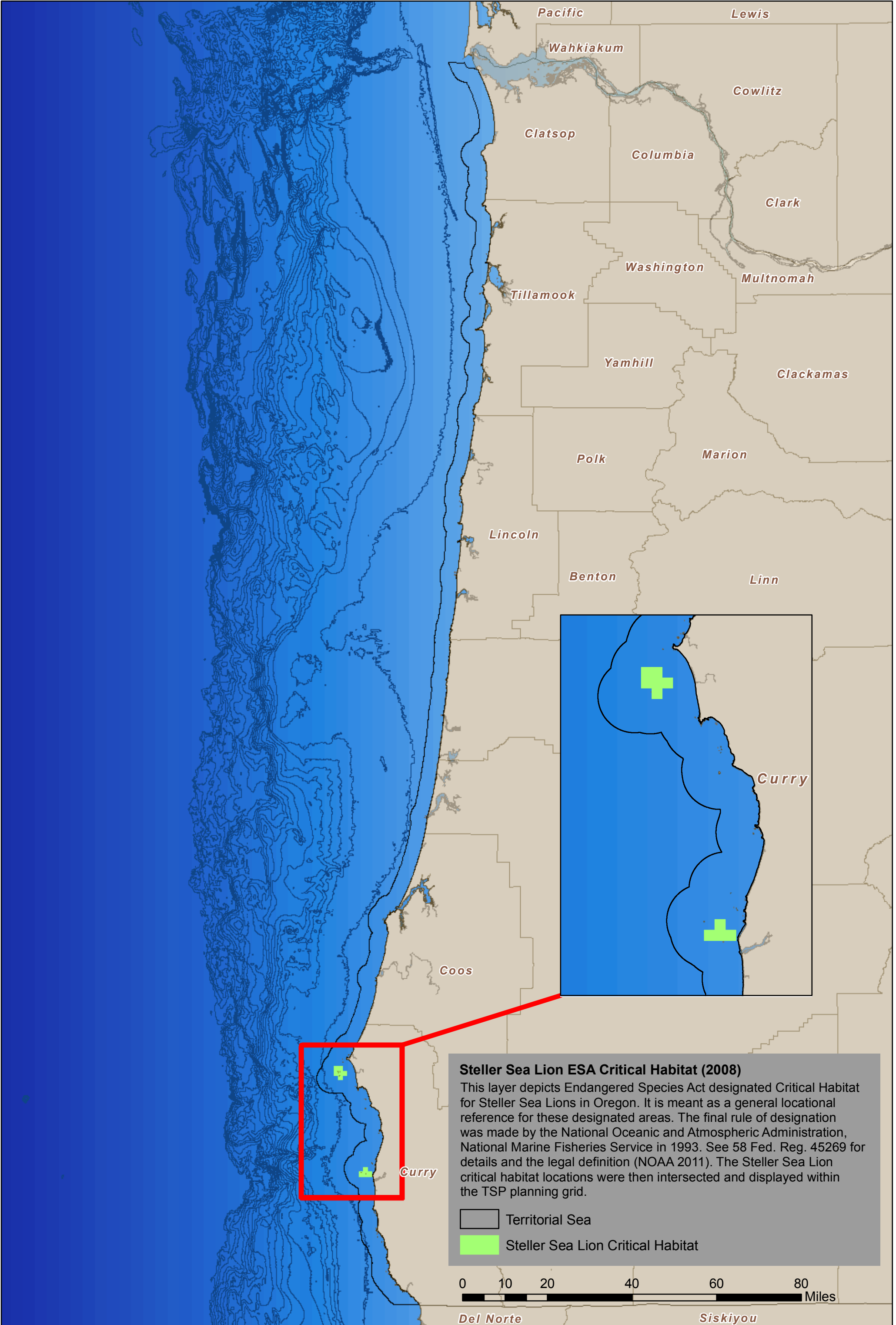
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Pinniped Haulouts





# Territorial Sea Plan Part Five Appendix B - Plan Map

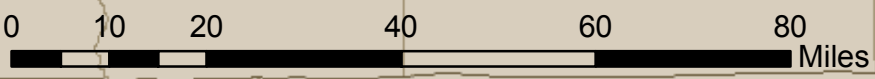
## Ecological Resource Inventory - Steller Sea Lion Critical Habitat



### Steller Sea Lion ESA Critical Habitat (2008)

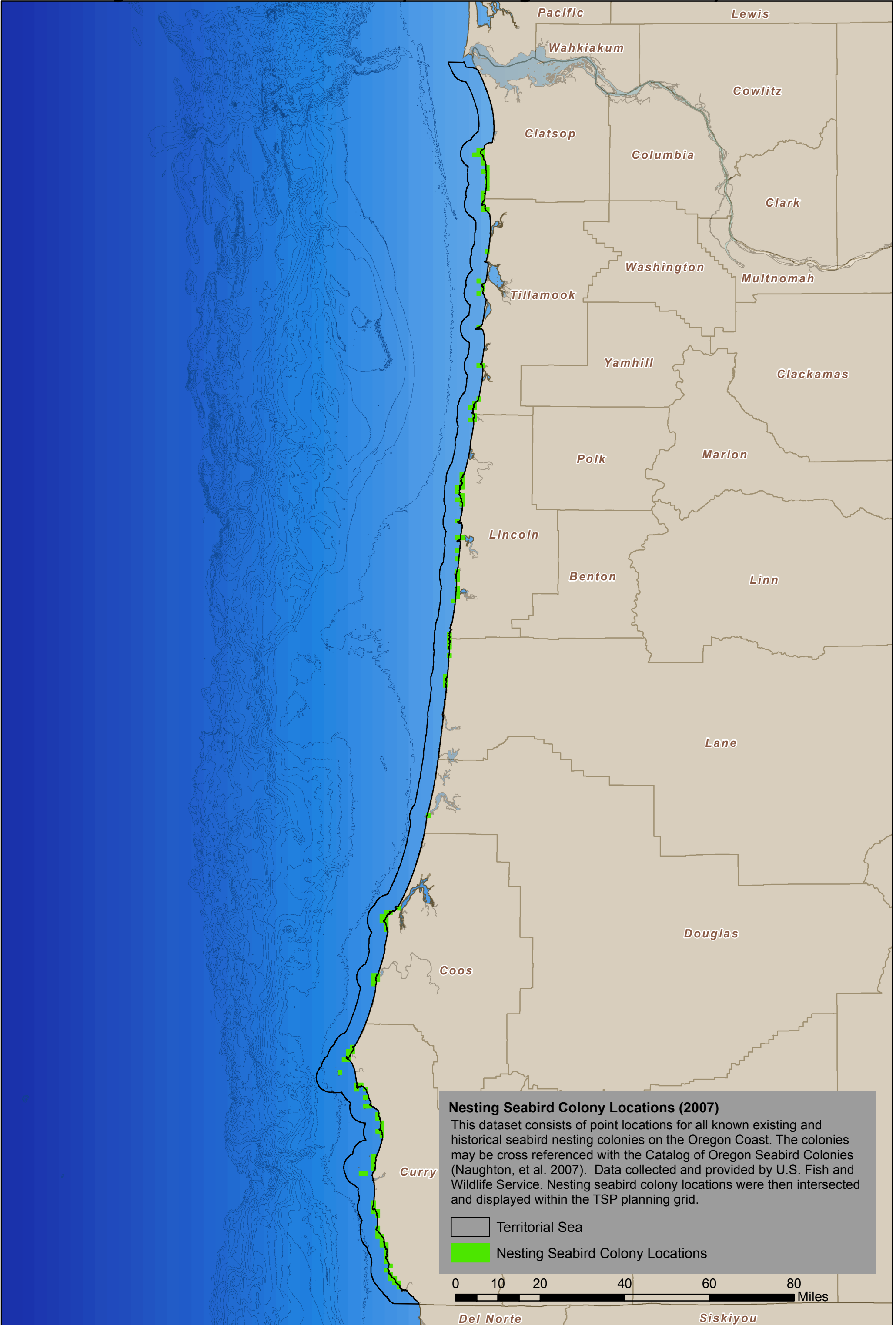
This layer depicts Endangered Species Act designated Critical Habitat for Steller Sea Lions in Oregon. It is meant as a general locational reference for these designated areas. The final rule of designation was made by the National Oceanic and Atmospheric Administration, National Marine Fisheries Service in 1993. See 58 Fed. Reg. 45269 for details and the legal definition (NOAA 2011). The Steller Sea Lion critical habitat locations were then intersected and displayed within the TSP planning grid.

-  Territorial Sea
-  Steller Sea Lion Critical Habitat

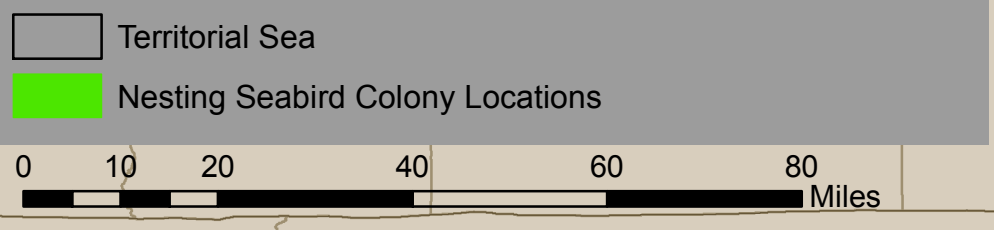


# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Nesting Seabird Colony Locations

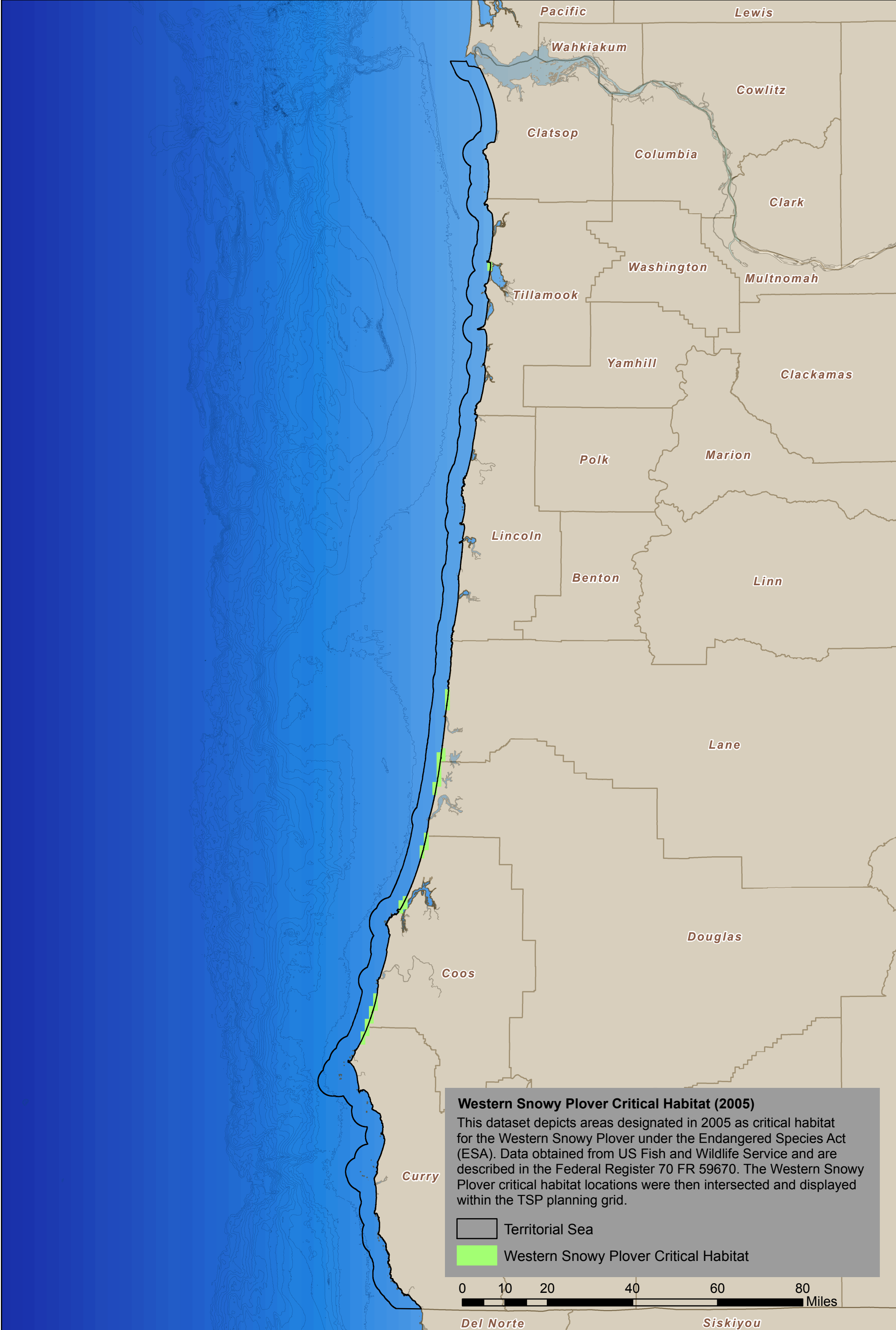


**Nesting Seabird Colony Locations (2007)**  
This dataset consists of point locations for all known existing and historical seabird nesting colonies on the Oregon Coast. The colonies may be cross referenced with the Catalog of Oregon Seabird Colonies (Naughton, et al. 2007). Data collected and provided by U.S. Fish and Wildlife Service. Nesting seabird colony locations were then intersected and displayed within the TSP planning grid.



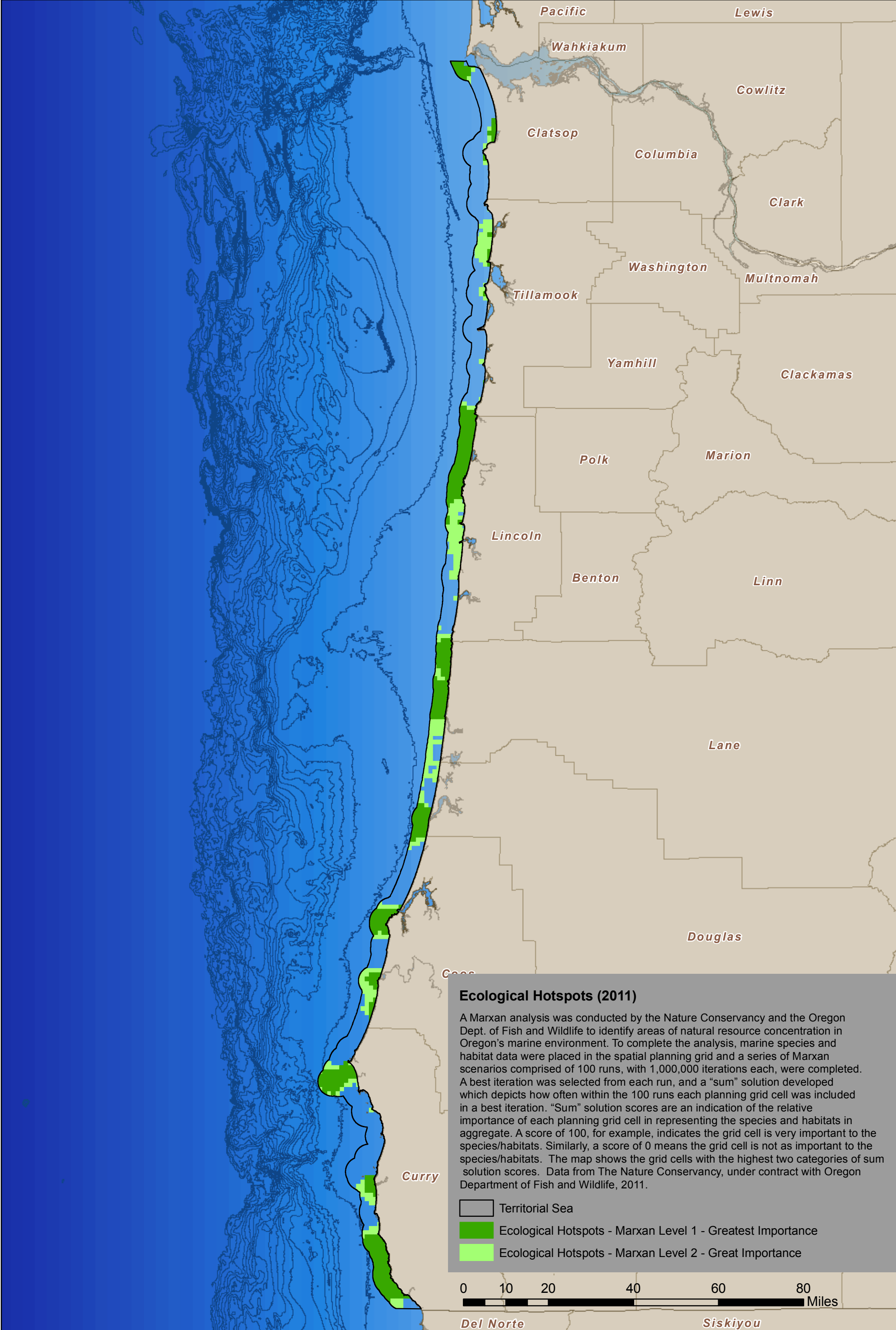
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Western Snowy Plover Critical Habitat



# Territorial Sea Plan Part Five Appendix B - Plan Map

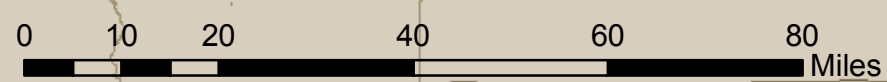
## Ecological Resource Inventory - Ecological Hotspots



### Ecological Hotspots (2011)

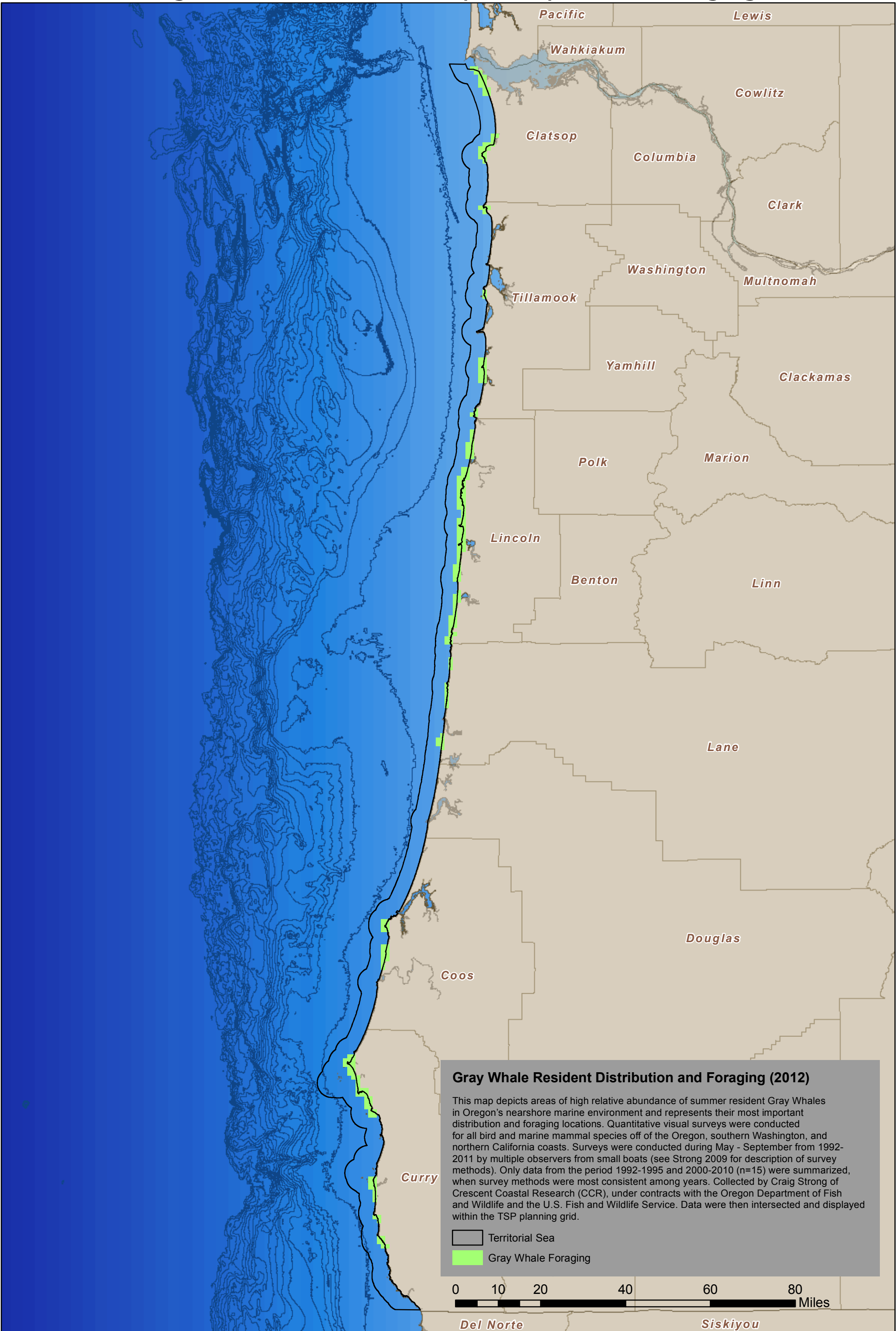
A Marxan analysis was conducted by the Nature Conservancy and the Oregon Dept. of Fish and Wildlife to identify areas of natural resource concentration in Oregon's marine environment. To complete the analysis, marine species and habitat data were placed in the spatial planning grid and a series of Marxan scenarios comprised of 100 runs, with 1,000,000 iterations each, were completed. A best iteration was selected from each run, and a "sum" solution developed which depicts how often within the 100 runs each planning grid cell was included in a best iteration. "Sum" solution scores are an indication of the relative importance of each planning grid cell in representing the species and habitats in aggregate. A score of 100, for example, indicates the grid cell is very important to the species/habitats. Similarly, a score of 0 means the grid cell is not as important to the species/habitats. The map shows the grid cells with the highest two categories of sum solution scores. Data from The Nature Conservancy, under contract with Oregon Department of Fish and Wildlife, 2011.

- Territorial Sea
- Ecological Hotspots - Marxan Level 1 - Greatest Importance
- Ecological Hotspots - Marxan Level 2 - Great Importance



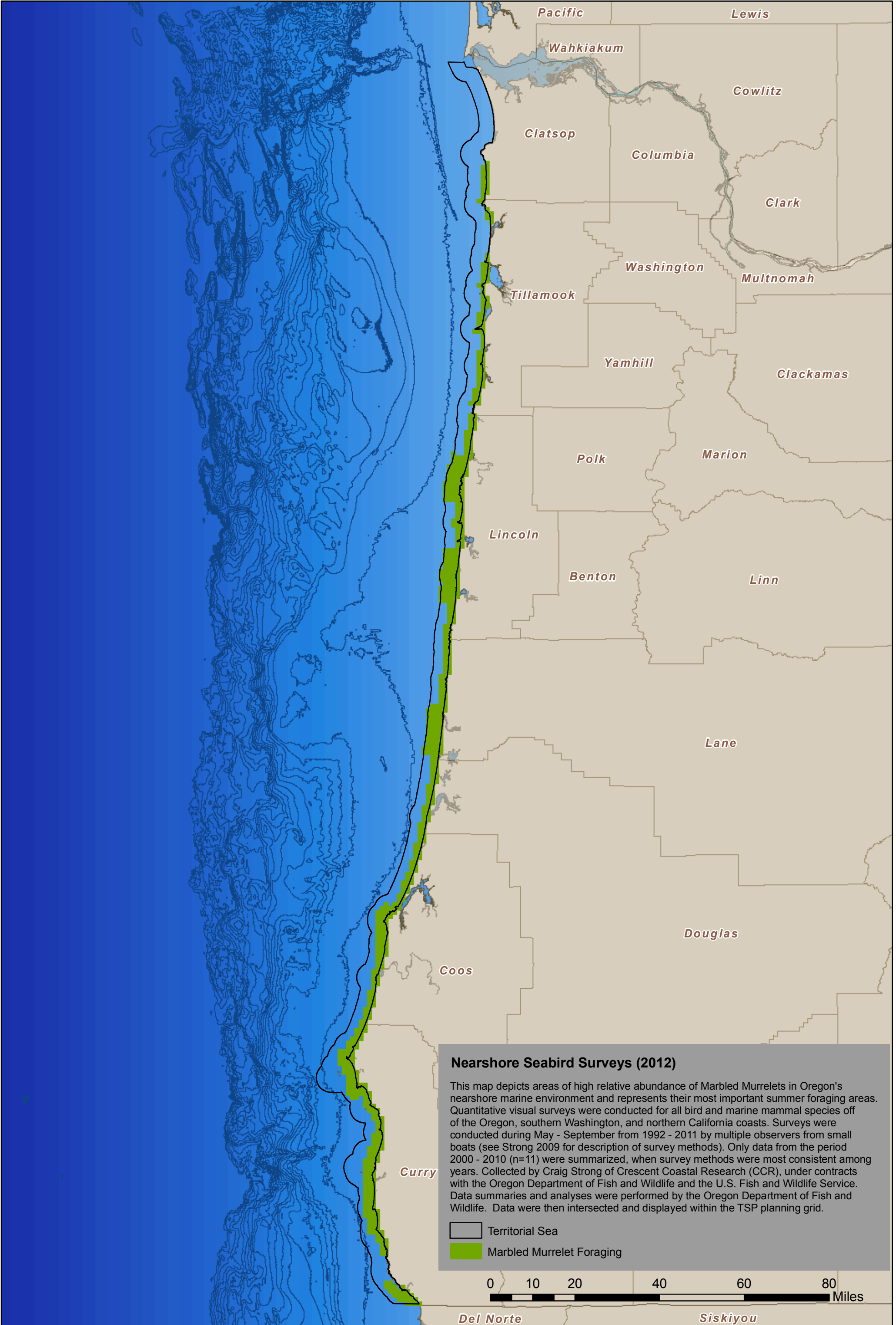
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Gray Whale Foraging



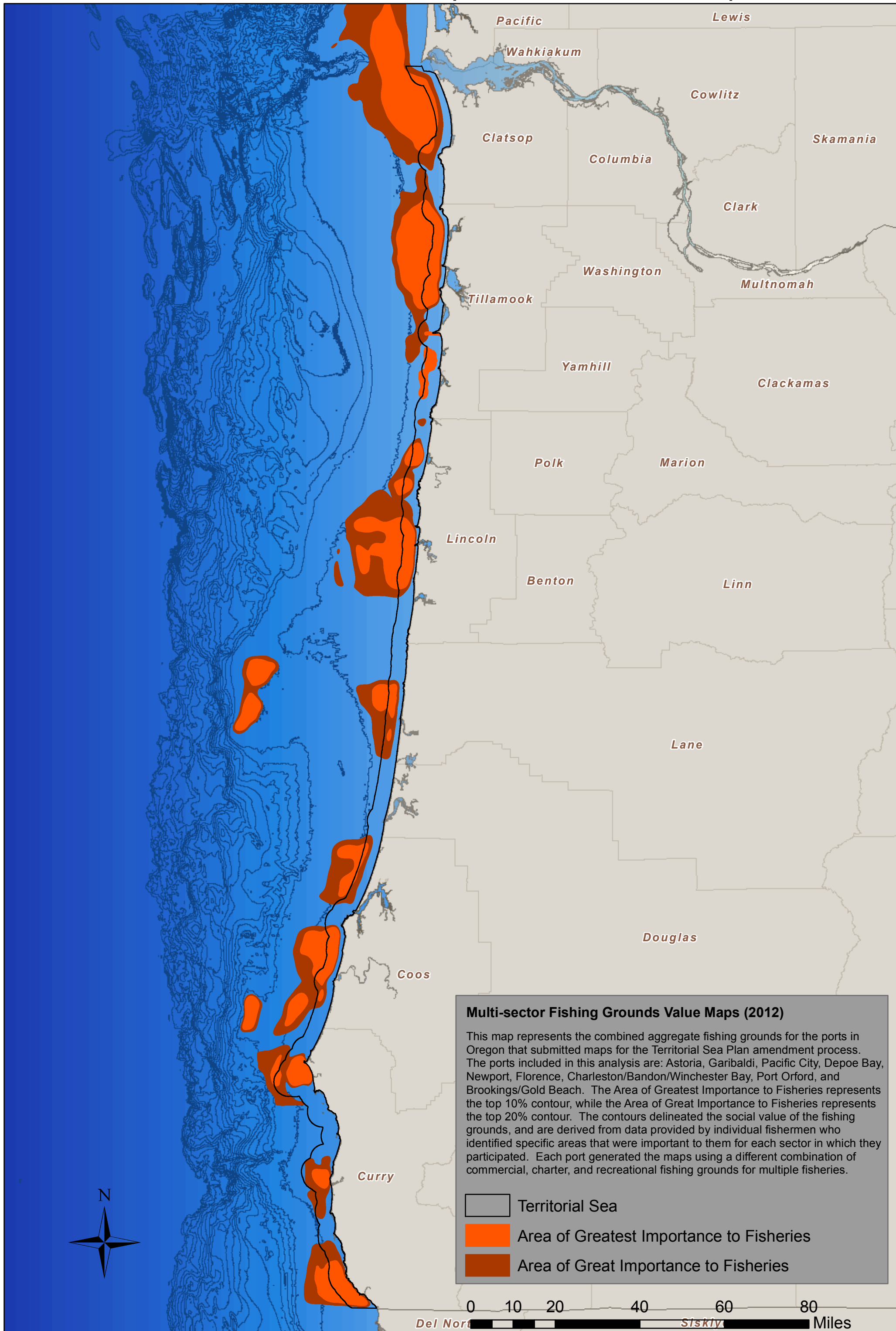
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Ecological Resource Inventory - Marbled Murrelet Foraging



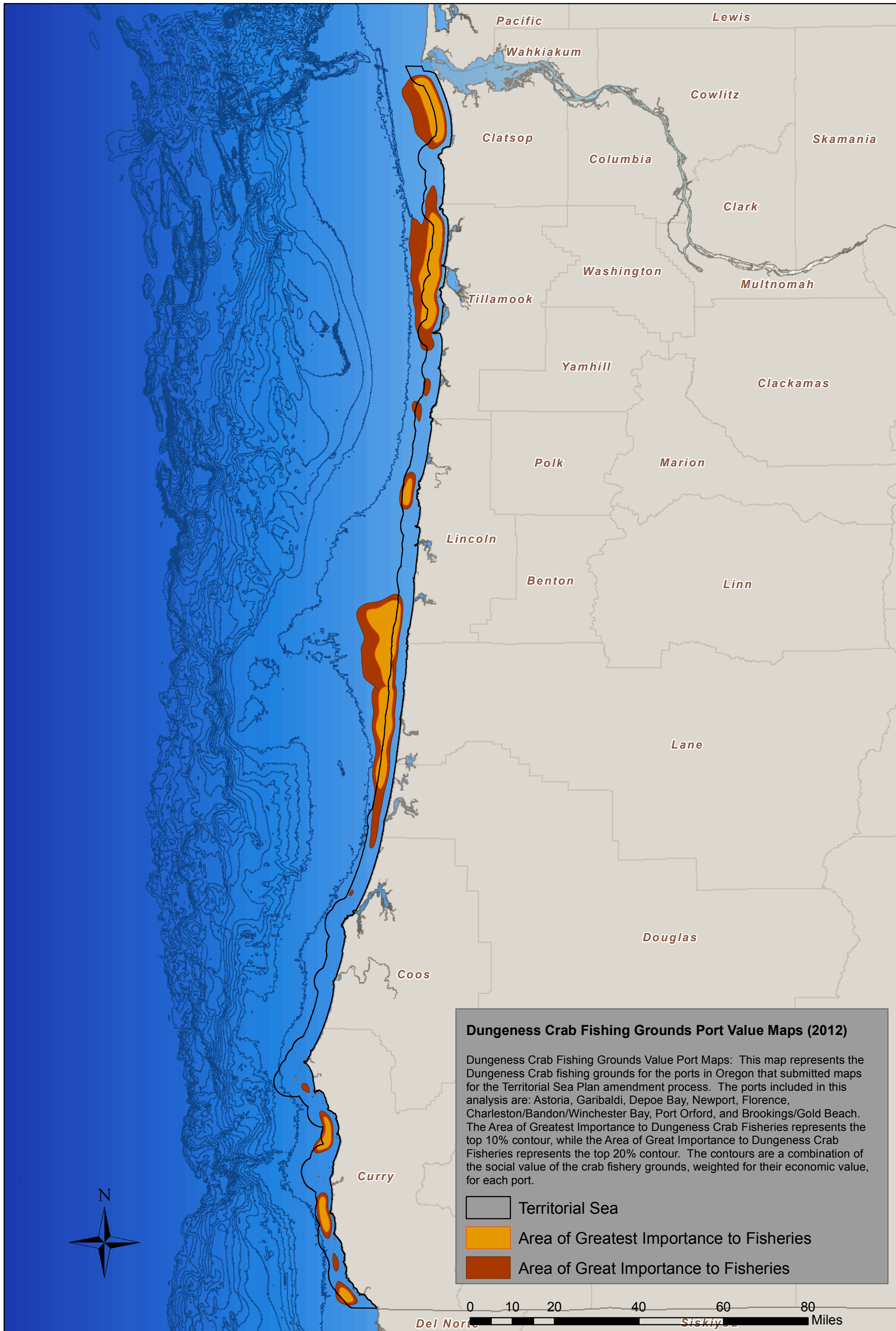
# Territorial Sea Plan Part Five Appendix B - Plan Map

## Fisheries Resource Inventory - Multisector Port Maps



# Territorial Sea Plan Part Five Appendix B - Plan Map

## Fisheries Resource Inventory - Dungeness Crab Port Fishery Maps



# Territorial Sea Plan Part Five Appendix B - Plan Map

## Fisheries Resource Inventory - Dungeness Crab Statewide Map

