BOEM Bureau of Ocean Energy Management

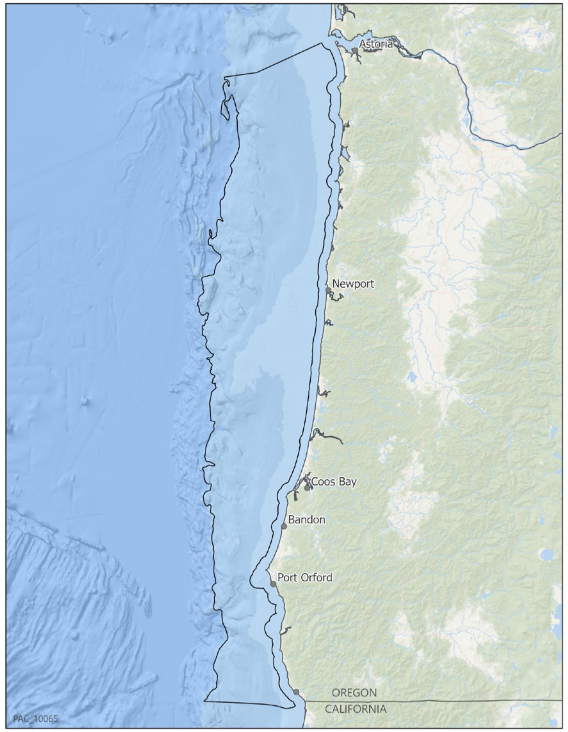
Pacific Region
Oregon Draft Wind Energy Areas

Pacific Fishery Management Council

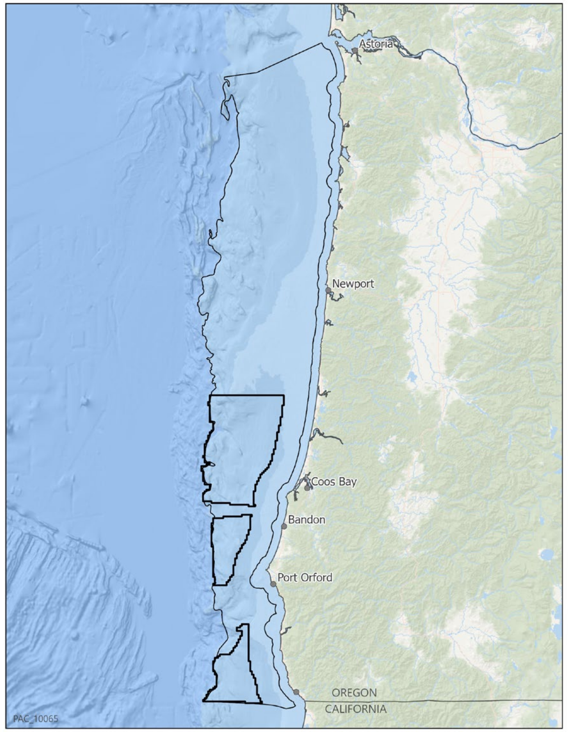
BOEM: Necy Sumait
NCCOS: Jessica Carlton

September 11, 2023

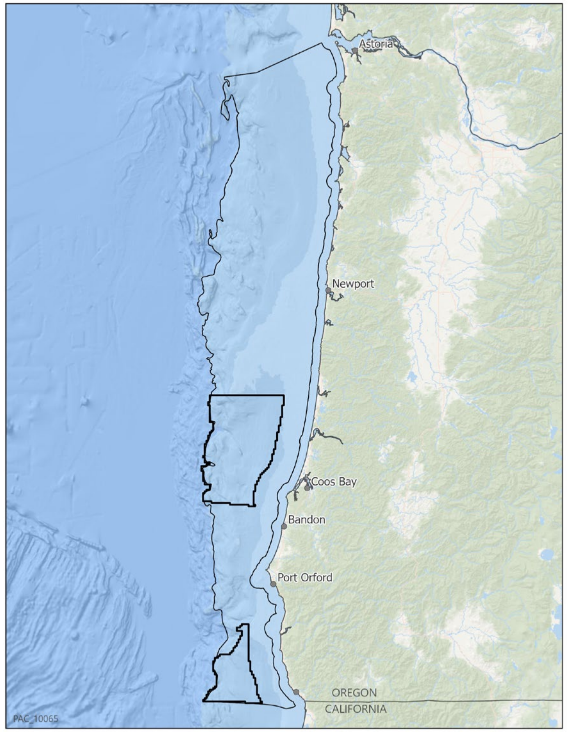
BOEM Oregon Offshore Wind Planning Efforts



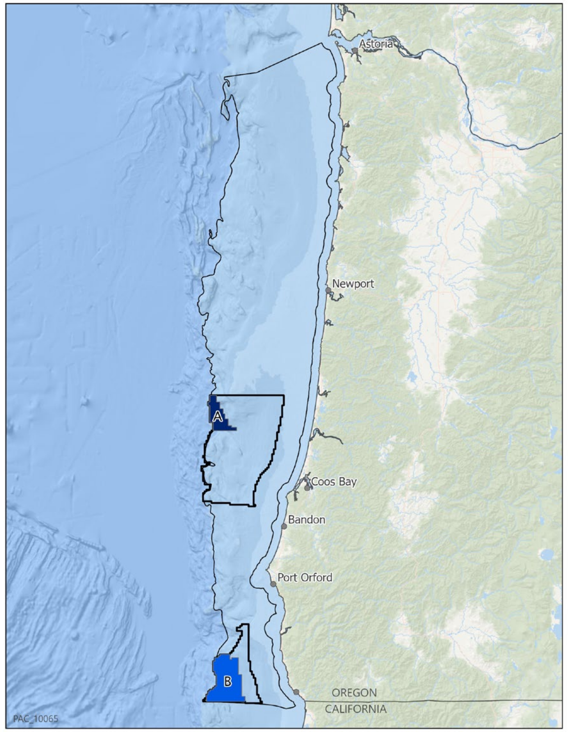
Planning Area
Entire OR Coast



3 Draft Call Areas
1,395,840 Acres



2 Call Areas
1,159,298 Acres



***Draft* Wind Energy Areas**
219,568 Acres (Aug 15, 2023)

2019 **2021** **2022** **2023**

Data Gathering and Engagement to Inform Call

Spatial Suitability Modeling

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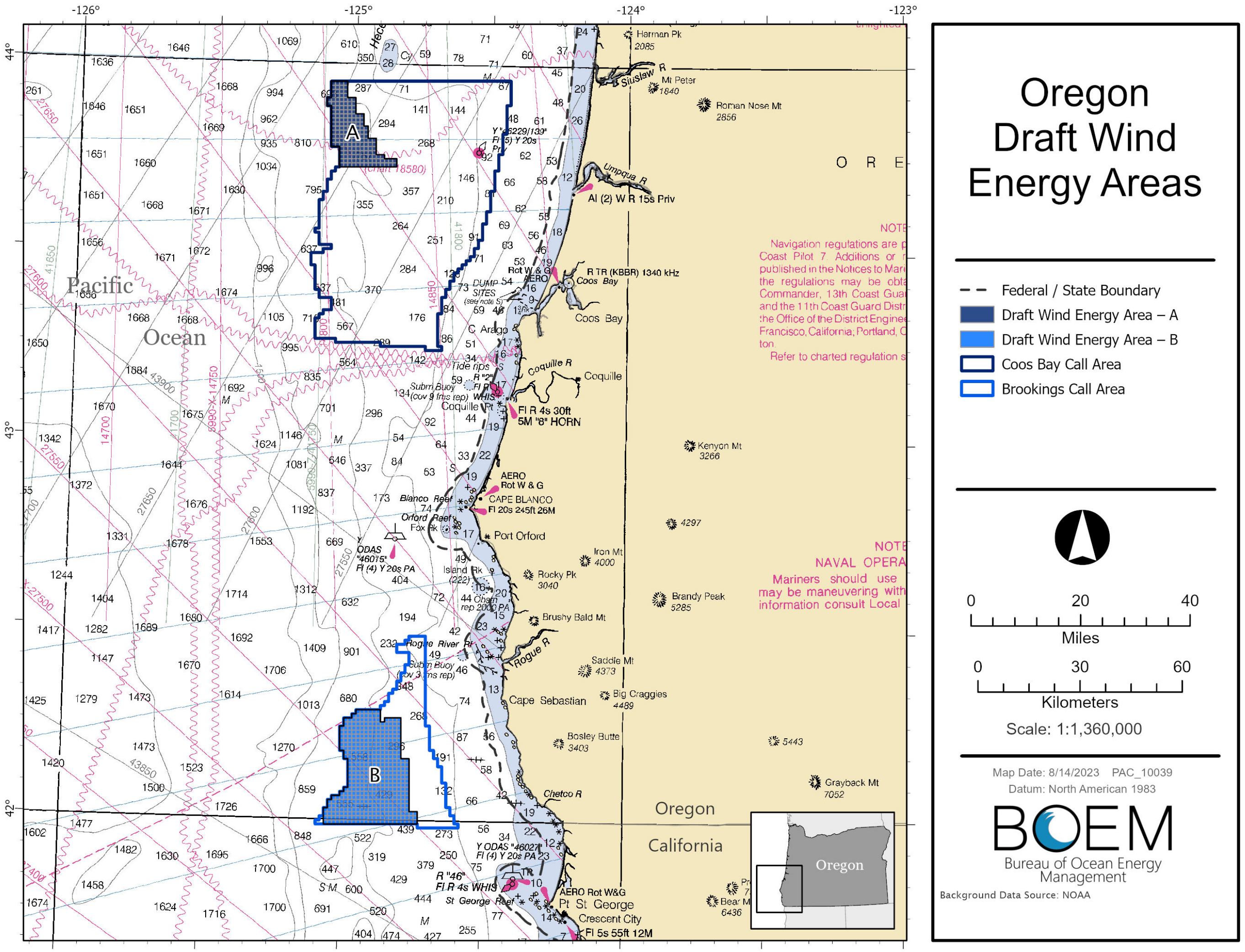
Includes coordination, outreach, and engagement with Tribal Governments, State of Oregon, Federal agencies, and State agencies.

Results of Spatial Modeling: Two Oregon Draft Wind Energy Areas

- Draft WEA – A (Coos Bay Call Area)
  - 61,204 acres
  - ~740 MW
  - 32 miles nearest to shore
  - 40 miles to Port of Coos Bay
- Draft WEA – B (Brookings Call Area)
  - 158,364 acres
  - ~1,920 MW
  - 18 miles to shore
  - 23 miles to Port of Brookings



Upcoming Engagement Opportunities: Virtual

- **Sept. 18, 2023: BOEM Oregon Intergovernmental Renewable Energy Task Force Meeting**
  - To join please register using the Registration link on www.boem.gov/Oregon
- **Sept. 21, 2023: Informational Fishing Virtual Webinar: 5:00 – 8:00 p.m.**
  - To join please register using the Registration link on www.boem.gov/Oregon

Ahead of the meeting, we encourage attendees to view the NMFS/ODFW fisheries analysis and recommendations in Appendix E of the NCCOS Report. Recordings of prior detailed presentations by NMFS and ODFW on this information can be found on the Pacific Fishery Management Council websites below:

- **PFMC Marine Planning Committee meeting slides**: https://www.pcouncil.org/events/ad-hoc-marine-planning-committee-to-hold-online-meeting-february-2-2023/ or
- **Youtube link:** https://www.youtube.com/watch?v=jBn5ICSrDQY&t=1s starting at timestamp 57:39.
- **PFMC Council fisheries data slides:** https://www.pcouncil.org/documents/2023/02/nmfs-odfw-fisheries-data-recommendations-or-boem-call-area.pdf/
- **PFMC recording:** https://www.youtube.com/live/8tr89qZhTw4?si=cIINI7bvCQBkSFRp at time stamp 1:42:19.
- **PFMC Council supplemental NMFS presentation slides:** https://www.pcouncil.org/documents/2023/03/g-3-a-supplemental-nmfs-odfw-presentation1-characterizing-fisheries-footprints-for-offshore-wind-energy-planning.pdf/

Upcoming Engagement Opportunities: In-Person Public Meetings

1. **Gold Beach, Oregon: Tuesday, September 26, 2023**
   - Event Center at the Beach, Docia Room
   - 29392 Ellensburg Avenue
   - Time: 4:00 – 8:00 p.m.
2. **Coos Bay, Oregon: Wednesday, September 27, 2023**
   - Coos Bay Public Library, Mrytlewood Room
   - 525 Anderson Avenue
   - Time: 4:00 – 8:00 p.m.
3. **Brookings, Oregon: Thursday, September 28, 2023**
   - Southwest Oregon Community College – Curry Campus, Commons Room
   - 96082 Lone Ranch Pkwy
   - Time: 4:00 – 8:00 p.m.

Spatial Suitability Modeling

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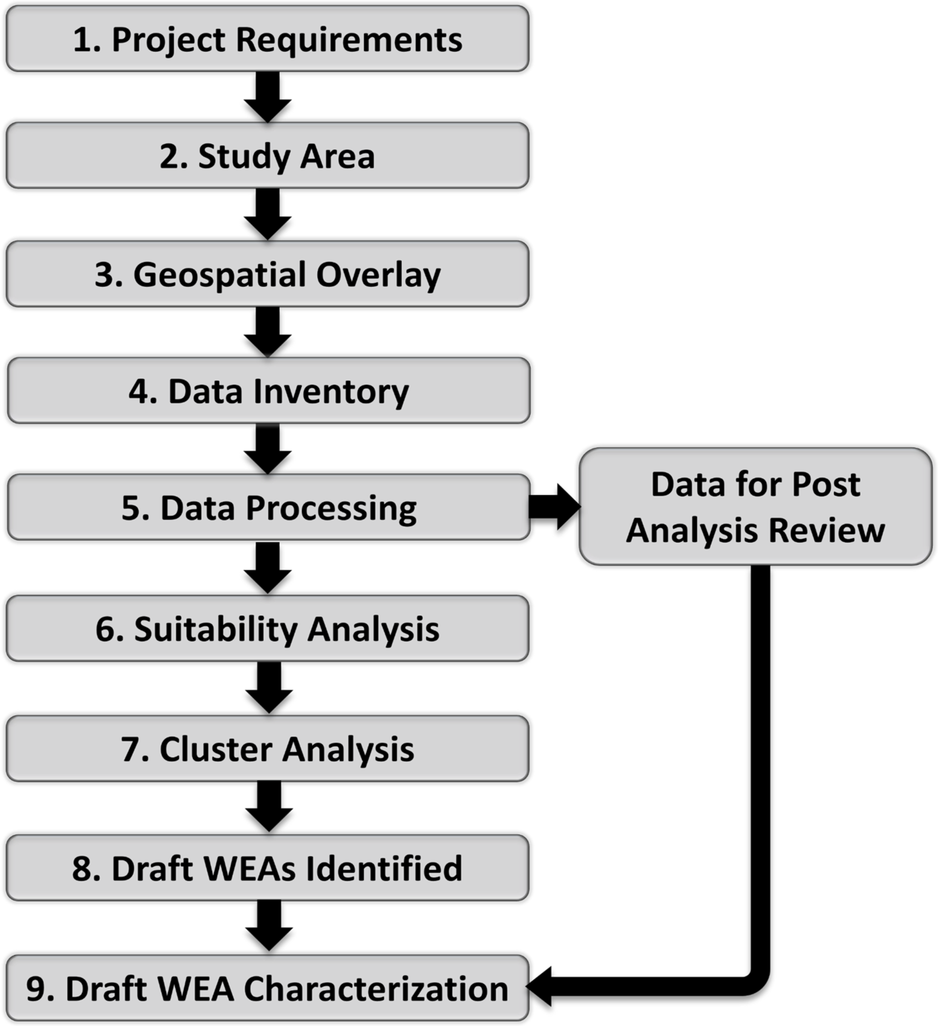
- A suitability model is a model that weights locations relative to each other based on given criteria.
- A common scale allows for meaningful values to be produced when the criteria are combined.
- Data must be transformed into a common scale so the criteria can be compared. We are using a 0 to 1 scale.
- Suitability modeling allows us to analyze the “whole ecosystem” and identify hotspots of conflict and opportunity.
- Provides defensible and transparent methods.
- Allows for scenario planning.

Spatial Planning Workflow



Modeling Methods

Data

OROWindMap
Supporting the Offshore Wind Planning Process in Oregon

MarineCadastre.gov
An Ocean of Information
A joint BOEM and NOAA initiative providing authoritative data to meet the needs of the offshore energy and marine planning communities.

NOAA FISHERIES

OREGON Fish & Wildlife

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NCCOS

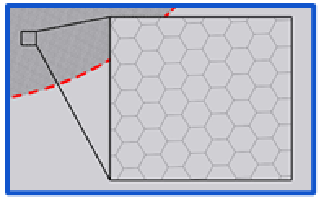
Submodels

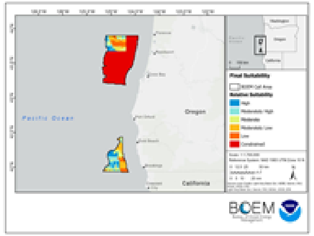
- Constraints
- Industry & Operations
- Fisheries
- Wind
- Natural Resources

Areas Eliminated

Geometric Mean Calculated

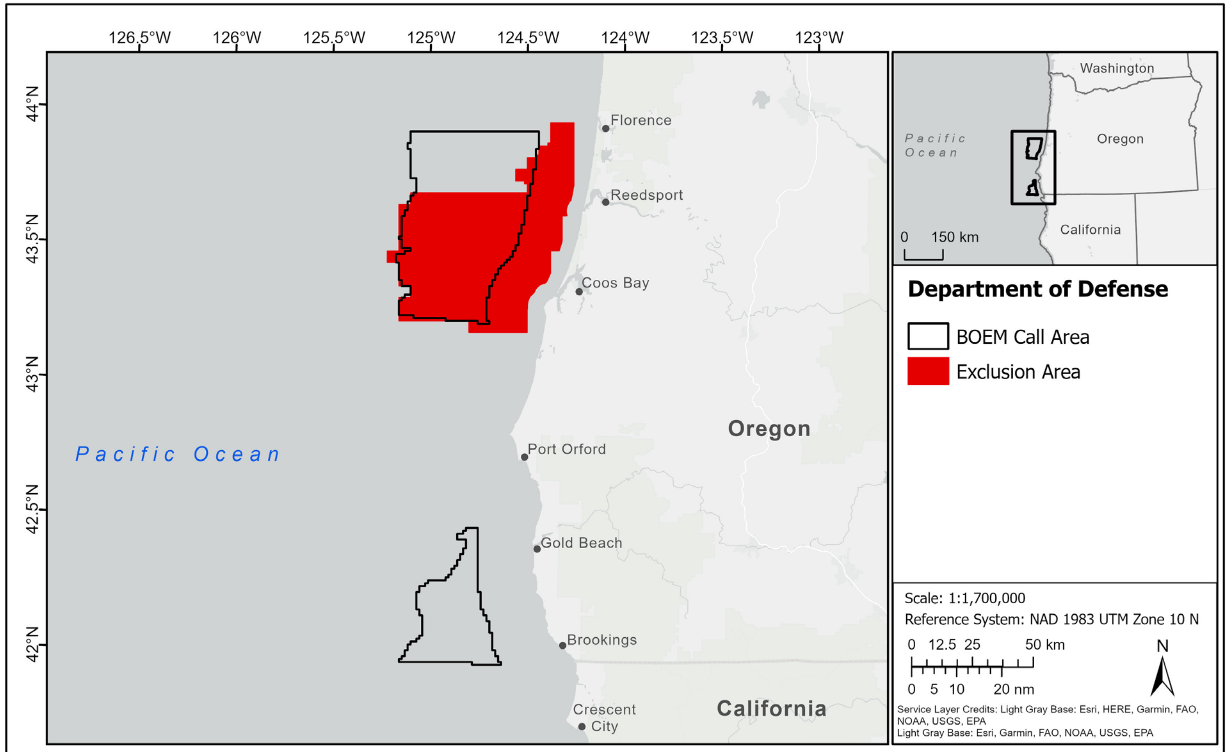
Final Suitability





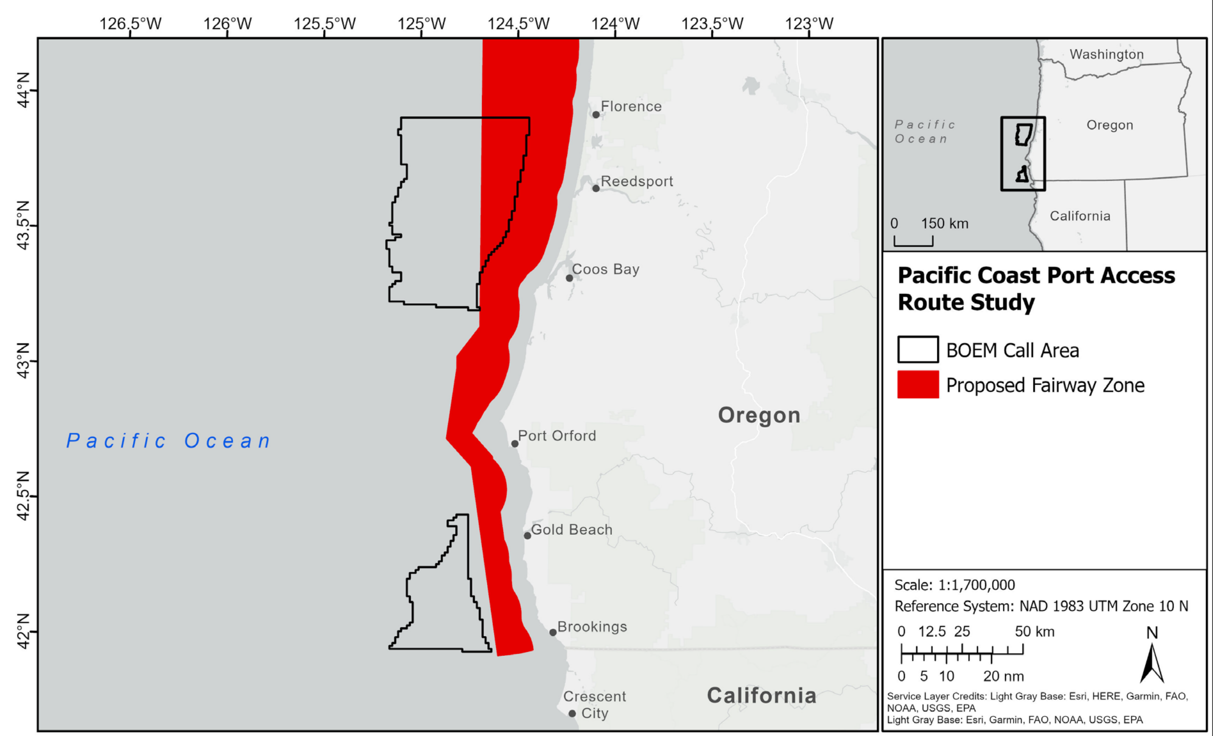
Constraints Submodel Data Inputs

Department of Defense Exclusion Area
Score of 0



Department of Defense Exclusion Area: OPNAV Assessment, U.S. Department of Defense and the Military Aviation and Installation Assurance Siting Clearinghouse (2022)

PACPARS – Proposed Fairway Zone
Score of 0



Pacific Coast Port Access Route Study Proposed Fairway Zone: U.S. Coast Guard Pacific Coast Port Access Route Study (2022)

Constraints Submodel Results

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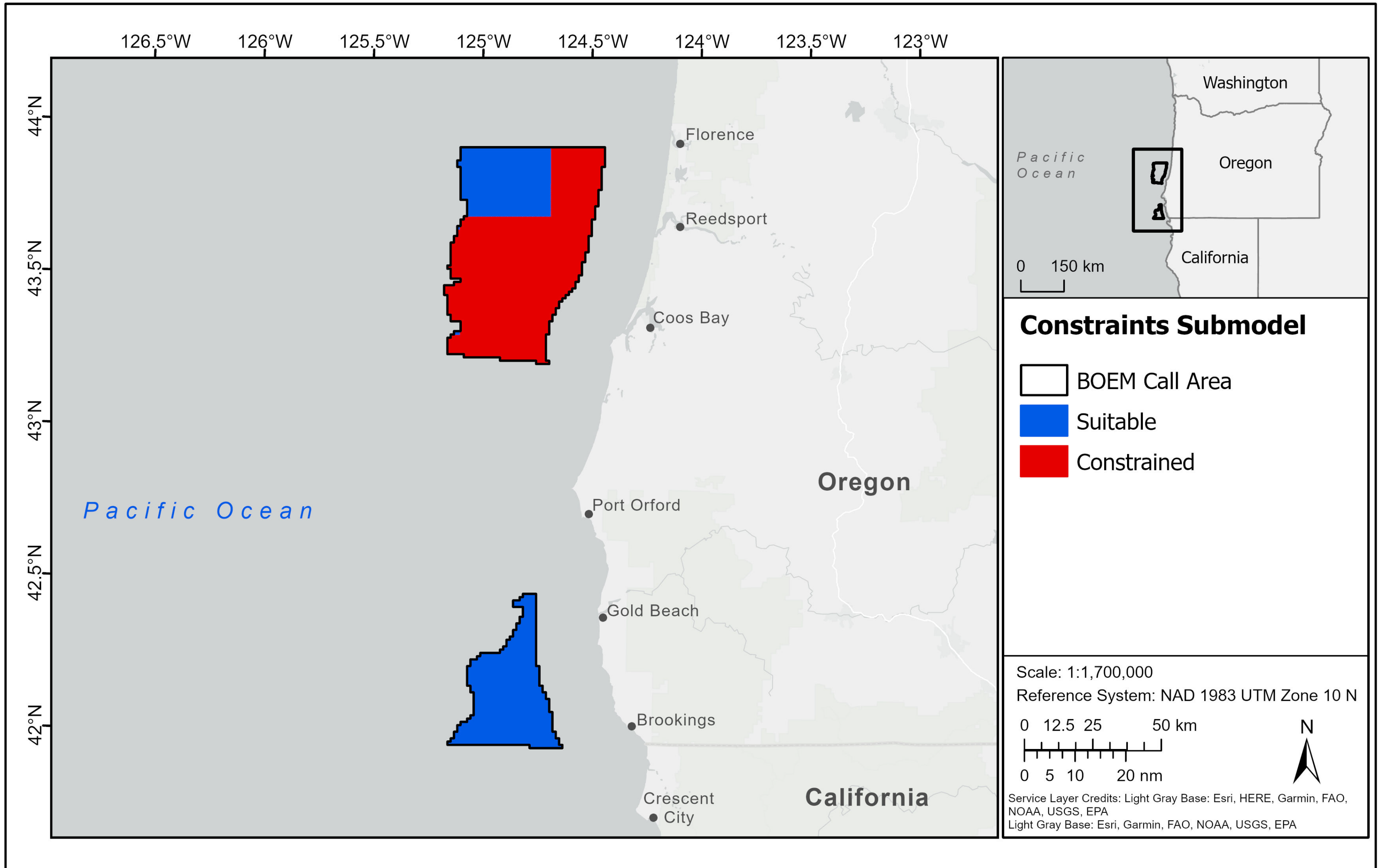
Constraint data layers	# acres constrained	# acres suitable
DOD	577,900	595,100
PACPARS	212,300	960,700
All Constraints	**675,550**	**497,450**

Constraints resulted in a **<u>57.59%</u>** reduction in the call areas.



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Industry & Operations Submodel Results

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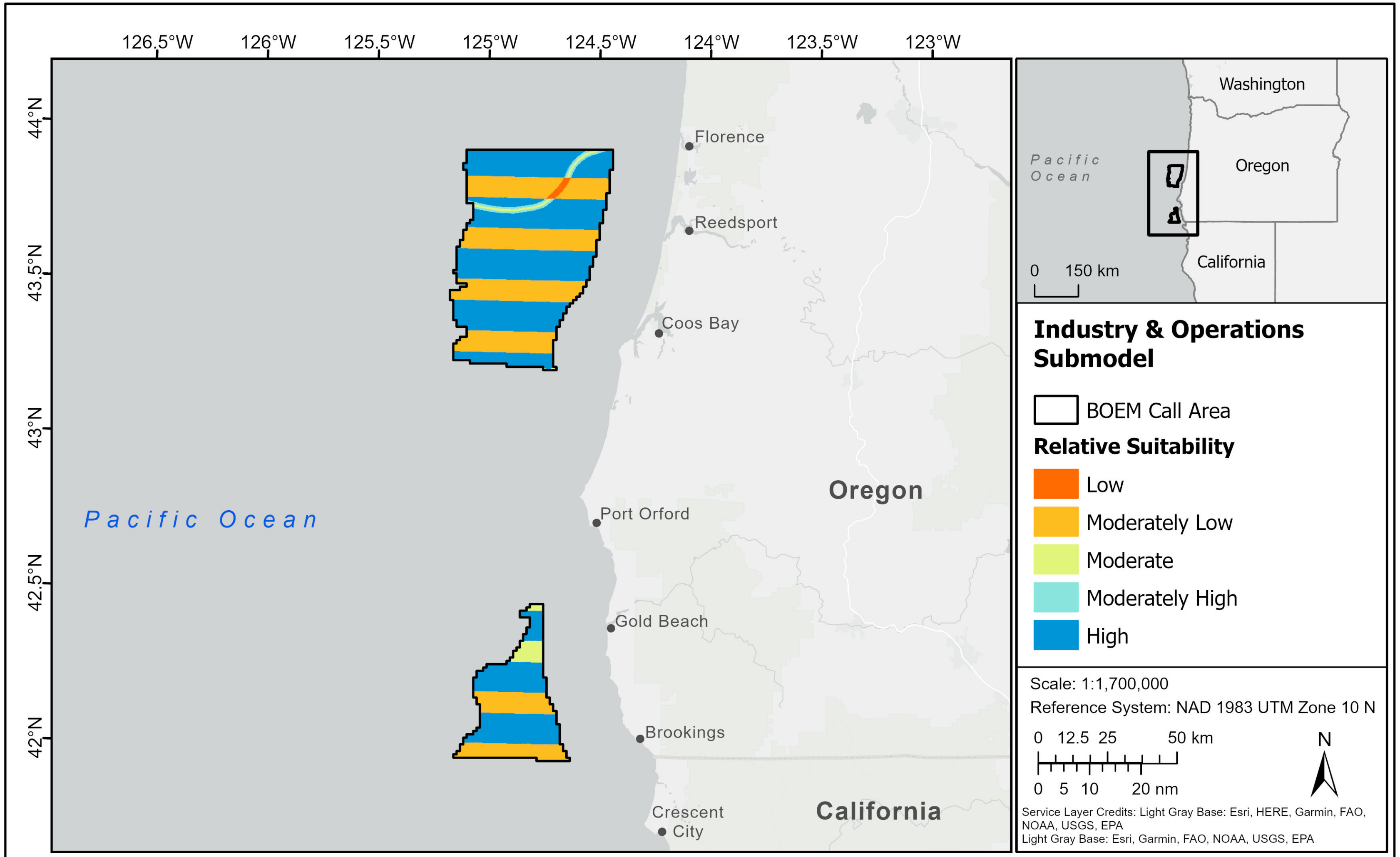
Data Layer	Score
NMFS Scientific Surveys Combined Layer	**NMFS Scoring Scenario 2**
Submarine Cables	0-500 m = **0.6** 501-1000 m = **0.8**



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Natural Resources Submodel Results

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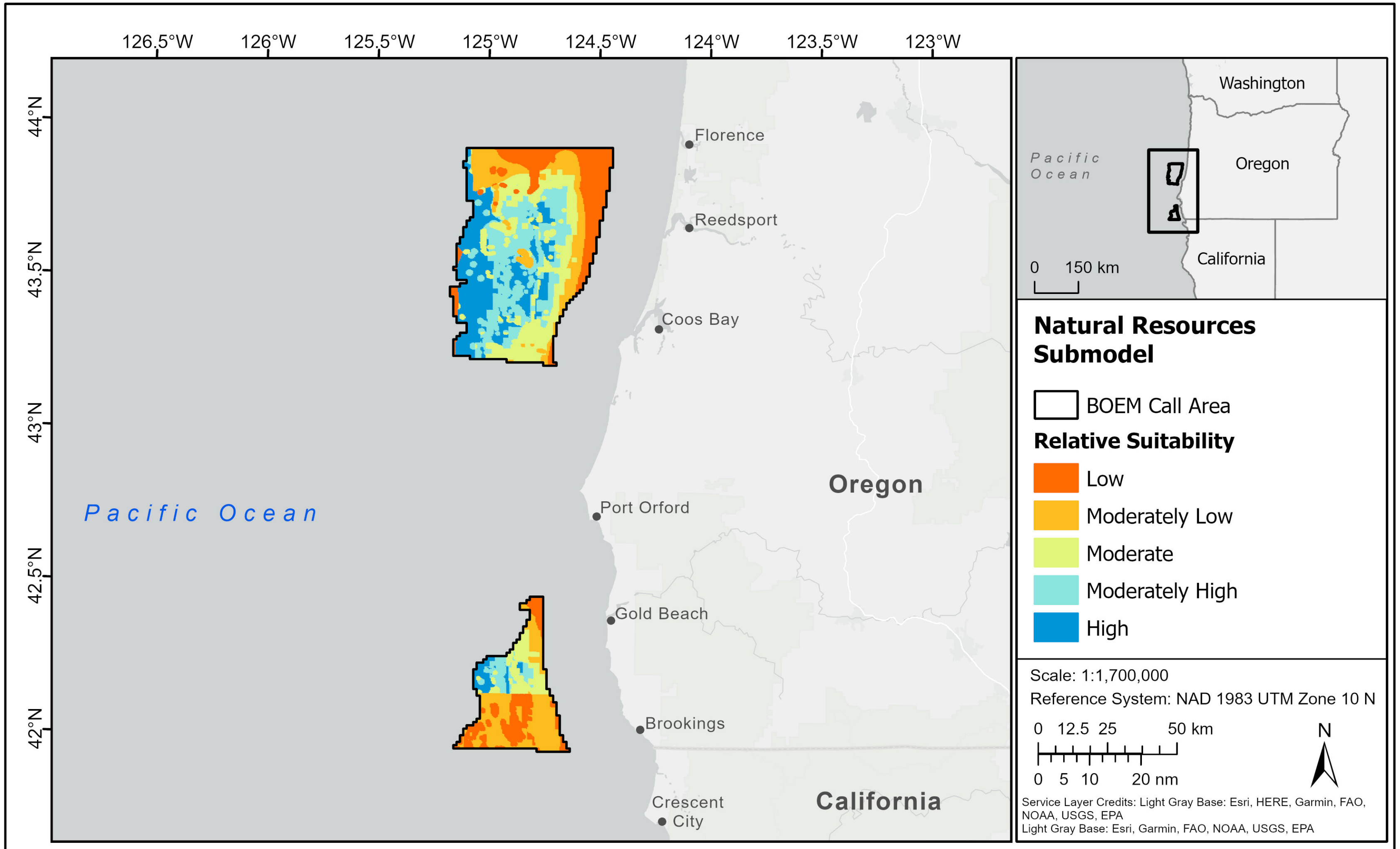
Data Layer	Score
NMFS Protected Species Combined Layer	**NMFS Scoring Scenario 3**
NMFS Habitat Combined Layer	**NMFS Scoring Scenario 2**
Marine Bird Combined Layer	**Z-Membership**



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Fisheries Submodel Data Inputs

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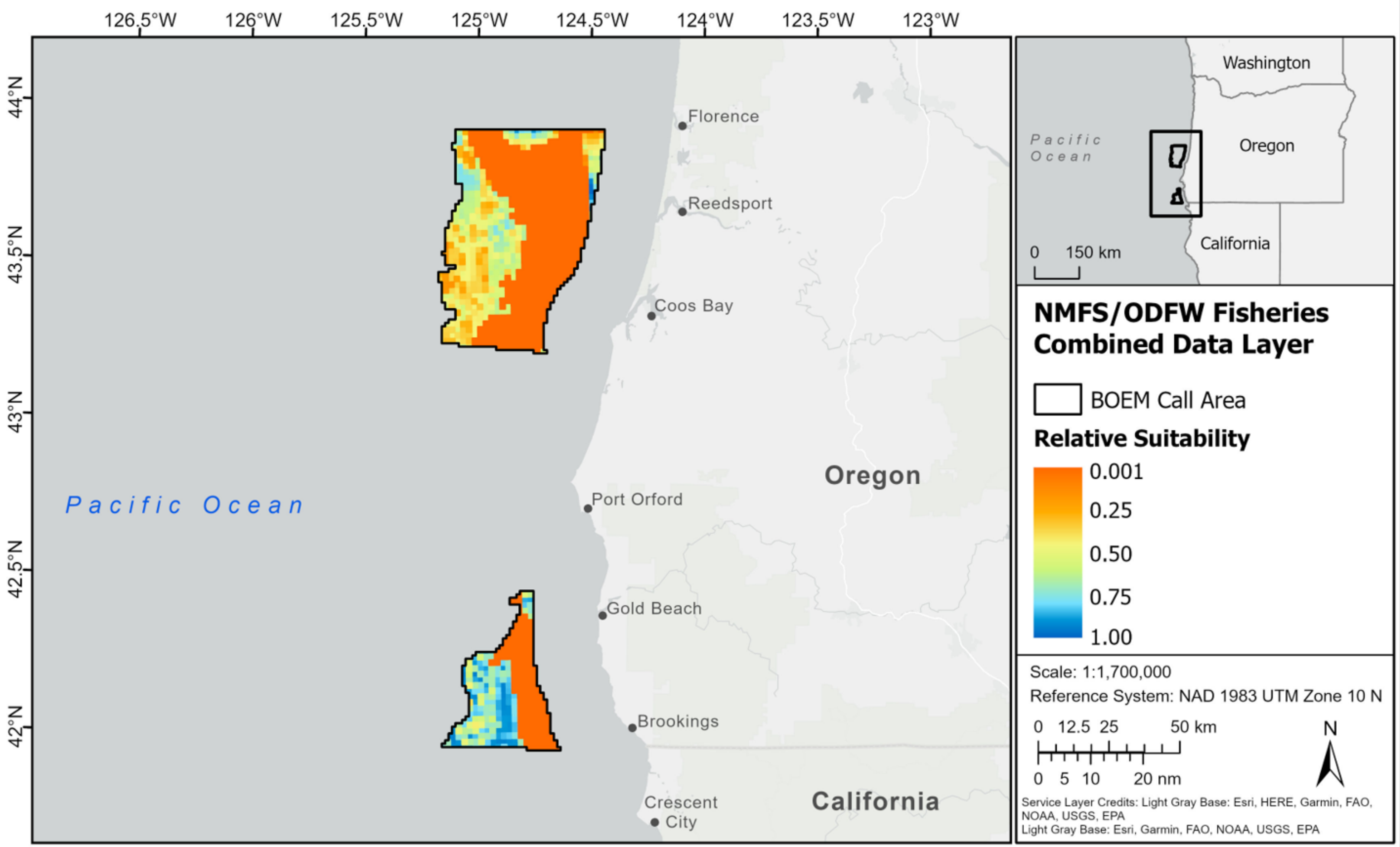
NMFS & ODFW Fisheries

Scoring scenarios provided by NMFS & ODFW
BOEM selected scenario four

Fisheries included:

- At-sea Hake mid-water trawl
- Shoreside Hake mid-water trawl
- Groundfish bottom trawl
- Groundfish longline
- Groundfish pot gear
- Pink shrimp trawl
- Dungeness crab
- Albacore commercial troll/hook-and-line
- Albacore charter troll/hook-and-line



NMFS/ODFW Fisheries Combined Data Layer: National Marine Fisheries Service, West Coast Region & Northwest Fisheries Science Center, & Oregon Department of Fish and Wildlife (2022)

See **Appendix E** in the NCCOS report for full details and methods used for NMFS & ODFW's recommendations

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Fisheries Submodel Results

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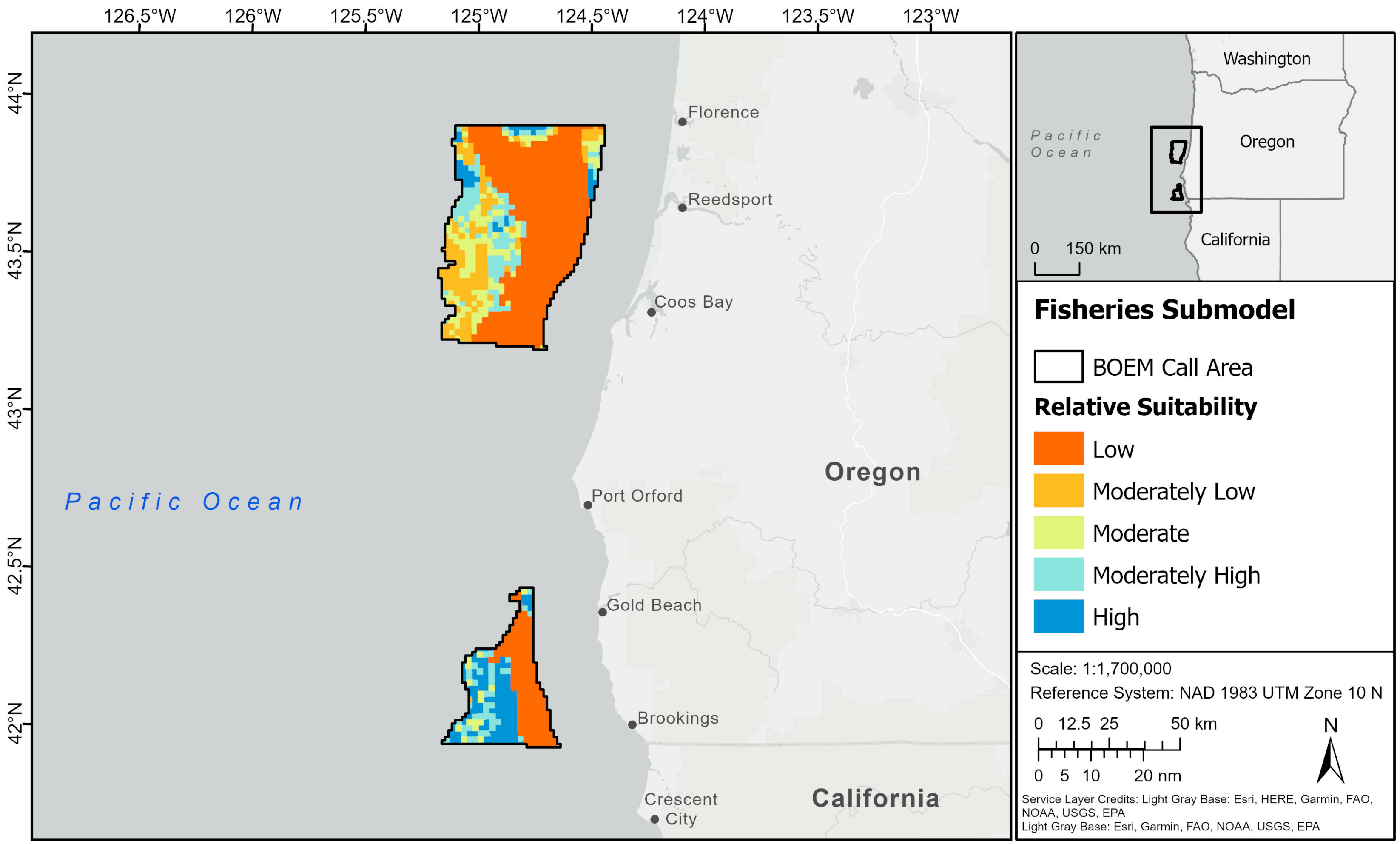
Data Layer	Score
NMFS & ODFW Fisheries Combined Layer	**NMFS & ODFW Scoring Scenario 4**



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Wind Submodel Results

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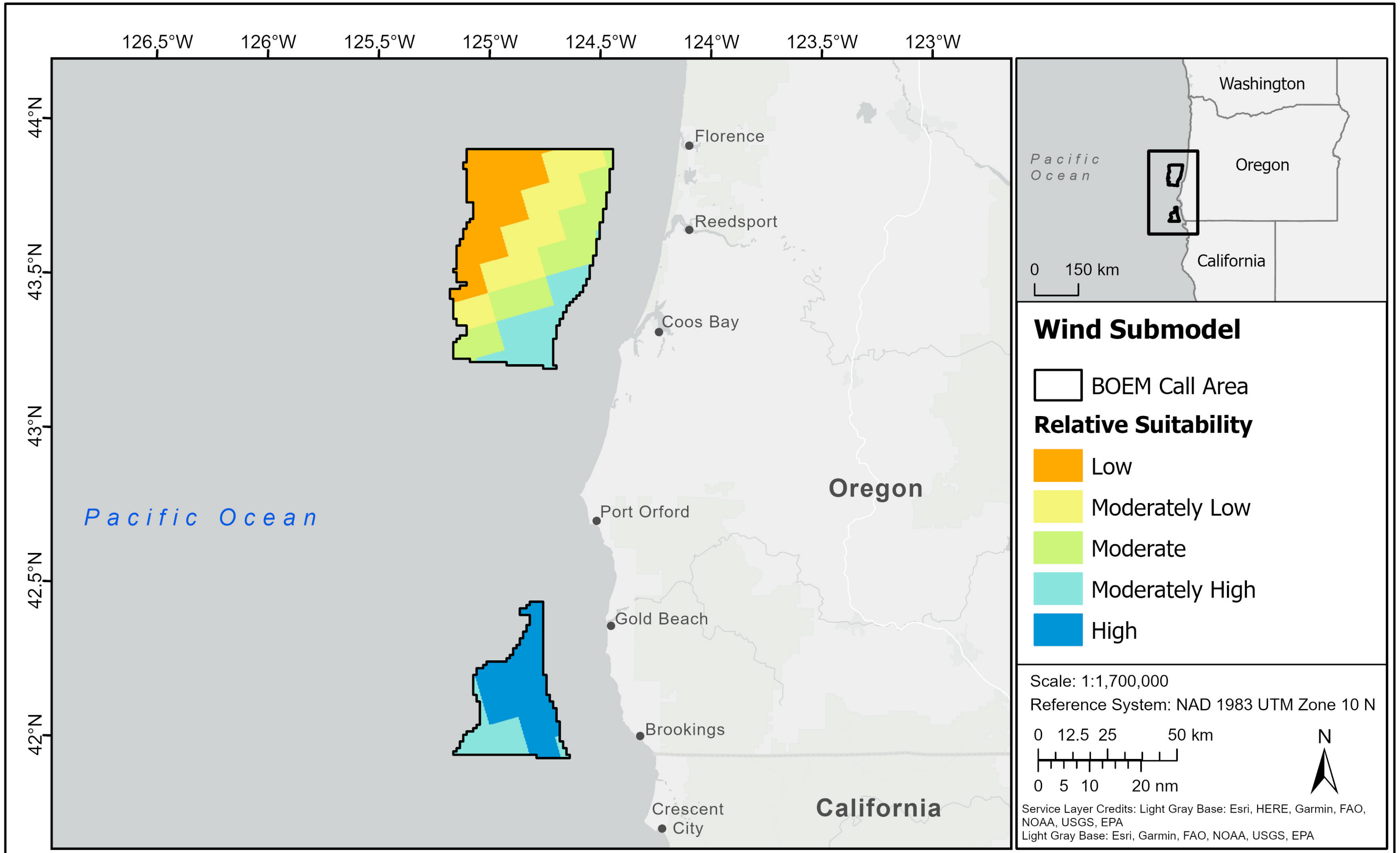
Data Layer	Score
Levelized Cost of Energy for 2027	**Linear Function 0.8-1.0**



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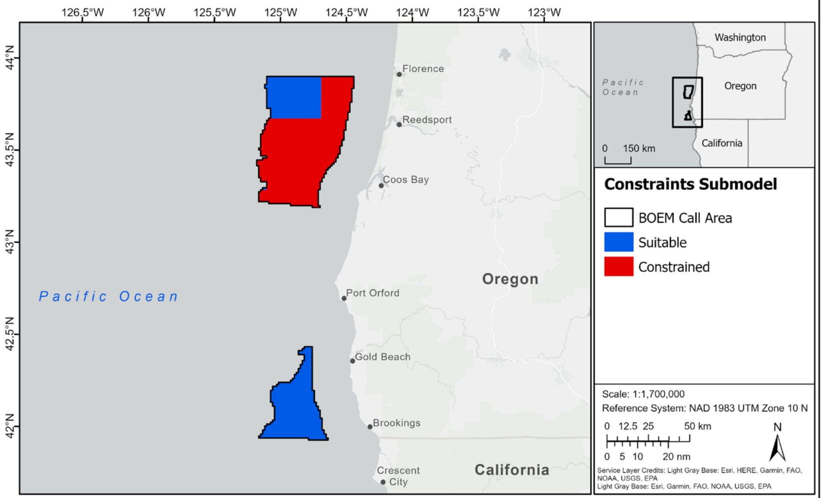
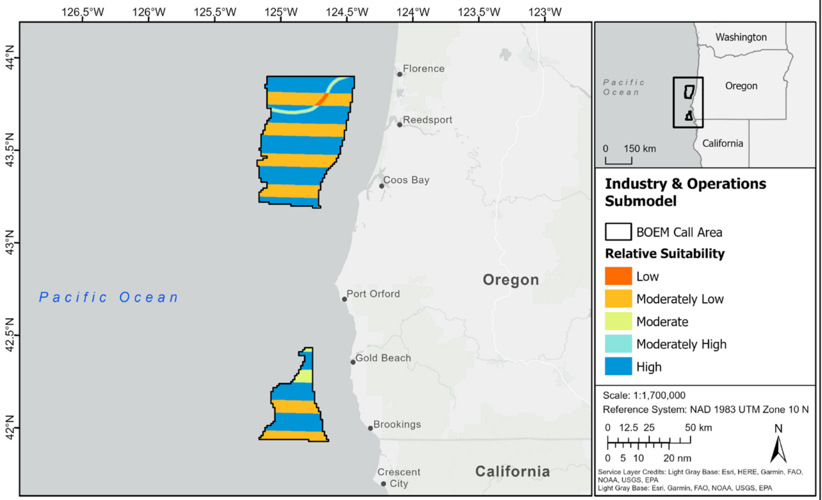
All Submodels

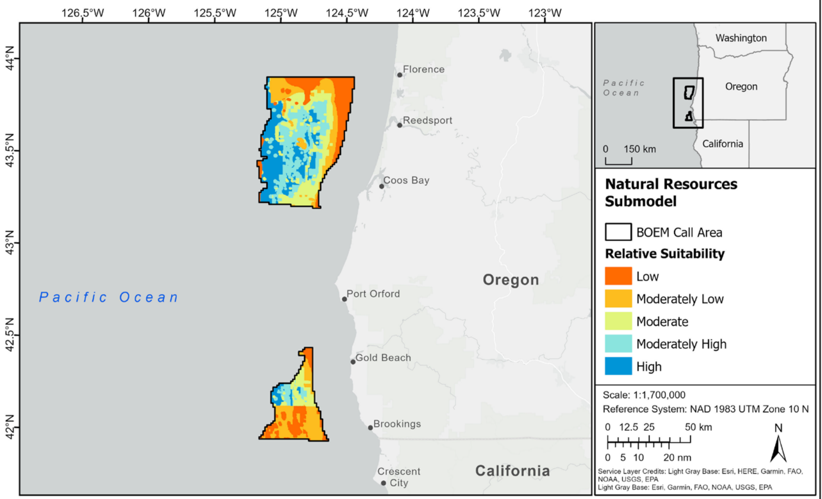
Constraint data layers	# acres constrained	# acres suitable
DoD	577,900	595,100
PACPARS	212,300	960,700
All Constraints	**675,550**	**497,450**



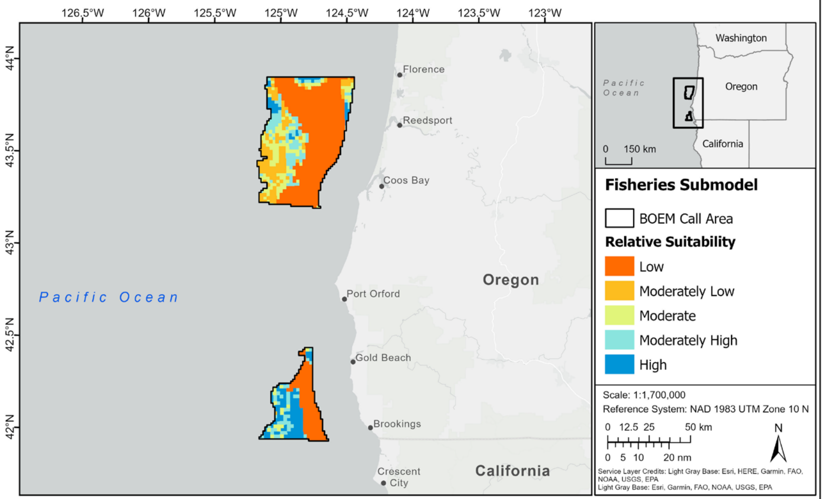
Constraints



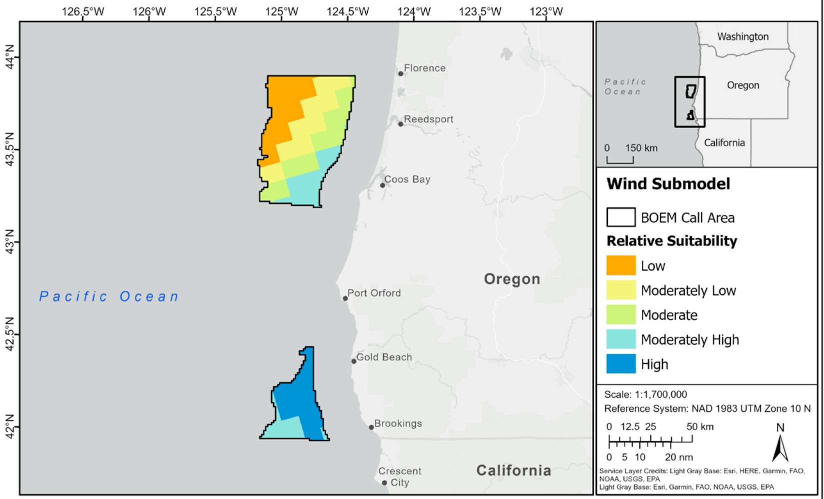
Industry & Operations



Natural Resources



Fisheries



Wind

Final Suitability Results

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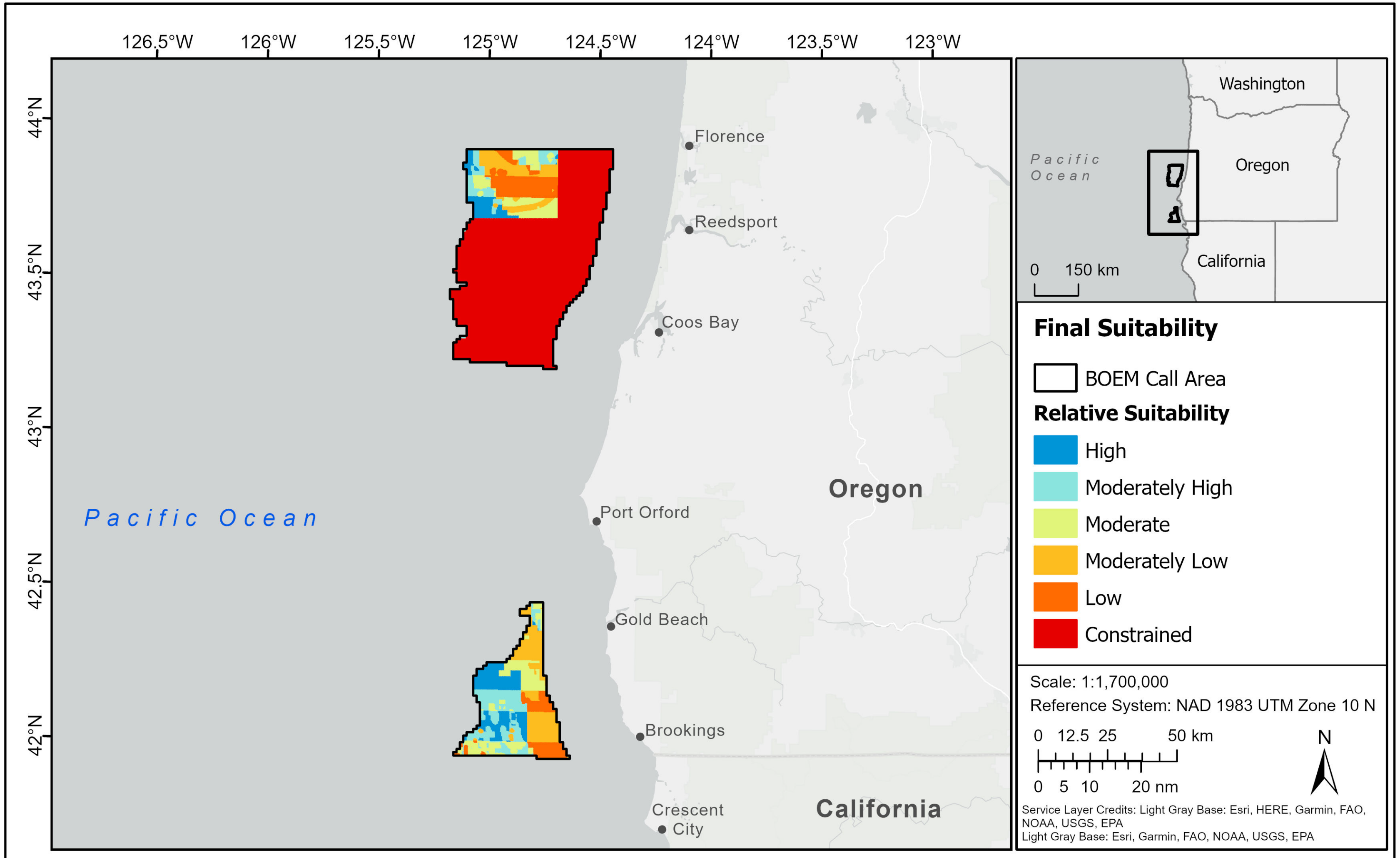

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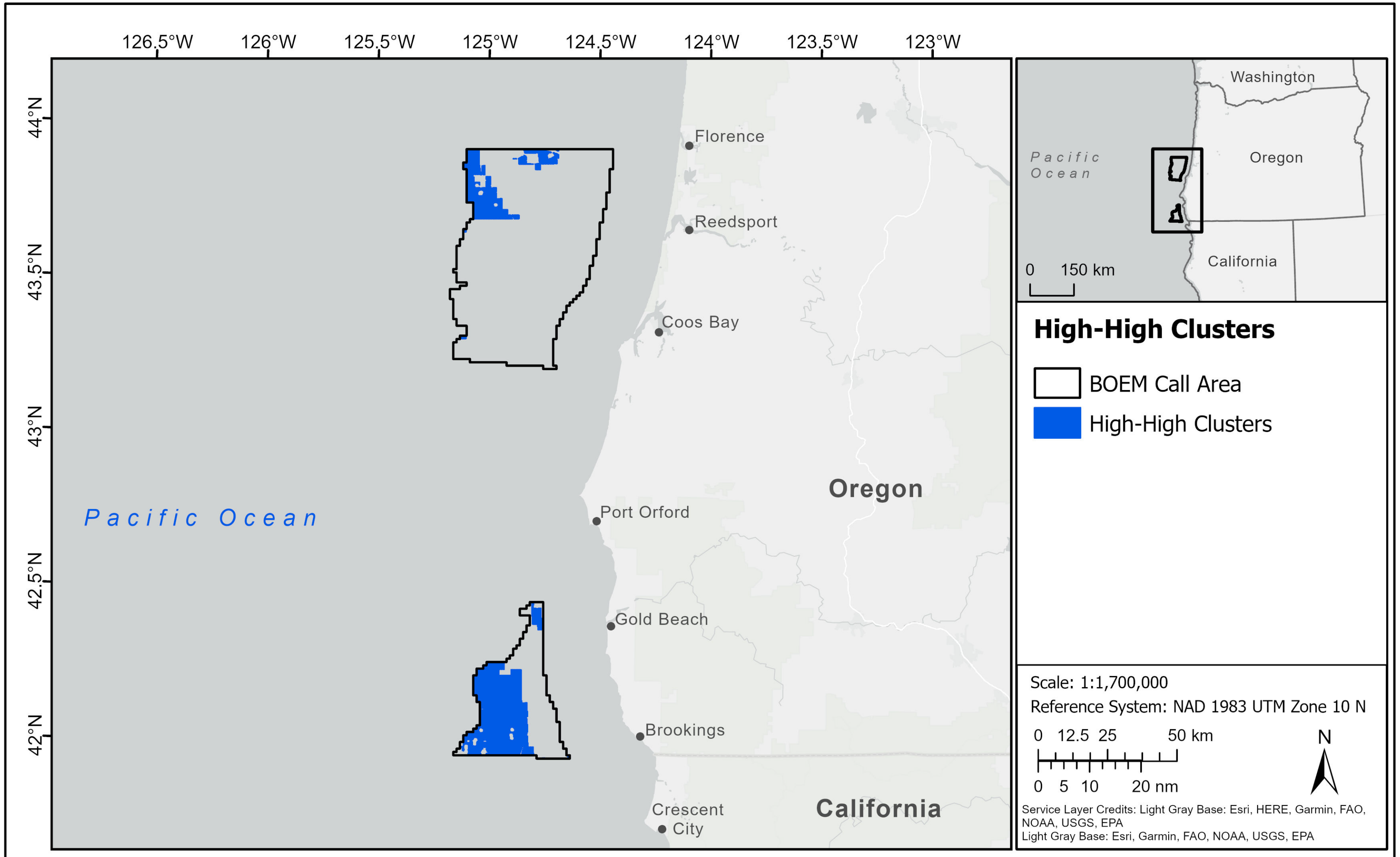
Cluster Analysis Results

Rules for identifying WEAs

- BOEM aliquots that intersect with a high cluster grid cell are selected
- Groups of aliquots less than 55,000 acres are removed
- Additional aliquots were included if they were fully encircled by the selected aliquots



Oregon Draft Wind Energy Areas

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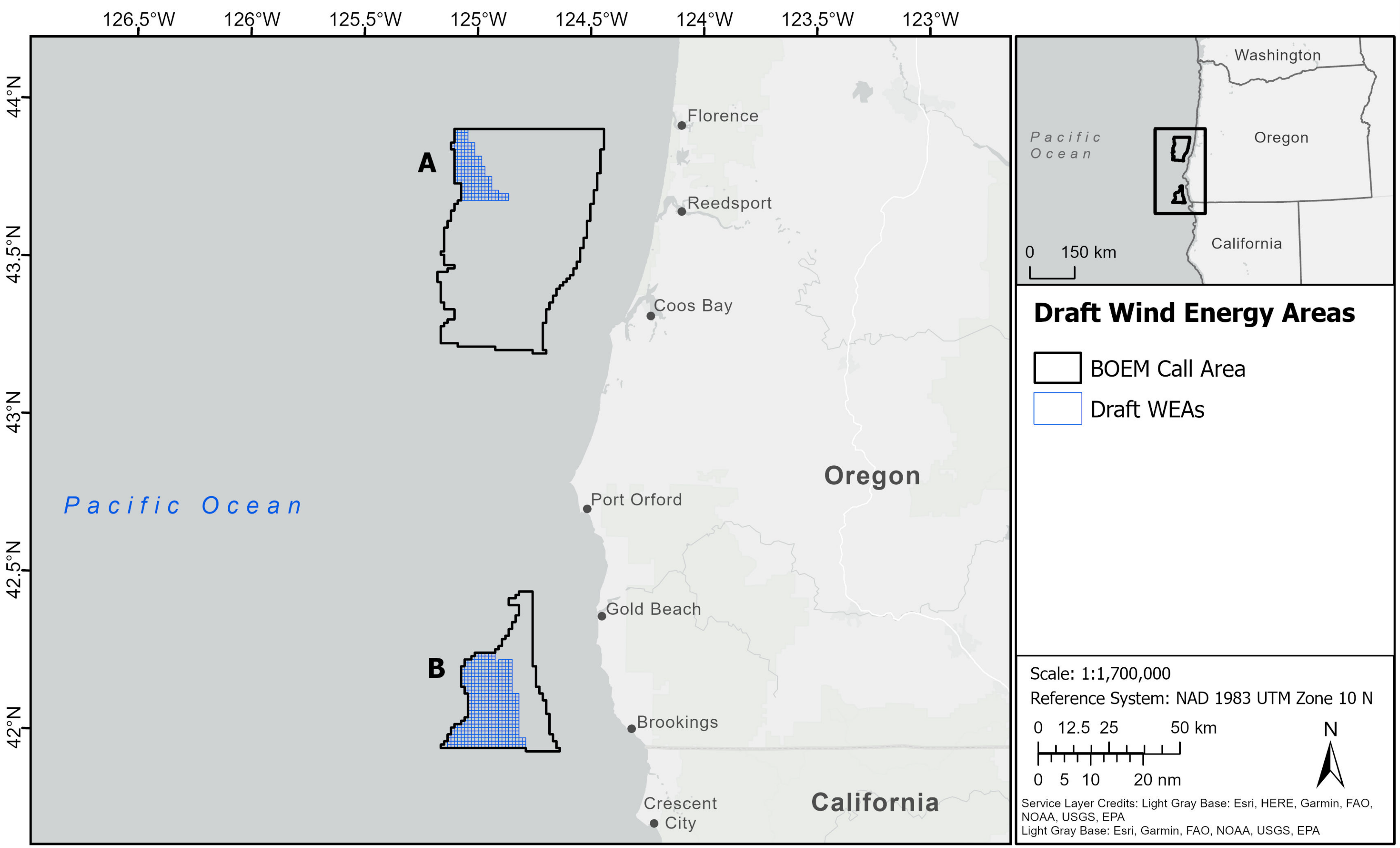

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