Cape Blanco

Marine Research Area Management Plan

Oregon Rocky Habitat Management Strategy

FEBRUARY 2026

OREGON
Coastal Management Program
DEPARTMENT OF LAND CONSERVATION & DEVELOPMENT

Land Acknowledgement

Indigenous tribes and bands have been with the lands that we inhabit today throughout Oregon and the Northwest since time immemorial and continue to be a vibrant part of Oregon today. We would like to express our respect to the First Peoples of this land, the nine federally recognized tribes of Oregon: Burns Paiute Tribe, Confederated Tribes of Coos, Lower Umpqua & Siuslaw Indians, Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation, Coquille Indian Tribe, Cow Creek Band of the Umpqua Tribe of Indians, and The Klamath Tribes.

It is important that we recognize and honor the ongoing legal and spiritual relationship between the land, plants, animals, and people indigenous to this place we now call Oregon. The interconnectedness of the people, the land, and the natural environment cannot be overstated; the health of one is necessary for the health of all.

We recognize the pre-existing and continued sovereignty of the nine federally recognized tribes who have ties to this place and thank them for continuing to share their traditional ecological knowledge and perspective on how we might care for one another and the land, so it can take care of us. We commit to engaging in a respectful and successful partnership as stewards of these lands. And as we are obliged by state law and policy, we will uphold government-to-government relations to advance strong governance outcomes supportive of tribal self-determination and sovereignty.

Legislative Commission on Indian Services. Land Acknowledgment Guidance. Retrieved July 2024, from https://www.oregonlegislature.gov/cis/ Pages/education.aspx

Cover Photo

Image 1: View of Cape Blanco from the South, Cape Blanco Lighthouse, Oregon ShoreZone, 2011.

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Projection Oregon Statewide Lambert, NAD1983 International feet, EPSG 2992

CAPE BLANCO MARINE RESEARCH AREA BOUNDARY

Miles
0 0.1 0.2 0.4

N

Access Points by OCMP
Trails by Open Street Map
Reference Map by Oregon Dep. of Transportation
Imagery by Maxar
Marine Managed Areas by:

Eva Krukowski, OCMP, Date Modified 09/24/2025

Map 1. The Cape Blanco Marine Research Area Boundary includes all state-owned submerged and submersible land in the intertidal area along the north and south sides of Cape Blanco extending seaward to encompass all rock along the headland up to the sand beaches of the north and south sides of the cape.

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City of Port Orford

Oregon Parks and Recreation Department

Oregon Department of State Lands

Oregon Department of Fish and Wildlife

Oregon State Police

U.S. Fish and Wildlife Service

National Oceanic and Atmospheric Administration

Tribal Partners

Coquille Indian Tribe

Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians

Confederated Tribes of the Siletz Indians

Other Partners

South Coast Rocky Shores Group

PISCO Lab at Oregon State University

Shoreline Education for Awareness Board

Ocean Policy Advisory Council

Native people have lived and used beaches, dunes, and rocky environments since time immemorial. We strongly encourage Oregonians and others to learn about the people indigenous to Oregon from the materials and resources made available by the tribes themselves. Learn how the state interacts with Tribes from the Legislative Commission on Indian Services.

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Chapter 1: Introduction

Summary

A Marine Research Area is a special part of Oregon's ocean and rocky shore where the State focuses on protecting marine life and habitat. These areas are set aside to support scientific research, preserve natural ecosystems, and limit the collection of marine plants and animals. They are chosen because the areas have been studied over time, have important environmental significance, and offer strong potential for future research.

The Cape Blanco Marine Research Area was established through a public proposal process outlined in the Territorial Sea Plan (TSP) Part Three, Section E., facilitated by the Oregon Ocean Policy Advisory Council (OPAC), and approved by the Land Conservation and Development Commission (LCDC). The LCDC is the public governing board of the Department of Land Conservation and Development, and agency responsible for stewardship of the TSP with the OPAC. Once the LCDC approves amendments to the TSP, state agencies like Oregon Parks and Recreations Department (OPRD), Oregon Department of Fish and Wildlife (ODFW), and the Oregon Department of State Lands (DSL) may adopt new rules through their agency rulemaking process to conform their rules to the amended TSP.

Any future changes to the Cape Blanco Marine Conservation Areas will also require completion of a public amendment process that would be led by OPAC and adopted via rulemaking at the LCDC.

The designation goals for Cape Blanco Marine Research Area are to formalize the long-term scientific research that has occurred at this site for decades, to maintain public access while providing protection for marine life, and to continue accessibility of non-consumptive, recreational activities.

The Cape Blanco Marine Research Area Management Plan (Plan) provides a framework for implementing site-based management actions at the Cape Blanco Marine Research Area. Management focuses on education, stewardship, and community science to protect the rich biodiversity at this site.

Site information

Cape Blanco Marine Research Area is located to the west of Cape Blanco State Park boundary and is notably the most western point of Oregon. Cape Blanco State Park, managed by the Oregon Parks and Recreation Department, is known for the Cape Blanco Lighthouse, the Historic Hughes House, camping, and horseback riding. Cape Blanco Marine Research Area is primarily used by residents, visitors, and researchers for sightseeing, hiking, dog-walking, bird-watching, whale watching, photography, tidepooling, picnicking, school field trips, scientific surveys, and drone-flying. Common consumptive activities at Cape Blanco Marine Research Area include sport fishing, agate hunting, beach-combing, sport clamming, and scientific collection of marine life

through a scientific permit program. See Appendix C for more information about state regulations and scientific research permits.

Cape Blanco is located in Curry County, five miles north of Port Orford, Oregon. The site boundary includes the approximate area from the start of the rocky intertidal (end of the sandy beach) on the north side of the cape, wrapping westward and to the south of the cape, stopping approximately at the east side of the small cove on the south side of the Cape. The site boundary hugs the shore line of the Cape and extend from the base of the Cape cliffs to a maximum depth of 14m into the subtidal zone.

The rocky intertidal is physically characterized by steep rock faces and long benches extending into the water. Large and small boulders occupy large swaths of the intertidal as well. Southern Oregon geology is composed mostly of accreted terranes. These are groups of rocks that formed together and show similar composition and environmental characteristics to each other, but are not similar to the other rocks surrounding them. This geological phenomenon makes Cape Blanco a distinctive part of the Southern Oregon Coastline.

The rocky intertidal ecology here is unique as a result of the bathymetry off of the Oregon coast. Cape Blanco has intermittent upwelling and therefore creates a “Goldilocks zone” of nutrient supply and cooler water in the warm summer months (Krenz et al. 2011, Fenberg et al. 2015, Menge et al. 2015). Upwelling occurs when annual offshore winds push surface water off of the coast, and cold, nutrient-dense water flushes in from the bottom of the sea floor (Huyer 1983). In the California Current Large Marine Ecosystem (CCLME), upwelling occurs primarily in summer and relaxes in the late fall (Huyer 1983). The upwelling conditions at Cape Blanco allow for high recruitment and survival of algae and invertebrates.

The area within the proposal Marine Research Area consists of large boulders and rocky benches that provide habitat for a diversity of plants and animals. Common species found in the intertidal at Cape Blanco include a variety of algae (most conspicuously, red algae and a variety of kelps), invertebrates (mussels, barnacles, sea stars, and crabs, among many others), birds (Black Oystercatchers, Gulls, Terns, Kingfishers and others), and fishes (including economically important species such as Lingcod, Cabezon, and many species of Rockfish).

MARINE RESEARCH AREA DESCRIPTION

The Cape Blanco Marine Research Area encompasses roughly 61 acres covering about 1.3 miles of shoreline around the cape. There are around 22.7 acres of intertidal habitat area and 1.6 acres of offshore rocks and islands within the boundary. The Cape Blanco Marine Research Area boundary includes the intertidal habitat along the north and south sides of the cape extending to encompass all rock along the headland up to the sand beaches of the north and south sides.

The government agencies with jurisdiction within or nearby Cape Blanco Marine Research Area are the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, Oregon Parks and Recreation Department, and the U.S. Fish and Wildlife

Service. See Appendix C and Appendix D for more information about state and federal regulations.

How to use this document

The Cape Blanco Marine Research Area Management Plan (further referred to as "the Plan") is multipurpose: 1) it is a tool for community members to learn about rocky habitat management and support programming in the area, and 2) it will help government agencies implement regulations for marine research areas and coordinate stewardship of the habitat.

The Plan includes regulatory and non-regulatory management strategies for achieving management goals. Regulatory strategies are added restrictions to the harvest of marine plants and animals associated with the Marine Research Area designation. Non-regulatory strategies describe the resources and existing or desired efforts and programs for educational programming and scientific monitoring.

The audience for this Plan is all individuals and groups with an interest in the ecological health and resilience of Cape Blanco. These groups include Tribal Nations, state, local, and federal government agencies, non-governmental organizations or non-governmental organizations, community groups, charter and commercial fishing companies, residents, local businesses, tourists, researchers, and local schools.

The Plan can help communities:

- Understand how the policies and principles from the Oregon Rocky Habitat Management Strategy are applied at Cape Blanco.
- Share the goals and objectives for management priorities at Cape Blanco.
- Document what efforts community groups and government agencies can contribute towards achieving Plan goals.
- Build new and existing engagement opportunities at Cape Blanco.
- Participate in scientific monitoring at Cape Blanco.
- Access outreach and educational materials about rocky habitats.

Chapter 2: Cape Blanco Marine Research Area Management Objectives

Chapter 2 covers objectives and implementation actions for habitat management strategies such as information sharing, interpretation, site monitoring, and compliance.

Management strategies and objectives for the Cape Blanco Marine Research Area will foster cooperation and coordination among local, state, and federal resource management agencies, and Tribal Nations, to ensure that ecosystem-based management principles guide decision-making for marine resources, wildlife, and habitat.

Communities should coordinate stewardship efforts at Cape Blanco Marine Research Area with the following government agencies and Tribal Governments, as appropriate:

- Coquille Indian Tribe
- Confederated Tribes of Siletz Indians
- Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians
- Any other interested Tribe
- U.S. Fish and Wildlife Service
- Oregon Parks and Recreation Department
- Oregon Department of Fish and Wildlife
- Oregon Department of State Lands
- Department of Land Conservation and Development
- City of Port Orford
- Curry County

Marine Research Area Non-Regulatory Management Standards

The Territorial Sea Plan Part 3 includes three non-regulatory standards & management practices for Marine Research Areas.

1. Regarding physical public access to areas:
   - Avoid enhancement of future physical public access on public lands to rocky habitats except in instances of safety concerns.
   - Maintain but avoid enhancing capacity of current physical access.
   - Enhance visual access to these sites.
   - Prioritize access to these sites for low impact research.
2. When possible, researchers in these areas should report project outcomes and metadata to the permitting agency for incorporation into a publicly accessible repository.
3. Other actions and practices that aid in reaching site goals.

Refer to the Territorial Sea Plan Part 3 on pages 66-67 to compare the standards for all three types of rocky habitat designations.

Site Management Objectives and Recommended Actions

The following site objectives are designed to align public activities within the Cape Blanco Marine Research Area with both the community-identified goals for Cape Blanco Marine Research Area and the broader guidance from the Territorial Sea Plan Part III: Rocky Habitat Management Strategy. These objectives and implementation actions build upon the coastwide standards for management of Marine Research Areas while also addressing site-specific needs for the habitat and local community.

Nonprofits, community groups, research teams, government agencies, and other interested parties planning projects in or involving the Cape Blanco Marine Research Area should use these objectives and recommended actions as a framework to guide their activities and ensure consistency with site management priorities. Common themes for the objectives below include collaborative planning, natural resource conservation, inclusive and equitable access to views and public marine education, long-term site monitoring, and public safety.

Workshop participants developed recommended implementation actions during the 2025 South Coast Rocky Habitat Workshop, following consultation with community groups, state agencies, and other partners. The list below categorizes six main objectives and 55 associated actions. For the complete table of the recommended implementation action matrix, see Appendix F.

Objective 1: Foster regular coordination among Tribal Nations and local, state, and federal resource management agencies to ensure that ecosystem-based management principles guide management decisions for marine resources, wildlife, and habitat at the Marine Research Area.

See Actions: 1, 4*, 10, 43*, and 50

Sub-Objectives:

1.1. Coordinate with the Coquille Indian Tribe, Confederated Tribes of Siletz Indians, and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians, and any other interested Tribes about stewardship decisions at the Blacklock Point Marine Conservation Area.
1.2. Support Tribal-led monitoring, stewardship, interpretation efforts at Blacklock Point
1.3. Preserve cultural resources at Cape Blanco, ensuring they are respected and protected in any activity within the Marine Research Area.
1.4. Include all interested Tribes in resource monitoring efforts.

1.5. Coordinate with all interested Tribes on the appropriate handling and collection of marine life particularly if the research involves a tribally significant species or in the event of marine mammal stranding[1].

Objective 2: Prioritize the long-term conservation of natural resources in rocky habitats.

See Actions 2*, 3, 6, 12, 13, 22*, 25*, 26, 35, 41, 43*, 44*, and 48*

Sub-Objectives:

2.1. Conserve biodiversity and support ecosystem functions by monitoring site conditions and minimizing human disturbance.
2.2. Maintain the ecological integrity of the Cape Blanco Marine Research Area by preserving habitat complexity, species diversity, and healthy populations of keystone species as identified in the State Wildlife Action Plan (SWAP).
2.3. Prevent human disturbance of wildlife or habitats, particularly during shorebird nesting season (April – September) and Harbor seal pupping season (March – June).
2.4. Encourage responsible public behavior through education about proper etiquette around marine plants and animals, fostering stewardship and minimizing ecological impacts.
2.5. Support targeted research, monitoring, and community science initiatives to inform adaptive, science-based conservation practices.

Objective 3: Monitor and maintain existing physical access to rocky habitats, trails and visibility of signage at Cape Blanco while balancing visitor impact on the environment.

See Actions 2*, 5, 9, 14, 19*, 24, 25*, 26, 28, 35, 43*, 44*, 49, and 51.

Sub-Objectives:

3.1. Maintain visual access of the offshore rocks and islands by preserving unobstructed views of the ocean from scenic viewpoints.
3.2. Implement strategies to minimize visitor impact on the environment.
3.3. Reduce trampling, littering, wildlife disturbance, and other physical impacts on sensitive habitats through education, signage, and controlled access when necessary.

[1] Read about an example of agency partners coordinating with the Confederated Tribes of Siletz Indians during a whale stranding response in 2025. https://ctsi.nsn.us/confederated-tribes-of-siletz-indians-assist-in-yachats-whale-stranding-response/.

Objective 4: Enhance public appreciation, awareness, and understanding of rocky habitats and resources within the Cape Blanco Marine Research Area while balancing visitor impact on the environment.

See Actions: 2*, 4, 9, 15-18, 19*, 20, 22-24, 25*, 26-28, 30- 34, 36, 37, 42, 43*, 44*, 47, 48*, 51, and 52.

Sub-Objectives:

4.1. Enhance appreciation for and foster personal stewardship of rocky habitats through education, interpretation, and outreach.
4.2. Provide educational and interpretive opportunities to advance public appreciation of rocky habitats and the species dependent upon these habitats.
4.3. Design educational opportunities for diverse communities and user groups.
4.4. Enhance public awareness of rocky habitat stewardship practices, tidepool etiquette, and responsible behavior.

Objective 5: Support long-term research and site monitoring projects at Cape Blanco Marine Research Area.

See Actions 1, 3, 4*, 5-8, 10-14, 22*, 29, 37, 43*, 49, 50, 53, and 54

5.1. Identify knowledge and management gaps for fully achieving site designation goals and implement monitoring, research including citizen science, or other actions to fill those gaps (e.g., invasive species identification and control, tracking trends in sea star wasting disease, trampling, etc.).
5.2. Provide accessible engagement in community science and monitoring opportunities for diverse communities and user groups.
5.3. Prioritize public safety during field research.
5.4. Prioritize research projects that contribute to a deeper understanding of changing ocean conditions and habitat resiliency.
5.5. Use standardized data collection practices across all community science projects.
5.6. Monitor visitor use and regularly assess visitation patterns and their impacts on the habitat.

Objective 6: Encourage public safety and regulatory compliance from all visitors.

See Actions 2*, 5, 15-18, 19*, 21, 23, 25*, 29, 30, 32, 33, 36, 38-42, 43*, 45-47, 48*, 49, and 55.

6.1. Support visitor awareness of site rules, regulations, and ecological sensitivities through clear and consistent messaging (e.g. Stay on trail and watch out for slippery rocks).
6.2. Notify USFWS, DSL, ODFW, OPRD, or DLCD if regulations are not clear or accessible online or on signage.
6.3. Center public safety in planning discussions about site improvements and programming.

6.4. Support informed stewardship programs by empowering program staff, volunteers, and other visitors to evaluate the appropriate response to an unsafe event or violation.

6.5. Use public education as the primary enforcement mechanism to obtain compliance with existing site and coastwide policies, rules and regulations.

#	**Recommended Implementation Actions List:** *Priority Actions support three or more objectives
1	Engage tribes during the planning of community science and monitoring projects.
2*	Inform Oregon Coast Trail hikers about sensitive areas like during harbor seal pupping season.
3	Participate in bioblitz(es) to measure site diversity on a regular basis.
4*	Host educational seminars for community members to learn about ongoing updates or results of monitoring efforts. Topics could also include basic ecological theory to discuss resilience. This is an opportunity to invite Tribal representatives to speak.
5	Ensure community science trip guides follow beach safety recommendations.
6	Help develop, host, or find community science projects that collect data to inform management.
7	Develop community science monitoring protocols consistent with all designated Marine Reserves and Rocky Habitats.
8	Train community science volunteers to implement the protocols.
9	Strengthen relationships between commercial users of the area and those recreating. Examples could include hosting an event or creating a survey of all users.
10	Facilitate access to Cape Blanco research data for Tribes, researchers, and community groups, provided the data is not confidential or otherwise protected, regardless of whether they are held by state, federal, or research institutions.
11	Support data transparency for information collected by community groups so that it is accessible to the OCMP, ODFW, OPRD, DSL and Tribes. Oregon SeaSketch could be a potential data-sharing platform.
12	Consider adding ODFW monitoring sensors for Ocean Acidification and Hypoxia within the designation boundary.
13	Collaborate with educational institutions to develop future research projects based on community priorities.
14	Establish consistent photo point locations where visitors can take repeatable photos and share them to a central database to document long-term change.
15	Translate all printed materials into Spanish. Make digital materials available in Spanish as well.
16	Provide species ID guides and resources.

17	Develop brochures that can be shared at the chamber of commerce, outdoor gear stores, and local hotels or vacation housing.
18	Make all plans, signs, and brochures available online.
19*	Monitor and maintain the interpretive panels at the site. If a sign needs maintenance, notify USFWS Refuge Manager and the OPRD Bullards Beach Park Manager.
20	Host public presentations for community and school groups, individuals and organizations about the marine environment and ocean literacy. Locations for presentations could include rotary clubs, schools, library, and guided tours for people with mobility challenges.
21	Increase availability of information about protected areas where visitors are already going to look (e.g. State Parks, ODFW Website, Curry County, etc.)
22*	Partner with local schools to share education about tidepool etiquette and marine education. Organize school field trips to Cape Blanco with a hands-on component (ex. tidepooling, complete a CoastWatch survey).
23	Participate in the development of a Rocky Habitat Communications Plan with ODFW and the Rocky Habitat Partners.
24	Develop a "virtual" field trip option to Cape Blanco for non-coastal schools.
25*	Provide volunteer steward presence at sites seasonally during daylight low-low tide periods.
26	Connect interpretation materials or events to sustainable seafood networks.
27	Consider participating in a species spotlight podcast series to highlight some of the most important indicators of healthy rocky habitats. Potential partners could include the Oregon Coast Visitor Association and Shoreline Education for Awareness.
28	Support tidepool education offsite to encourage marine education in urban areas and to minimize onsite visitation. Partners could include the Oregon Coast Aquarium, Portland Aquarium, Charleston Marine Life Center, Oregon Museum of Science and Industry, and the Eugene Science Center.
29	Volunteer tidepool ambassadors monitor visitor use by collecting data like the number of visitors and dogs to the Marine Research Area at low-tide.
30	Identify gaps in existing outreach materials to support the development of new materials.
31	Provide handouts about marine education or Cape Blanco at Battle Rock Visitor Center and the gift shop at Cape Blanco.
32	Table at large community events or festivals to spread awareness.
33	Develop a hospitality packet that includes information about designated sites nearby and guidance for responsible tidepooling and safe recreation.
34	Work with Oregon Coast Visitor Association to support awareness campaigns like the ‘Coast Like a Local Campaign'.
35	Promote monthly beach cleanups. Partners could include SOLVE and Surfrider.

36	Acquire a tidepool ambassador hat or vest so that visitors know how to identify volunteers. Partners could include USFWS because USFWS volunteers wear vests at Coquille Point.
37	Track the number of participants at on-site events.
38	Support volunteers' comprehension of state and federal regulations that apply on the beach and within the Marine Garden by providing Appendix D and Appendix E of the Plan.
39	Direct recreational anglers to the current issue of the ODFW Sport Fishing Regulations booklet.
40	Increase the number of available enforcement officers who could respond to emergencies or violations on the beach. Support discussions between Curry County Sheriff, OSP, USFWS, and OPRD so Patrol officers can respond at Cape Blanco, if necessary.
41	Train tidepool ambassador volunteers to recognize when action is needed and how to respond appropriately in cases of violations or emergencies. Share Appendix F with volunteers for reference.
42	Provide an overview of state and federal regulations at annual tidepool ambassador training for volunteers and seasonal staff. Reach out to State Agency staff at OPRD, ODFW, USFWS, or DLCD to find staff to provide this training.
43*	Research a dedicated funding stream to support implementation of site goals.
44*	Participate in media campaigns that promote etiquette like leave-no-trace.
45	Invite first responders to public workshops to speak on beach safety.
46	Invite OPRD Beach Rangers, an OSP Lieutenant, and other law enforcement officers to train volunteers and staff on how to properly engage with the public and respond to different scenarios.
47	Include a beach-safety briefing for participants at every event on the beach.
48*	Develop a volunteer stewardship program to share between Cape Blanco and Blacklock Point.
49	Install parking lot/trail counter at the Cape Blanco lighthouse parking lot. TRAFx is a service used at other parks in Oregon.
50	Notify the Tribal Historic Preservation Officer or the Natural Resources Department Director from any other interested Tribes before any resource monitoring or extractive activity occurs within the Marine Research Area.
51	Interact with visitors through interpretation programs, tabling, junior ranger packets, and sharing outreach materials.
52	Coordinate messaging about Cape Blanco Marine Research Area and the Oregon Islands National Wildlife Refuge with USFWS.
53	Rely on established scientific monitoring and data collection protocols with current research in the region.

54	Vet data collection methods through a science-based group such as the Scientific and Technical Advisory Committee (STAC) or Oregon Department of Fish and Wildlife.
55	Notify USFWS, DSL, ODFW, OPRD, or DLCD if regulations are not clear or accessible online or on signage.

Chapter 3: Rocky Habitat Management Strategies

Learn more about the main themes of rocky habitat management strategies that are currently being implemented on the Oregon Coast and what programs are being developed. See Chapter 4 to learn more about Tribal engagement.

Natural Resource Conservation

The protection of natural resources at Cape Blanco is everyone's responsibility: visitors, community members, researchers, planners, and land managers alike. Organizations that host public programs — such as beach walks, field trips, or community events at Cape Blanco — will carefully plan their activities to protect the environment and avoid disturbing wildlife or natural habitats. Examples of habitat disturbance are trampling, removing plants or shells from the beach, or handling animals.

Public Access

Management agencies like Oregon Parks and Recreation Department and the U.S. Fish and Wildlife Service will ensure the long-term preservation of public visual access to the ocean.

Viewpoints from the headlands above Cape Blanco Marine Research Area and the area around the Lighhouse are the most accessible option to enjoy the Marine Research Area for people with mobility limitations.

There is a walking trail leading to the beach and the intertidal area on north side of the Marine Research Area (see Map 1) with parking on Cape Blanco Road.

INFORMATION SHARING

Visitors learn about Cape Blanco from a variety of sources. Goals about sharing information should focus on efforts to simplify and coordinate messaging about the Cape Blanco Marine Research Area. Information sharing could include signage, information available on websites or maps, tidepool etiquette materials, safety info/tide charts, etc.

When organizations or agencies design materials for public consumption, the content should be inclusive of diverse user groups. For example, including options for translated materials, sharing relevant information about different types of recreation activities, and using plain language to be accessible to varying levels of education and ocean literacy.

As part of the 2019-2023 Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP), the Oregon Parks and Recreation Department (OPRD) conducted a statewide visitor survey of Oregon State Park users. The five most common information sources for visitors in the Coastal Region were official OPRD websites, relying on knowledge from previous visits, recommendations from friends and family, highway signs, and brochures (Bergerson, 2019).

Community discussions during the rocky habitat workshop series suggested that many people in the community get their information from social media, local radio, newspapers, and local businesses. Communications that use these pathways are a good way to reach local audiences and visitors. Community members identified local hubs where they seek or find information:

- Cape Blanco Lighthouse Station and Greeting Center Gift Shop
- Hughes House & Ranch
- Social media
- Local newspapers and magazines
- Local radio
- Local churches
- Local fishing organizations
- Whale watching charters
- Hatfield Marine Science Center
- Oregon Coast Aquarium
- Bandon Library
- Port Orford Public Library

Education and Interpretation

The Cape Blanco Marine Research Area offers a unique opportunity to inform visitors about statewide marine conservation efforts and the value of those areas to the nearby communities. For many coastal visitors, Oregon's beaches and tidepools are often their first experience of the ocean. Education and interpretation are the best way to spread awareness about ocean systems, encourage best practices for viewing marine life, and enhance the visitor experience.

An informed and aware public is critical to protecting rocky habitat resources and carrying out the goals and strategies of the Cape Blanco Marine Research Area Management Plan. In many cases, education is the strongest tool to increase informed visitation habits and discourage disturbance.

For the most effective results, education and interpretation should be a collaborative effort among community groups to develop a comprehensive plan aimed at raising awareness about marine ecosystems. Examples of collaborations are sharing marine education curriculums with educators and summer camps, coordinating social media posts, publishing articles, designing interpretive signage, and organizing interpretive events.

The Shoreline Education for Awareness (SEA) is a non-profit organization dedicated to promoting education and awareness of shoreline habitats and the wildlife found on the southern Oregon Coast. SEA workshops focus on marine education and safe wildlife viewing practices on the coast. They train volunteer wildlife interpreters every year on topics like tidepool etiquette, harbor seal pups, seabirds, and more. While most of their work is focused in Bandon, they are a great group to collaborate with for events at Cape Blanco.

MARINE EDUCATION CURRICULUM

Coastal communities have a long-term goal for state investment in the development of a marine education curriculum focused on rocky habitat ecosystems that would be incorporated into the science standards for school-age children. Marine educators, local school-age educators, Coastal Tribal educators, and state agencies would contribute to the K–12 education program to teach students about the ecology of marine habitats.

Outside of the classroom, there are many other opportunities for incorporating rocky habitat education into youth programming. Outdoor School, afterschool programs, day camps and sleep-away camps are all great opportunities to bring young people into the field for hands-on learning experiences.

Rocky Habitat Educational Resources

Oregon Tidepools	Great resource for field trips and general visitors.
Tidepools Are Alive! Brochure, Oregon Parks and Recreation Department	Printable brochure with tidepool etiquette and an interpretive species guide. The map on the back is not up to date with new restrictions.
Oregon Coast Stem Hub	The Oregon Coast STEM Hub is a great resource for educators. They have a library of equipment for outdoor education (rain boots, microscopes, scales, ROV kits, etc.)
Oregon Sea Grant K-12 Science Curricula	Tidepool Tussle (Grades 6-8): https://seagrant.oregonstate.edu/orsea-tidepool-tussle Check out the Oregon Sea Grant website for more resources and events for educators: https://seagrant.oregonstate.edu/visitor-center/marine-education
Redfish Rocks Community Team	The Redfish Rocks Community Team has compiled a list of education resources.
Ocean Literacy Guide	Guide for all ages.
Charleston Marine Life Center	Online and onsite school programs.
Oregon Coast Aquarium Education Programs	Online and onsite school programs, youth camps, and marine education for all ages.
CoastWatch in the Schools	Coordinates guest educators to be on the beach with teachers and students; provides training for community science projects; introduces

	classrooms to scientists and researchers. Schools submit miles reports just like all CoastWatch volunteers.
Tidepool Unit Study, Teachers Pay Teachers	Downloadable tidepool curriculum for a variety of ages designed by an Oregon educator.
Rocky Shores Training 2025	Video recordings and summary of the 2025 Rocky Shores Training intended for volunteers, seasonal staff, and interns who provide front-line rocky shore interpretation along the coast of Oregon.

Education should emphasize proper tidepool etiquette, measures to protect wildlife, and ecology of nearshore and subtidal habitats. Indigenous traditional uses of marine resources, both past and present, is an educational topic that is best informed through involvement of local Tribes. This collaborative effort will help ensure future generations have the knowledge and appreciation of these sites to help maintain and protect them.

INTERPRETIVE SIGNAGE

Image 2: Welcome to Coquille Point Marine Garden interpretive panel, Shoreline Education for Awareness, 2024 https://sea-edu.org/coquille-point-marine-garden/.

Interpretive signs provide stories designed to stimulate visitors' interest while challenging their imaginations, and perhaps present new perspectives on familiar topics. Thematic signage enables visitors to understand more clearly the local history, environment, and cultural significance within the rocky habitat.

The example above shows a Welcome Panel located at the Coquille Point parking lot giving a general description of the designated area and tidepool etiquette tips. A similar Welcome Panel about Marine Research Areas could be appropriate in the parking lot near the Cape Blanco Lighthouse. Interpretive signage and/or digital narratives at key viewpoints at the Cape Blanco State Park can enhance the visitor experience by describing the ecological functions of rocky habitats and kelp forests.

EQUITABLE ACCESS TO MARINE EDUCATION

A wide range of legal standards exist for the design, alteration, construction, and maintenance of interpretive signs. This includes the Americans with Disabilities Act (ADA) Standards for Accessible Design and the Architectural Barriers Act (ABA) Accessibility Standards, which ensure baseline access to public lands for the disability community. Planners must holistically consider the full spectrum of disability identities within the ADA and ABA frameworks to ensure that built environments accommodate the diverse experiences and needs of people with disabilities.

Access and enjoyment of Cape Blanco matter to a diverse population. Interpretive signage will be bilingual (English and Spanish). Cape Blanco Heritage Society, OPRD, and USFWS will strive to provide translated versions of English-only signs on their websites.

Site Monitoring

Cape Blanco Marine Research Area will function as a key location for scientists and community members to collaboratively monitor the effects of changing conditions on rocky habitats and intertidal zones. Monitoring these ecologically sensitive areas is crucial for effective management of the Marine Research Areas and of rocky habitats coastwide. Monitoring efforts should track indicator species.

U.S. FISH AND WILDLIFE NESTING SURVEYS

The U.S. Fish and Wildlife Service (USFWS) conducts aerial surveys of breeding birds at seabird colonies along the Oregon coast. This project provides valuable data to both the Migratory Bird and National Wildlife Refuge programs within the USFWS, as both seek to understand and manage the many seabird species that are an integral part of the Pacific Northwest coast.

Observers enter nesting count data into the Oregon Seabird Colony Database, which helps identify the current distribution and abundance of Common Murres and cormorants at colonies on the Oregon coast. These counts are part of a large historical data set that goes back to the early 20th century.

OREGON DEPARTMENT OF FISH AND WILDLIFE PINNIPED SURVEYS

Rocky habitats along the Oregon coast provide critical resting and breeding areas for pinnipeds. The Oregon Department of Fish and Wildlife's Marine Mammal Program conducts periodic aerial surveys of these habitats to monitor pinniped distribution and abundance in support of coastal conservation, management, and coastal development activities.

Survey results are publicly available through an online dashboard:
https://www.arcgis.com/apps/dashboards/530f6596548941aeb1cbb24b7bd3e6ab

COMMUNITY SCIENCE OPPORTUNITIES

Community science is about working with communities to engage science in locally relevant problem-solving that addresses community priorities, values, and aspirations. Community science is a monitoring and research approach that empowers anyone, regardless of educational background, to collect and contribute data to research efforts. Community science projects at Cape Blanco will build upon ongoing projects and emerging opportunities.

There are many community science projects to get involved in along the Oregon coast. Learn more about all these projects here:

- Oregon Ocean Information Links
- Oregon Marine Reserves Partnership Links
- Oregon Tidepools Links
- Oregon Shores Community Science Links
- Multi-Agency Rocky Intertidal Network (MARINe) Links

Learn More and Get Involved

Community members can get involved with one or more community science projects. Whether you are looking for a one-day educational family adventure or an ongoing commitment, there is something for everyone.

INATURALIST

iNaturalist is an online social network platform for people to share biodiversity information and observations publicly. Users can learn how to identify plants and animals while also generating spatial data points that contribute research-quality data for science and conservation efforts.

iNaturalist project observations for Cape Blanco can now be viewed using Oregon SeaSketch - the marine spatial planning tool for the State of Oregon. Through Oregon SeaSketch, users can view a variety of human use, physical, and biological datasets pertaining to the Oregon coast. Projects and maps can then be created using Oregon SeaSketch to fit a wide variety of spatial planning needs.

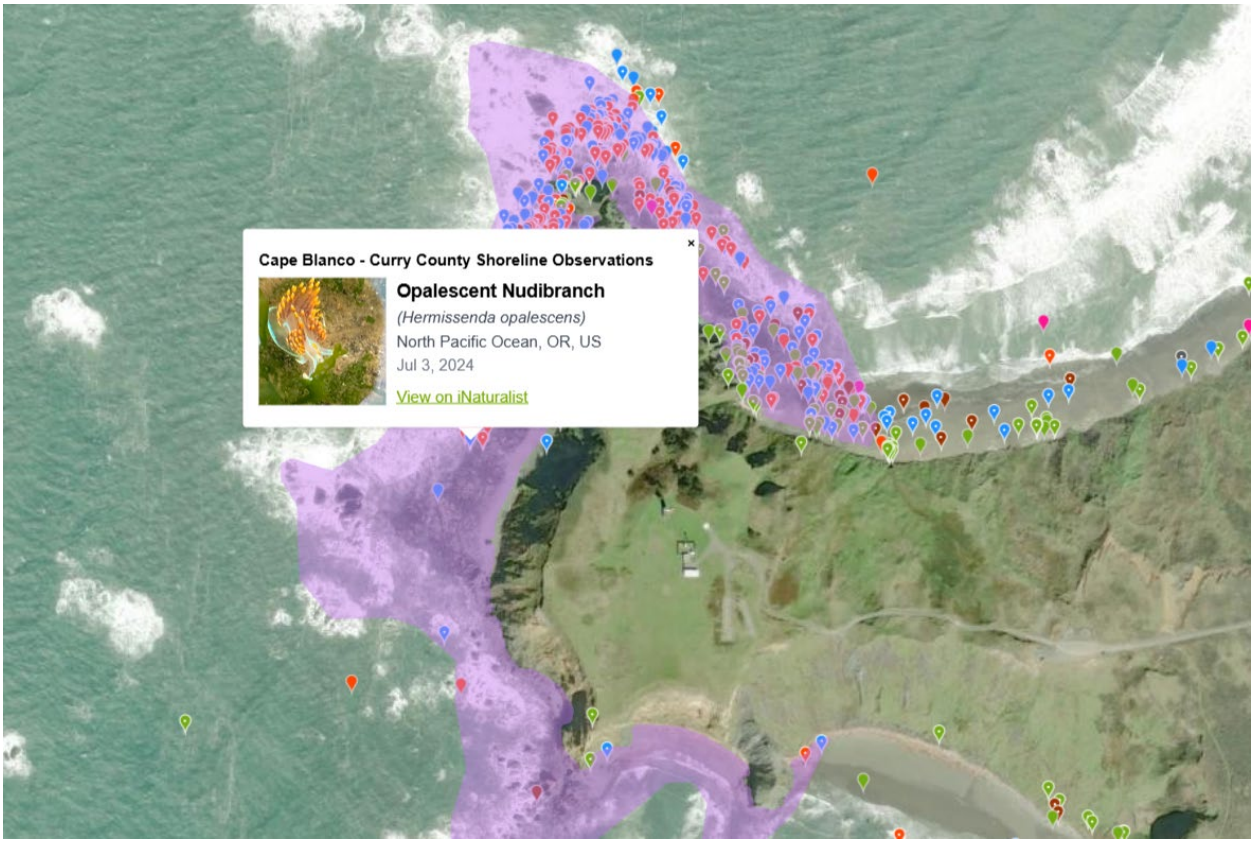

Image 3: SeaSketch iNaturalist observations for Cape Blanco. Generated February 2026.

Oregon Parks and Recreation Department facilitates an ongoing project on iNaturalist called the Oregon State Parks Coastal Species Inventory. Start adding observations today!

COASTWATCH

CoastWatch is a coastwide program initiated and managed by Oregon Shores. CoastWatch engages people in documenting Oregon's sandy beaches and rocky shores for natural and human-caused changes, wildlife, and phenomena. Volunteers adopt a section of the Oregon coast to observe seasonally. The program offers

education about shoreline ecology and natural history, with opportunities to contribute data to community science.

BLACK OYSTERCATCHER MONITORING

The Bird Alliance of Oregon organizes an ongoing community science project to monitor Black Oystercatchers nests coastwide. The Black Oystercatcher (*Haematopus bachmani*) is a shorebird found in rocky habitats along the Oregon coast and elsewhere along the west coast of North America. The species' global population is relatively small with a low reproductive rate. According to the U.S. Fish and Wildlife Service in 2021, Black Oystercatchers are a species of high conservation concern and may act as an indicator of intertidal ecosystem health.

The Bird Alliance of Oregon monitors the nesting and fledgling success for Black Oystercatchers along the Oregon coast. Researchers will use monitoring information as part of a regionwide effort in California and Oregon to assess Black Oystercatcher population viability and estimate impacts from human disturbance, predation, and other factors. They will use all collected data to inform the conservation and management of this species.

KELP MONITORING

The Oregon Kelp Alliance (ORKA) published a status report on kelp (*Nereocystis luetkeana)* that documents the distribution and condition of kelp forests within Oregon's Territorial Sea. The status report includes monitoring recommendations. Opportunities to integrate the monitoring recommendations in the kelp status report with ongoing long-term monitoring by the ODFW Marine Reserve Program should be explored.

Compliance and Enforcement

The best way to avoid instances of rule violation or habitat disturbance is by following an education-first model that the Oregon Department of Parks and Recreation practices. Education-first in this context means prioritizing public education about the marine ecosystem, followed by sharing information about rules, regulations, and tidepool etiquette, and relying on enforcement measures as a last resort.

Robust public education and interpretation programs are the State's greatest compliance tool to combat violations. By centering public education, nonprofit organizations, volunteers, and beach visitors can support compliance efforts. Individuals and groups that do not have enforcement authority can share information about tidepool etiquette, marine ecosystems, and general information about regulations to support public compliance within Marine Research Areas.

Enforcement of rules and regulations on the ocean shore is the responsibility of Oregon State Police, Oregon Parks and Recreation Department Beach Rangers, and some local police units. Volunteers should not engage directly with members of the public who appear to be committing a violation. If a concern arises within the Cape Blanco Marine Research Area, pause, collect information, and evaluate the appropriate response.

Image 4: Draft Regulation sign for Coquille Point Marine Garden, OCMP, OPRD, 2024.

Severe wildlife disturbance like poaching is a serious violation of state and federal law; see Appendix E for a list of whom to contact about an emergency, habitat law violation, or other scenarios on the beach.

REGULATION SIGNAGE

The Oregon Parks and Recreation Department (OPRD) is developing regulation signage in coordination with the Oregon Department of Fish and Wildlife and the Department of Land Conservation and Development. OPRD will post the regulation sign at the main Cape Blanco beach access point cluster board near the lighthouse parking lot. The QR code (link) on the regulation sign will go to a site page for Cape Blanco Marine Research Area housed on the Oregon Tidepools website with more information about site regulations and a boundary map. Spanish language translation of the sign should be available on the website.

COMPLIANCE WITH TIDEPOOL ETIQUETTE

Education is the best way of addressing wildlife disturbance and compliance with site regulations. Staff and volunteers will share rules, regulations, and tidepool etiquette at Cape Blanco through signs and oral interpretation.

Beach visitors and site stewards who witness wildlife or habitat disturbance should document the scenario and report it to the appropriate channel. Do not intervene during an instance of wildlife violation because it could be unsafe and cause more harm to do so. For violations needing an urgent response, see Appendix E for more details.

Public education about best practices for interacting with marine plants and wildlife can be accessible as signage, informational flyers, guided outings, and stewardship interactions.

Tidepool etiquette includes respecting the fragile marine ecosystem found in tidepool. Below is a list of recommended guidelines that the public should follow when visiting rocky habitats. Following these guidelines helps to keep visitors and wildlife safe. Many agencies and organizations have developed their own lists of visitor guidance in rocky habitats.

Website	**Outreach Materials and Best Messaging about Viewing Marine Life**
Oregon Tidepools	Being Good Visitors Webpage
Haystack Rock Awareness Program	It's Their Home. We're Just Visiting Webpage
Oregon Coast Visitor Association	How to Visit Oregon's Coastal Tidepools Webpage Coast Like a Local Campaign
Shoreline Education for Awareness	Tidepool Etiquette Webpage
Oregon Department of Fish and Wildlife	It's All Connected Handout
National Oceanic and Atmospheric Administration	Viewing Marine Life Webpage

Chapter 4: Guidance on Tribal Engagement

Indigenous Significance of Rocky Habitats

Rocky habitats, ecosystems uniquely positioned between land and the Pacific Ocean, have provided rich marine resources for thousands of years. Since time immemorial, Indigenous communities have lived around estuaries and bays, near marine resources found in rocky habitats, like clams, mussels, and seaweed that provide sustenance and materials for their families and culture.

Today, Coastal Tribes continue a meaningful connection with Ancestral Homelands between land and sea in rocky areas. These lands are locations for gathering first foods, ceremonies, traditional cultural practices, and are a part of coastal, indigenous identities. The health of these coastal lands is inextricably linked to the wellbeing of coastal indigenous communities, which is why indigenous communities and Tribes must be included in stewardship, monitoring, protection, and restoration efforts that occur in rocky habitats.

The Cape Blanco Marine Research Area Management Plan cannot begin to appropriately summarize the rich lineage of tribal use of the coast and traditional lifeways related to abundant rocky habitats. Rocky habitat management strategies implemented at Cape Blanco by the State of Oregon and members of the public should prioritize Tribal interests. Management strategies should be planned and conducted in coordination with appropriate Tribal Staff and Governments including:

- The Coquille Indian Tribe
- The Confederated Tribes of Siletz Indians
- The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians
- The Confederated Tribes of the Grand Ronde
- The Cow Creek Band of the Umpqua Tribe of Indians
- Chinook Indian Nation
- Clatsop-Nehalem Confederated Tribes

Communities may contact the Legislative Commission on Indian Services to determine which Tribal nations have an interest in specific geographic areas in Oregon and to inquire about project collaboration.

Tribally Significant Species

The cultural sensitivity of the species listed below should be prioritized when researching and managing wildlife and their habitats.

Marine and Estuary Plants:

- Eelgrass
- Giant kelp
- Bull Kelp
- Sea lettuce
- Surf grass

Marine and Estuary Animals:

- Shellfish (crab, snails, mussels, barnacles, abalone, dentalium)
- Rockfish (lingcod, sculpin, perch, greenling)
- Lamprey (all species)
- Flounder
- Eulachon
- Sea urchin
- Salmon (all species)
- Sea mammals
- Halibut
- Herring
- Chiton

Interested community members should visit the Tribal websites listed above and review content published by the Tribes to learn more about individual cultural history surrounding these areas.

Image 5: Tribal Tradition interpretive panel at Coquille Point Marine Garden designed by the Coquille Indian Tribe in partnership with USFWS, Shoreline Education for Awareness, Wild Rivers Coast Alliance, and art by Ram Papish. Photo by Micky Franks, 2025.

Sign Text:

> This intertidal ecosystem has nourished the bodies and spirits of the Coquille Indian Tribe since time immemorial. Before colonization, two traditional Coquille Languages, Nuu-wee-ya' and miluk, echoed across beaches and waves as Tribal members worked and played. These languages are being reawakened today.
>
> Generations of Coquille women have carried handwoven burden baskets (*miige* in miluk; *dv-le* in Nuu-wee-ya') down to the shore at low tide to harvest the coast's bounty. Baskets are a cornerstone of Coquille culture. The gapped weave of burden baskets allows water to flow through as mussels (*q'walxwen* in miluk; *dee-lhat* in Nuu-wee-ya') pried from the rockfaces are placed inside. Mussels are prepared through smoking and turning into jerky or are used as ingredients in other dishes.
>
> The Coquille Indian Tribe retains the right to harvest traditional materials and first foods as a sovereign people. Please be respectful of this place and the traditions it carries.

KEY THEMES TO CONSIDER WHEN ENGAGING WITH TRIBES:

The State of Oregon has a formal relationship to Federally Recognized Tribes in Oregon and must follow legal requirements for Tribal coordination. Although not legally obligated, community organizations working on rocky habitat stewardship are strongly encouraged to develop relationships with the local indigenous communities, Tribal representatives, and Tribal Governments. Below are some key themes and contexts to consider when reaching out to indigenous communities and Tribal Nations.

Engage Early and Often: The best time to engage with Tribal Nations is before the initiation of a project (ideally during the grant writing stage) or at the beginning of a project. Building partnerships takes time, so it's essential to begin relationship-building early. Each Tribal Government is unique and will have specific procedures and policies for coordination.

If you are working directly with individual Tribal members rather than formally engaging with a Tribal Government, remember that one person's perspective may not represent the views of the entire Tribal Nation. It is important to understand when someone is speaking on behalf of a Tribe in an official or subject matter expert capacity.

Respecting Tribal Sovereignty: Recognize and respect the sovereignty of Tribal governments. Unlike treaty rights, Tribal sovereignty was not bestowed on Tribes by the U.S. Government; tribes always possessed sovereignty rights and never gave them up. Tribal Nations have their own laws, regulations, and government structures.

Indigenous Data Sovereignty: Openly share data and findings about marine resources at Cape Blanco with Tribal Governments. Respect Tribal Nation's right to protect and steward their own data about cultural and natural resources.

Protecting Access to First Foods: Beaches and rocky shores provide essential habitats for fish, marine plants, and shellfish that have long supported the traditional sustenance and cultural practices of coastal Indigenous peoples. Shirod Younker of the Coquille Indian Tribe explains how, "Exercising that ancestral right to gather traditional food helps exercise what we call food sovereignty," (Museum of Natural and Cultural History, 2020).

Marine Research Areas generally prohibit the harvest of shellfish and marine plants for non-tribal community members. Tribal members have the right to collect marine resources within the Cape Blanco Marine Research Area in accordance with Tribal laws and regulations.

Respecting Traditional Ecological Knowledge: Traditional ecological knowledge is the cumulative body of place-based knowledge and practices passed down through generations within Indigenous communities, reflecting thousands of years of place-based wisdom. It is a powerful form of cultural teachings and ways of knowing.

Traditional ecological knowledge should be integrated into natural resource or area-based stewardship plans through respectful collaboration with Tribes. Implementation of traditional knowledge in natural resource management can result in increasing

biodiversity, strengthening relationships between people and the natural environment, and fostering meaningful collaboration with Indigenous communities.

Including Tribal Voices in Interpretive Materials: Interpretation at Cape Blanco should celebrate traditional cultural uses of the habitat and offer educational opportunities for all member of the public to learn about the indigenous significance of coastal environments.

Engage with Tribes to include indigenous voices and stories in rocky habitat interpretive materials. Include Tribes in planning for interpretive materials associated about rocky habitats early in the development and plan for enough time for meaningful engagement and review of materials by Tribes.

Before publishing materials, ensure that the Tribe has granted appropriate permissions. Multiple Tribes may have an interest in Cape Blanco, and each Tribe may have different perspectives, stories, and experiences associated with the area.

The Ancestral Waters Coloring and Activity Book is an example of successful collaboration between nonprofits, state agencies, multiple Tribal Nations, and Indigenous voices to develop a powerful interpretive material about Marine Protected Areas.

Image 6: Ancestral Waters Coloring and Activity Book was designed by the California MPA Collaborative Network and the North Coast Native Protectors in 2024.

Revitalizing Native Languages: Many Tribes and Indigenous communities are actively working to preserve native languages by reintroducing ancestral languages into common practice. Interpretive materials about rocky habitats present an opportunity to support native language revitalization. For example, signs, brochures, tidepool species guides, website content, or other learning materials could include translations of common terms like “clams”, “sea star”, “rock”, “seal”, etc. in multiple native languages.

Learn more about coastal native languages:

- Miluk, Hanis, and Athabaskan: Languages – Coquille Indian Tribe
- Hanis Coos, Miluk Coos, and the Sha'yuushtl'a uhl Quuiich: Languages - CTCLUSI
- Athabaskan: Language - Confederated Tribes of Siletz Indians
- Chinuk Wawa: Language - Confederated Tribes of Grand Ronde

- Takelma: [Language – Cow Creek Education]

Image 7: The Kalapuya Talking Stones are an example of an Indigenous interpretive display along the Willamette River in Eugene, Oregon that features fifteen basalt boulders carved with Yoncalla Kalapuya words and their English translation Eugene Parks & Open Space, 2022.

Deepening Relationships: Building relationships with Tribal Governments and communities is a long-term commitment that requires trust, respect, and consistency. One way to strengthen these relationships is by participating in public events hosted by local Tribes, such as Powwows or cultural gatherings, and by inviting Tribal representatives to community events. Reaching out to Tribal Education, Cultural, or Natural Resource departments can also open doors for meaningful dialogue and collaboration. Above all, prioritize clear, respectful communication and focus on building authentic partnerships not only achieving specific outcomes.

The Oregon Coastal Management Program developed the Oregon Coastal Public Access Guide for Local Government Planners that includes a detailed chapter on Tribal Engagement Guidance. While written for local planners, the guide can also be helpful for organizations and other government agencies pursuing Tribal engagement.

Chapter 5: Marine Ecosystem

The rocky coastline which makes up Oregon's intertidal zone, is a dynamic and ecologically significant environment. The rocky intertidal and subtidal zones serve as a biodiversity hotspot by providing homes and breeding habitats for marine life like fish, seabirds, marine mammals, shellfish, invertebrates, and marine plants that have all become well adapted to the ever-changing landscape of the tides. These habitats also play an important role in breaking wave action and the movement of sand on the beach.

The kelp forests at Cape Blanco were historically some of the largest and most significant kelp beds along Oregon's south coast. However, there has been a significant decline in the extent of kelp beds near Cape Blanco in recent years. Kelp forests are threatened by the exploding purple sea urchin population in the region. Purple sea urchins feed extensively on algae like bull kelp, resulting in dramatic losses of kelp forests, putting the area's biodiversity at risk. Review the Oregon Kelp Forest Status Report and Restoration Plan to learn more about kelp forests at Cape Blanco.

The coastal economy in Oregon depends on a healthy marine ecosystem for industries like commercial fishing, shellfish harvesting, recreational fishing and foraging, and the tourism industry to thrive. Millions of visitors come to the Oregon Coast every year to enjoy the unique coastline and coastal communities. Protected areas like the Cape Blanco Marine Research Area will benefit local industries by strengthening local environmental integrity and supporting the growing biodiversity of marine resources for the surrounding region.

Environmental Stressors

Rocky habitats, including subtidal and intertidal zones, are vulnerable to stressors like marine debris, habitat disturbance, pollution from both land and sea, and changing ocean conditions. These environmental stressors have various implications for the economic, environmental, and cultural value of rocky habitats in Oregon.

These unique habitats are subject to the growing risks associated with warming ocean temperatures, ocean acidification, and hypoxia. Oceans take on some of the worst impacts of changing environmental conditions (Juranek, et al., 2024). Carbon dioxide emissions mixed with seawater produce carbonic acid, which decreases the pH level in the chemical make-up of the ocean. More acidified seawater, or ocean acidification, results in negative implications for all marine life, particularly for shell-forming species found in intertidal habitats.

In recent years, the Pacific Ocean has experienced record-breaking marine heatwaves and disease outbreaks that negatively affected key rocky habitat species like the Sunflower Sea Star (Prentice, et al, 2025). Marine heatwaves and disease outbreaks are causing abrupt changes in community structures and food webs. These environmental stressors result in changes in tide patterns and intensity, which in turn influence nutrient availability and oxygen levels. Similar marine heatwave events are

likely to continue for the foreseeable future. Learn more about Oregon regulations on Climate and Ocean Change Policy.

Some of the impacts of changing ocean conditions along rocky coastlines are:

- Ocean warming and marine heat waves
- More frequent and increased intensity of storms
- Loss of marine life and habitat
- Sea-level rise and Sea ice melt
- Change in ocean circulation
- Hypoxia (low or depleted oxygen levels in seawater)
- Ocean acidification (more acidic seawater)
- Harmful algal blooms
- Increased ocean stratification

Research and monitoring efforts are necessary to understand the current state of ocean conditions related to intertidal habitats and to assess the extent of these long-term impacts. (Meunier 2024, and Deluca 2025).

Sea Star Wasting Disease and Marine Heat Wave

The sea star wasting disease outbreak and the coinciding marine heat wave occurred on the West Coast between 2014 and 2016. This event negatively impacted intertidal and subtidal marine species resulting in a severe decline of ochre sea star *(Pisaster ochraceus)* and sunflower sea star *(Pycnopodia helianthoides)* populations in Oregon.

Biological communities in Oregon's rocky habitats shifted in response to the marine heatwave and disease outbreak (Meunier 2024). Some invertebrate populations like gooseneck barnacles, California mussels, and purple urchins increased during this time because of the decline in predators like sea stars (Hamilton et al., 2024). Ochre sea star populations have recovered since the event, but research suggests that sea stars may have lower resilience than other intertidal organisms.

Sea Level Rise

Sea level rise refers to the increase in the level of the world's oceans caused by many factors. The two major causes of global sea level rise are thermal expansion caused by warming ocean water and increased melting of land-based ice, like glaciers. Rising sea levels affect the Oregon Coast in a variety of ways like increased storm surge intensity, higher tide levels, and reduced river drainage during precipitation events.

The extent to which sea level rise will change the ecological structure of the rocky habitats in Oregon is unclear. Rising sea levels over time are likely to reduce the

availability of low-lying islands and headlands, which could lead to habitat loss for seabirds and marine mammals. Other intertidal plants and animals are vulnerable to habitat loss because many organisms evolved to survive in specific intertidal zones (e.g. low tide zone, middle tide zone, high tide zone, splash zone).

The risk of sea level rise within the Cape Blanco Marine Research Area ranges from no risk to moderate risk depending on the severity of the water level increase. Low risk level could result in an 11-29% habitat loss while moderate risk could result in a 30-49% loss by 2100 (Oregon SeaSketch, 2025). See Appendix B for more details on this report.

Natural Resource Protection

The SWAP now includes the Oregon Nearshore Strategy. The Oregon Nearshore Strategy is a tool developed by the Oregon Department of Fish and Wildlife (ODFW) Marine Resources Program to coordinate management efforts and support the long-term sustainability of nearshore resources in Oregon. Species in the Oregon Nearshore Strategy are found to have the greatest conservation needs in a broad social and ecological context. The Cape Blanco Marine Research Area management strategies should align with recommendations in the Oregon Nearshore Strategy.

Understanding the distribution and abundance of marine resources is critical for any kind of natural resource management. At Cape Blanco, it is important to consider key protected species and critical habitats when making management decisions.

The list of marine fish and invertebrate species that have been assessed as the 2026 Species of Greatest Conservation Need (SGCN) is available on the Oregon State Wildlife Action Plan (SWAP) website.

Chapter 6: Tools and Resources

Plan Evaluation

Program leaders for the South Coast Rocky Shores Group will incorporate the strategies, objectives, and actions from the Cape Blanco Marine Research Area Management Plan into their internal program evaluations.

Communities will have the opportunity to periodically update the Plan based on changing recommendations over time. The Plan evaluators will assess the implementation of this management plan by answering three key questions:

1. Have recommended actions in the plan been implemented?
2. Are the site-based actions helping achieve the plan's goal and objectives?
3. What adaptive management measures can improve progress toward the goal and objectives?

The outcome of evaluation is to inform adaptive management of this plan. Adaptive management is a structured, iterative process of robust decision-making in the face of uncertainty, with an aim to reduce uncertainty over time via system monitoring (Holling 1978). Adaptive management allows for future improvements to both natural resource protection and enriching visitor experiences.

Community organizations and agencies stewarding rocky habitats should be empowered to make small updates to this Plan as needed for their own programming or work plans.

Essential Species and Critical Habitats

Learn More About Essential Species and Habitats	
Natural Resource Management	**Essential Species and Critical Habitats**
NOAA & USFWS: Endangered Species Act Threatened, Endangered, and Candidate Fish and Wildlife Species	Statewide species list from ODFW that includes state-listed status and federal-listed status.
U.S. Fish and Wildlife Service: USFWS Threatened and Endangered Species Active Critical Habitat Report	Critical Habitat Designations near Cape Blanco: • Pacific marten, coastal distinct population segment – Threatened
NOAA Fisheries Pacific Fishery Management Council: West Coast Essential Fish Habitat	Essential Fish Habitats (EFH) on the Oregon Coast: ▪ Coho salmon – Threatened ▪ Chinook salmon – Candidate ▪ Groundfish EFH ▪ Coastal Pelagic Species EFH ▪ Highly Migratory Species EFH

NOAA Fisheries: Cetacean Biologically Important Areas	The nearshore around Cape Blanco is a Biologically Important Area for whale migration, feeding, reproduction, and cow/calf rearing: ▪ Grey whale – State Listed Endangered ▪ Southern Resident Killer Whale – Endangered
Oregon Department of Agriculture: State Listed Coastal Plants	Threatened and endangered plants in Curry County: ▪ Pink sand verbena – Endangered ▪ McDonald's rockress – Endangered ▪ Howell's mariposa lily – Threatened ▪ Howell's microseris – Threatened ▪ Mendocino coast paintbrush – Endangered ▪ Stansell's daisy – Endangered ▪ Seaside gilia – Endangered ▪ Large-flowered goldfields – Endangered ▪ Western lily – Endangered ▪ Wolf's evening-primrose - Threatened ▪ Silvery phacelia – Threatened

Maps

Map 1: Cape Blanco Marine Research Area Boundary Map, Oregon Coastal Management Program, 2025

Appendix

Appendix A – Site Designation Snapshot

The Cape Blanco Marine Research Area boundary includes the intertidal area along the north and south sides of Cape Blanco extending seaward to encompass all rock along the headland up to the sand beaches of the north and south sides of the cape.

The Cape Blanco Marine Research Area is closed to the take of shellfish and other invertebrates within the intertidal except for clams, Dungeness crab, red rock crab, mussels, piddocks, scallops, and shrimp may be taken. The collection of marine plants, kelps, and seaweeds from the ocean shore is not allowed within the site boundary, except by scientific research permit from the Oregon Parks and Recreation Department.

The harvest of marine resources by members of Federally Recognized Tribal Nations are unaffected by the Cape Blanco Marine Research Area designation regulations. The new rules at the Cape Blanco Marine Research Area do not affect Consent Decrees, Co-Management Agreements, or other agreements between the State of Oregon and any Federally Recognized Tribe in Oregon. These rules do not change any state agency policy recognizing Tribal harvest rights in rocky habitat areas.

WORKSHOP SUMMARIES

The Blacklock Point and Cape Blanco Rocky Habitat Workshop summary from September 9, 2024 is available online.

The South Coast Rocky Habitat Workshop was held on July 29, 2025. More information about this event is online.

SITE PROPOSAL

On May 17th, 2021, the Ocean Policy Advisory Council approved, by consensus, the recommendation of the Cape Blanco Marine Research Area proposal, with identified considerations, to Land Conservation and Development Commission for potential adoption. On March 31st, 2022, the Land Conservation and Development Commission approved the Cape Blanco Marine Research Area designation. The original goals and management strategies from the proposal were the foundation of the Cape Blanco Marine Research Area Management Plan.

Read the original proposal by the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) in 2020.

Appendix B Sea Level Rise Projections

The Sea Level Calculator is a tool developed by the National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management that produces location-specific scenarios for sea level and flooding. The Sea Level Calculator uses projection scenarios to help communities and planners make informed decisions about adaptive

coastal management. The scenario projections range from low to extreme water levels (mean sea level) by the year 2100.

Oregon SeaSketch is an online mapping tool that facilitates participatory marine spatial planning processes based on relevant science, observations, and public information. The table below shows the risk to intertidal areas under three different sea level rise projections: 50 cm, 100 cm, and 150 cm.

Sea Level Rise

Sea level rise is predicted to cause the following changes in the intertidal habitat within this designated area.

Sea Level Rise Scenario	Remaining Intertidal Habitat (in Acres)*
0.5 Meters	20.2
1 Meter	11.1
1.5 Meters	4.2

* due to the fact that future intertidal areas may be above present-day MHW, this analysis is based on intertidal area contained in the unclipped site polygon.

Sea Level Rise Risk

Nearby sites have the following estimated risk from sea level rise (slr) of 0.5, 1.0, and 1.5 meters.

Name	SLR 0.5m	SLR 1.0m	SLR 1.5m
Cape Blanco	None	Low	Moderate

Ranges for Estimated SLR Risk Levels:

Minor. Increase or Less than 10% Loss
Low. 11-29% Loss
Moderate. 30-49% Loss
High. More than 50% Loss

Table 1: SeaSketch Reporting Tool, Generated December 2025, https://www.seasketch.org/oregon/app.

The risk of sea level rise within the Cape Blanco Marine Research Area ranges from none to moderate depending on the severity of the water level increase. Currently, there are approximately 22.7 acres of intertidal habitat in the Marine Research Area. The 0.5-meter (1.6 feet) sea level rise scenario projects that Cape Blanco Marine Research Area could lose up to 2.5 acres of intertidal habitat by 2100. The more severe scenario of 1.5-meters (4.9 feet) of sea level rise could result in the loss of 18.5 acres of intertidal habitat by 2100. Low risk level could result in an 11-29% habitat loss whereas moderate risk could result in a 30-49% loss by 2100.

Researchers must conduct more studies on potential habitat impacts to accurately project the ecosystem implications at Cape Blanco.

Appendix C- State Regulations for Cape Blanco

All current state and local regulations relevant to the Territorial Sea and beaches apply to Cape Blanco. In addition, there are specific regulations that apply within the Marine Research Area at Cape Blanco. The following is not an exhaustive list of all applicable State regulations.

Acronyms: Oregon Administrative Rules (OAR), Oregon Revised Statutes (ORS)

OREGON DEPARTMENT OF STATE LAND

The Oregon Department of State Land has jurisdiction of the submerged and submersible land within the Territorial Sea. Rules regarding the Cape Blanco Marine Research Area can be found in Chapter 141 Division 142.

General Provisions: OAR 141-142-0020

> The department will only grant an authorization or a removal-fill permit for a regulated removal-fill activity if the use, or removal, fill or alteration of material is necessary to study, monitor, evaluate, enforce or protect or otherwise further the studying, monitoring, enforcement and protection of the marine reserve, marine garden, marine conservation area, marine protected area, marine research area, or seabird protection area.

Cape Blanco Marine Research Area Boundary: OAR 141-142-0130

> All state-owned submerged and submersible land in the intertidal area along the north and south sides of Cape Blanco extending seaward to encompass all rock along the headland up to the sand beaches of the north and south sides of the cape is within the Cape Blanco Marine Research Area.

Learn more about DSL Removal Fill Permits.

OREGON PARKS AND RECREATION DEPARTMENT

The Oregon Parks and Recreation Department (OPRD) is both a landowner of Oregon State Parks and manager of the ocean shore recreation area. The ocean shore is the land between the extreme low tide line and the statutory vegetation line or headland. Rules regarding the Cape Blanco Marine Research Area can be found in Chapter 736 Division 21.

Cultural, Historic, Natural and Wildlife Resources: OAR 736-021-0090

> A person may not pick, cut, mutilate, trim, uproot, remove or attempt to take or possess any living or non-living plants or seaweeds in areas designated for Rocky Habitat Site Management (Marine Research Areas, Marine Gardens (Marine Education Areas), and Marine Conservation Areas) under Oregon Territorial Sea Plan Part Three unless specifically allowed under management goals for the designated site or authorized under Section (3).
>
> Section (3): A person who is an enrolled member of an Indian Tribe as defined in ORS 97.740 may collect natural products as part of their traditional cultural heritage or as authorized in any agreement between an Indian Tribe and the department, in accordance with procedures established by the department and in state rules. Upon request by a park employee, a person collecting natural products under this section must present tribal enrollment identification.

Learn more about OPRD Scientific Research Permits.

Drone Usage on beaches and in State Parks: The Oregon Parks and Recreation Department began a rulemaking process in 2025-2026 to update State rules about take-off and landing regulations related to recreational drone usage. Follow the rulemaking process to learn about the proposed OPRD rules.

OREGON DEPARTMENT OF FISH AND WILDLIFE

The Oregon Department of Fish and Wildlife (ODFW) manages fish and wildlife in their habitats. Within rocky habitats this primarily includes marine invertebrates, shellfish, fish, and birds within the intertidal habitat, beach, and tidepools.

Sport fishing regulations that apply to fish, shellfish, and marine invertebrates can be found in Chapter 635 Division 11 and Division 39. Rules that apply more specifically to Cape Blanco Marine Research Area can be found in the current annual Oregon Sport Fishing Regulations.

> No take of shellfish and other invertebrates except clams, Dungeness crab, red rock crab, mussels, piddocks, scallops, and shrimp may be taken. Site boundary: Intertidal along the north and south sides of the cape extending to encompass all rock along the headland up to the sand beaches of the north and south sides (Cape Blanco MRA Inset 15, Oregon Sport Fishing Regulations, 2026, page 87).

Commercial harvest regulations that apply to commercial shellfish and marine invertebrate fisheries can be found in Chapter 635 Division 5. Information about commercial harvest regulations within marine managed areas can be found in OAR 635-005-0260.

For more information on shellfish regulations and licenses, visit the Oregon Department of Fish and Wildlife. The Oregon Sport Fishing Regulations booklet is available online and updated annually. Most outdoor gear stores offer a free hard copy of the booklet. Always check the Oregon Department of Agriculture Shellfish Safety page for recreational shellfish biotoxin closures in your region before taking.

Appendix D – Federal Regulations at Cape Blanco

There are several Federal Regulations that are relevant to the Cape Blanco Marine Research Area including policies that apply to protected species, critical habitats, airspace, and federally protected land. The following is not an exhaustive list of all applicable Federal regulations.

UNITED STATES FISH AND WILDLIFE SERVICE

The United States Fish and Wildlife Service (USFWS) owns and manages the offshore rocks and islands within and adjacent to the Marine Conservation Area. All offshore rocks and islands above the mean high tide line are a part of the Oregon Islands National Wildlife Refuge (NWR) and are designated as Wilderness (U.S. Fish & Wildlife Service, 2009). The federal regulations associated with the National Wildlife Refuge and

Wilderness Designation supersede the state regulations associated with the Marine Conservation Area designation.

Boaters should keep a 500-foot buffer zone around rocks and islands to prevent wildlife disturbance and damage to vessels. Pilots must always maintain a minimum altitude of 2,000 feet above offshore rocks and islands.

Oregon Islands National Wildlife Refuge and Seabirds
Visit the Oregon Islands National Wildlife Refuge Headquarters and learn more about this work.
Explore a map of the Oregon Islands National Wildlife Refuge.
Download the Pacific Northwest Seabirds Brochure.

The United States Fish and Wildlife Service (USFWS) has enforcement authority of the Migratory Bird Treaty Act. The USFWS is also jointly responsible for enforcing the Endangered Species Act and the Marine Mammal Protection Act with the National Oceanic and Atmospheric Administration.

All activities within the Oregon Islands National Wildlife Refuge that require review, permits and clearances will undergo appropriate review and obtain necessary permits or clearances as needed. Examples of activities requiring review are Section 106 of the National Historic Preservation Act, Section 7 endangered species consultation, and a 401-water quality permit.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

The National Oceanic and Atmospheric Administration's (NOAA) has multiple offices that have a role in coastal and rocky habitat management in Oregon. NOAA Fisheries, also known as the National Marine Fisheries Service or (NMFS), oversees fisheries management and is jointly responsible for implementing the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA) with the USFWS.

The Office for Coastal Management (OCM) implements the National Coastal Zone Management Program, providing federal consistency authority. Additionally, the Office of Response and Restoration coordinates the Oregon Marine Debris Action Plan.

FEDERAL AVIATION ADMINISTRATION

The Federal Aviation Administration (FAA) oversees Oregon's airspace and requires all recreational and non-recreational drone users to be licensed to fly legally in the United States. The FAA prohibits recreational use of unmanned aircraft at the Oregon Islands

National Wildlife Refuge and in any congressionally designated Wilderness or Primitive Area. Learn more about recreational drone usage:

- FAA has information about flying drones legally: Unmanned Aircraft Systems
- OPRD developed a list of Recreational Drone Best Practices
- USFWS: Tips for Responsible Drone Use
- NOAA Fisheries: Viewing Marine Life from the Air

Appendix E – Enforcement Contact List

Urgent Response Contact List: For rapid responses please use the contact information below depending on the circumstances.

Situation	Phone Number	More Information
Emergencies or Life-Threatening Situations	Dial 911	• Connects to a local emergency dispatch center.
Non-Emergency Assistance Report a Wildlife or Habitat Law Violation	Dial ***OSP** or *677 from your mobile phone or dial **1-(800)-452-7888**	• Fish & Wildlife Division • Phone number connects to one of Oregon State Police Command Centers. • OSP.FWD@osp.oregon.gov • TIP@osp.oregon.gov
Report a Stranded or Injured Marine Animal	West Coast Hotline: (866) 767-6114 OSU Marine Mammal Stranding Network: (541) 270-6830	• NOAA Fisheries Marine Mammal Health and Stranding Response Program • Oregon Marine Mammal Stranding Network • Fill out an online form to report the stranding of a marine mammal or sea turtle.
Report an Entangled Whale	West Coast Hotline: (877) SOS-WHALE; (877) 767-9425	• National Marine Mammal Entanglement Response Networks

Non-Urgent Contact List: Other contacts for general information about enforcement not for emergencies or rapid response.

Division/Position	Agency	Contact Information
Lieutenant, Fish & Wildlife Division	Oregon State Police - Fish and Wildlife Division	Office: (503) 378-3720 3565 Trelstad Ave SE Salem, OR 97317
Park Manager, Humbug Mountain	Oregon Parks and Recreation Department	Park Office: 541-332-6774

Refuge Manager, Oregon Islands National Wildlife Refuge	U.S. Fish and Wildlife Service - Oregon Coast National Wildlife Refuge Complex	Office: (541) 347-1470 Headquarters: (541) 867-4550 Bandon Marsh National Wildlife Refuge, 83673 N. Bank Ln, Bandon, OR 97411
Marine Resources Program	Oregon Department of Fish and Wildlife - Marine Resources Program	Office: (541) 867-4741 Marine Resources Main Office, 2040 SE Marine Science Drive, Newport, OR 97365

Appendix F – Outreach Materials Example USFWS Poster

Image 8: U.S. Fish and Wildlife Service Poster," Help Protect Marine Wildlife", https://www.fws.gov/sites/default/files/documents/Boat%20Poster.pdf

Messaging for observing boating and recreational guidelines:

- Stay back. Studies have shown that seabirds and marine mammals may flee their colonies when closely approached by humans. Please do not approach rocks and islands closer than 500 feet, in boats or on foot. Aircraft are requested to always maintain a minimum of 2,000 feet above the rocks and islands.
- Use Caution. Approach and depart areas near rocks and islands cautiously. Minimize noise and abrupt movements.

- Observe. Take a few moments to observe the birds and mammals. If you see animals bobbing their heads, making alarm calls, or departing from the colony, you are too close and should move away immediately.
- Conditions Change. Don't assume a safe operating distance one day will be the same as the next, even at the same site. Be cautious and observant every time out.
- Wildlife Harassment is Against the Law. Federal and State laws prohibit harassment of seabirds and marine mammals. Violators will be cited. Help protect Oregon's wildlife by reporting suspected violators to the Refuge Manager (541) 867-4550.

Appendix H – Recommended Implementation Actions Table

See table below on pages 48-51.

Cape Blanco Marine Research Area							
#	**Implementation Action** (*Priority objectives support three or more main objectives)	**Objective 1.** Coordinate with all interested Tribes on preserving and monitoring rocky habitat resources and site stewardship.	**Objective 2.** Prioritize the long-term conservation of natural resources in rocky habitats.	**Objective 3.** Maintain scenic viewpoints and access to Cape Blanco Marine Research Area while balancing visitor impact on the environment.	**Objective 4.** Promote educational opportunities at Cape Blanco Marine Research Area while balancing visitor impact on the environment.	**Objective 5.** Support site monitoring projects at Cape Blanco Marine Research Area.	**Objective 6.** Encourage public safety and regulatory compliance from all visitors.
1	Engage tribes during the planning of community science and monitoring projects.	X				X	
2*	Inform Oregon Coast Trail hikers about sensitive areas like during harbor seal pupping season.		X	X	X		X
3	Participate in bioblitz(es) to measure site diversity on a regular basis.		X			X	
4*	Host educational seminars for community members to learn about ongoing updates or results of monitoring efforts. Topics could also include basic ecological theory to discuss resilience. This is an opportunity to invite Tribal representatives to speak.	X			X	X	
5	Ensure community science trip guides follow beach safety recommendations.			X		X	X
6	Help develop, host, or find community science projects that collect data to inform management.		X			X	
7	Develop community science monitoring protocols consistent with all designated Marine Reserves and Rocky Habitats.					X	
8	Train community science volunteers to implement the protocols.					X	
9	Strengthen relationships between commercial users of the area and those recreating. Examples could include hosting an event or creating a survey of all users.			X	X		
10	Ensure datasets about research at Cape Blanco held by state, federal, or research institutions is accessible to Tribes, researchers, and community groups.	X				X	
11	Ensure data collected by community groups is accessible to the OCMP, ODFW, OPRD, and DSL. Oregon SeaSketch could be a potential data-sharing platform.					X	
12	Consider adding ODFW monitoring sensors for Ocean Acidification and Hypoxia within the designation boundary.		X			X	
13	Collaborate with educational institutions to develop future research projects based on community priorities.		X			X	
14	Establish consistent photo point locations where visitors can take repeatable photos and share them to a central database to document long-term change.			X		X	

15	Translate all printed materials into Spanish. Make digital materials available in Spanish as well.				X		X
16	Provide species ID guides and resources.				X		X
17	Develop brochures that can be shared at the chamber of commerce, outdoor gear stores, and local hotels or vacation housing.				X		X
18	Make all plans, signs, and brochures available online.				X		X
19*	Monitor and maintain the interpretive panels at the site. If a sign needs maintenance, notify USFWS Refuge Manager and the OPRD Bullards Beach Park Manager.			X	X		X
20	Host public presentations for community and school groups, individuals and organizations about the marine environment and ocean literacy. Locations for presentations could include rotary clubs, schools, library, and guided tours for people with mobility challenges.				X		
21	Increase availability of information about protected areas where visitors are already going to look (e.g. State Parks, ODFW Website, Curry County, etc.)						X
22*	Partner with local schools to share education about tidepool etiquette and marine education. Organize school field trips to Cape Blanco with a hands-on component (ex. tidepooling, complete a CoastWatch survey).		X		X	X	
23	Participate in the development of a Rocky Habitat Communications Plan with ODFW and the Rocky Habitat Partners.				X		X
24	Develop a "virtual" field trip option to Cape Blanco for non-coastal schools.			X	X		
25*	Provide volunteer steward presence at sites seasonally during daylight low-low tide periods.		X	X	X		X
26	Connect interpretation materials or events to sustainable seafood networks.		X		X		
27	Consider participating in a species spotlight podcast series to highlight some of the most important indicators of healthy rocky habitats. Potential partners could include the Oregon Coast Visitor Association and Shoreline Education for Awareness.				X		
28	Support tidepool education offsite to encourage marine education in urban areas and to minimize onsite visitation. Partners could include the Oregon Coast Aquarium, Portland Aquarium, Charleston Marine Life Center, Oregon Museum of Science and Industry, and the Eugene Science Center.			X	X		
29	Volunteer tidepool ambassadors monitor visitor use by collecting data like the number of visitors and dogs to the Marine Research Area at low-tide.					X	X

30	Identify gaps in existing outreach materials to support the development of new materials.				X		X
31	Provide handouts about marine education or Cape Blanco at Battle Rock Visitor Center and the gift shop at Cape Blanco.				X		
32	Table at large community events or festivals to spread awareness.				X		X
33	Develop a hospitality packet that includes information about designated sites nearby and guidance for responsible tidepooling and safe recreation.				X		X
34	Work with Oregon Coast Visitor Association to support their 2025 ‘Coast Like a Local Campaign'.				X		
35	Promote regular beach cleanups. Partners could include SOLVE and Surfrider.		X	X			
36	Acquire a tidepool ambassador hat or vest so that visitors know how to identify volunteers. Partners could include USFWS because USFWS volunteers wear vests at Coquille Point.				X		X
37	Track the number of participants at on-site events.				X	X	
38	Support volunteers' comprehension of state and federal regulations that apply on the beach and within the Marine Research Area by providing Appendix C and Appendix D of the Plan.						X
39	Direct recreational anglers to the current issue of the ODFW Sport Fishing Regulations booklet.						X
40	Increase the number of available enforcement officers who could respond to emergencies or violations on the beach. Support discussions between Curry County Sheriff, OSP, USFWS, and OPRD so Patrol officers can respond at Cape Blanco, if necessary.						X
41	Train tidepool ambassador volunteers to recognize when action is needed and how to respond appropriately in cases of violations or emergencies. Share Appendix E with volunteers for reference.		X				X
42	Provide an overview of state and federal regulations at annual tidepool ambassador training for volunteers and seasonal staff. Reach out to State Agency staff at OPRD, ODFW, USFWS, or DLCD to find staff to provide this training.				X		X
43*	Research a dedicated funding stream to support implementation of site goals.	X	X	X	X	X	X
44*	Participate in media campaigns that promote etiquette like leave-no-trace.		X	X	X		
45	Invite first responders to public workshops to speak on beach safety.						X

46	Invite OPRD Beach Rangers, an OSP Lieutenant, and other law enforcement officers to train volunteers and staff on how to properly engage with the public and respond to different scenarios.						X
47	Include a beach-safety briefing for participants at every event on the beach.				X		X
48*	Develop a volunteer stewardship program to share between Cape Blanco and Blacklock Point.		X		X		X
49	Install parking lot/trail counter at the Cape Blanco lighthouse parking lot. TRAFx is a service used at other parks in Oregon.			X		X	X
50	Notify the Tribal Historic Preservation Officer or the Natural Resources Department Director from any other interested Tribes before any resource monitoring or extractive activity occurs within the Marine Research Area.	X				X	
51	Interact with visitors through interpretation programs, tabling, junior ranger packets, and sharing outreach materials.			X	X		
52	Coordinate messaging about Cape Blanco Marine Research Area and the Oregon Islands National Wildlife Refuge with USFWS.				X		
53	Rely on established scientific monitoring and data collection protocols with current research in the region.					X	
54	Vet data collection methods through a science-based group such as the Scientific and Technical Advisory Committee (STAC) or Oregon Department of Fish and Wildlife.					X	
55	Notify USFWS, DSL, ODFW, OPRD, or DLCD if regulations are not clear or accessible online or on signage.						X

Glossary

Adaptive management: Adaptive management is a structured, iterative process of robust decision-making in the face of uncertainty, with an aim to reduce uncertainty over time via system monitoring.

Biodiversity: The diversity of lifeforms and biotic communities that occur in the coastal zone, including nearshore ocean waters. Diversity is a concept that means "variety or multiformity, a condition of being different in character and quality."25 There is no single way to define, measure, or evaluate diversity of life; rather there are at least four interrelated ways:

- Species diversity, which refers to the variety and abundance of species in an ecosystem.
- Ecological diversity, which refers to the variety of types of biological communities found on Earth.

Conservation: To manage in a manner which avoids wasteful or destructive uses and provides for future availability. A principle of action guiding Oregon's ocean resources management, which seeks to protect the integrity of marine ecosystems while giving priority to the protection and wise use of living marine resources; as used in the Oregon Ocean Resources Management Plan, the act of conservation means "that the integrity, diversity, stability, complexity, and the productivity of marine biological communities and their habitats are maintained or, where necessary, restored" and "accommodating the needs for economic development while avoiding wasteful uses and maintaining future availability."

Critical Habitats: Critical habitats refer to specific areas within the coastal zone or Pacific Ocean occupied by the species that have physical or biological features essential to conservation of the species and that may require special management considerations or protection.

Cultural Areas: Archaeological sites and landscape features of cultural interest. This includes landscape features that are:

- Integral to a tribe's history, legends, traditions, and stories.
- Traditionally used for wayfinding.
- Traditionally used for gathering first foods and materials.
- Integral to ongoing tribal cultural practices.
- Traditional trails.
- Sites that support traditions of a culturally identified group.

Cultural Resources: Resources vital to or the product of the perpetuation of traditional practices, ceremonies, and lifeways.

Data Sovereignty: The right of a nation to govern the collection, ownership, and application of its own data.

Ecosystem: The living and non-living components of the environment which interact or function together, including plant and animal organisms, the physical environment,

and the energy systems in which they exist. All the components of an ecosystem are interrelated.

Extreme high-water line: The highest elevation reached by the sea as recorded by a tide gauge during a given period.

Extreme low-water line: The lowest elevation reached by the sea as recorded by a tide gauge during a given period.

Habitat: The portion of the environment in which an organism, species, or community lives. Just as humans live in houses, within neighborhoods, within a town or geographic area, within a certain region, etc., marine organisms live in habitats which may be referred to at different scales.

Holistic: Referring to an interconnected system rather than by its individual parts.

Important Marine Habitats: Marine habitats that must be specifically considered when an inventory-and-effects evaluation is conducted following Goal 19, including but not limited to: habitat necessary for the survival and conservation of Oregon renewable resources (e.g. areas for spawning, rearing, or feeding), kelp and other algae beds, seagrass beds, seafloor gravel beds, rocky reef areas and areas of important fish, shellfish and invertebrate concentration.

Indicator Species: A species that is relatively common. A species that occurs frequently enough to be monitored and respond to certain actions or represent the desired condition.

Rocky Habitat: Consists of outcrops or deposits of the above-described material either along the shoreline or in submerged areas. The individual rock structures or fragments within a rocky habitat area are often interspersed with gravel or sediment and overlain with biogenic habitat features. This creates a complex mix of substrate characteristics that all contribute to the form and function of the rocky habitat. Thus, rocky habitat can have non-rock (sand, gravel, biological) components. These habitats are variously referred to as rocky reefs, rocky banks, rocky beaches, rocky intertidal areas, rocky subtidal areas, boulder fields, rocky debris fields, benches, rock pavement, sea stacks, wash rocks, pinnacles, and many other names.

Oregon’s rocky habitats are grouped into three major classifications based on proximity to shore, jurisdictional boundaries, and ecological zone. Within these main classifications many other sub-classifications may be present including rocky intertidal and subtidal, cliffs, tidepools,

Rocky Shoreline: All rocky habitat between the statutory vegetation line described in ORS 390.770 and extreme low water (encompasses cliffs, tidepools, and rocky intertidal). These areas may be reached by foot from shore (regardless of hazard or convenience).

Rocky Upland: Rocky habitat area between the statutory vegetation line and extreme high-water line. In unvegetated areas, this is delineated at the 16-foot elevation contour.

Rocky Intertidal: Rocky habitat area between extreme high-water line and extreme low-water line.

Submerged Rocky Habitat: All rocky habitat below extreme low water, out to the deepest limits of the territorial sea. This area includes submerged rocky reefs, shallow rocky subtidal, and other submerged rocky habitats.

Ocean Literacy: An understanding of the ocean's influence on humanity and humanities influence on the ocean.

Offshore Rocks and Islands: Any rock or landform within the territorial sea separated from the mainland at mean high water which remains above the surface of the sea at mean high water.

Territorial Sea: The ocean and seafloor area from mean lower low water seaward three nautical miles.

Vegetation line: Statutory line of established upland shore vegetation and as described in ORS 390.770.

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