

Oregon Coastal Management Program DRAFT 309 Assessment and Strategy

2026 to 2030



Sisters Rock State Park, Curry County, OR. Photo Credit: Oregon Shore Zone, 2011.



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Oregon Coastal
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Glossary

Common Terms

CNPCP	Coastal Nonpoint Pollution Control Program
CZMA	Coastal Zone Management Act
EMP	Estuary Management Plan
ERAP	Estuarine Resilience Action Plans
ESA	Endangered Species Act
ISUs	Important, Sensitive, or Unique habitats
NHMP	Natural Hazard Mitigation Plan
SAMP	Special Area Management Plan
SWI	Statewide Wetland Inventory
TSP	Territorial Sea Plan

Agencies and Organizations

BOEM	Bureau of Ocean Energy Management
DEQ	Oregon Department of Environmental Quality
DLCD	Oregon Department of Land Conservation and Development
DOGAMI	Oregon Department of Geology and Mineral Industries
DSL	Oregon Department of State Lands
FEMA	Federal Emergency Management Agency
LCDC	Oregon Land Conservation and Development Commission
NOAA	National Oceanic and Atmospheric Administration
OCM	NOAA's Office for Coastal Management
OCMP	Oregon Coastal Management Program
ODEM	Oregon Department of Emergency Management
ODFW	Oregon Department of Fish and Wildlife
OPRD	Oregon Parks and Recreation Department
OPAC	Ocean Policy Advisory Council

Introduction

Oregon is one of 34 states and territories to have a nationally recognized Coastal Management Program established by the Coastal Zone Management Act of 1972. The Oregon Coastal Management Program (OCMP) aims to protect coastal and ocean resources, and ensure livable, resilient communities on the Oregon coast. The Oregon Department of Land Conservation and Development (DLCD) is the lead agency in the coastal program network, which also includes 10 other state agencies and 41 county and city governments.

DLCD also administers the state's innovative land use planning program. Oregon's statewide land use system, adopted in 1973, established nineteen planning goals that set statewide policy on land use and related topics. The last four goals are specific to coastal resources: estuaries, coastal shorelands, beaches and dunes, and the ocean. These coastal goals are the foundation of Oregon's coastal management program. These policies are implemented primarily through city and county comprehensive plans.

The Coastal Zone Enhancement Program, established under Section 309 of the Coastal Zone Management Act (CZMA) of 1972, as amended, encourages state coastal management programs to strengthen and improve their federally approved coastal management programs. Section 309 establishes a voluntary grant program that provides funding for states and territories to develop and implement coastal management program changes in one or more of nine enhancement areas. These specific "enhancement areas" are:

- Wetlands
- Coastal hazards
- Public access
- Marine debris
- Cumulative and secondary impacts
- Special area management plans
- Ocean resources
- Energy and government facility siting
- Aquaculture

Every five years, the Oregon Coastal Management Program conducts a self-assessment to identify issues and enhancement opportunities within each of the nine enhancement areas—and to assess the effectiveness of existing management efforts to address identified problems. The OCMP identifies high priority management issues as well as important needs and information gaps for the program to address. The OCMP also identifies high priority needs for improvement within one or more of the nine areas, and develops strategies, in consultation with NOAA's Office for Coastal Management (OCM), to address these management needs. The strategies provide a stepwise approach to reach a stated goal and lead to enhancement of the state's federally approved coastal management program.

OCM reviews and approves the Section 309 Assessment and Strategy document for each state and, after approval, provides funding under Section 309 to help carry out those strategies. This document comprises the Oregon Coastal Management Program's 309 Assessment and Strategy for the five-year period from 2026-2030.

The development process for this assessment and strategy began with an internal review of OCM issued guidance and a broad scoping of potential program enhancement priorities. During these initial stages of the preparation of the assessment and strategy, the OCMP solicited input from partners at the local and state levels through a short survey and several meetings (individually and in group settings). A letter informing five coastal Tribal Nations of this assessment development was sent out in July of 2024 with an ask for engagement if interested. A meeting with staff from the Coquille Indian Tribe was held on

February 6, 2025. Staff level meetings were also held with the Confederated Tribes of Siletz Indians. Feedback from these meetings and surveys was utilized in the development and revision of the 309 strategies.

Based on the results of the Phase I assessments and the partner input received, OCMP staff identified enhancement areas for which Phase II assessments would be completed. Informed by the results of these Phase II assessments and partner input, OCMP's internal review team then identified the selected strategy areas and formulated preliminary strategies. All the assessment results and the proposed strategies were compiled into a Draft Section 309 Assessment Strategy document. The process includes submitting a completed draft to OCM for review and comment; circulating a Public Notice providing for a 30-day public comment period on the draft assessment and strategy; revising the draft assessment to reflect the comments and direction received from OCM; and a final approval expected in late 2025.

Summary of Recent Section 309 Achievements

Coastal Resilience Planning

Strategy Goal: reduce risk due to coastal hazards, enhance planning efforts, and increase capacity to local governments and networked agency partners.

Summary of Major Milestones and Deliverables of the Coastal Resilience Planning Strategy:

- **Development of the Sea Level Rise Adaptation Toolkit** – OCMP staff created tools to assist communities in planning for sea level rise impacts specific to the Oregon coast both within estuaries and along the outer coast. These tools were developed collaboratively over a two-year period and published for use in October 2022. The sea level rise adaptation planning toolkit is a set of three resources for local governments and communities to assess and address the impacts of sea level rise: an online mapping tool, exposure assessment spreadsheet, and adaptation options guidebook. All three sea level rise adaptation resources are hosted on the Oregon Coastal Atlas: coastalatlus.net/sealevelrise.
- **Development of Oregon's Coastal Hazards Resilience Hub** – The OCMP developed Oregon's Coastal Hazards Resilience Hub to act as a repository for hazards and resilience resources that can help local jurisdictions better understand and prepare for the various risks that face Oregon's coastal communities. The website includes links and descriptions for online data viewers, tools, publications, websites, and funding sources. The Resilience Hub focuses on hazards such as tsunamis, sea level rise, earthquakes, shoreline erosion, coastal flooding, and landslides. The website (arcg.is/y80uH) will be maintained and updated by OCMP staff periodically.
- **Beaches and Dunes Project of Special Merit (PSM)** – The OCMP contracted with DOGAMI to produce updated inventory maps for beach and dune areas for the entire coast of Oregon, to replace the outdated 1975 maps that are still in use by most coastal cities and counties. Two jurisdictions, Coos County and the City of Bandon, then worked with DOGAMI and the OCMP to adopt the updated maps and update sections of their comprehensive plan and codes that pertain to beaches and dunes. A guidebook was also developed to assist other coastal jurisdictions to complete the same updates and adoption process. As part of this PSM, a Sea Grant Fellow worked with the OCMP to develop and present educational materials regarding beaches and dunes in Oregon; both the importance of protecting these landscapes as well as land use regulations at the local and state level that apply to them.

Local jurisdictions who have completed work or are in progress within the Coastal Resilience Planning Strategy:

1. **Clatsop County** has been undergoing work to update their Comprehensive Plan, maps, and land use ordinances for all the coastal land use goals. OCMP staff have been providing technical assistance and support to the county as they reviewed their existing information and developed updates. Once adopted by Clatsop County, new policies will be submitted to NOAA as program changes.
2. **Clatsop County** also completed a minor update to their Geologic Hazards Overlay District with technical support from OCMP staff to integrate best practices around the information included in geologic hazard reports for development proposed in areas of geologic instability. Newly adopted regulations were submitted and approved to NOAA as program changes.
3. **Coos County** is revising their inventory map and related comprehensive plan policies and implementing ordinances related to Goal 18: Beaches and Dunes with OCMP through the PSM described above. These changes will ensure the county is using updated information about the location and stability of beach and dune landforms to regulate development. Once adopted by Coos County, new policies will be submitted to NOAA as program changes.
4. **City of Bandon** is revising their inventory map and related comprehensive plan policies and implementing ordinances related to Goal 18: Beaches and Dunes with OCMP through the PSM described above. These changes will ensure the city is using updated information about the location and stability of beach and dune landforms to regulate development. Once adopted by Bandon, new policies will be submitted to NOAA as program changes.
5. **City of Manzanita** is beginning a process to review and update the Goal 18 section of their Comprehensive Plan. OCMP is giving them a small grant under this strategy to help with this work. These changes will ensure the city is using updated information about the location and stability of beach and dune landforms to regulate development. Once adopted by Manzanita, new policies will be submitted to NOAA as program changes.

Estuary Management Planning

Strategy Goal: Update state and local special area management plans, enhance planning efforts, and increase capacity for local governments and networked agency partners.

Summary of Major Milestones and Deliverables of the Estuary Management Planning Strategy:

- **Estuary and Coastal Shoreland Planning Guide, Version 1** – Through the Phase 1 update of the Coos Bay Estuary Management Plan and updates to the Yaquina Bay Estuary Management Plan, OCMP staff and local governments learned many lessons and tips for updating these multi-jurisdictional plans. From these processes, OCMP staff developed a guide primarily for local planning departments aimed at creating an implementation strategy to update their plans for estuaries and coastal shorelands.
- **Coastal Goals Workshops (“Road Show”) with each coastal county** – OCMP staff conducted training workshops with each coastal county and the cities within the county. These workshops

were conducted to provide background and information sharing around statewide planning goals 16-18 and to discuss potential strategies for updating estuary management plans. These workshops helped build practitioner networking between cities and counties and background knowledge on the coastal goals.

Local implementation within the Estuary Management Planning Strategy:

1. **Coos Bay Estuary Management Plan, Phase 1** – In Coos Bay, OCMP staff participated in the development of the Coos Bay Estuary Management Plan (CBEMP) audit and assessment project. Led by Coos County, this project produced a work scope and recommendations for modernizing the CBEMP, which is implemented by Coos Bay, North Bend, and Coos County. While the project had a significant delay due to the COVID-19 pandemic, it continued forward in 2022, thanks in part to a small grant from OCMP. The findings and products for the CBEMP, including a map atlas, were presented to City Councilors, Planning Commissioners, and County Commissioners in an informational work session setting in January 2023. After several more work sessions and hearings, the cities and county completed this “Phase 1” update of the CBEMP in January 2024, which digitized paper maps, improved the plan’s organization, and resolved jurisdictional alignment issues that had occurred over time. However, the Phase 1 update did not include any changes to zoning or regulations. This process was complex and time intensive, but also highly coordinated and collaborative. The outcomes include a more organized and unified CBEMP across jurisdictions and updated maps. It also serves as an important starting point for a more comprehensive plan update to come. Updates from this process were submitted and approved as program changes to NOAA in 2024.
2. **Yaquina Bay Estuary Management Plan** – In Yaquina Bay, OCMP completed a specific habitat estuary inventory map in 2018 to assist with estuary management plan updates. From there, the jurisdictions of Lincoln County, Newport, Toledo, the Ports of Newport and Toledo, and the Confederated Tribes of the Siletz Indians, met with OCMP to work through an update to the Yaquina Bay Estuary Management Plan (YBEMP). OCMP received a Project of Special Merit in 2020 to work with these entities to modernize the YBEMP. A consultant led the facilitation of the project which was directed by a Steering Committee, Technical Team, and Community Advisory Group. Since the completion of the project in 2023, OCMP staff continued to work with each jurisdiction to develop jurisdiction-specific products for adoption. The City of Newport adopted their portion of the updated YBEMP in October 2024. Lincoln County and City of Toledo are pending adoption when staff capacity allows. The outcomes include updated maps, data, policies, and implementing codes for the YBEMP jurisdictions. New enforceable policies from this update will be submitted to NOAA in a future program change submission.

Ocean Resources Planning

Strategy Goal: Continue the OCMP’s efforts to update and improve Oregon’s Territorial Sea Plan to create a comprehensive framework for managing and evaluating ocean resources.

Summary of Major Milestones and Deliverables of the Ocean Resources Planning Strategy:

- **TSP Part Three** – The completed amendment of TSP Part Three represents a major milestone of success for the OCMP, as the amended rule represents a sought-after program enhancement. The last time TSP Part Three was amended was in 2001, and the actions taken during the strategy period

completed that comprehensive review and policy development process. Oregon's Marine Reserves and Protected Areas were also incorporated into TSP Part Three (Appendix E). Following adoption of the amended rules by the Land Conservation and Development Commission (LCDC), OCMP staff worked with networked partner agencies to support amendment of their administrative rules to conform to the changes in Part Three. The Oregon Parks and Recreation Department, Oregon Department of Fish and Wildlife, and Oregon Department of State Lands completed their rule amendment processes. Additionally, the OCMP was successful in receiving a Project of Special Merit to work with the communities on the coast that have newly designated marine conservation areas for the purpose of assisting in the development of site management plans (this project is ongoing until early 2026). Community engagement workshops were held in the fall of 2024 to initiate the process and help focus on the needs of the communities related to future outreach, education, and site monitoring.

- **TSP Part Four** – The amendment of TSP Part Four, Uses of the Seafloor, was legislatively directed for completion in the 2021-2025 Strategy period via House Bill 2603 (2021 legislative session). The OCMP amended the Strategy to include support for that rulemaking process. The Ocean Policy Advisory Council (OPAC) and Land Conservation and Development Commission acted collectively to complete the amendment process, including adoption of the amendment in November 2023. This action was led via a working group of OPAC and included fact-finding and educational opportunities for participating industries and partners. Additionally, OCMP staff managed the conduct of a study by DOGAMI on geomorphic suitability for landing undersea cables on shore, and a best practices study for undersea cable siting, planning, installation, and decommissioning. Those products informed the work to complete the amendment and will continue to be available as educational resources via the Oregon Ocean Information website.

Program changes related to the TSP amendment have not yet been submitted to OCM, though the amended rules are queued up for submission in 2025.

Public Access Planning

Strategy Goal: Update public access inventories in local comprehensive plans, conduct an analysis that enhances strategic planning for public access across local and state jurisdictions, and establish interagency coordination to support future public access management.

Summary of Major Milestones and Deliverables of the Public Access Planning Strategy:

- **Decadal coastal public access inventory data collection** – Through a NOAA Coastal Management Fellowship, the 2020 Shoreline Access Inventory was completed by 2021. This updated inventory includes data from 1,243 sites spanning Oregon's 362 miles of coastline and 130,771,651 miles of other shorelines within the coastal zone. The inventory was shared with all coastal jurisdictions and OCMP network partners.
- **Shoreline Access Data Improvements** – The Shoreline Access Data Exchange Standard (SADES) was developed to establish formal data standards for shoreline access data. The state agencies that collect and maintain datasets related to access to shorelines within Oregon's coastal zone formed a Shoreline Access Work Group to set forth a data standard that promotes interagency data exchange. This data exchange standard establishes a lasting collaboration that promotes consistent and coordinated management of Oregon's shorelines. Included in the standard are core attributes

related to access. Although this standard was developed for the specific purposes of coastal shoreline public access, the standard is applicable to inland waters of Oregon as well. A Stewardship Plan for Shoreline Public Access Inventory (Coastal and Marine Framework) was developed as a complementary document to SADES. It describes how the data will be maintained over time and outlines a process for accepting or rejecting proposed changes to the data.

- **Oregon’s Coastal Public Access Guide for Local Government Planners** was developed to support strategic and collaborative long-term planning for public access across state and local jurisdictions and was shared with all coastal local governments. This guide was developed through PSM funds and crafted by OCMP staff with the purpose of providing local coastal governments in Oregon with a framework for planning for a community’s public access program. This Guide can be used by local coastal city and county jurisdictions and Tribal governments as guidance for maintaining and improving coastal public access programs. Local government and tribal staff, especially land use planners, public works, and parks staff can use this guide as a roadmap to make policy and on-the-ground improvements to a community’s public access to coastal shorelines and waters.
- **Online Mapping Tool** - OCMP staff also developed a new online mapping tool that allows the public to interactively search for public access sites using filters, map interaction, or bookmarks. This tool, called the Oregon Shore Explorer, is now publicly available through the Oregon Coast Visitor’s Association’s website.¹
- **Rulemaking Preparation** – OCMP developed draft coastal public access rulemaking concepts for potential future improvements to Oregon’s statewide land use policies in collaboration with a Coastal Access Advisory Team. This draft was finalized and will serve as the starting point for a rulemaking process, expected to potentially begin in 2025.
- **Collaborative Development of Model Language** – OCMP staff developed model coastal shoreline public access policy language for inclusion in local comprehensive plans. OCMP staff worked closely with the City of Bandon, Clatsop County, and others to develop this model policy that other jurisdictions can tailor to fit the unique needs and goals of each community, ensuring consistency and alignment with the broader state policies. This Model Comprehensive Plan language was incorporated and included in the Oregon’s Coastal Public Access Guide for Local Government Planners and is available on DLCD’s website.

Local jurisdictions who have completed work or are in progress within the Public Access Planning Strategy:

1. **City of Bandon** – Through Project of Special Merit funding, the City of Bandon worked with OCMP to adopt a new inventory map of public access sites and new comprehensive plan policies to address public coastal access. These measures were adopted in 2024 and will be incorporated into the OCMP as enforceable policies in a future program change submission.
2. **Clatsop County** - Clatsop County's public access policy and inventory was updated and is being incorporated into the County’s update of their comprehensive plan goals, specifically in Goal 17 (Coastal Shorelands). The county hired a consultant to complete updates for Goals 16-18, which will include public access policies as part of the Goal 17 chapter. The county also received a small grant

¹ Oregon Shore Explorer: visittheoregoncoast.com/oregon-shore-explorer-map/.

from OCMP through the Project of Special Merit funding to carry out the public access updates. While the updates are progressing, formal adoption of the public access policies will be contingent on the completion of the full comprehensive plan update, expected in 2025. The county worked with OCMP staff to integrate updated inventory data and policy language into the broader Goal 17 update process.

3. **City of Manzanita** – Through a small grant award, the city is working with OCMP to update their public access policies and maps using the model code developed earlier under this strategy. Project work is underway, and local adoption is likely to occur in late 2025 or 2026.

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Phase I Enhancement Area Assessment

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Wetlands

Section 309 Enhancement Objective: Protection, restoration, or enhancement of the existing coastal wetlands base, or creation of new coastal wetlands. §309(a)(1)

Note: For the purposes of the Wetlands Assessment, wetlands are “those areas that are inundated or saturated at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” [33 CFR 328.3(b)].

Resource Characterization

1. Extent, status, and trends of coastal wetlands within Oregon’s Coastal Zone.

Current state of wetlands in Oregon’s Coastal Zone in 2023: 179,981 (acres). Data in the tables below represent the areas within Oregon’s Coastal Zone.

Coastal Wetlands Status and Trends

Change in Wetlands	1996-2016	2016-2023
Percent net change in total wetlands (% gained or lost)*	-0.31%	0.01%
Percent net change in freshwater (palustrine wetlands) (% gained or lost)*	-0.27%	No data
Percent net change in saltwater (estuarine) wetlands (% gained or lost)*	-0.49%	No data
Percent net change in Emergent Herbaceous Wetlands (% gained or lost)*	-0.29%	0.27%
Percent net change in Woody Wetlands (% gained or lost)*	-0.35%	-0.45%

Data Source: National Land Cover Database. The top three values in the 1996-2016 row were calculated from the C-CAP data. All other values are from the National Land Cover Database (NLCD) because more recent C-CAP data is not yet available. NLCD does not have land cover categories for palustrine or estuarine wetlands.

How Wetlands Are Changing

Land Cover Type	Area of Wetlands Transformed to Another Type of Land Cover between 1996-2016 (Sq. Miles)	Area of Wetlands Transformed to Another Type of Land Cover between 2016-2023 (Sq. Miles)
Development	1.0480	0.2783
Agriculture	1.5964	0.3906
Barren Land	0.3802	0.1206
Water	1.1884	0.6390
Unconsolidated Shore	N/A	N/A

Data Source: National Land Cover Database.

Management Characterization

1. Significant changes at the state level (positive or negative) since the last assessment that could impact the future protection, restoration, enhancement, or creation of coastal wetlands.

Significant Changes in Wetland Management

Management Category	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpreting these	N
Wetlands programs (e.g., regulatory, mitigation, restoration, acquisition)	Y

2. Description of management categories with significant changes.

Wetland data change: In January 2020, the Oregon Department of State Lands (DSL) added waters shown on the National Hydrography Dataset and two subsets of soils based on Natural Resources Conservation Service Soil Survey data to Oregon’s Statewide Wetland Inventory (SWI). The SWI is a screening tool which helps to identify locations and extent of wetlands and waterways. Prior to 2020, SWI reflected wetlands and waters from the National Wetland Inventory and local wetland inventories, which are approved by DSL. The addition of these soil layers to the SWI is consistent with current statute, which directs DSL to update the SWI as better information becomes available. These additions to the SWI are intended to remedy the underreporting of wetlands and reduce the incidence of an SWI map query returning a false negative result. This ensures better coordination between local governments and DSL and improves application of state Removal/Fill permitting requirements. This change was not 309 or CZM driven.

Funding program change: OCMP is now hosting the Coastal Zone Management Habitat Protection & Restoration Bipartisan Infrastructure Law Funding Program, available only through coastal management programs. The objective of this initiative is to increase resilience through landscape-scale habitat restoration and conservation in coastal ecosystems nationwide and promote coastal resilience in rural coastal communities. The funding began in 2022 and will have the final competitive funding cycle in summer of 2025. This change was from federal legislation but directly impacts coastal management programs and can include direct wetland protection and restoration projects. Since the program began, the OCMP has been successful in securing funding for three acquisition projects including two for the Confederated Tribes of Siletz Indians to purchase a coastal headland and 42-acres of ocean front property that includes Sitka spruce wetlands. An additional acquisition project with the Oregon Department of Fish and Wildlife Department was awarded funding to purchase 528 acres of tidal wetlands as an addition to ODFW’s Coquille Valley Wildlife Area. This program is within the OCMP but is not 309-specific.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?
 - High X
 - Medium
 - Low

2. Explanation for this level of priority.

As finite, critical resources of fundamental ecological value, wetlands remain a high priority in Oregon. While the Department of State Lands plays a lead role in conserving the state's wetland resources through its permitting authority, Oregon's statewide land use planning program also fills a key role in managing and protecting wetlands at the local government level, particularly through the implementation of Statewide Planning Goals 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces), 16 (Estuarine Resources), and 17 (Coastal Shorelands). Partner responses from the OCMP's survey for 5-year assessment and strategy priorities expressed strong support for continued work to improve management and protection of Oregon's wetland resources through this advanced local planning approach. Although important advancements have been made in improved inventory data and regulatory standards, there are still significant needs and gaps for wetlands planning at the local government level. Partners engaged included local governments, state agency partners involved in wetland regulation and management, watershed councils, and non-profit organizations with interests in coastal resource management and conservation.

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Coastal Hazards

Section 309 Enhancement Objective: Prevent or significantly reduce threats to life and property by eliminating development and redevelopment in high-hazard areas, managing development in other hazard areas, and anticipating and managing the effects of potential sea level rise and Great Lakes level change. §309(a)(2)

Note: For purposes of the Hazards Assessment, coastal hazards include the following traditional hazards and those identified in the CZMA: flooding; coastal storms (including associated storm surge); geological hazards (e.g., tsunamis, earthquakes); shoreline erosion (including bluff and dune erosion); sea level rise; Great Lake level change; land subsidence; and saltwater intrusion.

Resource Characterization

1. General level of risk in the coastal zone for each of the coastal hazards.

General Level of Hazard Risk in the Coastal Zone

Type of Hazard	General Level of Risk (H, M, L)
Flooding (riverine, stormwater)	H
Coastal storms (including storm surge)	H
Geological hazards (e.g., tsunamis, earthquakes)	H
Shoreline erosion	H
Sea level rise	M
Great Lakes level change	N/A
Land subsidence	L
Saltwater intrusion	M
Wildfire	M

2. Summary of additional data and reports on the level of risk and vulnerability to coastal hazards within Oregon since the last assessment.

Oregon Natural Hazards Mitigation Plan: Oregon's Natural Hazards Mitigation Plan (NHMP) provides statewide and regional information on the natural hazards most likely to occur in the state. The Plan also reports on the potential impacts of natural hazards on people, property, and the environment, and establishes a mitigation strategy to reduce those impacts. Each five-year update to Oregon's NHMP must be approved by FEMA so that the state can receive federal funds to carry out mitigation planning and projects. Oregon's latest NHMP was approved on September 24, 2020, as a standard plan. It will need to be updated and re-approved in 2025. The plan includes a risk assessment for the following hazards: coastal hazards, droughts, dust storms, earthquakes, floods, landslides, tsunamis, volcanoes, wildfires, windstorms, and winter storms. All hazards, except for dust storms, are applicable to the coastal region of Oregon. The Oregon NHMP contains the most complete and up-to-date description of Oregon's natural hazards and their probability, the state's vulnerabilities, its mitigation strategies and implementation capability. Oregon's counties and cities can rely upon this information when preparing local natural hazard mitigation plans. A process to update the State's NHMP was started in the summer of 2024 and was submitted to FEMA for review in March 2025.

Risk Assessment Upgrade: Initiated in March 2023, DLCD and the Oregon Department of Emergency Management (ODEM) are leading a project to upgrade the Oregon Natural Hazards Risk Assessment. The risk assessment provides the factual foundation for establishing mitigation goals and identifying

and making strategic investments to reduce risks to people, property, and the natural environment from natural hazard events throughout the state. The factual foundation provided by the Risk Assessment Upgrade project guided development of the 2025 Oregon NHMP’s updated risk reduction strategy. The goals of this upgrade project are to:

- Develop and implement a public-facing comprehensive risk assessment tool in a geospatial environment that will respond to FEMA's new requirements and assist in regional and statewide natural hazard risk planning and mitigation;²
- Design the tool in a way that is useful not only for the state, but also for Tribes, cities, counties, special districts, and others for natural hazards mitigation planning.

Phase 1 of the risk assessment upgrade project, including model input selection, model runs, and model results with accompanying maps, was completed as of the end of 2024. Phase 2, which will entail utilizing the model results in the Oregon Natural Hazards Mitigation Plan Update, is anticipated to be published by March of 2026.

The work listed above was not 309 or CZM-driven; however, OCMP staff have and continue to provide support to each of these efforts and the results of these efforts inform OCMP’s 309 work.

Estuarine Resilience Planning: DLCD also led the development of two county-wide estuarine resilience action plans (ERAPs) for Coos and Tillamook Counties that include a vulnerability assessment for the estuary communities within those counties. A process to develop ERAPs for two additional counties (Lane and Lincoln) is now underway, to be completed in 2025. Those plans are described further under the *Management Characterization* section of the Cumulative and Secondary Impacts Phase I Assessment. These ERAPs were not developed using 309 funds but were developed by OCMP staff with funding from the National Coastal Resilience Fund.³

Management Characterization

1. Significant state-level changes (positive or negative) that have occurred since the last assessment that could impact the OCMP’s ability to prevent or significantly reduce coastal hazards risk.

Significant Changes in Hazards Statutes, Regulations, Policies, or Case Law

Topic Addressed	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Elimination of development/redevelopment in high-hazard areas	Y	Y	N
Management of development/redevelopment in other hazard areas	Y	Y	Y
Sea level rise	N	Y	Y

² FEMA Risk Assessment Requirements: www.oregon.gov/lcd/NH/Documents/FEMA%27s%20New%20Risk%20Assessment%20Requirements.pdf.

³ Estuarine Resilience Action Plans: www.oregon.gov/lcd/OCMP/Pages/Estuary-Planning.aspx.

Significant Changes in Hazards Planning Programs or Initiatives

Topic Addressed	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Hazard mitigation	Y	Y	Y
Sea level rise	Y	Y	Y

Significant Changes in Hazards Mapping or Modeling Programs or Initiatives

Topic Addressed	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Sea level rise	Y	Y	Y
Other hazards (coastal landforms, tsunami)	Y	Y	Y

2. How “high-hazard areas” are defined in Oregon’s coastal zone:

The OCMP does not employ a singular definition of “high hazard areas.” In general, the following hazard areas are subject to mandatory land use limitations and/or development standards for reducing risk:

- Floodplains (1% probability, both riverine and ocean);
- Beaches, active and conditionally stable foredunes, and interdune areas subject to ocean flooding;
- Other areas of geologic instability, including areas subject to chronic coastal erosion and landslides;
- Areas subject to tsunami inundation.

For each natural hazard assessed in the State’s Natural Hazard Mitigation Plan, there is a definition for how each hazard is ranked as high, medium, or low. Those are specific to each hazard and can be found within the State’s NHMP.

3. Description of management categories with significant changes.

Some changes indicated in the table above relate to the changes to the State Natural Hazard Mitigation Plan (Risk Assessment Upgrade) which are described under *Resource Characterization* above. Additional changes are described below.

Rule Change Related to Coastal Erosion: The Land Conservation and Development Commission (LDCD) adopted amendments to the Goal 2 (Land Use Planning) administrative rules in September 2022, which became effective in October 2022.⁴ The new rule addition creates a clear path for public roads and highways along the oceanfront to seek a local land use goal exception to use structural shoreline armoring (such as riprap) to mitigate coastal erosion. The new goal exception process requires a feasibility assessment, public benefit justification, and mitigation of shoreline armoring impacts to balance public needs with the important values and ecosystem services of the public beach. Staff received guidance on the development of new rules through a volunteer rulemaking advisory committee and public comments received. A summary of rulemaking advisory

⁴ Goal exception rule: secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3054.

committee meetings and associated rulemaking materials can be found on the DLCD rulemaking webpage.⁵ This effort was CZM-driven.

Tsunami Regulatory Changes: In 1996, the Oregon legislature passed ORS 455.446 and ORS 455.446-447, which limited or prohibited construction of certain types of new essential facilities, hazardous facilities, major structures, and special occupancy structures in the regulated tsunami inundation zone, which was adopted by the Oregon Department of Geology and Mineral Industries (DOGAMI) Governing Board. In 2019, the Oregon Legislature passed HB 3309, which ended the moratorium on the uses under ORS 455.446-447. All structures that were formally prohibited were now permitted within the regulatory tsunami zone, subject to consultation with DOGAMI. Then, in 2021, the Oregon Legislature adopted HB 2605 which adopted the tsunami design provisions contained in the American Society of Civil Engineers ASCE-7 Standard. This provides a minimum design and safety standard for any new critical or significant structures constructed in the tsunami inundation zone, implemented through Oregon Building Codes. Any community that has locally adopted tsunami resilience land use regulations (many of which were adopted during the OCMP's previous 309 strategy) still prohibit the building of new critical or essential structures within the regulated tsunami inundation zone. This regulatory building codes change was not 309 or CZM-driven.

Sea Level Rise Adaptation Planning: OCMP staff created tools to assist communities in planning for sea level rise impacts specific to the Oregon coast both within estuaries and along the outer coast. These tools were developed collaboratively over a two-year period and published for use in October 2022. The sea level rise adaptation planning toolkit is a set of three resources for local governments and communities to assess and address the impacts of sea level rise. All three sea level rise adaptation resources are hosted on the Oregon Coastal Atlas.

1. [Sea Level Rise Impact Explorer](#) is an interactive, online planning tool that covers all of Oregon's coastal zone areas. Inclusion of an area in the SLR planning area could mean permanent inundation or that the area will be impacted periodically by high tide flooding, storm surge, or erosion events.
2. [Sea Level Rise Impact Assessment Tool](#) is a digital workbook designed to help users inventory what activities take place within areas affected by sea level rise, assess vulnerability to harm, and prioritize further investigation into remedial and adaptive actions. Completing the workbook serves as a jurisdiction's or organization's vulnerability assessment.
3. [Sea Level Rise Planning Guide for Coastal Oregon](#) is a document that provides a suggested approach to evaluating the assets and populations at risk from the impacts of sea level rise. It offers potential adaptation strategies to adapt to those impacts within Oregon's regulatory framework and provides authoritative information about sea level rise projections and impacts. It is intended to guide local planning, capital improvements, and development decisions on the Oregon Coast that support community resilience and ensure effective coastal management.

A NOAA Coastal Management Fellow joined the OCMP team from August 2022 – August 2024 to provide direct capacity to advance sea level rise adaptation planning at the local level in Clatsop County communities utilizing the tools described above. That fellowship provided suggestions to revise the three resources listed above and resulted in a new community engagement guide for sea level rise planning, which is pending publication. These resources were 309-driven and the fellowship was CZM-driven.

⁵ Ocean-fronting public road rulemaking: www.oregon.gov/lcd/LAR/Pages/OFPRP.aspx.

Coastal Erosion Guidance: In early 2022, OCMP released the Guidebook on Erosion Control Practices of the Oregon Coast.⁶ Developed through a year-long Oregon Sea Grant Natural Resource Policy Fellowship, this guidebook is a comprehensive overview of erosion control techniques, such as riprap, cobble berms, and seawalls, and their regulation on the Oregon coast. It is meant for coastal planners, scientists, consultants, engineers, and coastal community members. The guidebook covers the main policies and land use goals relevant to coastal erosion on the Oregon coast, permitting processes for erosion control, and detailed information about erosion control mechanisms viable on the Oregon coast. Since its release, the department has received several positive reviews from practitioners using the guide. It has also been integrated into the Oregon Parks and Recreation Department’s ocean shore alteration permitting process as a resource for applicants and staff. The development of this resource supported the 2021-2025 Coastal Resilience 309 strategy and was CZM-driven.

Tsunami Data and Modeling Changes: The Oregon Department of Geology and Mineral Industries (DOGAMI) completed a series of maps and publications along the Oregon coast that model pedestrian evacuation routes and speeds for a local tsunami event called “Beat the Wave.” Some of this work was funded through a Project of Special Merit (which concluded in September 2019) and a NOAA Coastal Resilience Grant (which concluded in June 2021) to address gaps identified in local land use planning for tsunami hazards. This modeling now covers 27 coastal communities, which is comprehensive of all populated areas along the coast. DOGAMI also completed vertical evacuation studies for the cities of Seaside and Cannon Beach in Clatsop County.⁷ This work was part of the larger tsunami evacuation analyses conducted. Vertical evacuation is one hypothetical scenario that can be evaluated to improve pedestrian evacuation in challenging coastal areas.⁸ These “Beat the Wave” maps and associated publications are a key component to improving a community’s evacuation routes and facilities. All publications and maps can be found at www.oregontsunami.org. Some of this work was 309-driven, while some of the work was funded by the National Tsunami Hazard Mitigation Program.

Beach and Dune Mapping: The OCMP applied for and was successful in securing a Project of Special Merit to update beach and dune landform mapping for the Oregon coast to be used in conjunction with Statewide Planning Goal 18 (Beaches and Dunes). The OCMP contracted with DOGAMI to update the beach and dune landform inventory, last mapped in 1975, for all of Oregon’s coastal counties. The mapping method was first piloted in Tillamook County in 2020 through a small CZM grant. DOGAMI is replicating this method for this project along the whole coast. Maps and associated reports also analyze changes that have occurred in these dynamic landscapes since 1975. The OCMP is working with Coos County and the City of Bandon to adopt the results of these maps in their comprehensive plans and accompanying Goal 18 zoning requirements. This is an essential piece of data to implement Statewide Planning Goal 18, which works to limit or prohibit development in certain hazardous or ecologically important areas. Having this data will also help the OCMP assess the effectiveness of its management efforts in these areas. This project and its results are 309-driven.

⁶ Guidebook on Erosion Control Practices of the Oregon Coast: www.oregon.gov/lcd/Publications/guidebook_erosion_control_practices.pdf.

⁷ Cannon Beach Evacuation Analysis: pubs.oregon.gov/dogami/ofr/O-22-02/O-22-02_report.pdf.

⁸ Beat the Wave Route Maps: www.oregon.gov/dogami/tsuclearinghouse/Pages/pubs-evacbro_BTW.aspx.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High X

Medium

Low

3. Explanation for this level of priority.

The OCMP has placed a priority on and devoted significant effort to improving management of coastal hazards. Substantial work has been completed during both the former (2016-2020) and current (2021-2025) 309 strategy cycles. The OCMP has provided and continues to provide technical support for several local efforts to improve coastal hazards and resilience management. These efforts have made it clear that there is much additional work to be done to provide technical tools, data, and support for improved local and state efforts. Community and partner responses solicited for this assessment consistently ranked coastal hazards as one of the highest priorities for continued program focus and improvement. Partners engaged included local governments, state agency partners, and non-profit organizations with interests in coastal land use and development issues.

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Public Access

Section 309 Enhancement Objective: Attain increased opportunities for public access, taking into account current and future public access needs, to coastal areas of recreational, historical, aesthetic, ecological, or cultural value. §309(a)(3)

Resource Characterization

1. Public access availability within Oregon’s coastal zone.

Public Access Status and Trends

Type of Access	Current number	Changes or Trends Since Last Assessment (↑, ↓, -, unknown)	Cite data source
Beach access sites	659	of these, 14 sites are of unknown status due to inability to visit at the time of the most recent inventory ↑	Shoreline Access inventory 2020
Shoreline (other than beach) access sites	553 + 106 = 659	↓	Shoreline Access inventory 2020 + OMB Boating Access Sites, 2025
Recreational boat (power or non-motorized) access sites	290	↑	OMB Boating Access Sites 2025 (not Privately owned)
Designated scenic vistas or overlook points	292	↑	Shoreline Access inventory 2020
Fishing access points (i.e. piers, jetties)	184	unknown	OMB Boating Access Sites 2025
Coastal trails/boardwalks	214 1,307	↑	OpenStreetMap 2025
Acres of parkland/open space	73,953.4 acres	unknown	Acres of Parklands within the Coastal Zone (source: Oregon Parklands GDB, OPRD)
Access sites that have accessibility features	360	↑	Shoreline Access Inventory 2020 (Accessibility Improvements)

Note about coastal access data: The actual quantity of active shoreline access sites has not changed significantly since the first public access inventory the OCMP conducted in 1990.

Oregon is one of just a few states with explicit statutory protections guaranteeing free and uninterrupted public use of all beaches (Beach Bill, passed in 1967). In addition, the state has an extensive parks system that provides shoreland access, camping, and other recreational opportunities throughout the entire coastal zone. The coast has an extensive network of federal, state, and local trails. It is difficult to accurately quantify the mileage of these trails and acreage of all parks as they are always changing and are regulated or maintained by differing groups. The above table reflects the best available data but is not exhaustive or comprehensive.

2. Coastal public access demand characterization and process for assessment:

The demand for coastal public access in Oregon is driven by a combination of factors including population growth, tourism, and outdoor recreation. According to the draft 2025-2029 Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP), Oregon's coast is a significant recreational resource, with coastal recreation activities such as beach access, hiking, and nature-based tourism seeing substantial growth. Tourism in coastal communities also contributes to Oregon's 'blue economy.'

It is estimated that approximately 30 million people visit the Oregon coast annually, with a large portion of those visitors seeking outdoor activities such as beach access, wildlife viewing, and hiking. The Oregon coast tourism economy is the second largest in Oregon, second only to the Portland region. According to recent data from Travel Oregon, around 37% of visitors to Oregon included a trip to the Oregon coast. Additionally, the population in Oregon's coastal counties is projected to grow significantly over the next few decades. From 2020 to 2040, Oregon's coastal counties are expected to see a population increase of about 20%, with some areas expected to experience even higher rates of growth due to migration patterns, such as retirees relocating to the coast (especially Lincoln, Tillamook, and Clatsop counties). Oregon's SCORP provides a framework for periodically assessing the demand for outdoor recreation needs. This is done through surveys of Oregon's residents and visitors, as well as through engagement with local communities and partners. The tourism industry also provides regular assessments for coastal public access demands through organizations such as Travel Oregon and the Oregon Coast Visitors Association. OCMP also conducted a public access survey and listening sessions in 2022. Key results of those efforts are summarized in Oregon's Coastal Public Access Guide for Local Government Planners publication. Respondents of the survey and listening sessions highlighted that there is a growing need for increased public access to the coast, particularly in areas that are seeing rapid development or where coastal access is currently limited. Survey results also highlighted a demand to focus on expanding access balanced with environmental protections, creating a welcoming and accessible coast, and improving infrastructure and accessibility features.

3. Summarize the results of any additional data or reports on the status or trends for coastal public access since the last assessment.

Nothing additional was completed outside of the reports and assessments described in question #2 above.

Management Characterization

1. Significant state-level changes (positive or negative) that could impact the future provision of public access to coastal areas of recreational, historical, aesthetic, ecological, or cultural value.

Significant Changes in Public Access Management

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	Y	Y
Operation/maintenance of existing facilities	Y	N	N
Acquisition/enhancement programs	Y	Y	Y

2. Description of management categories with significant changes.

Regulatory Updates: In 2024, the Oregon Court of Appeals and Oregon Supreme Court decisions struck down some of the State Legislature's recreational immunity statutes regarding paths and trails. The ruling centered around “access” to a recreation site and that the Oregon law only protects unimproved access trails. This raised liability concerns around improved accessways and trails. Many beach access points fall under this category. Statewide Planning Goal 17 (Coastal Shorelands) and other land use goals have provisions around protecting the public’s right to access the shoreline. After the court ruling, the Oregon Coast Visitor’s Association estimated that at least 22 trails were closed on the Oregon coast because of the fear of liability and litigation. In 2024, the Oregon Legislature passed and the Governor signed a temporary stopgap measure (SB 1576) to grant recreational immunity to landowners, including local governments, from lawsuits when people are injured while using improved public trails and accessways. The measure sunsets at the end of the next legislative session, with the understanding that will give lawmakers enough time to write a long-term fix. The 2025 Oregon Legislature is currently considering a bill to make permanent the temporary fixes from the 2024 session, but the measure has not yet passed. This legislative measure was not 309 or CZM-driven but does have implications for coastal local governments and the State’s land use planning system around coastal public access.

New Funding Program: In 2019, the Oregon Legislation established a new grant fund to prioritize non-motorized boating access improvements, implemented by the Oregon State Marine Board. The grants are competitive and are used to acquire property, improve, or renovate public recreational boating access, provide education and promote boating opportunities to communities with limited access. This grant program was not 309- or CZM-driven but has benefitted many coastal entities.

Coastal Access Guide: As discussed elsewhere in this section, the OCMP developed a Coastal Public Access Guide for Local Government Planners. This resource includes model policy language, description of the new online mapping tool, and a list of potential funding sources for improvements for coastal public access. This effort was 309-driven.

2. Indicate if your state has a publicly available public access guide. How current is the publication and how frequently it is updated?

Publicly Available Access Guide

Public Access Guide	Printed	Online	Mobile App
State has? (Y or N)	N	Y	N
Web address (if applicable)	N/A	www.oregon.gov/lcd/OCMP/Pages/Public-Access.aspx	N/A
Date of last update	N/A	2024	N/A
Frequency of update	N/A	Inventory of sites is updated every 10 years.	N/A

The OCMP recently published Oregon's Coastal Public Access Guide for Local Government Planners. This guide was crafted for the purpose of providing local coastal governments with a framework for planning for a community's public access program. This Guide can be used by coastal city and county jurisdictions and Tribal governments as guidance for maintaining and improving coastal public access programs. Local government and tribal staff, especially land use planners, public works, and parks staff can use this guide as a roadmap to make policy and on-the-ground improvements to a community's public access to coastal shorelines and waters. The OCMP also created an online mapping tool for local governments and tribes to better understand vulnerabilities of coastal access sites, aid in the planning for improvements to sites to increase accessibility and amenities, and to discover where gaps in access amenities may be located. This tool aims to provide critical data and information on specific access sites within a jurisdiction to better aid in informed decision making in the preservation and enhancement of coastal shorelines. The OCMP's Oregon Coastal Atlas platform hosts a publicly available database of all inventoried coastal shoreline public access sites, and the Oregon Coast Visitors Association also hosts the Oregon Shore Explorer public interactive map that uses OCMP's decadal inventory data. While these resources are not specifically available on a mobile app, they are available for mobile users.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High
Medium X
Low

4. Explanation for this level of priority.

The OCMP incorporates strong regulatory provisions requiring the retention of existing coastal public access points. During the 2021-2025 Assessment and Strategy, the OCMP prioritized public access and made several program enhancements through implementation of the strategy as described elsewhere in this document. These resources and program improvements are meant to support local governments, tribes, and state agencies in protecting and improving public access to the shoreline and managing natural resources. The Public Access enhancement area may be the focus of OCMP 309 strategies in the future but was not identified as a priority for the 2026-2030 assessment period. Partners engaged included local jurisdictions, state agencies, watershed councils, and non-governmental organizations.

Marine Debris

Section 309 Enhancement Objective: Reducing marine debris entering the nation’s coastal and ocean environment by managing uses and activities that contribute to the entry of such debris. §309(a)(4)

Resource Characterization

1. Status and trends of marine debris in Oregon’s coastal zone based on the best-available data.

Existing Status and Trends of Marine Debris in Coastal Zone

Source of Marine Debris	Significance of Source (H, M, L, unknown)	Type of Impact (aesthetic, resource damage, user conflicts, other)	Change Since Last Assessment (↑, ↓, -, unknown)
Beach/shore litter	L	Aesthetic/User Conflict/Public Safety	-
Land-based dumping	M	Aesthetic/Public Safety	-
Storm drains and runoff	M	Aesthetic/Resource Effects	-
Land-based fishing (e.g., fishing line, gear)	L	Aesthetic/Resource Effects	-
Ocean-based fishing (e.g., derelict fishing gear)	M	Resource Effects/User Conflicts	-
Derelict vessels	M	Aesthetic/User Conflicts/Resource Effects	-
Vessel-based (e.g., cruise ship, cargo ship, general vessel)	M	Aesthetic/Public Safety	-
Hurricane/Storm	L	Aesthetic/Public Safety	-
Tsunami	M	Aesthetic/Public Safety/Resource Effects	-

Data source: No additional data has been collected since the last assessment, so the table above is the same as the previous assessment and strategy.

2. Results of any additional state-specific data or reports on the status and trends or potential impacts from marine debris in the coastal zone since the last assessment.

The Oregon Marine Debris Action Plan was created in 2017 and last updated in 2019. Since then, many state agencies and nonprofit partners have been implementing the actions of the Plan, some of which are highlighted under the *Management Characterization* section below. A new Oregon Marine Debris Action Plan will be developed in 2025 with the support of the NOAA Marine Debris Program. Also new since the 2021-2025 Assessment and Strategy is that NOAA’s Marine Debris Program publishes a newsletter for Oregon’s Marine Debris Action Plan four times a year, highlighting efforts of local, state, and regional entities to address marine debris, including funding opportunities. Find past newsletters here: <https://marinedebris.noaa.gov/your-region/pacific-northwest>. There has been no new marine debris assessment for Oregon since the previous assessment, so the trends for significance of source are the same as in the previous assessment.

Management Characterization

1. Significant state-level changes (positive or negative) for how marine debris is managed in the coastal zone.

Significant Changes in Marine Debris Management

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Marine debris statutes, regulations, policies, or case law interpreting these	Y	N	Y
Marine debris removal programs	Y	N	Y

3. Description of management categories with significant changes.

Recycling: The Oregon Department of Environmental Quality (OCMP network partner) has been working to implement the Plastic Pollution and Recycling Modernization Act, which is seeking to update Oregon’s outdated recycling system. The Oregon legislature passed the Recycling Modernization Act (Senate Bill 582) during the 2021 legislative session. The new law became effective January 1, 2022, and recycling program changes will start in July 2025. This system-wide update will make recycling easier for the public to use, expand access to recycling services, upgrade the facilities that sort recyclables, and create environmental benefits while reducing social and environmental harms, such as plastic pollution and marine debris. Producers and manufacturers of packaged items, paper products and food service ware will pay for many of these necessary improvements and help ensure recycling is successful in Oregon.

Abandoned and Derelict Vessel (ADV) Removal: From 2023 – 2024, the Oregon Department of State Lands (OCMP network partner) convened a workgroup of partners and community members to advise on key elements of a new statewide program to address abandoned and derelict vessels (ADV) in Oregon waterways. The 24 members of the ADV Workgroup brought a wide variety of perspectives and expertise, including ports, marinas, waterway recreation, environmental protection, vessel salvage, and local government. The framework developed through this workgroup captures key challenges that must be addressed as well as commitments for the Department in establishing the new program over the coming years. It will guide the work of staff and partners for near-term action and long-term solutions.

The Oregon State Marine Board also manages an ADV removal program. In 2020 the Marine Board proposed an initiative to remove unwanted abandoned vessels from marinas while the vessels are still securely moored and afloat. Under this initiative, the Marine Board coordinated the removal of legally abandoned vessels from eligible marinas who adopted a suite of new management practices to help reduce the number of vessels that might become abandoned in the future. Eligible marinas under this new initiative are those that participate in the Marine Board's Clean Marina certification program and are located along the Oregon Coast and in the lower Columbia River basin.

All changes listed above were not 309 or CZM-driven efforts.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High

Medium X

Low

2. Explanation for this level of priority.

While this issue is significant across Oregon’s coastal zone, many other entities are working to address marine debris. It is not currently a high priority for the OCMP in our efforts under Section 309 funding. Partners engaged included local jurisdictions, state agencies, watershed councils, and non-governmental organizations.

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Cumulative and Secondary Impacts

Section 309 Enhancement Objective: Development and adoption of procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development, including the collective effect on various individual uses or activities on coastal resources, such as coastal wetlands and fishery resources. §309(a)(5)

Resource Characterization

1. Changes in population and housing units in Oregon’s coastal counties between 2017 and 2021.

Trends in Coastal Population and Housing Units

	2017	2021	Percent Change (2017-2021)
Number of people	1,608,978	1,653,971	2.80
Number of housing units	690,125	715,585	3.69

Data Source: www.oceaneconomics.org/. Counties in Oregon’s Coastal Zone = Benton, Clatsop, Columbia, Coos, Curry, Douglas, Lane, Lincoln, Polk, Tillamook, Washington, and Yamhill.

2. Status and trends for various land uses in Oregon’s coastal counties between 1996 and 2023.

Data Source for all tables below: US Geological Survey’s National Land Cover Database. Counties in Oregon’s Coastal Zone = Benton, Clatsop, Columbia, Coos, Curry, Douglas, Lane, Lincoln, Polk, Tillamook, Washington, and Yamhill.

Distribution of Land Cover Types in Coastal Counties

Land Cover Type	Land Area Coverage in 2023 (Acres)	Gain/Loss Since 1996 (Acres)
Developed, High Intensity	23,405	1,581
Developed, Medium Intensity	110,693	3,697
Developed, Low Intensity	212,804	7,719
Developed, Open Space	328,665	3,022
Grassland	827,065	98,754
Scrub/Shrub	1,141,765	28,178
Barren Land	55,709	993
Open Water	361,034	-1,082
Agriculture	1,106,320	-8,931
Forested	8,208,013	-133,837
Woody Wetland	114,030	-988
Emergent Wetland	196,589	894

Development Status and Trends for Coastal Counties

	1996	2023	Percent Net Change
Percent land area developed	4.76%	5.48%	15.16%
Percent impervious surface area	4.04%	4.51%	11.57%

How Land Use Is Changing in Coastal Counties

Land Cover Type	Areas Lost to Development Between 1996-2023 (Acres)
Barren Land	175
Emergent Wetland	161
Woody Wetland	120
Open Water	268
Agriculture	3,890
Scrub/Shrub	10,027
Grassland	5,014
Forested	16,345

3. Coastal shoreline change since last assessment.

The Oregon Parks and Recreation Department (OPRD) permits shoreline stabilization structures on the ocean shore of Oregon. From January 2020 through December 2024, OPRD approved 62 permits. The total length of shoreline armoring constructed through those permits is 5,191 feet.

4. Summary of any additional state-specific data or reports on the cumulative and secondary impacts of coastal growth and development, such as water quality, shoreline hardening, and habitat fragmentation, since the last assessment.

No new reports since the last assessment.

Management Characterization

1. Significant state-level changes (positive or negative) in the development and adoption of procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development, including the collective effect on various individual uses or activities on coastal resources, such as coastal wetlands and fishery resources, since the last assessment.

Significant Changes in Management of Cumulative and Secondary Impacts of Development

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	Y	Y
Guidance documents	Y	Y	Y
Management plans (including SAMPs)	Y	Y	Y

2. Description of management categories with significant changes.

Improved Data for Wetlands Screening Tool: Oregon’s Statewide Wetland Inventory (SWI) is a screening tool which helps to identify locations and extent of wetlands and waterways. Prior to 2020, the SWI reflected wetlands and waters on the National Wetland Inventory and on LWIs. In

January 2020, the Oregon Department of State Lands (DSL) added waters shown on the National Hydrography Dataset and two subsets of soils based on Natural Resources Conservation Service Soil Survey data to the SWI. This addition to the SWI is consistent with current statute, which directs DSL to update the SWI as better information becomes available. These additions to the SWI are intended to remedy the underreporting of wetlands and reduce the incidence of an SWI map query returning a false negative result. This ensures better coordination between local governments and DSL and improves application of Removal/Fill permitting requirements. This effort was not 309 or CZM driven.

Amendments to the Territorial Sea Plan: See *Management Characterization* Section under Ocean and Great Lakes Resources for information regarding updates to Oregon’s Territorial Sea Plan, which is a special area management plan. These updates were 309-driven.

Estuarine Resilience Planning: Between May 2021 and August 2023, DLCD led the development of Estuarine Resilience Action Plans (ERAP) for two coastal jurisdictions (Tillamook and Coos Counties), supported by a grant award from the National Coastal Resilience Fund (NCRF). These plans outline the resources, assets, and populations at risk to natural hazard impacts, and identify potential green infrastructure projects and other nature-based solutions to improve natural hazard resilience in seven major estuaries. Development of the plans was led by steering committees composed of city and county governments, watershed councils, soil and water conservation districts, tribal staff, state and federal agencies, and others who can coordinate and implement resilience activities. These efforts also included broader outreach and engagement efforts to solicit local feedback and garner community buy-in for developing plans and projects. ERAPs have and will continue to support putting projects into action to protect coastal fish, wildlife, and habitats as well as human communities. In November 2022, DLCD was awarded a second NCRF grant to develop ERAPs for estuaries in Lincoln and Lane Counties, which will likely be completed by summer of 2025. This work is creating a pipeline of nature-based restoration projects. This effort was not 309 driven but does support the OCMP’s current 309 strategies under both coastal hazards and special area management planning.

Statute and Rule Changes: In February 2022, the Oregon Legislature adopted SB 1501 to direct implementation of the Private Forest Accord, an agreement reached between conservation and timber groups describing measures that will better protect streams and aquatic habitat from the impacts of forestry activities. In October 2022, the Board of Forestry adopted amendments to Chapter 629 of the OARs consistent with the Forest Accord. Oregon Administrative Rules 629-603-000 through 0500 describe Oregon’s Adaptive Forest Management Program. Amendments to several other divisions of Chapter 629 codify elements of SB 1501, including larger buffers for non-fish bearing streams, provisions for mitigating impacts of legacy forest roads, and measures to identify and manage landslide prone areas. All rule amendments are available on ODF’s Private Forest Accord web page.⁹ The forest practices amendments are integral to the Oregon Department of Forestry’s Habitat Conservation Plan for several ESA listed species. The Habitat Conservation Plan is currently under development and has not yet been approved by the National Marine Fisheries Service or the US Fish and Wildlife Service.

⁹ Private Forest Accord: www.oregon.gov/odf/pages/private-forest-accord.aspx.

In February 2022, Oregon Department of Environmental Quality (DEQ) amended rules directing actions for establishing a total maximum daily load (TMDL). Amendments to Oregon Administrative Rule 340-042-0040 added criteria for evaluating whether a TMDL includes reasonable assurances of implementation. Amendments to OAR 340-042-0060 added the option of the Environmental Quality Commission (EQC) adopting a TMDL by rule. DEQ expects these amendments will assist with the issuance or reissuance of several river basin TMDLs in the Coastal Nonpoint Pollution Control Program (CNPCP) boundary over the next few years. More generally, DEQ anticipates that adopting TMDLs by rule will provide predictable and transparent administrative procedures associated with rulemakings and allow the EQC to address important policy considerations at the time of commission action.

These two policy efforts were not 309 driven but were supported by CZM staff through 306 funds.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High

Medium X

Low

2. Explanation for this level of priority.

The OCMP is based on the state's strong comprehensive land use planning laws. These laws mandate the local development of coordinated long range comprehensive plans implemented by specific land use regulations. These plans anticipate and address a variety of cumulative and secondary effects of growth and development and incorporate strong growth management controls to minimize significant adverse effects. Likewise, the state's regulatory framework for water, wetlands, fish and wildlife habitat and endangered species provides substantial mechanisms to avoid and mitigate adverse effects. This enhancement area is of importance both to the State of Oregon and the OCMP. However, at this time, these efforts are either incorporated into other enhancement area strategies or are included in the program's 306 work. Therefore, this enhancement area is given a medium priority here and will not include a Phase II assessment. Partners engaged included local jurisdictions, state agencies, watershed councils, and non-governmental organizations.

Special Area Management Planning

Section 309 Enhancement Objective: Preparing and implementing special area management plans for important coastal areas. §309(a)(6)

The Coastal Zone Management Act defines a special area management plan (SAMP) as “a comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed and comprehensive statement of policies; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone. In addition, SAMPs provide for increased specificity in protecting natural resources, reasonable coastal-dependent economic growth, improved protection of life and property in hazardous areas, including those areas likely to be affected by land subsidence, sea level rise, or fluctuating water levels of the Great Lakes, and improved predictability in governmental decision making.”

Resource Characterization

1. Geographic areas in the coastal zone subject to use conflicts that may be able to be addressed through a SAMP. This can include areas that are already covered by a SAMP but where new issues or conflicts have emerged that are not addressed through the current SAMP.

Geographic Area	Opportunities for New or Updated Special Area Management Plans Major conflicts/issues
Ocean lands and waters	The Oregon Territorial Sea Plan is an existing SAMP and there is an ongoing need to steward the plan to address new and emerging proposed uses of the ocean seafloor, water column, and intertidal areas.
Estuaries and Coastal Shorelands	Estuary Management Plans are existing SAMPs and there is need to continue to incorporate updated natural resource, cultural resource, economic development, and coastal hazard information into existing plans, and need for improved coordination within and between local governments and with current state and federal regulatory processes.

2. Additional state-specific data or reports on the status and trends of SAMPs since the last assessment.

Oregon did not develop any new coast wide SAMP assessments since the last strategy but did support the development of specific SAMP assessments for two estuaries. Additionally, other entities released assessments, which contributed to knowledge of the status and trends of Oregon’s ocean resources. These assessments are described below.

Yaquina Bay Estuary Management Plan Needs and Gaps Assessment: A needs and gaps assessment was completed in September 2022 for the Yaquina Bay Estuary through a Project of Special Merit. This assessment is specifically for the Yaquina Bay Estuary Management Plan (YBEMP) which is implemented through one coastal county and two coastal cities. The assessment outlines recommendations for updating the plan, many of which were incorporated into the update of the YBEMP. That updated plan has been adopted by the City of Newport (October 2024) and is pending adoption by Lincoln County and the City of Toledo. This effort was 309-driven.

Coos Bay Estuary Management Plan: From 2016 through 2019, the OCMP assisted in the implementation of a National Estuarine Research Reserve Science Collaborative project led by South Slough National Estuarine Research Reserve (SSNERR) and Coos County, in partnership with Coos Bay, North Bend, and the International Port of Coos Bay focused on estuary management of the Coos Bay. OCMP staff provided technical support throughout the project to complete the Coos Bay Estuary Management Plan (CBEMP) Audit and Assessment, including a series of community workshops. The final products of the project are an assessment report containing a series of recommendations for modernizing the CBEMP, an online mapping tool of updated data products, and a guide to lessons learned. These resources and recommendations supported a Phase 1 update to the CBEMP which was adopted by all three local governments in January 2024. These efforts were 309-driven.

Oregon Kelp Forest: The Oregon Kelp Alliance released a report on the status of kelp in Oregon in 2024. The report authors found that from 2010 to 2022, Oregon's kelp canopy cover declined by 67–73% and estimate that more than two-thirds of the state's kelp forest habitat no longer supports substantial kelp populations. The report also includes key needs for future research, monitoring, and conservation work. www.oregonkelp.com/wp-content/uploads/2024/10/ORKA_StatusReport_2024-Digital-72dpi.pdf.

Sea Otters on the Oregon Coast: The Elakha Alliance released a report in 2023 on the suitability for sea otter reintroduction in Oregon. The feasibility study's overall goal is to assist the Elakha Alliance, relevant state and federal agencies, stakeholders, and the public in identifying, understanding, evaluating, and addressing environmental, economic, social, legal, and other factors relevant to restoring a population of sea otters on the Oregon coast. It is intended to provide all parties with the best available scientific, economic, and legal information and analyses to guide consideration of future steps toward restoration. www.elakhaalliance.org/feasibility-study/download/.

Nearshore Habitat State of the Knowledge: The Pacific Marine and Estuarine Fish Habitat Partnership produced a report to document the current state of knowledge of U.S. West Coast nearshore habitat use by fish assemblages and select marine invertebrates. It reports on the compilation of standardized spatial data on nearshore habitats within defined nearshore zones. It is designed to provide a big picture of fish habitats throughout the U.S. West Coast; a baseline against which to investigate changes, shifts, and adaptations. honu.psmfc.org/media/PMEP/Documents/PMEP_Nearshore_FishInvert_Habitat_Report.pdf.

The three ocean resource reports above were not 309-driven but the information within these reports provides important justification for continued enhancements to the Territorial Sea Plan and informed the ocean resources strategy for the 2026-2030 time period.

Management Characterization

1. Significant state-level management changes (positive or negative) that could help prepare and implement SAMPs in the coastal zone.

Significant Changes in Special Area Management Planning

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
SAMP policies, or case law interpreting these	Y	Y	Y
SAMP plans	Y	Y	Y

2. Description of management categories with significant changes.

The OCMP carries out special area management planning primarily through the state’s Territorial Sea Plan and local estuary management plans. These continue to be important and successful tools for both natural resource protection and community development. Recent updates are described below.

Policy-related Changes: Significant policy changes in Special Area Management Planning related to ocean resources are described in the *Ocean Resources Phase I Assessment* section and the *Energy and Government Facility Siting Phase I Assessment* section (HB 2603 and HB 4080).

HB 3382 passed during the 2023 Legislative Session that created a new ‘reasons’ goal exception for the expansion of the federal navigation channel within the Coos Bay estuary. This bill provides a pathway for the Port of Coos Bay to propose channel modifications in the Coos Bay Estuary, which will have implications for the Coos Bay Estuary Management Plan (a special area management plan). DLCD was tasked with completing conforming rulemaking to put the new goal exception reason into rule, which was completed in early 2024. The goal exception has not yet been utilized, but it is anticipated within the coming year. While not applicable to all estuaries, it will have significant impacts as Coos Bay is one of three deep-draft development estuaries in Oregon. This effort was not 309 or CZM-driven.

Oregon Territorial Sea Plan Updates: Amendments to Oregon’s Territorial Sea Plan are described in the *Ocean Resources Phase I Assessment*.

Estuary Management Plan Updates: Local estuary management plans (EMPs) are a critical tool to guide local decisions that protect estuarine and coastal shoreland resources. Since 2016, OCMP has provided technical, financial, and planning support to the jurisdictions managing the Coos Bay Estuary Management Plan and the Yaquina Bay Estuary Management Plan, which represent two of the three deep draft development estuaries in Oregon, to modernize their plans.

In Coos Bay, OCMP staff participated in the development of the Coos Bay Estuary Management Plan (CBEMP) audit and assessment project. Led by Coos County, this project produced a work scope and recommendations for modernizing the CBEMP. The audit and assessment projects were a first step in updating the CBEMP and corresponding comprehensive plans and land use regulation amendments for the jurisdictions of Coos Bay, North Bend, and Coos County. While the project had a significant delay due to the COVID-19 pandemic, it continued forward in 2022, thanks in part to a small grant from OCMP. The findings and products for the CBEMP, including a map atlas, were presented to City Councilors, Planning Commissioners, and County Commissioners in an informational work session setting in January 2023. After several more work sessions and hearings,

the cities and county adopted final products in January 2024. This process was complex and time intensive, but also highly coordinated and collaborative. This work was 309 driven under the estuary management planning strategy. The outcomes include a more organized and unified CBEMP across jurisdictions and updated maps. It will also serve as an important starting point for a more comprehensive plan update in the future.

In Yaquina Bay, OCMP completed a specific habitat estuary inventory map in 2018 to assist with estuary management plan updates. From there, the jurisdictions of Lincoln County, Newport, Toledo, and the Ports of Newport and Toledo, as well as the Confederated Tribes of the Siletz Indians, met with OCMP to work through an update to the Yaquina Bay Estuary Management Plan (YBEMP). OCMP received a Project of Special Merit in 2020 to work with these entities to modernize the YBEMP. A consultant led the facilitation of the project which was directed by a Steering Committee, Technical Group, and Community Advisory Group and was completed by September 2023. Since the completion of the project, OCMP staff continued to work with each jurisdiction to develop jurisdiction-specific products for adoption. The City of Newport adopted their portion of the updated YBEMP in October 2024. Lincoln County and City of Toledo are pending adoption when staff capacity allows. This work was 309 driven. The outcomes include updated maps, data, policies, and implementing codes for the YBEMP jurisdictions.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High

Medium X

Low

2. Explanation for this level of priority.

The Oregon Coastal Management Program relies largely on comprehensive planning and special area management planning to achieve coastal management objectives. However, the OCMP will boost this enhancement area through the strategies developed under the wetlands, coastal hazards, and ocean resources enhancement areas. Therefore, for the purposes of this assessment and strategy cycle, special area management plans are given a medium priority.

Ocean and Great Lakes Resources

Section 309 Enhancement Objective: Planning for the use of ocean [and Great Lakes] resources.
§309(a)(7)

Resource Characterization

1. Status of Oregon's ocean economy as of 2021:

The three tables below are populated using information from the ENOW Explorer, NOAA Office for Coastal Management: coast.noaa.gov/enowexplorer/.

Status of Ocean and Great Lakes Economy for Coastal Counties (2021)

	All Ocean Sectors	Living Resources	Marine Construction	Ship & Boat Building	Marine Transportation	Offshore Mineral Extraction	Tourism & Recreation
Employment (# of Jobs)	42,276	3,594	547	1,633	11,639	594	24,266
Establishments (# of Establishments)	2,494	277	46	50	172	25	1,924
Wages (Millions of Dollars)	\$1.7 Billion	\$127.4	\$44.6	\$120.6	\$734.4	\$34.5	\$668.2
GDP (Millions of Dollars)	\$3.4 Billion	\$287.7	\$68	\$210.9	\$1.1	\$91.1	\$1.6 Billion

Change in Ocean and Great Lakes Economy for Coastal Counties (2005-2021)

	All Ocean Sectors	Living Resources	Marine Construction	Ship & Boat Building	Marine Transportation	Offshore Mineral Extraction	Tourism & Recreation
Employment (# of Jobs)	9,706	627	-193	-160	6,396	57	2,977
Establishments (# of Establishments)	324	23	-22	-9	2	2	328
Wages (Millions of Dollars)	\$990.7	\$81.2	\$8.9	\$46.9	\$494	\$10.9	\$348.7
GDP (Millions of Dollars)	\$1.8 Billion	\$172.6	\$0.57	\$109.2	\$538.3	\$14.5	\$976.1

2. Number of uses within the ocean off Oregon:

Uses within Ocean Waters

Type of Use	Number of Sites
Federal sand and gravel leases (<i>Completed</i>)	N/A
Federal sand and gravel leases (<i>Active</i>)	N/A
Federal sand and gravel leases (<i>Expired</i>)	N/A
Federal sand and gravel leases (<i>Proposed</i>)	N/A
Beach Nourishment Projects	0
Ocean Disposal Sites	41

Principle Ports (<i>Number and Total Tonnage</i>)	1; 1,755,356
Coastal Maintained Channels	35
Designated Anchorage Areas	14
Danger Zones and Restricted Areas	1
Other – Protected Areas within 15 miles	99
Other – Undersea Cable Installations	6

3. Changes in threats to and use conflicts over ocean resources in Oregon’s coastal zone:

Significant Changes to Ocean Resources and Uses

Resource/Use Change in the Threat to the Resource or Use Conflict	Since Last Assessment (↑, ↓, -, unknown)
Benthic habitat (including coral reefs)	↑ Threats from increased hypoxia events, ocean warming, harmful algal blooms, and ocean acidification.
Living marine resources (fish, shellfish, marine mammals, birds, etc.)	↑ Threats from hypoxia events, harmful algal blooms, ocean warming (marine heat waves, including “the blob”), ocean acidification, all of which impact seabirds, shellfish, and ESA listed salmon and Southern Resident Orcas.
Sand/gravel	-
Cultural/historic	↑ The impact to living marine resources is culturally and historically important to tribes and coastal communities. Additionally, shorelines with cultural and historical significance are being lost and threatened by coastal erosion, increased storm surge, flooding, and sea level rise.
Transportation/navigation	-
Offshore development	↑ Offshore development continues to drive policy and a focus on compatible uses of the ocean.
Energy production	-
Fishing (commercial and recreational)	↑ Fisheries are erratic in their response to marine heat waves, hypoxia, and ocean acidification. For example, the Dungeness crab fishery has had increasing closures due to whale entanglement concerns, caused by a shift in prey distributions that are changing with ocean conditions. Use conflicts associated with offshore development are also a significant concern.
Recreation/tourism	↑ Significant increases in the number of visitors to the coast through the year are increasing the stress on coastal communities and the natural resources.
Sand/gravel extraction	-
Dredge disposal	-
Aquaculture	-
Undersea Telecommunication and Power Cables	↑ There continues to be an interest in landing new fiber optic telecommunications cables on Oregon’s shore.

4. Characterization of the major contributors to the increase in threats and conflicts of ocean resources:

Major Contributors to an Increase in Threat or Use Conflict to Ocean Resources

	Land-based development	Offshore development	Polluted runoff	Invasive species	Fishing (Commercial and Recreational)	Aquaculture	Recreation	Marine Transportation	Dredging	Sand/Mineral Extraction	Ocean Acidification	Hypoxia
Living marine resources		X		X			X				X	X
Benthic Habitat		X	X	X					X		X	X
Cultural/historic		X		X							X	X
Offshore development				X	X	X	X	X				
Energy production					X		X	X				
Fishing		X	X	X		X	X	X	X		X	X
Aquaculture	X	X	X	X	X		X				X	X

- Additional state-specific data or reports on the status and trends of ocean resources or threats to those resources since the last assessment:

Funding changes: In 2021, the Oregon Legislature passed HB 3114, which distributed \$1.9 million to Oregon State University, Oregon Department of Fish and Wildlife, and Oregon Ocean Science Fund for research on ocean acidification and hypoxia (OAH) along the Oregon coast. The research supported by the bill supports implementation of the 2019-2025 Oregon OAH Action Plan.¹⁰ More specifically, the projects will advance scientific understanding of OAH impacts, mitigate the effects of OAH on Oregon’s coastal resources and communities, and raise community understanding of OAH impacts. For more information see the Fourth Biennial Report produced by the Oregon Coordinating Council on Ocean Acidification and Hypoxia.¹¹

Management Characterization

- Significant state-level changes (positive or negative) in the management of ocean resources:

Significant Changes to Management of Ocean Resources

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	N/A	Y
Regional comprehensive ocean/Great Lakes management plans	N	N	N/A

¹⁰ OAH Action Plan 2019-2025: oregonocean.info/index.php/resources-tools/other-resources/ooi-documents/ocean-acidification-hypoxia-council/oah-reports-publications/214-oah-2019-action-plan/file.

¹¹ Third Biennial Report, 2022: oregonocean.info/index.php/resources-tools/other-resources/ooi-documents/ocean-acidification-hypoxia-council/oah-reports-publications.

State comprehensive ocean/Great Lakes management plans	Y	N	Y
Single-sector management plans	Y	N	Y

2. Description of management categories with significant changes.

Oregon Territorial Sea Plan Updates: Ongoing stewardship of the Oregon Territorial Sea Plan (TSP) was identified as the primary goal in the last 309 Ocean Resources Planning Strategy, and amendments to both the Rocky Habitat Management Strategy (Part Three) and the Uses of the Seafloor (Part Four) chapters of the plan were accomplished during that time. A summary of the amendments and their significance is provided below.

Part Three of the TSP, Rocky Habitat Management Strategy was amended and finalized in 2023. This amendment resulted in several significant changes for coastal habitat protection. In addition to new policies related to management of nearshore rocky intertidal habitats, new management designations were approved and implemented. This is a highly significant accomplishment for the OCOMP as the amended Rocky Habitat Management Strategy (RHMS) includes new policies related to resource management protections while informing decision making in one of the most visible and visited coastal habitats. The new amendments incorporate policies that recognize and highlight the importance of protecting submerged aquatic vegetation, policies that recognize the rights of Oregon’s Federally Recognized Tribal Governments, and an adaptive management strategy for consideration of changes to site-based management designations on a recurring cycle.¹² Additionally, eight new management areas were approved for designation through the effort, including new Marine Education Areas (also called Marine Gardens) at Coquille Point and Chapman Point, a Marine Research Area at Cape Blanco, and five Marine Conservation Areas at: Blacklock Point, Cape Foulweather, Fogarty Creek, Cape Lookout, and Ecola Point. The new sites were all proposed by local community groups and will include new regulations on the allowable activities at those locations, marking the first time since 1998 that new rocky habitat designations were established as part of Oregon’s TSP. The update to the RHMS was initiated through coastal stakeholder request as part of the Ocean Policy Advisory Council (OPAC) issue survey process and was mainly supported through 309 funding, including two Projects of Special Merit.

Part Four of the TSP, Uses of the Seafloor was also amended during the assessment period in response to legislative directives in House Bill 2603, passed in the 2021 legislative session. The amendment effort was not initiated as part of the 309-strategy process, however 309 funding supported staff time for technical analysis and support, project management, website development, and meeting facilitation during the amendment process. HB 2603 directed DLCD to lead the amendment process in coordination with OPAC and provided funds to support two technical studies and to hire a Project Coordinator. The amendment process included the establishment of a working group for the purpose of reviewing and recommending changes to Part Four for consideration by OPAC. As directed by HB 2603, OPAC completed their recommendations in September 2023, and the amendments were subsequently approved in November 2023 by the Land Conservation and Development Commission.

¹² Territorial Sea Plan, Part Three, as amended: oregonocean.info/index.php/resources-tools/other-resources/ooi-documents/territorial-sea-plan/44-tsp3-rocky-habitat-management-strategy-full-chapter-april-2023/file.

Single Sector Management Plan Changes: The Oregon Department of Fish and Wildlife closed indefinitely the recreational fishery for abalone in 2023. Reasons for the closure include poor environmental conditions, commercial fishery, and the expansion of the purple sea urchin population which outcompetes abalone for food and space. The department also completed a Conservation and Fishery Management Plan for red abalone.

2. Indicate if your state has a comprehensive ocean management plan.

Comprehensive Ocean Management Plan	State Plan	Regional Plan
Completed plan (Y/N) (If yes, specify year completed)	Y - Territorial Sea Plan, completed 1994; amended 2000; 2019; 2023	N
Under development (Y/N)	Y	N
Web address (if available)	www.oregonocean.info/	N/A
Area covered by plan	Oregon Territorial Sea	N/A

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High X
Medium
Low

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Ocean Resources are highly important to Oregon residents, federally recognized tribes, and ocean industry and interest groups. The state’s ocean resources are continuing to be stressed in response to changing ocean conditions and an increase in the number of uses of the ocean. The OCMP will continue to prioritize stewardship of the Oregon Territorial Sea Plan in conjunction with partners and natural resource managers as new proposed uses of the ocean are considered. The amendment to Part Three of the Territorial Sea Plan provides a mechanism for more frequent plan amendments due to the identification of concerns from local communities, which may propose on a semi-regular basis new special area management designations. The enforceable policies of the Territorial Sea Plan are likely to be considered in planning for offshore energy projects on the outer continental shelf, as documented in Oregon’s Geographic Location Description. Additionally, the pilot system of marine reserves and protected areas that were established in 2012 were evaluated during the 2021-2025 assessment period and reauthorized in 2022 with a new focus on developing an adaptive management plan (see **Ocean Resources Phase II**). Finally, the potential for consideration of aquaculture opportunities within the territorial sea and in federal waters on the outer continental shelf will add yet another potential use to evaluate in the context of conflicting uses and natural resource protection or enhancement. Partners engaged included local jurisdictions, state agencies, non-profit organizations, and concerned community members.

Energy and Government Facility Siting

Section 309 Enhancement Objective: Adoption of procedures and enforceable policies to help facilitate the siting of energy facilities and Government facilities and energy-related activities and Government activities which may be of greater than local significance. §309(a)(8), which states:

“The management program provides for adequate consideration of the national interest involved in planning for, and managing the coastal zone, including the siting of facilities such as energy facilities which are of greater than local significance. In the case of energy facilities, the Secretary shall find that the State has given consideration to any applicable national or interstate energy plan or program.”

Resource Characterization

1. Status and trends of different types of energy facilities and activities in the state’s coastal zone:

Data in the tables comes, in part, from NOAA’s Office for Coastal Management, Ocean Reports: coast.noaa.gov/digitalcoast/tools/ort.html.

Status and Trends in Energy Facilities and Activities in Oregon’s Coastal Zone

Type of Energy Facility/Activity	Exists in Coastal Zone (# or Y/N)	Change in Existing Facilities/Activities Since Last Assessment (↑, ↓, -, unknown)	Proposed in Coastal Zone (# or Y/N)	Change in Proposed Facilities/Activities Since Last Assessment (↑, ↓, -, unknown)
Pipelines	Y	-	Y	-
Electrical grid (transmission cables)	Y	↑	Y	↑
Ports	Y	↑	Y	↑
Liquid natural gas (LNG)	N	-	Y	↓
Oil	N	-	N	-
Gas	N	-	N	-
Coal	N	-	N	-
Nuclear	N	-	N	-
Wave	Y	↑	Y	↑
Tidal	N	-	N	-
Current ocean, lake, river	N	-	N	-
Hydropower	N	-	N	-
Ocean thermal energy conversion	N	-	N	-
Solar	N	-	N	-
Biomass	N	-	N	-

2. Summarize the results of any additional state-specific information, data, or reports on the status and trends for energy facilities and activities of greater than local significance in the coastal zone since the last assessment.

Large-scale Federal Consistency Decisions: The OCMP issued a federal consistency decision in June 2020 for the construction of PacWave South Wave Energy test facility. Following the decision, the company installed subsea cables from the test site to an access point on land, which is grid-connected. The facility is operational and ready to be a test site for energy technologies, though tests are not expected to utilize the site until 2026, depending upon additional federal investments.

A large scale Liquefied Natural Gas (LNG) export facility was proposed for the southern Oregon coast. The OCMP issued a federal consistency decision in February 2020 to object to the project. The applicants appealed the decision to the US Secretary of Commerce, who upheld OCMP's objection in February 2021.

Undersea Cables: In the legislative session of 2021, House Bill 2603 was passed into law requiring DLCD to lead a study on the siting of undersea cables and draft amendments to Part Four of the TSP. The Department was allocated state general funds to hire a full-time limited duration position to lead the effort. A Working Group was formed, and recommended amendments developed over the course of ten meetings during 2022 and 2023. The Ocean Policy Advisory Council (OPAC) reviewed and approved the transmittal of the recommendations to the Land Conservation and Development Commission (LCDC), which adopted the amendment to the TSP in November 2023. Information about the amendment is available online at: oregonocean.info/ and the updated TSP Part Four is in effect. Three studies were completed as a result of HB 2603: 1) a geologic study to evaluate appropriate landing sites for undersea cables; 2) a study of undersea cable industry best practices and policies in undersea cable siting domestically and internationally; and 3) a study of undersea cable siting policies within Oregon.

3. Status and trends for federal government facilities and activities of greater than local significance in the state's coastal zone:

The OCMP has been extensively engaging with the Bureau of Ocean Energy Management (BOEM) since 2019 due to increasing levels of interest in offshore development for leasing areas on the outer continental shelf of Oregon. The OCMP worked to facilitate discussion of the topic with partners, communities, OPAC, and the Governor's office, resulting in an OPAC recommendation to the Governor's office that Oregon engage in a planning exercise with BOEM ahead of leasing activities. In furtherance of that goal, the State and BOEM began a planning process and the development of a data gathering and engagement plan. In April 2022, BOEM issued a Call for Information and Nominations for two areas off the southern Oregon coast for offshore development. BOEM received over 250 public comments regarding the call, and multiple nominations of interest from companies responding to the opportunity. In response to the public comments, BOEM identified two areas off the Oregon coast, which were announced in April 2024. BOEM submitted a federal consistency determination to the OCMP for leasing the areas offshore Oregon. Prior to issuing a decision, the OCMP hosted a series of in-person and virtual meetings in coastal Oregon to provide background information on the State's review of the BOEM consistency determination and seek feedback from the public. Subsequently, the OCMP conditionally concurred that BOEM's leasing action was consistent with Oregon's existing enforceable policies in July 2024. Since then, BOEM postponed the offshore energy auction planned for the potential lease areas due to insignificant interest at this time.

Management Characterization

1. Significant state-level changes (positive or negative) that could facilitate or impede energy and government facility siting and activities:

Significant Changes in Energy and Government Facility Management

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpretations	Y	N	Y
State comprehensive siting plans or procedures	Y	N	N

2. Description of management categories with significant changes:

Significant management changes within this enhancement area are described under question #2 under *Resource Characterization* above, as well as question #2, *Management Characterization* under the *Phase I, Special Area Management Planning*.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High
Medium X
Low

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Oregon will continue to devote resources to the review and management of offshore development in the coastal zone. Program changes and enhancements in this area will be addressed under the Ocean Resources strategy. Partners engaged included local governments, state agency program partners, and various community groups with interests in coastal management and development issues.

Aquaculture

Section 309 Enhancement Objective: Adoption of procedures and policies to evaluate and facilitate the siting of public and private aquaculture facilities in the coastal zone, which will enable states to formulate, administer, and implement strategic plans for marine aquaculture. §309(a)(9)

Resource Characterization

- Existing status and trends of aquaculture facilities in Oregon’s coastal zone based on the best-available data.

Status and Trends of Aquaculture Facilities and Activities

Type of Facility/Activity	Number of Facilities	Approximate Economic Value	Change Since Last Assessment (↑, ↓, -, unknown)
Oysters	25	Unknown	↑
Pacific Dulse Seaweed	~3	Unknown	Unknown
Salmonoid hatcheries	~8	Unknown	Unknown

Data source: Oregon Department of Agriculture Food Safety Program licensee database for current holders of the Shellfish Grower license for oyster facilities.

Guide to Oregon Aquaculture, 2022. Oregon Sea Grant for other entries:
storymaps.arcgis.com/stories/bf4e927011d54b96957a4385e01d59a6.

There is not comprehensive information available about aquaculture in Oregon’s coastal zone, particularly around its economic value and how that has changed over time. The table above provides the most applicable and available information gathered in 2025 but is likely not a complete picture of aquaculture in Oregon’s coastal zone.

- Summarize the results of any additional state-specific data or reports on the status and trends or potential impacts from aquaculture activities in the coastal zone since the last assessment.

Oregon Sea Grant, through the assistance of a fellow, developed a Story Map tool about aquaculture in Oregon in 2022, which can be found here:

<https://storymaps.arcgis.com/stories/bf4e927011d54b96957a4385e01d59a6>.

Management Characterization

- Significant state-level changes (positive or negative) that could facilitate or impede the siting of public or private aquaculture facilities in the coastal zone:

Significant Changes in Aquaculture Management

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Aquaculture comprehensive siting plans or procedures	N	N	N
Other aquaculture statutes, regulations, policies, or case law interpreting these	Y	Y	Y

2. Description of management categories with significant changes:

Aquaculture of shellfish (specifically oysters, clams, and mussels) is an important resource in Oregon. Oysters specifically are estimated to have an economic value of \$10.6 million in the state. The state passed HB 2574 in the 2019 legislative session. The legislation directed DLCD to aggregate public records related to shellfish aquaculture and develop a tool to provide that information to the public to improve the process of aquaculture siting. DLCD, in partnership with state and federal agencies and the Institute for Natural Resources, developed a shellfish mariculture siting tool. The siting tool, which is a map viewer with the ability to generate site reports, enables stakeholders to assess a potential site for viability of future shellfish aquaculture operations, while still protecting fragile native habitats and ecosystem services. The final version of the siting tool was released in June of 2021.¹³ This effort was not 309-driven but was supported by DLCD staff through state legislation and funding.

Enhancement Area Prioritization

1. What level of priority is the enhancement area for the coastal management program?

High
Medium X
Low

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

This topic is important and there is a small role that the land use system plays in aquaculture siting within estuaries through estuary management plans and Statewide Planning Goal 16: Estuarine Resources. However, aquaculture management is principally the responsibility of the Oregon Department of Agriculture, which works in cooperation with other resource agencies to assess and consider the impacts of aquaculture operations on other coastal resources and uses. Partner input did not identify any priority needs for program changes related to aquaculture. Partners engaged included resource agencies involved in the management of aquaculture activities, local governments, and various community groups.

¹³ Estuary Shellfish Mariculture Siting Tool: tools.oregonexplorer.info/OE_HtmlViewer/Index.html?viewer=shellfishmariculture.

Phase II Enhancement Area Assessment

DRAFT

Wetlands

In-Depth Resource Characterization

Purpose: To determine key problems and opportunities to improve OCMP’s ability to protect, restore, and enhance wetlands.

1. Three most significant existing or emerging physical stressors or threats to wetlands within Oregon’s coastal zone:

	Stressor/Threat	Geographic Scope (throughout coastal zone or specific areas most threatened)
Stressor 1	Development/Fill	Throughout coastal zone
Stressor 2	Hydrological alteration	Former tidal wetlands
Stressor 3	Sea level rise	Tidal areas

2. Briefly explain why these are currently the most significant stressors or threats to wetlands within Oregon’s coastal zone.

There are no new reports or studies that have come out for this topic since the last assessment. Based on OCMP staff knowledge and conversations with experts in this field, the information from the last assessment is still relevant for this topic.

Hydrological alteration of Oregon’s tidal wetlands (mostly diking and draining) is primarily historical, but these alterations have reduced wetland functions and values. While new development and fill is substantially regulated, cumulative effects from this activity continue to impact wetland resources. Findings from a report in 2017 led by Laura Brophy¹⁴ highlight that Oregon’s estuaries are susceptible to sea level rise. Sediment accretion can help offset loss of wetlands with rising sea levels and restoration efforts that release sediment sources are key to that mitigation. The report recommends finding opportunities for conservation and restoration of areas within the landward migration zones of Oregon’s estuaries and avoiding new development in these areas.

Brophy’s 2019 report, “Comparing historical losses of forested, scrub-shrub, and emergent tidal wetlands on the Oregon coast, USA: A paradigm shift for estuary restoration and conservation,” also highlights the need for restoration of forested tidal wetlands. This wetland class has been the most impacted by hydrological alterations and associated land use conversion on the Oregon coast (>95% loss).¹⁵ Because of the historic loss of forested tidal swamps, there is need for a map and science-based guidance on where to restore tidal swamps under current and future conditions, which is included in the emerging issues table below.¹⁶

¹⁴ Brophy, L.S. and M.J. Ewald. 2017. Modeling sea level rise impacts to Oregon’s tidal wetlands: Maps and prioritization tools to help plan for habitat conservation into the future. Institute for Applied Ecology, Corvallis, Oregon, USA. ir.library.oregonstate.edu/concern/technical_reports/tt44ps38k.

¹⁵ Brophy, L.S. 2019. Comparing historical losses of forested, scrub-shrub, and emergent tidal wetlands on the Oregon coast, USA: A paradigm shift for estuary restoration and conservation. Institute for Applied Ecology, Corvallis, Oregon, USA. doi.org/10.13140/RG.2.2.25732.68481.

¹⁶ Brophy LS, with contributions from Stein E, Whipple A, Vaughn L, Baumgarten S, Borde A, Janousek C, and O’Connor K. 2024. West Coast Tidal Swamp Map: Prospectus. Institute for Applied Ecology. dx.doi.org/10.13140/RG.2.2.29086.34888.

- Are there emerging issues of concern but which lack sufficient information to evaluate the level of the potential threat?

Emerging Issue	Information Needed
Sea level rise	Need for policy and regulatory recommendations and actions that address impacts from sea level rise to protect, restore, and enhance coastal wetlands.
Spatial Data Gaps and Errors	Need for more consistent and accurate spatial data coastwide to identify wetland areas that are regulated, particularly in estuary management plans. Need for enhanced mapping of restoration opportunities for forested tidal wetlands.
Salinity Changes	Need to further understand salinity change and its impact on Oregon's estuaries
Temperature Changes	Need for increased understanding of the effects of temperature on aquatic beds and habitats in Oregon's estuaries.

In-Depth Management Characterization

Purpose: To determine the effectiveness of management efforts to address identified problems related to the wetlands enhancement objective.

- For each additional wetland management category below that was not already discussed as part of the Phase I assessment, indicate if the approach is employed by the state and if significant state-level changes (positive or negative) have occurred since the last assessment.

Significant Changes in Wetland Management

Management Category	Employed By State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Wetland assessment methodologies	Y	Y	N
Wetland mapping and GIS	Y	Y	Y
Watershed or special area management plans addressing wetlands	Y	Y	Y
Wetland technical assistance, education, and outreach	Y	Y	N

- Description of management categories with significant changes since the last assessment. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information.

Some of the significant changes related to wetland mapping and GIS are described under ***Wetlands Phase 1, Management Characterization*** section of this document.

Significant changes related to special area management plans addressing wetlands are described under ***Special Area Management Plans Phase 1, Management Characterization*** section of this document.

Habitat mapping and GIS changes: Since January 2020, the OCMP completed several new phases of habitat classification work using the Coastal and Marine Ecological Classification Standard (CMECS; termed Phase 3, 4 and 5). This habitat mapping work includes wetland habitats. Phase 3 characterized the substrate component for the entire outer coast nearshore area. Phase 4 completed substrate and aquatic components for the Columbia River and Phase 5 revised Coos Bay estuary data using remote sensing and modeling techniques to spatially delineate three key wetland classes more accurately. These CMECS classifications will eventually be combined with prior CMECS work by the OCMP and its partners to continue the buildout of seamless habitat layers on all Oregon coastal and marine systems from head of tide to the limits of the territorial sea. These efforts were CZM-driven.

3. Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state's management efforts in protecting, restoring, and enhancing coastal wetlands since the last assessment. If none, is there any information that you are lacking to assess the effectiveness of the state's management efforts?

There are no comprehensive studies that have reviewed the effectiveness of the state's management efforts in protecting, restoring, and enhancing coastal wetlands since the last assessment. Oregon's goal is to have net zero loss of wetlands and waters. There are multiple agencies involved in coastal wetland management, which has led to a lack of a coordinated approach to effectively evaluate the success of management efforts. For example, while the Oregon Department of State Lands tracks removal/fill permits in wetlands across the state, the database lacks sufficient detail to evaluate quantitative information about these permits, such as permit type, length or volume (if structural), or region (coast vs. inland). Staff at DSL lack the capacity to upgrade their current tracking systems. There is also a backlog of information needs, gaps, and upgrades related to state and local wetland inventories that could help with both implementation of wetland management and assessing impacts or protections of wetlands at the state and local levels. As mentioned above, Oregon has experienced significant losses in tidal wetlands, especially forested wetlands. There is a need for additional efforts to integrate restoration needs and priorities with local and state regulations. Additionally, while Oregon's planning-based approach to estuary management has provided a strong foundation for estuarine resource conservation and development decisions since its inception, most estuary management plans (EMPs) have not been updated. There remains a great need for the modernization of these EMPs which will continue to serve as the basis for the OCMP's 309 Wetlands Strategy.

Identification of Priorities

1. Considering changes in wetlands and wetland management since the last assessment and stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the OCMP to improve its ability to more effectively respond to significant wetlands stressors.

Management Priority 1: Update and improve the implementation of local estuary management plans

Description: The OCMP has an opportunity to continue to build off the previous estuary management 309 strategy to provide technical capacity and support to local governments in their efforts to incorporate updated information into estuary plans, and to modernize management measures and decision-making processes based on updated information. There continues to be a need for localized capacity to assess, update, and implement local estuary management plans (EMPs) using the best available information and community input. There are seven coastal counties and 39 estuaries included in regulatory local EMPs. Each jurisdiction requires dedicated time and support to successfully update an EMP and associated implementation maps and ordinances. Coastal jurisdictions greatly rely upon the expertise and capacity of the OCMP to make progress on these efforts. Supporting the updates of EMPs is a priority of the OCMP.

Management Priority 2: Update and improve the use and implementation of coastal shoreland and estuarine data

Description: The OCMP has the expertise and experience to continue to provide needed GIS data and associated products for its local government and state agency partners. This priority is focused on data upgrades and gaps related to coastal areas subject to Goals 16 (estuaries) and 17 (coastal shorelands). Having this data in GIS format and updated to reflect local conditions will have multiple benefits for coastal management at both the state and local levels. The spatial inventories of Goals 16 and 17 include wetland and riparian areas, estuary management unit boundaries, areas subject to ocean flooding, aesthetic areas, areas of geologic instability, public access points, and water dependent or water related zones. Once completed, cities and counties can adopt the maps and associate metadata into their comprehensive plans and state agencies can utilize the data in their permitting processes (such as federal consistency reviews, local wetland delineations, or removal/fill permits). Updated datasets can also be utilized in local EMPs updates. Delivering high quality data is a priority of the OCMP and addresses a need from OCMP partners.

2. Identify and briefly explain priority needs and information gaps the OCMP has to help it address the management priorities identified above. The needs and gaps identified here do not need to be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Research	Y	Cumulative assessments of the state of wetlands and estuarine resources throughout Oregon's coastal zone
Mapping/GIS	Y	Bathymetric data for estuaries, Coastal Shoreland mapping for the Coastal Zone, which includes wetland areas, Estuary Management unit boundary updates for all estuaries to reflect local changes and updated information.
Data and information management	Y	Resource inventories to meet Goals 16 and 17 requirements for each estuary: physical and biological characteristic, social and economic characteristics, geologic and hydrologic hazards, fish and wildlife habitat, water-dependent and water-related uses, aesthetic resources.
Training/capacity building	Y	Managing and updating a multi-jurisdictional plan between cities and counties. High staff turnover at local level.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
		Processes and relationship building support between local governments, state agencies, ports, and Tribal Nations.
Decision-support tools	Y	Model policies and implementing measures that are updated, consistent with regulatory requirements
Communication and outreach	Y	Communication products about ecosystem services that estuaries provide, utilizing existing data and resources for multiple audiences. Outreach about how resilience strategies and policies can benefit communities and ecosystems.

Enhancement Area Strategy Development

1. Will the CMP develop one or more strategies for this enhancement area?

Yes	X
No	

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

Coastal wetlands and estuaries continue to be an important topic to the partners and communities of the OCMP. In Oregon, local estuary management plans (EMPs) are a primary mechanism to protect coastal wetlands, as well as provide for community balance. The OCMP has spent many years working with local jurisdictions and other partners to develop resources and help update these estuary management plans that are typically more than 40 years old. Several factors have contributed to the static nature of EMPs, including the lack of financial resources to undertake comprehensive reviews and updates and the fact that plans require coordination among cities and counties. EMPs require focused support at the local level and often take multiple years to work through, making this process a long-term effort and priority of the OCMP. The OCMP intends to continue to build upon past work and develop a wetlands strategy to further provide capacity for local governments to update their locally adopted EMPs and improve local implementation of these plans to protect coastal wetlands and support resilient communities.

Coastal Hazards

In-Depth Resource Characterization

Purpose: To determine key problems and opportunities to improve the CMP's ability to prevent or significantly reduce coastal hazard risks by eliminating development and redevelopment in high-hazard areas and managing the effects of potential sea level rise and Great Lakes level change.

1. Three most significant coastal hazards within Oregon's coastal zone:

	Type of Hazard	Geographic Scope (throughout coastal zone or specific areas most threatened)
Hazard 1	Geological (Earthquake and Tsunami)	Throughout coastal zone
Hazard 2	Shoreline Erosion	Throughout coastal zone
Hazard 3	Coastal Flooding	Throughout coastal zone

2. Briefly explain why these are currently the most significant coastal hazards within the coastal zone. Cite stakeholder input and/or existing reports or studies to support this assessment.

A local earthquake and tsunami event is the most significant acute coastal hazards facing the Oregon coast. The damage from the impending Cascadia subduction zone earthquake and tsunami will be extreme, and there is an urgent need for planning for the impacts of this event on several fronts. This need is fully identified in the Oregon Resilience Plan (February 2013), which is currently being updated by the Oregon Seismic Safety Policy Advisory Commission (OSSPAC).¹⁷ OCMP staff worked with OSSPAC on a report in 2021 specific to tsunami resilience planning on the Oregon coast, which outlines a number of recommendations, including to support local governments in land use updates.¹⁸ Additional reports and information about tsunami and earthquake hazards and their expected impacts to the Oregon coast have been developed by the Oregon Department of Geology and Mineral Industries (DOGAMI), including tsunami mapping, mitigation and education, and community preparedness.¹⁹

Issues such as shoreline erosion and coastal flooding are the most significant chronic hazards affecting Oregon's coast and are projected to increase in both scale and frequency in the future. Large segments of Oregon's ocean shore are extensively developed with residential and commercial uses and associated infrastructure, and the pressure for additional ocean front development and redevelopment is substantial. Much of this existing and future development is and will continue to be subject to risk from shoreline erosion. The wave environment on the Oregon Coast is extremely dynamic and powerful, with year-round erosion being exacerbated by acute episodic erosion events in winter months accompanied often by storm surge and tidal flooding. The risks associated with shoreline erosion on Oregon's coast have been documented in a series of reports and publications by DOGAMI, an example of which can be reviewed here:

www.oregon.gov/dogami/pubs/Pages/ofr/p-O-24-13.aspx.

¹⁷ Oregon Seismic Safety Policy Advisory Commission: www.oregon.gov/oem/councils-and-committees/pages/ossnac.aspx.

¹⁸ Tsunami Resilience on the Oregon Coast, 2021: www.oregon.gov/oem/Documents/OSSPAC_Tsunami_report_2021_final_singlePage_reduced.pdf.

¹⁹ Oregon Tsunami Clearinghouse: www.oregon.gov/dogami/tsuclearinghouse/Pages/thmp.aspx.

OSU researchers have also been modelling potential future changes on the Oregon coast.²⁰

Work done by the OCMP on assessing these impacts include a sea level rise vulnerability assessment of Clatsop County and the Oregon Natural Hazards Risk Assessment.

OCMP partners repeatedly cited planning for coastal hazards as a top priority in the survey conducted for this assessment and strategy document.

- Are there emerging issues of concern, but which lack sufficient information to evaluate the level of the potential threat?

Emerging Issue	Information Needed
Wildfires	Data on drought, heat wave effects, and changing fire patterns in Oregon's coastal zone
Sea level rise	Data and modeling of sea level rise impacts, inundation extent, the effectiveness of mitigation strategies, and the expected increased rates of erosion and flooding
Non-structural shoreline management strategies	Data and analyses of the effectiveness of non-structural shoreline armoring methods in different wave and erosional environments

In-Depth Management Characterization

Purpose: To determine the effectiveness of management efforts to address identified problems related to the coastal hazards enhancement objective.

- For each coastal hazard management category below, indicate if the approach is employed by the state and if there has been a significant change since the last assessment.

Significant Changes in Coastal Hazards Statutes, Regulations, and Policies

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Change Since the Last Assessment (Y or N)
Shorefront setbacks/no build areas	Y	Y	N
Rolling easements	Y	Y	N
Repair/rebuilding restrictions	N	Y	N
Hard shoreline protection structure restrictions	Y	Y	N
Promotion of alternative shoreline stabilization methodologies (i.e., living shorelines/green infrastructure)	Y	Y	N
Repair/replacement of shore protection structure restrictions	Y	Y	N

²⁰ Projecting Future Chronic Coastal Hazard Impacts, Hotspots, and Uncertainty at Regional Scale: shorturl.at/1UYzv.

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Change Since the Last Assessment (Y or N)
Inlet management	N	Y	N
Protection of important natural resources for hazard mitigation benefits (e.g., dunes, wetlands, barrier islands, coral reefs) (other than setbacks/no build areas)	Y	Y	Y – FEMA’s implementation of no net loss of fish habitat under the Endangered Species Act through cities and counties. ²¹
Repetitive flood loss policies (e.g., relocation, buyouts)	Y	Y	N
Freeboard requirements	Y	Y	N
Real estate sales disclosure requirements	Y	Y	N
Restrictions on publicly funded infrastructure	Y	Y	N
Infrastructure protection (e.g., considering hazards in siting and design)	N	Y	N

Significant Changes to Coastal Hazard Management Planning Programs or Initiatives

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Change Since the Last Assessment (Y or N)
Hazard mitigation plans	Y	Y	Y – updates to local and state natural hazard mitigation plans.
Sea level rise or adaptation plans	Y	Y	Y – OCMP’s sea level rise adaptation toolkit.
Statewide requirement for local post-disaster recovery planning	N	Y	N
Sediment management plans	Y	Y	N
Beach nourishment plans	Y	Y	N
Special Area Management Plans (that address hazards issues)	Y	Y	Y – local estuary management plan updates in Coos Bay and Yaquina Bay include new hazards data.
Managed retreat plans	N	Y	N
Other (please specify): Resilience Planning	Y	Y	Y – Estuarine Resilience Action Plans in several coastal counties

²¹ National Flood Insurance Program in Oregon: www.oregon.gov/lcd/NH/Pages/NFIP.aspx.

Significant Changes to Coastal Hazard Research, Mapping, and Education Programs or Initiatives

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Change Since the Last Assessment (Y or N)
General hazards mapping or modeling	Y	Y	Y – tsunami modeling and mapping by DOGAMI.
Sea level rise mapping or modeling	Y	Y	N
Hazards monitoring (e.g., erosion rate, shoreline change, high-water marks)	Y	Y	N
Hazards education and outreach	Y	Y	Y – sea level rise adaptation fellowship project.

- Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state’s management efforts in addressing coastal hazards since the last assessment. If none, is there any information that you are lacking to assess the effectiveness of the state’s management efforts?

DLCD, supported by ODEM, is currently updating the Oregon Natural Hazards Mitigation Plan.²² As part of this effort, the two agencies are leading a project to upgrade the Oregon Natural Hazards Risk Assessment, which will provide the foundation for establishing mitigation goals and identifying investment opportunities to reduce risks to people, property, and the natural environment from natural hazards.²³ This work includes developing a public-facing risk assessment geospatial tool that will assist in regional and statewide natural hazard risk planning and mitigation. This risk assessment is for the entire state, but it will be scalable to assess coastal hazards as well to not only assess future risk but also to help assess the effectiveness of the state’s ongoing management efforts.

Oregon’s coastal zone would benefit from regional-scale sea level rise modeling. Currently, OCMF hosts the Oregon Sea Level Rise Impacts Explorer as part of the Sea Level Rise Toolkit (see **Coastal Hazards, Phase I Assessment**).²⁴ The Impacts Explorer uses a compilation of datasets from FEMA, DOGAMI, DLCD, and the Lower Columbia Estuary Partnership. While this combination of layers provides for a basis to begin planning for sea level rise, a single and comprehensive data layer based on a model that accounts for these dynamics would allow for a more realistic and region-specific view of future conditions.

Identification of Priorities

- Considering changes in coastal hazard risk and coastal hazard management since the last assessment and stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the CMP to improve its ability to more effectively address the most significant hazard risks.

²² Oregon Natural Hazards Mitigation Plan Update: www.oregon.gov/lcd/NH/Pages/Mitigation-Plan-Update.aspx.

²³ Oregon Natural Hazards Risk Assessment Upgrade: www.oregon.gov/lcd/nh/pages/risk-assessment-upgrade.aspx.

²⁴ Oregon Sea Level Rise Impacts Explorer: www.coastalatlus.net/sealevelrisepanning/.

Management Priority 1: Strengthen state and local strategies to minimize risks to coastal communities and coastal resources from coastal hazards.

Description: Oregon's coastal communities face ongoing and future risks from coastal hazards such as sea level rise, increased storm activity, and increased shoreline erosion. While land use management strategies to avoid future risks have usually relied upon historical data to identify and avoid hazardous areas for development, this strategy will likely not be appropriate for avoiding future hazards. For future conditions, models and projections show a deviation in past conditions with respect to space, time, intensity, and frequency. Therefore, using historical data will no longer be the most effective method for hazard planning, meaning that models and projections for future conditions should be prioritized. This can help lead to mitigation strategies and policies such as purchase or transfer of development rights, land swaps, revised design standards for critical service infrastructure, or increased buffer zone requirements.

Management Priority 2: Assess the implementation of coastal hazard resilience measures currently in place across Oregon's coastal zone

Description: Oregon's coast faces risks from both chronic hazards, such as shoreline erosion and flooding, and acute hazards, such as tsunamis and landslides. The approaches to minimizing these different types of hazards vary from land use planning to emergency management strategies. An assessment of these measures, when and how they are implemented, and how successful they have proven to be in different hazard scenarios would help provide guidance for how to increase the efficiency and efficacy of measures such as education and outreach, tsunami sirens, building prohibitions in high hazard zones, evacuation orders, and emergency alert systems.

Management Priority 3: Strengthen hazard and resilience policy networking at the state and local level

Description: While the State of Oregon is increasingly prioritizing hazard mitigation and adaptation, the OCMP and its network of small coastal communities need support to understand their specific risks to hazard impacts, approaches to adaptation, and responses that also work in the existing regulatory framework. In response, the OCMP is proposing to develop the foundation for a practitioner network to address these needs in a collaborative setting: the Oregon Coastal Resilience Policy Network. A priority of the OCMP is to expand and support the idea of this Network to encourage new and innovative approaches to avoiding and mitigating coastal hazards through policy recommendations and land use and emergency management strategies. The Network is meant to be an exploratory group to innovate, provide opportunities for practitioners to identify their learning needs and information gaps, and for the OCMP and partners to provide training opportunities that meet those needs.

2. Identify and briefly explain priority needs and information gaps the CMP has for addressing the management priorities identified above. The needs and gaps identified here should not be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Research	Y	Needs include: how to implement a shoreline realignment program in Oregon; how to develop a mitigation or compensation program in Oregon to offset new shoreline armoring; economic valuation of private oceanfront property vs. the public beach vs. the protection of public infrastructure.
Mapping/GIS/modeling	Y	Gap in understanding the amount of oceanfront that is still developable and vacant. Further needs for inventory of critical infrastructure along the Oregon coast. Analysis of all littoral cells regarding armoring, physical processes, and other hazards.
Data and information management	N	
Training/Capacity building	Y	Needs for: Community Rating System (CRS) training; training for coastal goals and their implementation; training for incorporating community needs into coastal hazard planning.
Decision-support tools	N	
Communication and outreach	Y	Capacity to assist local governments and state agencies in utilizing the outcomes of the above-mentioned topics.

Enhancement Area Strategy Development

1. Will the CMP develop one or more strategies for this enhancement area?

Yes X

No

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

Oregon’s coastal zone faces very high risks from various hazards, including sea level rise, erosion, landslides, earthquakes, tsunamis, and flooding. The OCMP’s partners, including DOGAMI and Oregon State University, continue to develop data products and tools such as tsunami evacuation studies, shoreline erosion studies, and sea level rise models that can help inform OCMP’s management strategies. Many of Oregon’s coastal jurisdictions are also currently in the process of updating their local natural hazard plans and comprehensive plans, but they do not always have the capacity or access to the latest resources to incorporate them into updates. Developing a coastal hazards strategy will strengthen both the development of more resilience and hazard resources as well as the implementation of the products into hazard planning for coastal communities.

Ocean Resources

In-Depth Resource Characterization

Purpose: To determine key problems and opportunities to enhance the ability of state CMP to better address ocean and Great Lakes resources.

1. Three most significant existing or emerging stressors or threats to ocean resources within Oregon’s coastal zone:

	Stressor/Threat	Geographic Scope (throughout coastal zone or specific areas most threatened)
Stressor 1	Ocean acidification, marine heat waves, and hypoxia	Throughout
Stressor 2	Offshore ocean development	Throughout
Stressor 3	Land-based development	Nearshore intertidal habitats

2. Briefly explain why these are currently the most significant stressors or threats to ocean and Great Lakes resources within the coastal zone. Cite stakeholder input and/or existing reports or studies to support this assessment.

Stressor 1: Changing Ocean Conditions

Marine environments off Oregon have always had fluctuations and changes in oceanographic conditions, but the extent, duration, and frequency of multi-stressor events that impact water quality have increased significantly in the last decade. Marine species and habitats that form the basis of trophic levels are being disrupted, habitats are shifting, and species are being stressed in new ways. Oregon’s coastal economy is closely linked with the environmental conditions of the ocean, as the fishing industry provides both economic and cultural benefits to communities. The changes in ocean conditions have the potential to impact all species and ocean users across the geographic range of the state, therefore it is likely the most significant threat. The chemistry of the waters off the Oregon coast has reached (in episodic events) a threshold harmful to calcifying organisms and negative impacts are already evident. Reductions in calcifying organisms at the base of the marine food web could have cascading effects on higher trophic animals, including: marine fish; birds; mammals; and the people who rely on the ocean as a resource. In addition, warming ocean waters have altered marine species composition with greater prevalence of warm-water species expected during marine heat waves.” Additionally, the recently completed Oregon Kelp Forest status report estimates that Oregon has lost almost two thirds of its persistent canopy forming kelp beds in the period between 2010 and 2022. The report also projects that most of the remaining kelp beds do not support maintainable kelp populations. Canopy forming kelp beds are an essential fish habitat, forming nursery habitats for multiple commercially important fish species.

Recently published assessments, studies, or publications:

- Barth, J.A., et al. 2024. Widespread and increasing near-bottom hypoxia in the coastal ocean off the United States Pacific Northwest. Nature Scientific Reports 14:3798. doi.org/10.1038/s41598-024-54476-0.
- Oregon Kelp Forest Status Report, 2024: <https://www.oregonkelp.com/2024-oregon-kelp-forest-status-report/>.

- Oregon Ocean Acidification and Hypoxia Council Biennial Reports (2020, 2022, 2024): <https://www.oregonocean.info/index.php/ocean-acidification>.

Stressor 2: Ocean Development

Oregon’s ocean habitats are some of the most energetically rich places on the planet, as it is situated on the easternmost portion of the world’s largest ocean. Placement of infrastructure in the ocean environment to support societal needs continues to grow. The types of development include energy development, fiber optic cable installation, offshore aquaculture, underwater data centers, and more. While the generation of marine related energy could provide positive benefits to the state, there are still many uncertainties and risks associated with impacts to natural resources and ocean user communities. The other development concepts need careful consideration for the potential impacts to marine ecosystems and the existing users of the ocean that have protection in Goal 19, the Ocean Resources state policies.

Stressor 3: Increased disturbance to natural resources due to land-based development and recreational activity.

Intertidal habitats along the Oregon coast are often the only way a member of the public gets to see and experience the uniqueness of marine habitats and species – and that opportunity is a major driver of public visitation. Post COVID pandemic, remote work policies have also meant a steady increase in the number of people moving to, visiting, and recreating on Oregon’s ocean shore. The 2023 Oregon Resident Outdoor Recreation Survey Report indicates that beachgoing and tide-pooling were in the top ten recreational activities for Oregon residents in 2022.²⁵ This has led to increased pressure and disturbance of rocky intertidal species and habitats. During the Territorial Sea Plan public process for establishment of new management area designations, this was documented and highlighted as one of the rationales for the new designations.

3. Are there emerging issues of concern, but which lack sufficient information to evaluate the level of the potential threat?

Emerging Issue	Information Needed
Invasive Species	Gaps include: population distributions and count, effects on native species.
Submerged Aquatic Vegetation Loss	Needs for: increased habitat mapping, species variety, ecosystem services loss quantification.

In-Depth Management Characterization

Purpose: To determine the effectiveness of management efforts to address identified problems related to the ocean and Great Lakes resources enhancement objective.

1. For each of the additional ocean resources management categories below that were not already discussed as part of the Phase I assessment, indicate if the approach is employed by the state or territory and if significant state-level changes (positive or negative) have occurred since the last assessment.

²⁵ 2023 Oregon Resident Outdoor Recreation Survey Report: www.oregon.gov/oprd/PRP/Documents/SCORP-2023-Oregon-Resident-Outdoor-Recreation-Survey-Report.pdf.

Significant Changes in Management of Ocean Resources

Management Category	Employed by State (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Ocean research, assessment, monitoring	Y	N	Y
Ocean GIS mapping/database	Y	Y	Y
Ocean technical assistance, education, and outreach	Y	Y	Y

2. Description of management categories with significant changes since the last assessment. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information.

Research, assessment, and monitoring:

There have been several assessments on ocean management and health related topics during the last strategy period; most were not 309-driven. The most significant report was prepared by the Oregon Department of Fish and Wildlife (ODFW) and was a Marine Reserves Program Synthesis Report.²⁶ It provided a comprehensive overview of the ODFW Marine Reserves Program and the first 10 years of marine reserves implementation – much of which was focused on research at the sites. The Scientific and Technical Advisory Committee (STAC) of OPAC convened a team of university researchers from across the west coast to evaluate the Synthesis Report. The STAC assessment²⁷ concluded that the marine reserves and protected areas were effectively designed and implemented to reach the goals set forth in the legislation and OPAC recommendations.²⁸ Recommendations were provided by the STAC for the continued monitoring of ecological and socioeconomic impacts, and the generation of adaptive management plans.

As mentioned above in the stressors section, the Oregon Kelp Alliance also completed an assessment of the status of canopy kelp forests in 2024, indicating that kelp forest extent in Oregon is significantly diminished from areas it has normally persisted. OCMP staff and network agency staff participated in the development of a canopy kelp ocean health indicator for the west coast, which provides regional context for understanding the current conditions in Oregon.

There have also been efforts to monitor, assess, and develop water quality standards for ocean acidification and hypoxia. The most significant improvements were the development and incorporation of ocean acidification and hypoxia water quality standards for marine water bodies of the state. That work was led by the Oregon Department of Environmental Quality, which established both numeric and biological standards for ocean acidification in marine waters of the state.²⁹ Additional capacity to monitor ocean acidification in Oregon waters was provided through funding

²⁶ Marine Reserves Program Synthesis Report, 2009-2021, ODFW:

drive.google.com/file/d/1Hn8GJniIsJRGSwpS1vMIZ0G87b45r3f-/view?usp=sharing.

²⁷ OPAC Scientific and Technical Advisory Committee assessment: <https://oregonocean.info/index.php/resources-tools/other-resources/ooi-documents/marine-reserves-documents/266-or-marine-reserves-assessment-report-stac-sept-2022/file>.

²⁸ 2022 Assessment of Oregon’s Marine Reserves, 2022: <https://oregonocean.info/index.php/resources-tools/other-resources/ooi-documents/marine-reserves-documents/266-or-marine-reserves-assessment-report-stac-sept-2022/file>.

²⁹ 2024 Integrated Report: Assessing Ocean Acidification and Hypoxia Impacts in Oregon Marine Waters <https://www.oregon.gov/deq/wq/Documents/ir24OAHfs.pdf>.

provided by the Oregon legislature and administered by the Oregon Ocean Science Trust, which resulted in nine projects being conducted.

Ocean GIS mapping/database:

The OCMP continues to support ocean resources planning through the development and delivery of geospatial information to public decision-making processes. The Rocky Habitat Management Strategy amendment process was supported by the development of the Oregon SeaSketch Tool. The tool was critical in the analysis and visualization of information associated with review of the site-based proposals for new marine conservation areas. The tool served as a mechanism for data visualization, public participation in planning, and submission and review of proposals via the public forum. The resource inventory information collected as part of the amendment process was provided to the public by the tool, and it now serves as a unique collection of data to inform future conservation area planning processes. Most, if not all, statewide data sets for Oregon were published via the OCMP ArcGIS server as web map services and made available to any user or tool via publicly accessible metadata and data service URLs. These efforts were CZM and 309-driven.

Ocean resources technical assistance, education, and outreach:

Ocean resources were a very active area of work throughout the 2021-2025 Assessment and Strategy period with a focus on stewardship of the TSP via comprehensive amendments that required both planning and technical assistance being provided to local coastal communities. Examples of such actions include engagement around rocky habitat conservation area planning (TSP Part Three Amendment), industry and community planning (TSP Part Four Amendment), and offshore development planning. The OCMP maintained website, oregonocean.info/, provided a public facilitation and policy making information hub to coordinate those activities. OCMP staff completed a comprehensive revision to this resource, including a content area and public visitation analysis, and content development plan for future areas of support. These efforts were CZM and 309-driven.

3. Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state's management efforts in planning for the use of ocean resources since the last assessment. If none, is there any information that you are lacking to assess the effectiveness of the state's management efforts?

See the above section on Research, Assessment and Monitoring describing the state's recently completed Assessment and Evaluation of the Marine Reserves Program via the ODFW creation of a 10-year synthesis report and the STAC led university Assessment Report. This work concluded that the state was effectively managing the State's established Marine Reserves and Protected Areas.

Identification of Priorities

1. Considering changes in threats to ocean resources and management since the last assessment and stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the OCMP to improve its ability to effectively plan for the use of ocean resources.

Management Priority 1: Implement the TSP Part Three Rocky Habitat Management Strategy designations, and the adaptive management provisions of the Strategy for the consideration of new or revised site-based management designations

Description: Amendment of the TSP Part Three provides the state with an opportunity to evaluate marine conservation efforts in a comprehensive manner. The recent adoption of eight new marine conservation areas, and the acceptance and reauthorization of the system of Marine Reserves and Protected Areas provides an opportunity to evaluate how existing marine managed areas may function together, and to discuss a statewide goal related to marine protected areas. The effort would also generate guidance for the development of educational stewardship programs focused on marine conservation needs and the continued implementation and development of site management plans.

Management Priority 2: Amend the Territorial Sea Plan with a focus on updating Parts 1 and 2 which describe the ocean management context and framework for making resource use decisions, respectively.

Description: The Territorial Sea Plan Parts 1 and 2 are the only parts of the Plan that have not been amended since adoption in 1994. These parts of the document are due for updates that would serve the state as it moves forward in making resource management decisions with an ever-busier ocean. DLCDC staff and OPAC will work together to establish the scope and timelines for review and adoption of plan amendments. The work would likely be led by an OPAC working group who would conduct the review and draft language amendments that would be considered by the full Council. Rulemaking with the Land Conservation and Development Commission would occur following OPAC’s recommendation.

Management Priority 3: Development and maintenance of an Ocean Resources and Uses Spatial Data Atlas

Description: Ocean resources decision making by the state is guided by Goal 19 which directs the state to consider the impacts of new development on existing ocean resources (plants, animals) and human uses. To responsibly evaluate the balance of the benefit of new uses with the impacts on existing resources and users, the state must use the best available information to inform its decision. The establishment of an Ocean Resources and Uses Atlas will support the future decision-making processes established in the other chapters of the TSP. The information provided by the Atlas will be available for all future reviews of proposed TSP uses.

2. Identify and briefly explain priority needs and information gaps the OCMP has to help it address the management priorities identified above. The needs and gaps identified here do not need to be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Research	Y	Research is needed to better understand the location of important, sensitive, or unique habitats offshore Oregon in both state and federal waters. Research on the understanding of changing ocean conditions and the impacts to nearshore ecosystem health (including the extent and frequency of water quality stress events (e.g. OAH derived events, harmful algal blooms, and marine heat waves). Additional research on the status of marine resources and oceanographic processes (cycles like El Nino and the Pacific Decadal Oscillation), upwelling and relaxation cycles.

Mapping/GIS	Y	High resolution remotely sensed information to map important, sensitive, or unique habitats offshore Oregon are a continued priority for the state. Nearshore benthic habitat mapping for the ocean shore forms the understanding of geomorphic habitats, while mapping of the biotic habitats that form structure in the nearshore environmental are crucial to understanding ecosystem health. This would include annual canopy forming kelp extent maps, marine aquatic vegetation mapping (understory kelps, nearshore algal beds). Updates to existing data to reflect new information.
Data and information management	Y	While the Oregon Coastal Atlas serves as the underlying information archive for the OCMP, development of a GIS infrastructure using published web mapping services continues to serve the continued development of Oregon’s ocean spatial data visualization tools. Capacity to continue development and publishing of new information layers will be necessary to maintain those information systems moving forward. Additionally, information analysis and synthesis will be necessary to generate products that are accessible and can be conveyed in a manner that is digestible and compelling to resource managers and decision makers.
Training/Capacity building	Y	Staff turnover at OCMP partner network agencies represents a continual need for capacity to educate and inform agency staff on the information and tools available for decision making.
Decision-support tools	Y	Capacity needs for the maintenance and stewardship of OCMP web-based information resources. These resources include informational websites, marine data visualization tools, and spatial data products and information designed to inform a public process.
Communication and outreach	Y	Engagement in local, state, and regional networks that depend upon accurate and current knowledge and information depends upon the staff capacity to participate in them. The OCMP continues to have challenges in meeting that need, especially with the increasing demand for participation in research studies, networks, and consortiums across several ocean management topics.

Enhancement Area Strategy Development

1. Will the CMP develop one or more strategies for this enhancement area?

Yes X
No

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

Ocean resources are important economically, culturally, and spiritually to all communities and tribes throughout Oregon. The OCMP will continue to prioritize stewardship of the Territorial Sea Plan to address opportunities and challenges to Oregon’s natural resources and ocean use communities.

Strategy: Tidal Wetland and Estuary Planning

I. Issue Area(s)

A. The proposed strategy or implementation activities will *primarily* support the following high-priority enhancement area(s) (*check no more than two*):

- | | |
|--|---|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Cumulative and Secondary Impacts |
| <input type="checkbox"/> Energy and Government Facility Siting | <input checked="" type="checkbox"/> Wetlands |
| <input checked="" type="checkbox"/> Coastal Hazards | <input type="checkbox"/> Marine Debris |
| <input type="checkbox"/> Ocean/Great Lakes Resources | <input type="checkbox"/> Public Access |
| <input type="checkbox"/> Special Area Management Planning | |

B. The proposed strategy or implementation activities will also support the following enhancement areas (*check all that apply*):

- | | |
|--|--|
| <input type="checkbox"/> Aquaculture | <input checked="" type="checkbox"/> Cumulative and Secondary Impacts |
| <input type="checkbox"/> Energy and Government Facility Siting | <input type="checkbox"/> Wetlands |
| <input type="checkbox"/> Coastal Hazards | <input type="checkbox"/> Marine Debris |
| <input type="checkbox"/> Ocean/Great Lakes Resources | <input checked="" type="checkbox"/> Public Access |
| <input checked="" type="checkbox"/> Special Area Management Planning | |

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes (*check all that apply*):

- A change to coastal zone boundaries;
- New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- New or revised local coastal programs and implementing ordinances;
- New or revised coastal land acquisition, management, and restoration programs;
- New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- New or revised guidelines, procedures, and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. Strategy Goal

Provide increased capacity to local governments and state agency partners to protect coastal habitats, update local estuary management plans, and increase community resilience through the integration of updated economic, habitat, and social information into local government policies.

C. Description

The strategy will focus on providing increased capacity to local governments and state agency partners to balance the protection of coastal habitats with economic development opportunities within and around Oregon's estuaries. This will be achieved by implementing activities within two focus areas: 1) coastal shoreland and estuarine data upgrades and 2) local government estuary management updates.

Focus Area 1) Coastal Shoreland and Estuarine Data Upgrades: The OCMP will work to develop a seamless and updated GIS zoning dataset covering the whole coast for areas subject to Goals 16 (estuaries) and 17 (coastal shorelands). Having this data in GIS format and updated to reflect local conditions will have multiple benefits for coastal management at both the state and local levels. The spatial inventories of Goals 16 and 17 include wetland and riparian areas, estuary management unit boundaries, areas subject to ocean flooding, aesthetic areas, areas of geologic instability, public access points, and water dependent or water related zones necessary for economic development. This project will take multiple years to complete and may need to span more than one assessment and strategy period, as this effort covers the outer coast and every estuary, and each jurisdiction has this information in different formats (e.g. paper maps or text descriptions). It can be completed by jurisdiction and be stitched together to make one uniform dataset. Once completed, cities and counties can adopt the maps and associate metadata into their comprehensive plans and state agencies can utilize the data in their permitting processes (such as federal consistency reviews, local wetland delineations, or removal/fill permits). The outcomes of this effort may include revisions or additions to existing resources and tools the OCMP has developed to include the updated datasets.

Focus Area 2) Local Government Estuary Management Updates: The OCMP will work with at least two coastal counties and associated cities to develop and implement (or begin to implement) an action plan to update their local estuary management plans or other related coastal resource management plans. Updates will be tailored to what each jurisdiction needs and the size and complexity of the associated estuary. Updates may include updated economic trends and natural resource inventories and maps, policies, estuary management and coastal shoreland boundaries, and development code language. It may focus on reviewing and assessing existing plan parts and identifying additional outside funding to support more comprehensive updates. It may focus on strategic updates to certain plan parts such as restoration and mitigation site identification, estuary boundary changes, or dredge material disposal plan modifications. The benefit of this strategy is the ability to be tailored and supportive of the needs of each estuary and jurisdiction. All local efforts will lead to program changes either directly or indirectly and will be submitted to NOAA OCM as they are completed. The outcomes of this effort may include revisions or additions to existing resources and tools the OCMP has developed to include lessons learned or case studies for updating estuary management plans that can further help other jurisdictions.

III. Needs and Gaps Addressed

As identified in the Phase II assessment for wetlands, the major needs in this enhancement area are for improved technical resources and specific, localized capacity to assess, update, and implement local EMPs using the best available information and community input. This strategy is specifically designed to build off the previous estuary management 309 strategy to provide technical capacity and support to local governments in their efforts to incorporate updated resource inventory mapping into estuary plans, and to modernize management measures and decision-making processes based on these improved resources. As mentioned previously, there are seven coastal counties and 39 estuaries included in regulatory local EMPs. Each jurisdiction requires dedicated time and support to successfully update an EMP and associated implementation maps and ordinances. Coastal jurisdictions greatly rely upon the expertise and capacity of the OCMP to make progress on these efforts. The tidal wetlands and estuary planning strategy is focused on providing those resources both at the individual jurisdictional level, understanding that

each jurisdiction will have different concerns and challenges to address, as well as on a coastwide level for those that have cross-cutting applicability.

IV. Benefits to Coastal Management

There are many benefits in taking the time to modernize and update EMPs. Policy adoption and implementation (usually through permitting) shapes over time how the land and water are developed, how resources are protected or restored, and how impacts from activities are avoided or minimized. The possibility of new development or changes to existing development means new challenges and implications for Oregon's estuaries, such as navigation channel expansions, new construction for infrastructure, and additional vessel traffic and mooring. The potential intensity of these activities and uses were not anticipated in the 1980s but will be evaluated against the original EMPs if they are not revised. Additionally, increasing protections through policy for coastal habitats can lead to community co-benefits such as flood reduction, improved water quality, increased recreation opportunities, and storm buffering. There is a critical need for dedicated investments to update EMPs, understand new information, coordinate among jurisdictions and tribes, and develop and implement new or updates policies.

V. Likelihood of Success

There is a high likelihood of success in attaining this strategy goal. The OCMP has a solid track record of developing data, maps, and tools to support coastal communities and state agencies. Staff will build upon these past experiences and successes to implement this strategy. Additionally, the OCMP recently supported pilot efforts to update EMPs in two estuaries with two coastal counties and multiple cities. These efforts brought together community members, state agencies, tribes, port districts, cities, and counties. OCMP staff recognized through these efforts that additional preparation, coordination, and collaboration is needed at all levels of government and with the broader public to facilitate even more successful modernization of the EMPs. Counties and cities have stated that they cannot undertake the entirety of the update effort themselves. OCMP believes that this strategy will be able to build upon this momentum, and that the timely delivery of technical assistance and capacity will facilitate the successful local plan modernization efforts.

However, it is important to note that adoption of policy recommendations from this strategy is within the legislative power of the local governments within the OCMP Network. Thus, the OCMP cannot guarantee that the programmatic changes or recommendations will be achieved within the five-year assessment and strategy cycle. Working with local partners to develop adoption-ready products will help increase the likelihood of achieving these program changes. The results from the survey that OCMP implemented also show great support and need for this tidal wetlands and estuary planning strategy. Survey respondents repeatedly stressed the need to update and modernize coastal management plans to incorporate new information and community priorities.

VI. Strategy Work Plan

Strategy Goal: Provide increased capacity to local governments and state agency partners to protect coastal habitats, update local estuary management plans, and increase community resilience through the integration of updated economic, habitat, and social information into local government policies.

Total Years: 5

Total Budget: \$465,000

Year: 1-2

Description of activities:

- Compile background information to inform the development of the coastal shoreland and estuarine GIS layer. Begin GIS work.
- Identify one coastal county to lead estuary plan modernization efforts and develop an EMP update steering committee. Develop the scope of the update effort, including geographic areas, coordinating jurisdictions, and needs and desired outcomes. Provide background and training to EMP update jurisdictions (if needed) to prepare for the modernization efforts.
- Begin to provide technical assistance to the local EMP-update steering committee to implement the scope of work. This may include GIS and mapping support, interpretation of informational products and publications, policy research, and policy and code drafting.

Major Milestone(s):

- Summary of progress completed for coastal shoreland and estuarine GIS layer. Updated areas displayed on the Coastal Atlas.
- Establishment of an EMP update steering committee for one coastal county, scope of work completed.

Years 1-2 Budget: \$186,000

Years: 3-4

Description of activities:

- Continue to develop the coastwide coastal shoreland and estuarine GIS layer. Work may include convening temporary working groups by jurisdiction or region to help OCMP staff refine the geographic boundaries of Goals 16 and 17 as implemented by each jurisdiction.
- Continue to provide technical assistance to the local EMP update steering committee to implement the scope of work. This may include GIS and mapping support, interpretation of informational products and publications, and plan policy and code drafting.
- Finish scope of work with EMP update steering committee. Support relevant local jurisdictions in the adoption process of updated EMPs.
- Identify additional coastal county to lead estuary plan modernization efforts. This could be the same coastal county in a different estuary or a different coastal county and estuary.
- Develop a steering committee and the scope of the update effort, including geographic areas, coordinating jurisdictions, and needs and desired outcomes. Provide background and training (if needed) to EMP update jurisdictions to prepare for the modernization efforts.

Major Milestone(s):

- Summary of progress completed for coastal shoreland and estuarine GIS layer. Updated areas displayed on the Coastal Atlas.
- Updated EMP or EMP plan parts for one coastal county/estuary.
- Establishment of an EMP update steering committee for another coastal county, scope of work completed.

Years 3-4 Budget: \$186,000

Year: 5

Description of activities:

- Finalize the coastwide coastal shoreland and estuarine GIS layer. Work may include convening temporary working groups by jurisdiction or region to help OCMP staff refine the geographic boundaries of Goals 16 and 17 as implemented by each jurisdiction.
- Provide technical assistance to the EMP update steering committee to implement the EMP update scope of work. This may include GIS and mapping support, interpretation of informational products and publications, and plan policy and development code drafting.
- Finish scope of work with the steering committee (it is likely this work will carry over into the next assessment and strategy time period).
- Support relevant local jurisdictions in the adoption process of updated EMPs.
- Submit program changes to NOAA OCM as relevant.

Major Milestone(s):

- Completed coastal shoreland and estuarine GIS layer, displayed on the Coastal Atlas.
- Updated EMP or EMP plan parts for another coastal county/estuary.
- Program changes submitted to NOAA OCM.

Year 5 Budget: \$93,000

VII. Fiscal and Technical Needs

A. Fiscal Needs:

Section 309 funding alone will not be sufficient to carry out all elements of the proposed strategy. Although the OCMP anticipates providing both technical and (when possible) financial assistance to participating local governments, local jurisdictions and other agency partners will contribute additional resources to this strategy, primarily in-kind resources in the form of staff time and volunteer time from appointed and elected officials. The strong partnership relationship OCMP enjoys with local communities on the coast has facilitated several successful projects within the coastal zone, and it is anticipated that this approach will likewise be effective in carrying out this strategy. Additionally, OCMP may utilize fellows, interns, or students to help carry out some pieces of this strategy. OCMP will also likely seek funds from additional sources to provide financial support to local communities or hire contractors, if possible, to supplement this strategy. If there are staff or other cost savings, the OCMP may hire contractors to carry out some of the work in this strategy.

B. Technical Needs:

It is expected that the technical knowledge and skills needed to carry out this strategy can be provided by the OCMP, participating agencies, and local partners.

VIII. Projects of Special Merit (Optional)

The OCMP may wish to pursue Projects of Special Merit to augment this strategy. These projects may include the gathering of bathymetric data, updating heads of tide locations, or mapping forested tidal wetland restoration priorities within Oregon's estuaries. These data needs have been identified as important in implementing several state and local estuary or wetland policies, particularly through the Department of State Lands' regulations. The OCMP may also seek a Project of Special Merit to provide additional financial support to local jurisdictions to update their EMPs, especially for those managing larger and more complex estuaries.

Strategy: Coastal Hazards Planning

I. Issue Area(s)

A. The proposed strategy or implementation activities will *primarily* support the following high-priority enhancement area(s) (*check no more than two*):

- | | |
|--|---|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Cumulative and Secondary Impacts |
| <input type="checkbox"/> Energy and Government Facility Siting | <input type="checkbox"/> Wetlands |
| <input checked="" type="checkbox"/> Coastal Hazards | <input type="checkbox"/> Marine Debris |
| <input type="checkbox"/> Ocean/Great Lakes Resources | <input type="checkbox"/> Public Access |
| <input type="checkbox"/> Special Area Management Planning | |

B. The proposed strategy or implementation activities will also support the following enhancement areas (*check all that apply*):

- | | |
|--|---|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Cumulative and Secondary Impacts |
| <input type="checkbox"/> Energy and Government Facility Siting | <input checked="" type="checkbox"/> Wetlands |
| <input type="checkbox"/> Coastal Hazards | <input type="checkbox"/> Marine Debris |
| <input type="checkbox"/> Ocean/Great Lakes Resources | <input checked="" type="checkbox"/> Public Access |
| <input checked="" type="checkbox"/> Special Area Management Planning | |

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes (*check all that apply*):

- A change to coastal zone boundaries;
- New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- New or revised local coastal programs and implementing ordinances;
- New or revised coastal land acquisition, management, and restoration programs;
- New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- New or revised guidelines, procedures, and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. Strategy Goal

Increase resiliency knowledge, resources, and capacity at the state and local level to reduce risks to coastal communities from coastal hazards and the impacts of current and future conditions.

C. Description

This strategy will focus on increasing local government capacity to update local comprehensive plans addressing coastal hazards and to enhance planning and mitigation efforts of local governments and OCMP networked agency partners. This will be achieved by implementing the following activities, all of which will result in or lead to program changes through the provision of data, assessments, capacity, and guidance from the OCMP:

1. Coastal Resilience Index: Assess local jurisdictions' resiliency to coastal hazards using the Coastal Resilience Index as a framework along with a coastal hazard vulnerability assessment component from which policy recommendations will be made;
2. Strategy Development: Identify and begin to implement resiliency and mitigation projects (such as managed retreat guidance, creation of a resiliency project tracking hub, development of a coastal hazards guidebook for coastal residents, or developing a coastwide resiliency plan);
3. Peer Learning Resilience Network: Continue to build and support the Coastal Resiliency Policy Network to research and develop example local and statewide policies that further increase coastal community resilience.

Coastal Resilience Index: The OCMP will initially work with two coastal communities which will be chosen based on willingness to participate and needs of the community to be pilot communities for conducting the Coastal Resilience Index (CRI) self-assessment tool developed by the Mississippi – Alabama Sea Grant Consortium and NOAA's Coastal Storms Program in addition to a vulnerability assessment of the risks posed by coastal hazards, based on the Oregon Natural Hazards Mitigation Plan Risk Assessment upgrade results. These assessments will be completed in a workshop style setting with practitioners, using data and tools available from DOGAMI, Oregon State University, Oregon Sea Grant, the OCMP's Coastal Atlas, and other local, regional, and national data sources. Based on the outcomes of the assessments, mitigation and adaptation strategies to help strengthen local policies and comprehensive plan updates will be identified with input from the local government staff. From there, policy recommendations will be made, and technical guidance and assistance will be provided to connect the jurisdictions with the appropriate subject experts as needed. Broader resilience projects that would benefit the entire coast will be identified for the OCMP to work on under Strategy Development. The OCMP will also create a guidance document to assist the remaining coastal jurisdictions with completing the CRI assessment independently.

Strategy Development: The OCMP will identify and begin to implement resiliency and mitigation projects based on the results of the Coastal Resilience Index assessment. These will be coastwide tools or resources that will help local coastal jurisdictions better address current and future coastal hazards in their land use management policies or permitting. Examples of potential projects include the development of managed retreat guidance, resiliency project tracking hub, coastal hazards guidebook for coastal residents, or a coastwide resiliency plan. The project(s) identified as priorities to move forward will be chosen based on input from the coastal jurisdictions and other OCMP network partners.

Peer Learning Resilience Network: The OCMP will also support and expand the Coastal Resilience Policy Network. The aim of the Network is to create an integrated, achievable vision to increase the resilience of Oregon's coastal communities through improved government collaboration, policy tools and resources suited for coastal management and planning, increased engagement with Tribal nations and rural communities, and specific policies that reduce risk to coastal populations, economies, and ecosystems. Coastal land use and resource management practitioners need a space for peer learning and information exchange focused on risk adaptation and resilience on the Oregon coast, which this Network can provide. The other focus areas of this strategy described above will feed into and benefit from the Network.

III. Needs and Gaps Addressed

This strategy will advance progress on resilience efforts by identifying and addressing current and future impacts from coastal hazards for Oregon’s coastal communities. The work done under this strategy will build and strengthen policy tools at the state and local levels by identifying both the natural hazard vulnerability of coastal communities as well as areas for improvement within their policy and zoning frameworks. The strategy will allow the OCMP to build capacity within coastal jurisdictions using the Coastal Resilience Index vulnerability assessment, the development of mitigation strategies to address needs highlighted by the assessment, the implementation of the Coastal Resilience Policy Network to create policy options, and the creation of training materials to provide education for coastal planners.

IV. Benefits to Coastal Management

This strategy will help the OCMP and its network by identifying specific vulnerabilities from coastal hazards to Oregon’s coastal communities and enhance their resilience against those risks. It will also increase capacity for local coastal jurisdictions to be able to access, incorporate, and implement the research and land use management tools and resources available now and those developed during this assessment and strategy period. This strategy can help lead to rule changes, amendments, code and policy updates, and more resilient land use management strategies such as increased setbacks for development or a framework for managed retreat strategies. The resilience assessment and subsequent implementation work with local governments will not only help to be more strategic but also provide tangible actions for coastal communities to move forward with their goals for resilience planning.

V. Likelihood of Success

There is a high likelihood of success for the OCMP to accomplish the work within this strategy. The OCMP has a strong network of partners, including local coastal governments, researchers, and state agencies. This network, along with the existing and ongoing resources and initiatives existing through the partnering agencies, can be leveraged and built upon through this strategy. Some of these resources include the Oregon Natural Hazards Risk Assessment Upgrade, which will be completed in 2025; the Oregon Natural Hazards Mitigation Plan update, which will also be completed in 2025; the Oregon Resilience Plan; and the many DOGAMI and Oregon State University publications and models analyzing specific coastal hazards.

However, it is important to note that adoption of policy changes from this strategy is within the legislative power of the local governments within the OCMP Network when related to local plans or the Land Conservation and Development Commission when related to agency rules. Thus, the OCMP cannot guarantee that the programmatic changes or recommendations will be achieved within the five-year assessment and strategy cycle. Working with local partners to develop tailored resources and capacity will help increase the likelihood of achieving these program changes and ultimately increase resilience to coastal hazards. The results from the survey that OCMP implemented also show great support and need for this coastal hazards planning strategy.

VI. Strategy Work Plan

Strategy Goal: To increase resiliency knowledge, resources, and capacity at the state and local level to reduce risks to coastal communities from current and future coastal hazards.

Total Years: 5

Total Budget: \$325,000

Year: 1

Description of activities:

- Assess local jurisdictions' resiliency to coastal hazards using the Coastal Resilience Index (CRI) as a framework along with a coastal hazard vulnerability assessment component
 - Identify and acquire data sets for shoreline characteristics, hazard risk, community demographics, and habitats.
- Identify mitigation initiatives and actions that could improve the resilience of the communities from the assessment phase.
 - Create an action list of mitigation options, resiliency policies and ordinances, funding opportunities, and technical guidance for project implementation.
- Create guidance for remaining coastal jurisdictions to be able to conduct the coastal resilience index and vulnerability assessment.

Major Milestone(s):

- Completed resilience and risk assessment for two coastal jurisdictions
- Guidance document to assist the remaining coastal jurisdictions with completing the CRI assessment independently

Year 1 Budget: \$65,000

Years: 2-3

Description of activities:

- Creation and implementation of a continuation plan for the Coastal Resilience Policy Network.
- Compile an inventory of resilience and mitigation projects that are 1) completed, 2) in progress, or 3) proposed across the coastal zone.
- Plan and host online training sessions based on the needs highlighted by the resilience assessment. Partner with appropriate agencies such as OPRD and ODEM for training as needed.
- Continue to solicit interest from local communities to engage in the development of enhanced local hazard plans and implementing regulations.
- Continue to support the development of improved land use measures to address coastal hazards and the high priority resilience and mitigation measures identified in Year 1.
- Provide assistance and support to communities proceeding through the plan amendment and adoption process for enhanced coastal hazards management plans and regulations.

Major Milestone(s):

- Finalized resiliency project tracking hub and creation of online training tools
- Trainings completed for resilience needs or resources
- Compilation of revised or added local planning policies developed with local governments

Years 2-3 Budget: \$130,000

Years: 4-5

Description of activities:

- Development coastwide resilience resources identified in earlier years, such as coastal hazards guidance for ocean-fronting residents, or a coastwide resiliency plan.

- Assemble and work with an advisory committee to develop, revise, and finalize the guidance.
- Continue to support the Coastal Resilience Policy Network.
- Continue to support the development of improved land use measures to address present and future coastal hazards and the high priority resilience and mitigation measures identified in earlier years.
- Provide assistance and support to communities proceeding through the plan amendment and adoption process for enhanced coastal hazards management plans and regulations.
- Submit any program changes adopted to NOAA OCM as relevant.

Major Milestone(s):

- Creation of at least one coastwide guidance product
- Updated local comprehensive plans or natural hazard mitigation plans as relevant
- Program changes, if any, submitted to NOAA OCM.

Years 4-5 Budget: \$130,000

VII. Fiscal and Technical Needs

A. Fiscal Needs:

It is expected that 309 funding will not be sufficient to carry out all elements of the proposed strategy. Participating local governments will contribute resources to the efforts undertaken on their behalf, primarily in-kind resources in the form of staff time and volunteer time from appointed and elected officials. The strong partnerships the OCMP has built with local communities have facilitated several successful projects of a similar nature, and it is anticipated that this approach will likewise be effective in carrying out this strategy. Additionally, OCMP may utilize fellows, interns, or students to help carry out some pieces of this strategy. OCMP may also seek funds from additional sources to provide financial support to local communities, or hire contractors if needed, to supplement this strategy.

B. Technical Needs:

It is expected that the technical knowledge and skills needed to carry out this strategy can be provided by the OCMP, participating agencies, and local partners.

VIII. Projects of Special Merit (Optional)

The OCMP may pursue projects of special merit under the Coastal Hazards strategy. One possible project would lead to the development of a managed retreat strategy, beginning with a feasibility study to assess the specific set of physical conditions and needs of Oregon's coastal communities with regards to managed retreat. This project would ultimately lead to the OCMP being able to provide guidance on how to approach managed retreat at the local level, reducing risk and encouraging long-term adaptation to sea level rise and future coastal hazard impacts for coastal communities. Another possible project would involve creating a digital inventory of all the shoreline protection structures on the Oregon Coast, both along the outer coast and in the estuaries. This would assist not only the OCMP with tracking the impact of Goals 16-18 over time but also assist OPRD and DSL with their permitting and enforcement processes by mapping and documenting both permitted and unpermitted structures across the coastal zone. It would also be useful for understanding the impacts of local jurisdictions' permitting and policy decisions relative to the requirements and intentions of the coastal land use goals.

Strategy: Ocean Resources Planning

I. Issue Area(s)

A. The proposed strategy or implementation activities will *primarily* support the following high-priority enhancement area(s) (*check no more than two*):

- | | |
|---|---|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Cumulative and Secondary Impacts |
| <input type="checkbox"/> Energy and Government Facility Siting | <input type="checkbox"/> Wetlands |
| <input type="checkbox"/> Coastal Hazards | <input type="checkbox"/> Marine Debris |
| <input checked="" type="checkbox"/> Ocean/Great Lakes Resources | <input type="checkbox"/> Public Access |
| <input type="checkbox"/> Special Area Management Planning | |

B. The proposed strategy or implementation activities will also support the following enhancement areas (*check all that apply*):

- | | |
|--|--|
| <input type="checkbox"/> Aquaculture | <input checked="" type="checkbox"/> Cumulative and Secondary Impacts |
| <input type="checkbox"/> Energy and Government Facility Siting | <input type="checkbox"/> Wetlands |
| <input type="checkbox"/> Coastal Hazards | <input type="checkbox"/> Marine Debris |
| <input type="checkbox"/> Ocean/Great Lakes Resources | <input type="checkbox"/> Public Access |
| <input checked="" type="checkbox"/> Special Area Management Planning | |

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes (*check all that apply*):

- A change to coastal zone boundaries;
- New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- New or revised local coastal programs and implementing ordinances;
- New or revised coastal land acquisition, management, and restoration programs;
- New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- New or revised guidelines, procedures, and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. Strategy Goal

To update the Territorial Sea Plan and to establish a Goal 19 Ocean Resources and Uses Atlas.

C. Description

Parts One and Two of the Territorial Sea Plan have not been updated or amended since their adoption in 1994, and it is the priority of the OCMP to update those outdated parts of the TSP during the next Strategy period. Continued implementation of the adaptive management section of Part Three, the Rocky Habitat Management Strategy is also a priority so effort will be expended to continue engagement with coastal communities in the consideration of site-based management designations. Lastly, underpinning the necessary policy changes to amend Parts One through

Three of the TSP is a need to inform decisions via the best available data and information, which will be provided via the establishment of a Goal 19 Ocean Resources and Uses Atlas.

III. Needs and Gaps Addressed

The need to update Parts One and Two of the TSP is driven by the changing ocean management framework (since 1994) and the needs to improve the review process for how the state makes decisions for development or conservation actions. The challenge of responding to changing ocean conditions is also driving the need for continued stewardship of the TSP, as issues like ocean acidification, hypoxia, marine heatwaves, and harmful algal blooms continue to impact Oregon coastal communities in a variety of different ways. During the amendment of TSP Part Three, new policies were adopted that require the consideration of species and habitats impacts when considering new uses of the ocean. Working together to implement site management plans with the communities that established new Rocky Habitat Management Designations will help the state observe and react to challenges at the local level, thereby increasing resilience of the ecosystem and communities together. Working to establish a Goal 19 Ocean Resources and Uses Atlas will also improve state decision making processes and make amending TSP Parts 1-3 more efficient.

IV. Benefits to Coastal Management

Coastal management-related decisions will be improved through the creation and maintenance of a Goal 19 Ocean Resources and Uses Atlas, which will provide the best available information from which to base decisions about the potential impacts of proposals for development or conservation. Updating the TSP Parts One and Two will be informed by the knowledge gathered and presented via the Atlas, and CZMA federal consistency review processes will be informed by the information which serves as the foundation of the resource inventory and effects analysis required to be conducted by project applicants.

V. Likelihood of Success

The likelihood of success for this strategy is high, as the OCMP has demonstrated the ability to work with coastal communities, tribes, and ocean interest groups in the last strategy period to amend the TSP, and there's been demonstrated commitment by the same entities to engage in the implementation of new management areas. Additionally, the OCMP has successfully built and maintained resource inventories related to previous TSP amendments, including for uses of the seafloor and rocky habitats. The OCMP will be able to build on these previous experiences and data collections to form the basis of the Atlas. Amendment of the TSP will require working with coastal communities and network partner agencies in a public process to update the Plan, all of which the OCMP staff have demonstrated success in achieving during the previous two Strategy periods. The TSP provides the process coordination mechanisms for ocean resource use decision making, and it is stewarded via joint action by the Ocean Policy Advisory Council and the Land Conservation and Development Commission (LCDC). These two entities have recent experience completing amendment processes which indicate a high likelihood of success for future amendment efforts.

VI. Strategy Work Plan

Strategy Goal: Update the Territorial Sea Plan Parts 1-3 and establish a Goal 19 Ocean Resources and Uses Atlas.

Total Years: 5

Total Budget: \$325,000

Year: 1-5

Description of activities:

- The OCMP staff will complete a comprehensive inventory of ocean resources and use spatial data that will serve as the information basis of the Atlas.
- OCMP staff will work with DLCD GIS program staff to design and develop information architecture to support the Atlas.
- Using the information architecture design, the OCMP staff will develop the Atlas and publish it via the web.
- The Goal 19 Ocean Resources and Uses Atlas will be used to support the amendment efforts for TSP Parts 1-3.

Major Milestone(s):

- A completed spatial data inventory compiled for the Goal 19 Ocean Resources and Uses Atlas
- Publication of the Goal 19 Ocean Resources and Uses Atlas

Budget: \$108,333

Years: 2-5

Description of activities:

- The Ocean Policy Advisory Council (OPAC) will establish a Territorial Sea Plan Work Group to draft amendments for Parts One and Two of the TSP. OCMP staff will support the TSP Work Group and facilitate the development of a work program scope to establish project timelines and deliverables for completion of the amendment process.
 - OCMP staff will work to develop outreach and engagement materials for the amendment process of TSP Parts One and Two.
- The TSP Work Group will develop recommended amendments to the TSP for consideration by OPAC.
- OPAC will review and recommend amendments to the TSP and transmit the adoption-ready recommendations to LCDC for their consideration.
- Adoption of the TSP amendments is ultimately dependent upon LCDC. The Commission first approves a policy agenda for the agency each biennium. Inclusion of TSP Amendments in DLCD's policy agenda will be considered but is not guaranteed.
 - If on the policy agenda, LCDC will review and potentially adopt the TSP amendments.
- Adoption would include a Legal Order documenting the TSP amendment process and LCDC's findings and a program change submission for OCM approval.
- *Not in chronological order:* OPAC may also initiate the next site-based proposal process for implementation of TSP Part Three and steward a process for adding marine managed areas into the state network of marine conservation areas. If amendments result, DLCD will staff the rulemaking process with LCDC as described above for Parts One and Two.

Major Milestone(s):

- OPAC recommended amendments to the parts of the TSP that apply to Parts One and Two
- LCDC adoption of the amendments to TSP Parts One and Two (if applicable).
- TSP Parts One and Two Program changes submission to NOAA OCM (if applicable).

- TSP Part Three site management designation changes may be generated via the proposal process and any changes would need to result in rulemaking via the OPAC and LCDC process.

Budget: \$216,667

VII. Fiscal and Technical Needs

A. Fiscal Needs:

While 309 funding is likely sufficient to support the process components of a TSP amendment, technical studies and associated projects may require additional funding.

B. Technical Needs:

It is anticipated that most of the technical knowledge and skills needed to carry out this strategy can be provided by the OCMP. Technical capacity exists within the OCMP related to geospatial data cataloging, geospatial analysis and interpretation, and tool development. The OCMP has already invested time and resources in the development of the geospatial data visualization tool, Oregon SeaSketch.

VIII. Projects of Special Merit (Optional):

The OCMP may develop a project of special merit application for resources associated with the necessary projects or studies to inform the TSP amendment process. While the focus of those studies is uncertain at this time, it will likely be a study or project that is related to the mapping or identification of ocean resources or uses. Additionally, work to develop communications products from the Goal 19 Ocean Resources and Uses Atlas may be a focus of a future PSM application.

5-Year Budget Summary by Strategy

Strategy Title	Anticipated Funding Source (309 or Other)	Year 1 Funding	Year 2 Funding	Year 3 Funding	Year 4 Funding	Year 5 Funding	Total Funding
Tidal Wetlands & Estuary Resilience Planning	309	\$93,000	\$93,000	\$93,000	\$93,000	\$93,000	\$465,000
Coastal Hazards Planning	309	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$325,000
Ocean Resources Planning	309	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$325,000
Total Funding		\$223,000	\$223,000	\$223,000	\$223,000	\$223,000	\$1,115,000

DRAFT

Summary of Partner Feedback and Public Comment

The OCMP solicited input from partners at the local and state levels in a variety of ways during the preparation and development of this 2026-2030 309 Assessment and Strategy. These engagements are summarized below.

Partner Meetings

OCMP met with partners during the following meetings between October and December 2024 (all virtual):

- Strategic Advisory Committee of the Oregon Coast Visitors Association, 10/21/24
- Coastal Planners Network Meeting, 11/6/24
- State Agency Network Meeting, 12/6/24.

During these meetings, staff presented an overview of the 309 Assessment and Strategy process, its importance, and examples of how the agency has utilized these funds to enhance the overall program in the past. Staff then took notes on discussions that followed from various meeting attendees with their ideas about how the OCMP should structure strategies for the 2026-2030 time period. These notes helped to inform the Phase II assessments and development of the three strategies presented here.

The *Strategic Advisory Committee* of the Oregon Coast Visitors Association is convened by the coastal tourism organization to bring together coastal natural resource agencies to share information, resources and develop unified strategies, tactics and messaging aimed at reducing the impacts of visitation on natural resources while also promoting public safety. OCMP staff participate regularly in these meetings and utilized the existing platform to engage with other state and federal agencies on the 309 Assessment and Strategy.

The *Coastal Planners Network Meeting* is convened by OCMP twice a year to bring together all coastal land use planners and other local practitioners to talk about coastal management and land use topics and issues of mutual interest and to provide a networking opportunity for peers.

The *State Agency Network Meeting* is convened by OCMP about once a year to bring together all the state agencies that make up the OCMP's network to talk about coastal management topics and issues of mutual interest and to provide a networking opportunity for peers.

Feedback from these three meetings included the following issues and priorities:

- Updating policies regarding offshore development
- Improved data for Oregon's estuaries (bathymetric mapping, heads of tide locations, location of historic fills, opportunities for restoration and compensatory mitigation)
- Updates to Goal 17 (Coastal Shorelands) maps and inventories
- Conservation and modernization needs for freshwater demand in coastal communities
- Making existing data more discoverable by those who need it
- Proactive coastal hazards and resilience planning along the Oregon coast
- Improved coordination and communication across state agencies and with local governments, especially for forthcoming large development projects (shipping container facility in Coos Bay, offshore development, dredging and dredged material disposal)
- Improved management of kelp
- Reacquiring 30% funding for DLCD and DEQ for the coastal nonpoint pollution control program
- Coordinating state agency efforts around community resilience

- Economic information gaps related to habitat restoration
- Integration of cultural practices into coastal management
- Improve efforts to mitigate nuisance flooding
- Improvements to safe public coastal access points
- Guidance on how to address requirements for clear and objective standards for housing with subjective requirements of the coastal land use goals and Goals 5 and 7; request for more model codes from DLCD
- Unknowns with the implementation of the Biological Opinion to FEMA for the National Flood Insurance Program
- Assistance with comprehensive plan updates, especially for the coastal land use goals
- Coastal access improvements to help with public safety; improvements for biking along the Oregon Coast Bike Route.

Not all topics discussed during these meetings were topics that could be addressed under the 309 strategies or are issues that DLCD has expertise in. Some items can be addressed under the OCMP's 306 budget and workplan. Other items did get incorporated into the three draft strategies.

Survey

Additionally, staff developed a short survey to help inform the prioritization of enhancement areas and development of strategies. Respondents picked their top three enhancement areas and described the biggest challenges in these areas and the best way for the OCMP to address those challenges. The survey was open from mid-November until mid-December of 2024. Surveys were sent to approximately 200 emails encompassing individuals from state and local government, tribes, watershed councils, community groups, organizations, or others familiar with the OCMP's work. The survey received 24 responses.

The Wetlands enhancement area received the highest number of votes (7) as the number one priority for the OCMP to address, followed closely by Coastal Hazards (6). These two enhancement areas also received the greatest number of votes as the second priority for the OCMP to address.

The top themes from respondents regarding the biggest issues or challenges within their top enhancement area priority are as follows:

1. **Environmental Impacts:** This theme revolves around the challenges of changing conditions, such as sea level rise, increased flooding, warming waters, and habitat degradation. It discusses how these environmental changes are affecting coastal management and the ability to plan for future risks, including the loss of natural infrastructure and issues related to coastal hazards (e.g., tsunamis, earthquakes).
2. **Limited Resources and Capacity for Planning and Management:** There is a significant focus on the lack of funding, technical capacity, and outdated infrastructure at the local government level to address coastal management needs. This limitation hampers effective planning, and mitigation of environmental risks, especially in rural communities.
3. **Development Pressure and Land Use Challenges:** This theme addresses the tension between development, public access, and the need for long-term balanced land use planning. It highlights issues like the pressure for development in hazard-prone areas, the difficulty of maintaining public beach access, and challenges in updating zoning codes or land use plans to address new environmental realities.

The top themes from respondents regarding how the OCMP can best assist in addressing the biggest issues or challenges within their top enhancement area priority are as follows:

1. **Adaptation:** Respondents emphasize building social and ecological resilience to coastal hazards and changing conditions. There is a focus on a desire for both nature-based solutions, such as green stormwater infrastructure, and developing policies that enforce proactive planning for future conditions.
2. **Updating and Strengthening Management Plans:** Respondents repeatedly stress the need to update and modernize coastal management plans, such as Estuary Management Plans (EMPs) and local Comprehensive Plans, to incorporate new information and ensure they reflect current scientific knowledge. Special attention is given to updating these plans to reflect the changing boundaries of estuaries and incorporating tribal perspectives that were previously excluded.
3. **Collaboration and Resource Development:** There's a strong emphasis on fostering partnerships, coordinating efforts between agencies, and providing technical expertise and resources to local governments. The importance of education, funding, and facilitating community-based solutions (e.g., nature-based infrastructure) is highlighted. The collaboration extends to securing funding for large-scale projects, particularly those involving coastal infrastructure, while ensuring access to resources for communities.

These three trends—community resilience, updating management plans, and collaboration—are crucial to improving coastal management and ensuring livable and vibrant communities along the coast and have been integrated into all three draft 309 strategies.

Tribal Engagement

A letter informing five coastal Tribal Nations of this assessment development was sent out in July of 2024 with an ask for engagement if interested. A meeting with staff from the Coquille Indian Tribe was held on February 6, 2025. Staff level meetings were also held with the Confederated Tribes of Siletz Indians. Feedback from these meetings was utilized in the development and revision of the 309 strategies. Feedback outside of the scope of the 309 Assessment and Strategy will be integrated into the OCMP's 306 workplan if applicable or shared with DLCD leadership for further consideration.

Public Comment

A 30-day public comment period will be held for the draft 2026-2030 309 Assessment and Strategy in the summer of 2025. Public comments will be compiled and summarized and incorporated into the revisions of the document to the extent applicable.

Internal Development and Review

The three strategies developed for the 2026-2030 are ultimately the workplans for several OCMP staff. These strategies reflect the priorities and needs of the OCMP's partners and communities and also embody the priorities of the staff that comprise the OCMP at DLCD. All staff were consulted during the development of this document. Their knowledge and expertise were critical to each assessment phase and the development of each strategy.