

Part 4 - Marine Spatial Plan and DRAFT Management Framework

NOTE: This is a working draft and sections are still undergoing editing.

The draft management framework (Part 4) guides how the marine spatial plan is applied to new ocean uses. It provides:

- *The existing policies, authorities and requirements that guide implementation of the MSP;*
- *The process for reviewing potential new ocean uses; and*
- *The substantive requirements and recommendations for evaluating new ocean uses through different phases of project review, consistent with the MSP law and existing state laws and regulations.*

The draft management framework also summarizes other activities that will be taken that assist in monitoring, evaluation, adaptation and revision of the marine spatial plan.

4.1 Existing policies and authorities

4.1.2 Introduction to the Management Framework

The Marine Spatial Plan (MSP) for Washington's Pacific Coast focuses on providing data, information, analyses and recommendations to address new potential ocean uses in Washington's marine waters such as marine renewable energy, offshore aquaculture, mining for sand and gravel or methane hydrates, new dredge disposal locations, or bioextraction. The MSP does not address or alter requirements for existing marine uses such as shellfish aquaculture, commercial or recreational fishing, recreation, shipping or navigation. The MSP study area covers the Washington's marine waters¹ along the Pacific Ocean from Cape Flattery to Cape Disappointment and from ordinary high water out to offshore waters to a distance offshore that follows the continental shelf at a water depth of 700 fathoms. The study area also includes the estuaries along the coast [reference study area figure].

The MSP Management Framework provides overall guidance and recommendations for applicants, agencies and third parties on using the plan in practice. The MSP should be used throughout the development of new ocean use proposals on Washington's Pacific Coast and in all stages of decision-making. The information and processes outlined in the Management Framework are essential to assist agencies in evaluating whether a new ocean use project satisfies compliance with the Ocean Resources Management Act and its regulations.² In particular, applicants need to follow processes for coordination and engagement in Section 4.2.1, and need to demonstrate their project complies with the spatial

¹ "Marine waters" is defined in RCW 43.372.010(9). Scoping further refined the study area for this specific plan.

² Depending on the project, other information may be required to process other permits or authorizations (see Section 4.1.5 for relationship to other state and local authorities). The Management Framework primarily focuses on the processes and specific information required for assessing compliance with the Ocean Resources Management Act and its regulations.

designations and recommendations in Section 4.3, provide all information listed in Sections 4.4, 4.5, and 4.7, and address their compliance with applicable standards in Sections 4.6 and 4.8.

The development of the Management Framework was informed by recommendations from the Washington Coastal Marine Advisory Council (WCMAC), including concerns about the effects of new ocean uses on existing uses, coastal communities and the environment. Actions that relate to specific WCMAC recommendations are referenced throughout the management framework. For complete WCMAC concerns and recommendation language, please see [reference location of WCMAC recommendations].

The Management Framework contains the following major sections:

- [Section 4.1](#) - Information on existing policies, authorities and requirements that guide implementation of the MSP.
- [Section 4.2](#) - Process for reviewing and consulting on ocean use proposals and other state implementation activities.
- [Section 4.3](#) - Spatial designations and information to understand spatial limitations, potential conflicts and interactions; to inform project siting, development and design; and to identify appropriate parties to consult regarding potential proposals.
- [Section 4.4](#) – Project and site-specific information requirements
- [Section 4.5](#) - Contents of a written effects evaluation
- [Section 4.6](#) – Review standards and design considerations
- [Section 4.7](#) – Project construction and operation plans
- [Section 4.8](#) – Standards specific to new use type

4.1.3 Requirements to Implement the Final MSP

Washington’s marine waters planning and management law (RCW 43.372) requires state and local agencies to make decisions consistent with the final Marine Spatial Plan.³ At the same time, the Marine Spatial Plan law limits the state and local agencies to using their existing authorities to implement the plan and does not create any new authorities.⁴

4.1.4 Existing State Ocean Policies, Permit Criteria and Regulations

The Ocean Resources Management Act (ORMA) outlines specific state policies and regulations that specifically apply to policy, planning and permitting of ocean uses on Washington’s Pacific Coast [RCW 43.143].

1. General policies:

³ Upon the adoption of the marine management plan under RCW 43.372.040, each state agency and local government must make decisions in a manner that ensures consistency with applicable legal authorities and conformance with the applicable provisions of the marine management plan to the greatest extent possible. [RCW 43.372.050(1)]

⁴ No authority is created under this chapter to affect in any way any project, use, or activity in the state’s marine waters existing prior to or during the development and review of the marine management plan. No authority is created under this chapter to supersede the current authority of any state agency or local government. [RCW 43.372.060]

When the state of Washington and local governments develop plans for the management, conservation, use, or development of natural resources in Washington's coastal waters, the following policies shall guide the decision-making process [RCW 43.143.030(1)].

- a. When conflicts arise among uses and activities, priority shall be given to resource uses and activities that will not adversely impact renewable resources over uses which are likely to have an adverse impact on renewable resources. [RCW 43.143.010(3)]
- b. Recreational uses or currently existing commercial uses involving fishing or other renewable marine or ocean resources are not required to meet the planning and review criteria set forth in RCW 43.143.030. [RCW 43.143.010(5)]
- c. The state shall participate in federal ocean and marine resource decisions to the fullest extent possible to ensure that the decisions are consistent with the state's policy concerning the use of those resources. [RCW 43.143.010(6)]
- d. There shall be no leasing of state tidal waters or submerged lands⁵ for oil or gas exploration, development or production [RCW 43.143.101(2)].
- e. Actively encourage the conservation of liquid fossil fuels, and to explore available methods of encouraging such conservation. [RCW 43.143.010(4)]

2. Ocean uses planning and project review criteria

Uses or activities that require federal, state, or local government permits or other approvals and that will adversely impact renewable resources, marine life, fishing, aquaculture, recreation, navigation, air or water quality, or other existing ocean or coastal uses, may be permitted only if the criteria below are met or exceeded [RCW 43.143.030(2)]:

- a. There is a demonstrated significant local, state, or national need for the proposed use or activity;
- b. There is no reasonable alternative to meet the public need for the proposed use or activity;
- c. There will be no likely long-term significant adverse impacts to coastal or marine resources or uses;
- d. All reasonable steps are taken to avoid and minimize adverse environmental impacts, with special protection provided for the marine life and resources of the Columbia river, Willapa Bay and Grays Harbor estuaries, and Olympic national park;
- e. All reasonable steps are taken to avoid and minimize adverse social and economic impacts, including impacts on aquaculture, recreation, tourism, navigation, air quality, and recreational, commercial, and tribal fishing;
- f. Compensation is provided to mitigate adverse impacts to coastal resources or uses;
- g. Plans and sufficient performance bonding are provided to ensure that the site will be rehabilitated after the use or activity is completed; and
- h. The use or activity complies with all applicable local, state, and federal laws and regulations.

⁵ Applies specifically from mean high tide seaward and from Cape Flattery south to Cape Disappointment, in Grays Harbor, in Willapa Bay, and the Columbia River downstream from the Longview bridge.

Further regulations implementing the Ocean Resources Management Act are provided in WAC 173-26-360 and include general requirements [WAC 173-26-360(7)] and requirements for specific types of ocean uses [WAC 173-26-360(8)-(14)]. Since these existing regulations apply to various phases of project review, they are integrated and referenced throughout the relevant sections of the MSP management framework, including: project and site-specific information, effects evaluation, general review standards, and specific use review standards.

4.1.5 Relationship of Marine Spatial Plan to other existing state and local authorities and plans

Washington state law requires the Marine Spatial Plan (MSP) to be consistent with applicable state laws and programs and to be implemented through existing state and local authorities [RCW 43.372.040(6)(b) and RCW 43.372.040(6)(d)]. The law does not create new authority for state agencies nor does it affect projects or activities permitted prior to or during the development of the plan [RCW 43.372.060]. The Marine Spatial Plan does not create new regulations. All state and local agencies are responsible for implementing and adhering to the plan through existing regulatory and decision-making processes (see also interagency coordination in Section 4.2.2 and project and site-specific information in Section 4.4). Additional federal permits, licenses, leases, authorizations or consultations may also be required depending on the type and location of the ocean use activity.⁶ This section does not list out nor does it pertain to federal requirements.

1. State Permits and Authorizations

Most state and local authorities apply only within state waters between 0 and 3 nautical miles (n.m.) offshore. The Marine Spatial Plan provides the following key benefits to existing state and local authorities:

- a. Compiles inventory of baseline conditions and trends of uses and resources of the marine environment (Part 2 of Plan).
- b. Provides data analyses to fulfill plan requirements and support plan designations and recommendations (Part 3 of Plan).
- c. Provides recommendations on siting; site-specific information and assessments; effects analysis and monitoring and adaptive management for new ocean uses (Part 4 of Plan).
- d. Improves process for agency review, consultation and coordination. (Part 4 of Plan).
- e. Clarifies and further details the information needed to support the application of existing state laws and policies to potential new ocean uses (Part 4 of Plan).

The tables below provide more specific information on the existing state and local authorizations that may apply to projects in marine waters. The following state authorizations may be required for projects in marine environments, depending on the specific project type and location.

⁶ Examples of these include: Olympic Coast National Marine Sanctuary authorizations, US Army Corps of Engineers Section 10 permits, Federal Energy Regulatory Commission licenses, and consultations required under the Endangered Species Act.

Table 4.1.5-1: State Permits or Authorizations for Aquatic Projects

State Action ⁷	Agency	Primary Authority	Location	Focus Area/Purpose
Section 401 Certification	WA Dept of Ecology	Federal Clean Water Act – delegated by EPA to Ecology. In some areas EPA or tribes issue permits.	State Waters	Certifies that the project will comply with state water quality standards and other appropriate State laws
CZMA Federal Consistency Determination	WA Dept of Ecology	Federal Coastal Zone Management Act WA's approved Coastal Zone Management (CZM) Program	State and Federal waters	Evaluates federal actions to ensure consistency with CZM Program's approved enforceable policies. Allows state to evaluate federal actions that will affect state's coastal resources.
NPDES Construction Stormwater General Permit⁸	WA Dept of Ecology	Federal Clean Water Act - Section 402 delegated to Ecology In some areas EPA or tribes issue permits.	State Waters	Prevents or minimizes sediment, chemicals, and other pollutants from entering surface water as a result of clearing, grading, and excavation activities.
Aquatic Use Authorization	WA Dept of Natural Resources	Public Lands Act RCW 79.105	State-owned Aquatic Lands	Administers leases, easements, and rights-of-entry to authorize use of the seabed and Washington's marine waters.
Hydraulic Project Approval	WA Dept of Fish and Wildlife	Hydraulic Code RCW 77.55	State Waters	Allows for hydraulic projects in state waters – applies to any project that includes construction in state waters. Evaluates adequacy of protection of fish life.
Scientific Collection Permit	WA Dept of Fish and Wildlife	RCW 77.12.047	State Waters	Allows for collection of fish, shellfish, wildlife or next of birds for scientific investigation (i.e. not commercial sale or personal consumption). Specific requirements on methods and amounts may apply.
Trial Commercial Fishery Permit	WA Dept of Fish and Wildlife	RCWs: 77.12.047, 77.50.050, 77.60, 77.70, and 75.08.080	State Waters	Allows for trial harvest of newly classified species, or harvest of previously classified species in a new area or by new means, but no need to limit participation.
Experimental Fishery Permit	WA Dept of Fish and Wildlife	RCWs: 77.12.047, 77.50.050, 77.60, 77.70, and 75.08.080	State Waters	Allows for harvest in an emerging commercial fishery or expanding commercial fishery (need to limit participation).

⁷ Actions may be a permit, lease, easement, or other authorization. As a part of these various processes there are formal and informal consultations among various federal, state, local, and tribal authorities. The coordination process will vary by permit and lead agency.

⁸ This permit is triggered if more than 1 acre of upland lands is disturbed.

State Action ⁷	Agency	Primary Authority	Location	Focus Area/Purpose
Marine Finfish Aquaculture	WA Dept of Fish and Wildlife	RCW 77.12.047, 77.15.030, 77.125	State Marine Waters	Allows for an aquatic farmer to possess any species, stock or race of marine finfish in net pens, cages or other rearing vessels. Must have escape prevention, reporting and recapture plan. No transgenic fish are allowed.
Shellfish Aquaculture Transfer	WA Dept of Fish and Wildlife	RCWs: 77.12.047	State Waters	Allows for transfer of shellfish, shellfish aquaculture products, aquaculture equipment or any marine organisms adversely affecting shellfish.
Right of Way Permit	WA State Parks and Recreation Commission	Seashore Conservation Area (SCA) RCW 79A.05.605	Coastal beaches in the SCA	Protects conservation areas for public recreation, cultural, and educational experiences.

2. Local Authorizations or Plans

Washington's local governments, cities and counties, have a variety of authorizations and permits that may apply to ocean use projects, depending on the specific project type and location. The Marine Spatial Plan provides information, analyses and recommendations for local governments to consider and incorporate in these processes, particularly in updating and revising their local Shoreline Master Programs. To be consistent with the MSP, local governments on Washington's Pacific Coast will need to update their local programs and incorporate information, analyses and recommendations from the final, adopted plan.⁹ Other management plans may exist that would benefit by incorporating the MSP.

Table 4.1.5-2: Local Permits and Other Authorities for Aquatic Projects

Action ¹⁰	Agency	Primary Authority	Location	Focus Area/Purpose
Shoreline Master Program Permits¹¹	Local County or City	Shoreline Management Act RCW 90.58 and WAC 173-27 (Ocean Use Guidelines – WAC 173-27-360). Local Shoreline Master Program	State Shorelines, including state marine waters	Protects shoreline natural resources and public access while encouraging water dependent uses.
Critical Areas Ordinance Permits	Local County or City	Growth Management Act RCW 36.70A	County/city lands and waters	Protects locally designated critical areas such as wetlands, habitat conservation areas, and frequently flooded areas.

⁹ RCW 43.372.040(10) – the plan must identify any provisions of existing management plans that are substantially inconsistent with the plan.

¹⁰ Formal and informal consultations among various federal, state, local, and tribal governments occur as part of these processes. The process varies by permit and lead agency.

¹¹ Permits may include Exemptions, Shoreline Substantial Development Permits, Conditional Use Permits, or Variances.

Action ¹⁰	Agency	Primary Authority	Location	Focus Area/Purpose
Floodplain Development Permit	Local County or City	Flood Plain Management RCW 86.16	County/city floodplains	Reduces social and economic loss caused by flood events. Project may not increase potential for damage from flood waters.
SEPA	State agency or local – depends on project ¹²	State Environmental Policy Act RCW 43.21C	State (land or water) State or local review of project or plan	Requires state and local agencies to review proposals to identify environmental impacts.

4.1.6 How the MSP builds upon Washington's existing Coastal Zone Management Program

The Marine Spatial Plan for Washington's Pacific Coast contains information, policies and recommendations that build upon and further refine Washington's existing Coastal Zone Management Program (CZMP). The enforceable policies of Washington's CZMP include provisions from the following state laws:

- Shoreline Management Act (SMA)
- State Environmental Policy Act (SEPA)
- State Water Pollution Control Act and Clean Water Act
- Clean Air Washington Act and Clean Air Act
- Energy Facility Site Evaluation Council (EFSEC)
- Ocean Resource Management Act (ORMA)

In particular, the Ocean Resources Management Act (ORMA) requires state approvals for ocean uses to meet a number of broad policies and permit criteria including avoiding and minimizing significant adverse impacts to the environment, economy, and society. The MSP assists implementation of ORMA's requirements by identifying and analyzing important ocean resources and uses upfront and by further detailing the data, information, analyses, and processes needed to apply the policies and standards in ORMA and its regulations to permits, licenses or leases for new ocean uses in coastal waters. This, in turn, provides the information needed for Ecology to evaluate whether a federal action may have reasonably foreseeable effects on the state's coastal uses or resources and to ensure information and analyses are provided that help the state determine whether a federal action is consistent with the state's enforceable policies.

As part of its CZMP, Washington State may study federal waters and identify uses, resources and areas of federal waters that are of interest to the state. The state may not establish enforceable policies or regulatory standards for federal agencies, federal waters or federal lands. However, the data, information, policies, standards and recommendations contained within the MSP should assist federal agencies in the siting and regulation of new ocean uses, such as conducting environmental reviews, in federal waters adjacent to state waters. Ecology will be able to use the MSP data and maps to assess

¹² Federal projects/plans may trigger NEPA regardless of location.

coastal effects from a proposed project in federal waters, which will be helpful for conducting federal consistency reviews.

4.2 State Plan Implementation

The state will undertake a number of activities to implement the Marine Spatial Plan. These activities primarily fall into two categories: 1) Reviewing proposals for new ocean uses and 2) Other activities that assist in monitoring, evaluation, adaptation and revision of the plan.

Section 4.2.1, below, provides an overview of the state process for reviewing proposed new ocean uses, while Sections 4.3 - 4.8 provide spatial designations, standards, requirements, and recommendations that apply to proposed new ocean uses during different phases of the process. The following roadmap generally describes activities during these different phases of the process and sections of the management framework that apply to those phases.

New Ocean Uses Roadmap

Application Phase –

- Applicant consults MSP, review management framework, spatial designations, etc. and use to shape potential project ideas. (Entire MSP, Part 4, and Section 4.3)
- Applicant conducts pre-application meetings with agencies and stakeholder groups. Applicant continues to receive feedback from and respond to requests of agencies and others to refine proposed project. (Section 4.2.1)
- Applicant develops and submits required project and site-specific data and information through JARPA, SEPA checklist, and other mechanisms. (Section 4.4)
- Applicant submits additional project information, including construction/operation, mitigation, and other plans. (Section 4.7)

Review Phase –

- Lead agency assesses effects of and potential adverse impacts from project.
- Applicant submits written effects evaluation to Ecology. (Sections 4.5, 4.6 and 4.8)
- State agencies review project for consistency with existing laws and policies.

Section 4.2.2 outlines the other activities the state will take to implement the Marine Spatial Plan, such as monitoring and adapting the plan.

4.2.1 Implementation: Process for Reviewing Ocean Uses

1. State agency coordination of review of renewable energy and other new ocean uses

As noted in section 4.1, state and local agencies are required to implement the MSP consistent with their authorities (RCW 43.372.050). In addition, state and local agencies are required to follow the planning and project review criteria for ocean uses [RCW 43.143.030].

State law requires the MSP to develop a framework for coordinating state agency and local government review of proposed renewable energy developments and to provide for timely review and action upon renewable energy development proposals while ensuring protection of sensitive resources and minimizing impacts to other existing or projected uses in the area [RCW 43.372.040(6)(f)]. If renewable energy projects are proposed in federal waters off Washington, the state will evaluate requesting the establishment of a taskforce with Bureau of Energy Management (BOEM).

State and local agencies will coordinate their roles and review of new ocean use proposals, including the following:

- a. Pre-application Meetings – Request applicants hold meetings for potential project proposals with state and local agencies prior to submitting any applications for leases, licenses or permits. During the pre-application stage, state agencies will work together to:
 - i. Encourage applicants to use the Marine Spatial Plan to understand potential use and resource conflicts.
 - ii. Ensure applicants provide required data and information about the project and identify and coordinate with stakeholder groups as well as other governments, including local, tribal and federal government entities.
 - iii. Communicate state and local policies, procedures and requirements, including those referenced in the Marine Spatial Plan.
- b. Inventory – Review adequacy of site-specific inventory and requests for additional data or studies.
- c. Effects Analysis – Review adequacy of effects evaluation and proposed mitigation measures and best management practices.
- d. Plans – Review proposed construction and operation plans, including adequacy of prevention, monitoring, and response plans.

The interagency team (State Ocean Caucus) will assess needs to further specify how best to coordinate on individual, proposed projects and to create more detailed agreements for the review process, as needed.

2. Government coordination (local governments, tribes, federal agencies)

Tribes, local governments and federal agencies also play an important role in reviewing proposed ocean uses. The state is committed to collaborating and communicating with other government entities on the review of proposed ocean uses, including:

- a. Ensuring government entities receive early notification of proposed projects and activities. State agencies will share information regarding potential projects with other government entities and assist applicants in identifying other government entities to contact.

- b. Discussing and determining how best to communicate and coordinate given a proposed project's type, location and scale. This may include convening a government coordination and review team to streamline communication and coordination between the applicant and government entities.
- c. Understanding each others' interests, needs, and concerns regarding proposed ocean uses.
- d. Recommending best available scientific information and other information to evaluate potential impacts of a proposed ocean use.

3. Stakeholder input

- a. Applicants should involve stakeholders and the public in all aspects of project development and review, including:
 - i. Working collaboratively with stakeholders, including but not limited to fishing, aquaculture, maritime commerce, conservation, tourism, and recreation interests, and the Washington Coastal Marine Advisory Council;
 - ii. Providing timely and effective notice, including early notification to the Washington Coastal Marine Advisory Council; and
 - iii. Initiating both formal and informal pre-application discussions between stakeholders and applicants. [WCMAC recommendation 3.1.1 and 3.1.3]
- b. Applicants and agencies should provide stakeholders and the public with early notice and opportunity to review and comment at key stages on various studies and assessments produced for the project, including social, economic, and environmental impact assessments. Applicants or agencies should provide response to comments and third party review of economic assessments. [WCMAC recommendations 1.1.1, 1.3.2]

4. Fisheries groups

The marine spatial planning law requires: "Any provision of the marine management plan that does not have as its primary purpose the management of commercial or recreational fishing but that has an impact on this fishing must minimize the negative impacts on the fishing. The team must accord substantial weight to recommendations from the director of the department of fish and wildlife for plan revisions to minimize the negative impacts." [RCW 43.372.040(8)].

Therefore, the following process is set out for new ocean use projects to identify potential adverse impacts to state commercial and recreational fisheries and opportunities to avoid, minimize or mitigate those impacts [WCMAC recommendation 3.1.2 and RCW 43.143.030(2)].

- a. Applicants will notify the Washington State Department of Fish and Wildlife regarding a potential project proposal, as early as possible, including likely location(s) of the project.

- b. The Washington Department of Fish and Wildlife will then notify established fishing advisory groups and license and permit holders for potentially affected commercial and recreational fisheries.
- c. Applicants will coordinate with WDFW and commercial and recreational fisheries on an effective process and schedule to identify and discuss potential adverse impacts on commercial and recreational fisheries and opportunities to avoid, reduce, or minimize impacts, which may require multiple meetings. Applicants must hold at least one meeting with WDFW and affected commercial and recreational fisheries (See Section 4.2.1.5).
- d. The director of WDFW will provide recommendations on ways to minimize impacts to fishing to Department of Ecology's federal consistency coordinator during the project review process [RCW 43.372.040(8)].

5. State's review of federal activities under the Coastal Zone Management Act and Necessary Data and Information:

The Washington Coastal Zone Management Program (administered by Department of Ecology) will review the consistency certification together with the required necessary data and information to ensure the project is consistent with the approved enforceable policies of the Washington Coastal Zone Management Program.

Specifically, 15 C.F.R part 930.58 describes that applicants for federal licenses, permits or leases must provide the Washington Coastal Zone Management Program with the consistency certification and:

- A detailed description of the proposed activity, its associated facilities, the coastal effects, and comprehensive data and information to support the applicant's consistency determination.
- Maps, diagrams, technical data and other relevant material, when written a description alone will not adequately describe the proposal.
- A copy of the federal application and all supporting material provided to the Federal agency.
- An evaluation that includes a set of findings related to the coastal effects of the proposal and its associated facilities to the relevant enforceable policies of the management program.

This Marine Spatial Plan Management Framework has organized and identified the specific information requirements that will satisfy these bullets above, for new ocean use projects; this includes: the fisheries process in Section 4.2, the spatial designations and recommendations in Section 4.3, information listed in Sections 4.4, 4.5, and 4.7, and compliance with applicable standards in Sections 4.6 and 4.8. Applicants will need to provide all of this information to enable the state to complete the consistency review process for a new ocean use project.

Additionally, for federal permit, license or lease applicants, the marine spatial plan identifies the following as Necessary Data and Information¹³ for purposes of starting the CZMA 6-month review period for federal license or permit activities under 15 C.F.R. part 930, subpart D, and OCS Plans under 15 C.F.R part 930, subpart E, pursuant to 15 C.F.R. 930.58(a)(3):

- A notice of proposed project that applicant provided to Washington Coastal Marine Advisory Council¹⁴ chair and membership (see Section 4.2.1.3(a)(ii)).
- A meeting with WDFW and affected commercial and recreational fisheries (see [Section 4.2.1.4\(c\)](#)).
- A list of alternatives considered, including other project sites, and reasons they were rejected [RCW 43.143.030(2)(b)]. Alternatives considered should be commensurate with the need for the proposed use [WAC 173-26-360(7)(d)].
- An assessment of the short and long-term economic and social impacts to the local and regional economies and communities, including tourism, recreation, fishing, aquaculture, navigation, transportation, public infrastructure, public services and community culture [WAC 173-26-360(t)]. Without this information the state will not be able to begin evaluating whether a project has potential for long term significant adverse impacts to coastal uses or will comply with current enforceable policies regarding social and economic impacts and [RCW 43.143.030(2)(c)(e)].

Within federal waters adjacent to Washington's state waters, Department of Ecology will review federal decisions to permit, license, or otherwise authorize ocean uses that have reasonably foreseeable effects on the state's coastal resources or uses for consistency with the Marine Spatial Plan and the applicable enforceable policies of the Washington Coastal Zone Management Program pursuant to the federal Coastal Zone Management Act and federal consistency regulations at 15 CFR Part 930.¹⁵ The Department of Ecology may use the data and maps provided in the MSP for federal waters to assess coastal effects, but Washington's CZMA federal consistency concurrence or objection must be based on enforceable policies contained in the NOAA-approved Washington Coastal Zone Management Program.

¹³ Other existing Necessary Data and Information is described in Washington's approved Coastal Program document.

¹⁴ The Washington Coastal Marine Advisory Council was established in the office of the governor by RCW 43.143.050 with duties outlined in 43.143.060.

¹⁵ Whether a particular federal license or permit activity proposed in federal waters is subject to Washington review depends on whether the state has, pursuant to 15 CFR § 930.53, (1) listed the federal authorization in the Washington Coastal Management Program, and (2) the proposed listed activity falls within a NOAA-approved "Geographic Location Description" (GLD). If Washington has not listed the activity and does not have a NOAA-approved GLD, the state can seek NOAA approval to review a project on a case-by-case basis as an "unlisted activity" pursuant to 15 CFR § 930.54. If a federal action, including the issuance of any federal authorizations, is subject to Washington CZMA review, it shall be supported by the information required in NOAA's regulations at either 15 CFR §§ 930.39, 930.58 or 930.76.

Federal actions, including the issuance of any federal authorizations that are subject to Washington's CZMP review, shall be supported by the information required in NOAA's regulations at either 15 CFR §§ 930.39, 930.58 or 930.76.¹⁶

6. Recommendations for federal agencies and federal waters

The state will follow the processes outlined above for reviewing new proposals for ocean uses. Furthermore, the state recommends federal agencies use the data, information, processes, and recommendations in the Marine Spatial Plan to guide their planning and review of proposed ocean uses, including in federal waters adjacent to Washington's Pacific Coast [as required by RCW 43.372.040(6)(d)]. Other sections that include references to federal activities or federal waters include Sections 4.2.1.5, 4.2.2, and 4.3.1.

4.2.2 Implementation: Other State Activities and Recommendations

Plan implementation by state agencies depends on available resources, capacity, priorities, and opportunities to leverage outside expertise and resources. To account for these factors and variations, the interagency team (State Ocean Caucus) will seek input on and further develop more detailed work plans that specify roles, tasks, timelines and processes for implementing these activities.

1. Finalize Ecosystem Indicators

Ecosystem indicators provide important context for decision-making. Ecosystem-level ecological integrity indicators provide important insights into the big-picture of ecosystem health. The current list of ecological and social indicators is too long to be an effective management tool or operationalized (Andrews, Coyle, & Harvey, 2015; Poe, Watkinson, Trosin, & Decker, 2015). While the economic indicators report provides a list of the top 5 economic indicators, the economic indicators report lists other potential economic indicators (Decker, 2015).¹⁷ More work is needed to refine and select key indicators for monitoring ecosystem health for Washington's Pacific Coast as required by RCW 43.372.040(6)(a).

In implementing the plan, state agencies will work with federal agencies, tribes, Washington Coastal Marine Advisory Council, and others to refine the current list of ecosystem indicators using the steps outlined below.

¹⁶ The regulations for federal consistency with approved state coastal programs are prescribed in 15 CFR Part 930. "Energy projects" are defined under 15 CFR § 930.123(c) to mean "projects related to the siting, construction, expansion, or operation of any facility designed to explore, develop, produce, transmit or transport energy or energy resources that are subject to review by a coastal State under subparts D, E, F or I of this part."

¹⁷ From this report, suggested top economic indicators include: Gross Regional Product; Month-to-Month Unemployment, Per Capita Income, Job Diversity, and Poverty Rate.

The state interagency team (State Ocean Caucus) will leverage existing expertise and seek additional resources, where necessary, to follow through on these process steps to finalize ecosystem (ecological, social, and economic) indicators:

- a. **Establish Management Priorities:** Convene state, federal and tribal resource managers to narrow large pool of potential ecosystem indicators to manageable list. Identify key priority indicators using conceptual models to refine why they are meaningful to various managers/management actions. Identify baselines and targets, where able.
- b. **Enlist Experts to Perform Sensitivity Assessments:** Use models to test sensitivity of key indicators to management actions and scenarios. Evaluate effectiveness of current monitoring strategies.
- c. **Monitor Indicators:** Create list of indicators for monitoring and pursue funding or adjustment in current monitoring efforts to address any gaps.
- d. **Evaluate and Adapt Indicators:** Revisit indicators on regular basis and revise list of indicators as needed to target most effective set of monitoring for management needs.

2. Science and Research Agenda

The interagency team (State Ocean Caucus) will develop and implement a Pacific Coast Science and Research Agenda using an inclusive process with researchers, tribal, federal, state and local governments, the Washington Coastal Marine Advisory Council and others, to improve scientific information available for managing ocean resources. The Science and Research Agenda will allow the state to:

- a. Continue to learn about Washington's Pacific Coast resources and activities;
- b. Better understand potential effects of future developments and other human impacts; and
- c. Increase understanding of projected impacts of climate change and other changes occurring in the marine system.

Building off of work begun in the marine spatial planning process, the state will bring together key scientists, ocean users, government agencies, and others to help the state identify data gaps, short- and long-term research priorities, potential partners and potential funding sources. Along with the efforts to finalize ecosystem indicators, the Science and Research Agenda provides a process to identify additional data gaps and to work to acquire new scientific data to strengthen plans [RCW 43.372.005(3)(b)] as well to determine how best to maintain, manage and update existing datasets, including enabling assessment of status and trends [WCMAC 4.1.1].

3. List substantially inconsistent existing management plans and provide recommendations on aligning plans [if needed, as required by 43.372.040(10)]
4. **Incorporate MSP into Washington's Coastal Zone Management Program.**

As required by RCW 43.372.040(12), Department of Ecology plans to submit the final MSP to NOAA to be incorporated into its federally-approved Coastal Zone Management Program (CZMP). Once NOAA approves of the incorporation of any information and enforceable policies within the MSP into Washington's CZMP,¹⁸ they are applicable to those federal actions that affect the uses or resources of Washington's coastal zone and are subject to the federal consistency requirements of the federal Coastal Zone Management Act.¹⁹ (See 15 C.F.R. Part 923, Subpart H; and 15 C.F.R. § 930.53).

Say more here about GLD application and other next steps?

5. **Sediment management planning and coastal erosion monitoring**

Keeping sand in our coastal littoral systems (i.e. placing the sand on the beach or as close to the beach as possible) protects vulnerable coastal areas from the effects of coastal storms, helps maintain beaches and dunes, maintains and enhances important habitat, and supports public access and use of shorelines.

- a. As state funding allows, state agencies will continue to monitor shoreline change on the Washington coast and provide technical assistance to help communities understand the implications of data. [WCMAC rec. 1.2.4]
- b. State agencies will continue to support and advance implementation of the Mouth of the Columbia River Regional Sediment Management Plan and other local plans aimed at addressing navigation safety and beneficial use of dredge materials. [WCMAC rec 1.2.2]

¹⁸ According to NOAA regulations and guidance, to be incorporated and approved into Washington's CZMP, the spatial designations, recommendations, and other standards included in the MSP and applied to ocean uses should be based on coastal effects and substantial evidence. They should not discriminate against a particular use, user or activity.

¹⁹ Whether a particular federal license or permit activity proposed in federal waters is subject to Washington review depends on whether the state has, pursuant to 15 CFR § 930.53, (1) listed the federal authorization in the Washington Coastal Management Program, and (2) the proposed listed activity falls within a NOAA-approved "Geographic Location Description" (GLD). If Washington has not listed the activity and does not have a NOAA-approved GLD, the state can seek NOAA approval to review a project on a case-by-case basis as an "unlisted activity" pursuant to 15 CFR § 930.54. If a federal action, including the issuance of any federal authorizations, is subject to Washington CZMA review, it shall be supported by the information required in NOAA's regulations at either 15 CFR §§ 930.39, 930.58 or 930.76.

- c. Through their permitting and authorizations, state agencies will work in partnership to evaluate new dredge disposal sites to ensure they are consistent with these other plans.

6. Government Coordination

Washington State is committed to coordination and communication with local governments, tribes, federal agencies and other states on Washington's Marine Spatial Plan on an ongoing basis. The interagency team (State Ocean Caucus) will pursue mechanisms that foster recognition of and implementation of each others' plans. Such efforts can:

- a. Continue to improve our understanding of and management of ocean and human uses through ongoing data collection, maintenance, and prioritization.
- b. Foster greater collaboration and communication among government entities in an efficient and strategic manner.
- c. Assist in marine spatial plan implementation and adaptation, including integration with tribal plans and federal recognition and use of Washington's Marine Spatial Plan.

7. Adaptive Management of plan and plan updates [WCMAC 4.1.2]

Since conditions change over time, plans benefit by having a regular process to review and adapt the plan as needed. Recognizing this need, this section addresses the adaptive management element, which is also required by the MSP law.²⁰ Using the processes described in the plan implementation section:

- a. The interagency team will address minor revisions to update information and clarify plan processes on an ongoing basis, as needed.
- b. The interagency team will identify new information and update data on the website, as resources allow. The mapping application is designed to automatically receive updated data from many, but not all, data sources.

Using the Plan Performance Monitoring and Ecosystem Indicator Monitoring processes, the Washington Coastal Marine Advisory Council and others will be involved in regularly reviewing implementation of the Marine Spatial Plan and in identifying potential revisions to the Marine Spatial Plan. The interagency team recommends reviewing the entire plan at least every 8 years and that funding be provided for the plan review process. The interagency team will evaluate if conditions warrant a more major revision to the plan prior to the suggested review period.

²⁰ In addition, the plan should incorporate existing adaptive management strategies underway by local, state, or federal entities and provide an adaptive management element to incorporate new information and consider revisions to the plan based upon research, monitoring, and evaluation. [RCW 43.372.0040(6)(a)]

8. Plan Monitoring and Reporting Measures

This is the performance monitoring goal, include “establish a performance management system to monitor implementation of any new marine spatial plan” [as required by RCW 43.372.005(3)(g)] and “Ensure all plans are linked to measureable environmental outcomes” [as required by RCW 43.372.005(3)(f)].

The agencies will monitor plan performance to assess progress on implementation, including the following monitoring activities:

- a. Regularly engage Washington Coastal Marine Advisory Council, the public and others in discussions and reviews of implementation of the Marine Spatial Plan including: exchanging new research findings, information and data; discussing strategies to strengthen implementation, including identifying any existing management plans that are inconsistent with the Marine Spatial Plan²¹; and identifying emerging issues and potential plan revisions.
- b. On an ongoing basis, the state agencies will assess progress of the Marine Spatial Plan including the following activities:
 - i. Establishing and monitoring ecosystem indicators.
 - ii. Other activities implementing the plan described in this section.
 - iii. Plan effectiveness and governance, including decisions, policy implementation, lessons-learned and adaptations.

This information will be conveyed on the website and formally reported to the public annually.

- c. Four years following the adoption of the Marine Spatial Plan, Ecology, in coordination with the interagency team (State Ocean Caucus), will report to the State Legislature (i.e. marine waters committees in the House and Senate) on provisions of existing management plans that are substantially inconsistent with the Marine Spatial Plan and make recommendations for eliminating the inconsistency per RCW 43.372.050(3) (see Section 4.1.5).

Insert graphic/table on plan potential performance indicators metrics?

4.3 Spatial Data, Designations and Recommendations

This section provides spatial designations and recommendations regarding use of spatial data developed in the plan. These spatial designations and recommendations are designed to provide early guidance on criteria for avoiding significant adverse impacts to important resources and uses through initial site selection [43.143.030(2)]. While this section can assist applicants in identifying impacted

²¹ This will assist with reporting required four years after adoption of the plan per RCW 43.372.050(3).

resources and users and in early elimination of potential sites and scales of projects, using the spatial designations below does not guarantee that a project will satisfy state criteria.

4.3.1 Federal Waters and MSP maps

States do not have direct permitting authority in federal waters and the Coastal Zone Management Act (CZMA) does not confer such authority. Therefore, to meet CZMA requirements, state plans, enforceable policies, and Important Sensitive and Unique (ISU) areas must only apply to areas of state jurisdiction. The Washington Marine Spatial Plan is a planning framework for the state and will be incorporated into the NOAA-approved Washington Coastal Zone Management Program (CZMP). To meet the CZMA's definition of "enforceable policy" and NOAA's corresponding regulations, the Marine Spatial Plan only applies to state waters (3 nautical miles). Under the CZMA (15 CFR 930.53 and 930.54), Washington has the opportunity to review federal activities outside of state waters that have reasonably foreseeable effects on coastal resources and uses of the state. Any enforceable policies, ISUs and other designations in this MSP that ultimately get approved by NOAA would be applicable to this process [see section 4.2.2(5)].

The MSP maps [insert specific Figure references] and available on the MSP website, accompany the plan's enforceable policies to show spatially where certain areas and resources are located in both state and federal waters. The data and maps pertaining to federal waters are not enforceable elements of the Marine Spatial Plan for Washington's Pacific Coast [see sections 4.1.6 and 4.2.2.5 for more details on the linkage to the state's federally approved Coastal Zone Management Program].

4.3.2 Marine Spatial Planning Data and Analyses

The data and analyses contained in the MSP provides important context to enable the state to review and influence projects in federal waters. It also provides important information for federal agencies to use when reviewing proposals for leases, licenses or permits and for applicants to consider when proposing ocean uses. The plan's information provides applicants and governments with the ability to:

- View other known activities, resources, interests, designations and authorities that may conflict or complement with a proposal.
 - Identify potential ways to avoid, minimize and mitigate adverse impact prior to submitting an application, including alternative locations and configurations of projects.
 - Identify appropriate parties to discuss the proposal with prior to submitting an application.
1. For projects in federal or state waters, applicants and agencies should use data presented in the Washington Marine Spatial Plan to understand and evaluate potential impacts to existing uses and resources, including any updated data available. Additional site specific analyses will be needed to further evaluate potential impacts from a particular proposal. Major data sources of the plan that should be reviewed and considered, include:
 - a. Baseline information on Washington's Pacific Coast, including maps of existing uses and resources (see Part 2).
 - b. Spatial analyses that aggregate and illustrate this information in various ways and convey key findings (see Part 3).

- c. Spatial designations, recommendations and approaches that identify areas that are incompatible for certain projects or activities in state waters (Part 4 – this section).
 - d. The online, Marine Spatial Planning [Mapping Application](#) provides a reference to access and view baseline information on existing human uses and ocean resources, including any updated data available after adoption of the plan.
2. Other Ocean Uses - The Marine Spatial Plan provides baseline information and analyses that can assist applicants and agencies in evaluating potential impacts from other potential new ocean uses such as offshore aquaculture, mining (sand/gravel, methane hydrate), bioextraction, and new dredge disposal sites. There is limited spatial data available on the areas of interest for these potential uses and the spatial scale of some uses is too small for some of the plan's analyses (see Part 3) to be helpful in guiding specific siting.

4.3.3 Important, Sensitive and Unique Areas (ISUs)

State law requires the Marine Spatial Plan to identify environmentally sensitive and unique resources that warrant protective measures [RCW 43.372.040(6)(c)]. Therefore, the plan is designating Important, Sensitive and Unique (ISU) Areas in state waters to protect these areas from new ocean use developments while allowing existing uses such as fishing that currently occur within them. ISUs are specific areas that meet established criteria with the goal of protecting areas that have high conservation value, historic value or areas with key infrastructure from offshore development. Consistent with this goal, all offshore development is presumptively excluded from ISUs occurring in state waters.

The following ISUs have been proposed by reviewing current knowledge and available data developed through the MSP process [refer to ISU maps]. Data gaps exist in mapped information for ISUs and maps presented in the plan depicting ISUs may be superseded by more detailed, site-specific maps created with finer resolution data. ISU designation extends to those areas defined below wherever those ISUs occur and regardless of data gaps. Additional ISUs may be identified and designated at a later date. The criteria below were used to identify the current, proposed ISUs:

1. ISU Criteria

- a. Areas that are environmentally sensitive or contain unique or sensitive species or biological communities that must be conserved and warrant protective measures [RCW 43.372.040(6)(c)].
- b. Areas with known sensitivity and where the best available science indicates the potential for development to cause significant adverse impacts.
- c. Areas with features that have limited, fixed and known occurrence.
- d. Areas with inherent risk or infrastructure incompatibilities (e.g. buoys or cables).

2. ISUs

- a. Biogenic Habitats: Aquatic vegetation and coral
- b. Rocky Reefs
- c. Bird colonies
- d. Pinniped haul-outs

- e. Historic and archaeological sites
- f. Buoys and cables
- g. Forage fish spawning areas

Offshore development²² of any size is presumptively excluded from these ISUs within state waters, whether they are mapped or not. This presumption is rebuttable, if an applicant can demonstrate: i) that the ISU maps do not accurately characterize the resource or use based on new or substantial information or ii) by clear and convincing evidence that the project will cause no significant alteration of the resources of the ISU.

Coastal estuaries, including Grays Harbor and Willapa Bay, are important ecological areas and are heavily used by existing uses and their associated infrastructure. They are home to critical saltwater habitats²³ and Priority Habitats and Species²⁴, such as spawning and juvenile rearing areas, aquatic habitats (e.g. eelgrass, kelp, mudflats, and shellfish beds), state-listed or candidate species, vulnerable aggregations, and species of commercial, recreational or tribal importance. While estuaries themselves are not designated as an ISU, many ISUs occur within estuaries. Since the density of uses and resources is higher in estuaries and the resolution and availability of current data is inadequate to aid in detailed siting, a more detailed and finer-scaled analysis for proposed projects will be required to provide special protection to the marine life and resources of the estuaries and to ensure all reasonable steps are taken to avoid and minimize impacts to the habitats, species, and uses in estuaries [RCW 43.143.030(2)(d) and RCW 43.143.030(2)(e)].

4.3.4 Spatial Recommendations

1. Further evaluation of proposed projects, in state waters, should occur on a case-by-case basis. Projects would still need to provide information, meet criteria and statutory requirements, and follow the process described in the MSP. When proposing any projects, applicants should seek to avoid adverse impacts to existing uses and ecological areas in state waters. The greater the number of existing uses and ecologically important areas or the greater intensity of uses or ecologically important areas will likely result in a more difficult permitting process.
2. Specific to Renewable Energy: Where particular uses have similar coastal effects (e.g. structures or cables), applicants should use the criteria, information and process described for renewable energy as a starting point.

In state waters on Washington's Pacific Coast, industrial-scale renewable energy facilities should not be permitted to avoid significant adverse impacts to existing uses and resources. Community-scale renewable energy facilities proposed for state waters

²² Development under the jurisdiction of the Shoreline Management Act is defined at RCW 90.58.030(3)(a) as "a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level." For purposes of the MSP, "offshore development" means any development occurring in the plan study area that also meets the definition of a new ocean use.

²³ "Critical Saltwater Habitat" is defined in Shoreline Management Regulations at: WAC 173-26-221(2)(c)(iii)(C).

²⁴ Washington Department of Fish and Wildlife identifies and maintains information about "Priority Habitats and Species", more information at: <http://wdfw.wa.gov/conservation/phs/>.

will be further evaluated for consistency with state policies, plans and authorities through existing permitting processes. The following definitions apply:

- a. **Industrial-scale Renewable Energy Facilities:** are those projects designed to provide energy at a scale for the regional power grid. Their size and energy generation is larger than those described as community-scale facilities and, therefore, would result in a larger footprint for development.
- b. **Community-scale Renewable Energy Facilities:** are those projects designed to provide energy at scale for a local community, subset of a community, or group of communities. Community-scale energy projects have:
 - i. A smaller size and energy generation levels more suited to the needs of a community than production and distribution to the regional grid and, therefore, a smaller footprint for development than an industrial-scale facility.
 - ii. Strong local participation in and support for the project. Support may be demonstrated by a letter from city's Mayor or City Council.
 - iii. Demonstrated economic benefit for the local community.

4.4 Project and Site-specific Data and Information

Applicants shall provide information listed below to regulating agencies at the earliest stage to assist with local and state required processes, permit, and leases [see WACs 197-11-100, 197-11-315, and 197-11-960]. This information enables evaluation of the magnitude of a project, the likelihood of effects from a project, and the significance of resources and uses that the project may affect. Applicants for construction and development activities in state marine waters can complete a Joint Aquatic Resources Permit Application (JARPA), which consolidates the initial information needed for multiple local, state, and federal permits and provides information on the status of SEPA review.

The list of project and site-specific data and information below is consistent with these existing application requirements (WAC 197-11-315) and provides specific details support agency implementation of existing state ocean policies and regulations and the MSP for Washington's Pacific Coast. In addition, applicants shall produce a written effects evaluation that addresses the requirements with any review standards that apply (See Sections 4.5, 4.6, and 4.8).

Table 4.4-1 Project and Site-specific data and information requirements

Type of Information	Including, but not limited to:	Specific types of data and information
Project information	<p>Project purpose, need (i.e. local, state, or national need) and anticipated benefits</p> <p>Location of alternative sites considered and why they were rejected [RCW 43.143.030(2)(b)]</p> <p>Total project footprint: number and sizes of equipment, structures, and anchors</p> <p>Methods, techniques and activities</p>	<p>Alternatives considered should be commensurate with the proposed need of project (e.g. national need requires, national alternatives) [WAC 173-26-360(7)(d)].</p>

	<p>Transportation and transmission systems for service and support</p> <p>Onshore facilities</p> <p>Utility corridors used or created</p> <p>Materials to be disposed and methods</p> <p>Physical and chemical properties of any hazardous materials used or produced</p> <p>Proposed time schedule</p>	
Physical and chemical conditions	<p>Water depth</p> <p>Wave regime</p> <p>Current velocities</p> <p>Mixing characteristics (horizontal transport, vertical mixing and dispersal)</p> <p>Meteorological conditions</p> <p>Water quality</p>	<p>Survivability assessment for structures based on physical and geological conditions at the site and expected in the future. [WCMAC 1.2.6]</p> <p>Adjacent area affected by physical changes in currents, waves or sediment transport caused by project. [WAC 173-26-360(10)(a)]</p>
Bathymetry	<p>Bottom topography (bathymetry)</p> <p>Shoreline topography</p>	
Geologic structure	<p>Bottom substrate type (rock, mud, sand)</p> <p>Faults</p> <p>Submarine landslides</p> <p>Other geologic hazards</p> <p>Mineral deposits</p> <p>Hydrocarbon resources</p>	
Biological features	<p>Critical and sensitive habitats: wetlands; sea stacks; estuaries, etc.</p> <p>Areas used for breeding, spawning, nursery, foraging and areas of high productivity areas for marine biota: upwelling and estuaries.</p> <p>Bird colonies</p> <p>Marine species migration routes</p> <p>Fish and shellfish stocks and other biologically important species</p> <p>Endangered and threatened species or their habitats</p> <p>Recreationally or commercially important finfish or shellfish</p> <p>Scientific preserves, sanctuaries, parks, refuges, and other protected areas</p> <p>[WAC 173-26-360(7) and WCMAC 1.3.1]</p>	
Historical, cultural or archaeological resources	<p>Historic or culturally significant sites, including any archaeological sites or objects.</p> <p>[WAC 173-26-360(7)(l)]</p>	<p>For new uses that will impact the ocean floor, conduct a high-resolution seafloor</p>

		archeological assessment [WCMAC 1.2.3]
Economic, social and cultural uses	<p>Aquaculture operations (private and public lands), oyster reserves, shellfish growing areas.</p> <p>Commercial and recreational fishing</p> <p>Coastal communities economy</p> <p>Designated dredge disposal sites, ports and navigation</p> <p>Recreation, including parks and designated recreation areas [WAC 173-26-360(7)(k)]</p> <p>Scientific research</p> <p>Military uses</p> <p>Tourism</p> <p>Aesthetic resources</p> <p>Existing aquatic land leases</p> <p>Local shoreline master program environment designation [WCMAC 3.1.4]</p> <p>Waste water or other discharge [WAC 173-26-360(7)(t)]</p>	<p>Where applicable, inventory should include information on established, traditional and recognized times of uses.</p> <p>Current information on uses, including data covering multiple years and seasons, when available. [WCMAC 4.1.3]</p> <p>Conceptual site drawings of visual impacts [WCMAC 1.2.5]</p>
Infrastructure	<p>Existing infrastructure: navigation aids, cables, buoys or other fixed structures.</p> <p>Utility or pipeline corridors and transmission lines</p> <p>[WAC 173-26-360(7)(t)]</p>	
Tribal uses	<p>Usual and Accustomed Areas</p> <p>Tribal fishing and other uses</p>	

Regulating agencies may determine and request other information from applicants to enable the evaluation of the effects of a proposed project [WAC 197-11-335].

4.5 Effects Evaluation

To enable evaluation of compliance with the state's ocean use policies and regulations, including the criteria at RCW 43.143.030(2), applicants must provide a written effects evaluation that complies with the contents in Section 4.5 and the applicable Review Standards (Sections 4.6 and 4.8). The evaluation must include the reasonably foreseeable adverse effects associated with the development, placement, operation, and decommissioning of a proposed new ocean use on Washington State's coastal resources or uses. This section does not provide the full list of other state laws and policies or requirements with which an applicant will have to demonstrate compliance (see Section 4.15 and 4.1.6).

The processes set out in Section 4.2.1 will assist applicants in identifying potentially adverse impacts to Washington's coastal resources and uses. For purposes of the evaluation, the submittal shall base the determination of "reasonably foreseeable adverse effects" on scientific evidence. Applicants should use up-to-date data that is adequate to evaluate the project and its potential effects. If new data gathering is required, it should be done at the applicants' expense. When it exists, data should include multiple years and multiple seasons within those years [WCMAC 4.1.3].

In addition, applicants shall provide information that addresses their compliance with the applicable review standards [Sections 4.6 and 4.8]. The evaluation shall describe the potential short-term and long-term effects of the proposed new ocean use on marine resources and uses of Washington's marine waters, continental shelf, onshore areas and coastal communities based on the required project and site-specific data [Section 4.4] and the following considerations:

1. Ecological Effects

Ecological effects include those on critical marine habitats and other habitats, and on the species those habitats support. The evaluation shall determine the probability of exposure and the magnitude of exposure and response, as well as the level of confidence (or uncertainty) in those determinations. The evaluation need not discuss highly speculative consequences. However, the evaluation shall discuss catastrophic environmental effects of low probability. Factors to consider include, but are not limited to:

- The time frames/periods over which the effects will occur;
- The maintenance of ecosystem structure, biological productivity, biological diversity, and representative species assemblages;
- Maintaining populations of threatened, endangered, or sensitive species;
- Vulnerability of the species, population, community, or the habitat to the proposed actions; and
- The probability of exposure of biological communities and habitats to adverse effects from operating procedures or accidents.

The following additional factors should be specifically evaluated and addressed:

- a. Impacts to habitats and species, including:
 - i. Impacts on migration routes and habitat areas of species listed as endangered or threatened, environmentally critical and sensitive habitats such as breeding, spawning, nursery, foraging areas, bird colonies, sea stacks, and wetlands, and areas of high productivity for marine biota such as upwelling and estuaries [WAC 173-26-360(7)(j)(n) and WCMAC 1.3.1]
 - ii. Impacts to sensitive and important habitat of commercially, recreationally and ecologically valuable species [WCMAC 1.3.1]
 - iii. Potential for direct injury or harm to species, including ESA listed and commercially valuable species (e.g. strikes, entanglement, etc.), or indirect injury related to exposure to noise, light, vibration, electromagnetic fields or other related stressors associated with the new use. [WCMAC 1.3.1]
 - iv. Risk for invasive species introductions and impacts, if applicable. [WCMAC 1.3.1 and 1.3.4]
- b. Effects to air and water quality [WAC 173-26-360(7)(t)], including potential degradation of water quality (chemicals, petroleum products, nutrients, oxygen, temperature, acidification, etc.). [WCMAC 1.3.1]
- c. Effects to physical processes, including, but not limited to, currents and waves, sediment processes, coastal erosion and accretion, electromagnetic fields, acoustics and wave amplification. [WCMAC 1.3.1]
 - i. For marine renewable energy projects, assess effects on upwelling oceanographic, ecosystem processes, beach accretion or erosion, and wave processes. [WAC 173-26-360(10)(a)(b)]

- d. Effects of projected coastal erosion, future sea-level rise, and other climate change impacts on the proposed project over the anticipated life of the project [WCMAC 1.2.4]
- e. Unintended impacts, including, but not limited to, impacts to the food chain, changes to physical processes, introduction of disease or genetic pollution, and access to existing resources. [WCMAC 1.3.1]

2. Current Uses

Evaluate the effects of the project on current uses and the continuation of a current use of ocean resources such as fishing, recreation, navigation, and port activities. Factors to consider include, but are not limited to:

- a. Social and economic impacts to local and regional economies and communities; including tourism, recreation, fishing, aquaculture, navigation, transportation, public infrastructure, public services and community culture [WAC 173-26-360(t)]. The assessment should address:
 - i. Short and long-term economic and social costs and benefits to the affected community, including social costs to vulnerable ocean users, potential impacts on taxpayers. The costs and benefits to larger economy (state, regional, national). Assessment of various scenarios, including full project footprint and scenarios where new use fails or is abandoned or decommissioned. [WCMAC recommendation 1.1.1]
 - ii. The risk proposed structures pose for entangling fishing gear or other debris [WCMAC 1.2.7]
 - iii. Established, traditional and recognized times of renewable ocean resource uses and site-specific impacts to current uses, including, but not limited to, fishing, aquaculture, and recreation. [WAC 173-26-360(7)(m) and WCMAC 3.1.4]
- b. Recreational activities and experiences such as public access, aesthetics, and views [WAC 173-26-360(7)(s) and WCMAC 1.2.5]
- c. Archeological and historical resources [WAC 173-26-360(7)(l)]; and
- d. Transportation safety and navigation, including
 - i. A vessel traffic risk assessment or a risk-based modeling to evaluate navigational safety risks. [WCMAC 1.2.1]

3. Natural and Other Hazards

Evaluate the potential risk to the new ocean use, in terms of its vulnerability to certain hazards and the probability that those hazards may cause loss, dislodging, or drifting of structures, buoys, or facilities. Consider both the severity of the hazard and the level of exposure it poses to the renewable marine resources and coastal communities. Hazards to be considered shall include:

- a. Based on the characteristics of the use and the environment, risk of and potential impact from a probable disaster, including explosions, spills, and other disasters, on the environment, adjacent uses, and communities. [WAC 173-26-360(7)(o) and WCMAC 1.3.1]

4. Cumulative Effects

Evaluate the cumulative effects of a new ocean use project, including the shoreland components, in conjunction with effects of any prior phases of the project, past projects, other current projects, and probable future projects²⁵. The evaluation shall analyze the biological, ecological, physical, and socioeconomic effects²⁶ of the new ocean use project and of other projects along the Washington coast, while also taking into account the effects of existing and future human activities, environmental baseline and variability, the regional effects of global climate change, and potential to reach tipping points of harm for existing uses or ocean resources [WCMAC 3.1.5].

In conducting the cumulative effects analysis, the applicant shall focus on the specific resources and uses that may be affected by the incremental effects of the proposed project and other projects in the same geographic area. The evaluation shall include but not be limited to consideration of whether:

- a. The resource and uses are especially vulnerable to incremental effects;
- b. The proposed project is one of several similar projects in the same geographic area;
- c. Other developments in the area have similar effects on the resources and uses;
- d. These effects have been historically significant for the resource and uses; and
- e. Other analyses in the area have identified a cumulative effects concern.

4.6 Review Standards

This section provides the detailed review standards for applicants and for agencies to consider in determining possible significant adverse effects²⁷ from an ocean use project²⁸ on coastal uses and resources. An applicant's written effects evaluation (Section 4.5) must address compliance with the standards noted in this section and any specific standards that apply to the particular type of new use (Section 4.8). The regulating agencies shall use best available maps and data and may consider new

²⁵ Under NEPA, "cumulative impact" means "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 CFR. § 1508.7

²⁶ "Effects" and "impacts" include: (a) Direct effects, which are caused by the action and occur at the same time and place. (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

"Effects" and "impacts" as used in NEPA regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

²⁷ In applying ORMA's policies, "significant adverse impacts" must be consistent with the SEPA rules and process. WAC 173-26-360(7)(e): "The determination of significant adverse impacts should be consistent with WAC 197-11-330(3) and 197-11-794. The sequence of actions described in WAC 197-11-768 should be used as an order of preference in evaluating steps to avoid and minimize adverse impacts."

²⁸ This section details the general ocean use standards contained in WAC 173-26-360(7), which specifically apply to ocean uses that require a shoreline permit. Development under the jurisdiction of the Shoreline Management Act is defined at RCW 90.58.030(3)(a).

information that is sufficient and applicable. Furthermore, the processes outlined in Section 4.2.1 will further assist applicants in identifying approaches that will prevent, avoid and minimize impacts.

4.6.1 Siting and development standards for the construction, deployment or maintenance of an ocean use facility.

1. Consider practicable alternative deployment and placement of structures in proximity to the proposed project area that would have less adverse impact on identified resources and uses, including social and economic impacts to coastal communities [WAC 173-26-360(7)(a)(b)].
2. For marine renewable energy, be located, constructed, and operated in a manner that has no detrimental effects on beach accretion or erosion and wave processes. [WAC 173-26-360(10)(a)]
3. Be located to avoid adverse impacts on proposed or existing environmental and scientific preserves and sanctuaries, parks, and designated recreation areas. [WAC 173-26-360(7)(k)]
4. In locating mining facilities or oil and gas facilities, avoid and minimize impacts on shipping lanes or routes traditionally used by commercial and recreational fishermen to reach fishing areas. [WAC 173-26-360(7)(x)]
5. Routing:
Ocean uses and their distribution, service, and supply vessels and aircraft should be:
 - a. Located, designed, and operated in a manner that minimizes adverse impacts on fishing grounds, aquatic lands, or other renewable resource ocean use areas during the established, traditional, and recognized times they are used or when the resource could be adversely impacted. [WAC 173-26-360(7)(m)]
 - b. Routed to avoid environmentally critical and sensitive habitats such as sea stacks and wetlands, preserves, sanctuaries, bird colonies, and migration routes, during critical times those areas or species could be affected. [WAC 173-26-360(7)(n)]
6. Associated on-shore facilities: In locating and designing on-shore facilities:
 - a. Special attention should be given to the environment, the characteristics of the use, and the impact of a probable disaster, in order to assure adjacent uses, habitats, and communities adequate protection from explosions, spills, and other disasters. [WAC 173-26-360(7)(o)]
 - b. Minimize impacts on existing water dependent businesses and existing land transportation routes to the maximum extent feasible. [WAC 173-26-360(7)(p)]
 - c. Be located in communities where there is adequate sewer, water, power, and streets. Within those communities, if space is available at existing marine terminals, the onshore facilities should be located there. [WAC 173-26-360(7)(q)]
 - i. For marine renewable energy projects, locate distribution facilities and lines in existing rights of way and corridors, whenever feasible [WAC 173-26-360(10)(c)]
7. Construction and Operation
 - a. Use methods and scheduling of construction activities that minimizes impacts on tourism, recreation, commercial fishing, local communities and the environment [WAC 173-26-360(7)(r)].

- b. Use methods and designs that prevent, avoid, and minimize adverse impacts such as noise, light, temperature changes, turbidity, water pollution and contaminated sediments on the marine, estuarine or upland environment. Such attention should be given particularly during critical migration periods and life stages of marine species and critical oceanographic processes. [WAC 173-26-360(7)(u)]
 - c. For mining, marine renewable energy or oil and gas uses, be designed, constructed, and operated in a manner that minimizes environmental impacts on the coastal waters environment, particularly the seabed communities, and minimizes impacts on recreation and existing renewable resource uses such as fishing. [WAC 173-26-360(7)(w)]
- 8. Compensation for impacts
 - a. Impacts on commercial resources, such as the crab fishery, on noncommercial resources, such as environmentally critical and sensitive habitats, and on coastal uses, such as loss of equipment or loss of a fishing season, should be considered in determining compensation to mitigate adverse environmental, social and economic impacts to coastal resources and uses. [WAC 173-26-360(7)(f)]
 - b. Allocation of compensation to mitigate adverse impacts to coastal resources or uses should be based on the magnitude and/or degree of impact on the resource, jurisdiction and use. [WAC 173-26-360(7)(g)]

4.6.2 Additional standards and recommended approaches to protect specific coastal resources and uses of the state

The following table provides additional state standards and recommended approaches for new ocean uses²⁹ designed to protect state coastal resources and uses. Additional standards requirements apply to offshore aquaculture, disposal, and mining (See Section 4.8).

²⁹ Requirements of WAC 173-26-360(7) apply to ocean uses that require a shoreline permit.

Table 4.6.2-1. Goals, Additional Standards and Approaches to Protect Washington State Coastal Uses and Resources

Key Washington Ocean Resource Policies ³⁰ & MSP Objectives	Standards	Approaches include, but are not limited to:
Ecological		
<ul style="list-style-type: none"> Foster healthy and resilient marine ecosystem functions, biodiversity and habitats. (MSP Objective 3) ORMA 43.143.030(2)(d). 	<ul style="list-style-type: none"> Prevent, avoid, and minimize adverse impacts on migration routes and habitat areas of species listed as endangered or threatened, environmentally critical and sensitive habitats such as breeding, spawning, nursery, foraging areas and wetlands, and areas of high productivity for marine biota such as upwelling and estuaries [WAC 173-26-360(7)(j)]. 	<ul style="list-style-type: none"> Schedule construction to avoid critical migration times, vulnerable life stages of species, and important oceanographic processes. Use designs and methods that prevent, avoid and minimize disturbance to species, habitats, water quality, and ecological processes.
Historic or Cultural Resources		
<ul style="list-style-type: none"> Sustain diverse traditional uses and experiences to ensure continuity of WA's coastal identity, culture, and high quality of life. (MSP Objective 2) Provide recommendations for uses that protect and enhance the aesthetic quality of marine environment, maritime activities, marine culture and sense of place. (MSP actions) 	<ul style="list-style-type: none"> Avoid and minimize adverse impacts on historic or culturally significant sites in compliance with chapter 27.34 RCW. Permits in general should contain special provisions that require permittees to comply with chapter 27.53 RCW if any archaeological sites or archaeological objects such as artifacts and shipwrecks are discovered. [WAC 173-26-360(7)(l)] 	<ul style="list-style-type: none"> Conduct high-resolution seafloor surveys for resources.
Coastal Uses: Existing uses such as aquaculture, fishing, navigation, recreation and tourism		
<ul style="list-style-type: none"> Protect and preserve healthy existing natural resource- based economic activity on the Washington Coast. (MSP Objective 1). ORMA 43.143.030(2)(e). 	<ul style="list-style-type: none"> Minimize impacts on existing water dependent businesses and existing land transportation routes to the maximum extent feasible. Avoid and minimize adverse social and economic impacts, including detrimental effects to tourism, recreation, fishing, aquaculture, navigation, transportation, public infrastructure, public services, and community culture. [WAC 173-26-360(7)(p)(t)]. 	<ul style="list-style-type: none"> Space structures to maximize compatibility with existing uses. Minimize project footprint. Schedule construction activities to minimize impacts to existing users. Mitigate possible hazards to navigation and, provide practicable opportunities for vessel transit, at the project location.

³⁰ This list is not exhaustive and is intended to highlights particular policies that are relevant to particular state coastal resources and uses.

Recommended Additional Approaches To Avoid and Minimize Impacts to Coastal Uses

In addition to the goals, standards, and approaches noted above, the following provides a list of specific approaches for applicants to consider in project siting, design, engineering, construction and operation. These approaches may contribute toward addressing Washington's ocean use standards to avoid and minimize adverse impacts to particular coastal uses. Use of any or all of these recommended approaches does not guarantee issuance of state or local permits or authorizations.

1. Aquaculture
 - a. Minimize impacts to existing shellfish aquaculture growing areas and operations.
 - b. Minimize disruption to physical processes and water quality of estuaries.
2. Fishing
 - a. Minimize the number of and size of anchors, spacing structures for greater compatibility with existing uses, and burying cables in the seafloor and through the shoreline.
[WCMAC new TC recommendation]
 - b. Minimize the displacement of fishers from traditional fishing areas, and the related impact on the travel distance and routing required to fish in alternative areas.
 - c. Minimize the compaction of fishing effort caused by the reduction in the areas normally accessible to fishers.
 - d. Minimize the economic impact resulting from the reduction in area available for commercial and recreational fishing for the effected sectors and ports.
 - e. Limit the number and size of projects that are located in an area to minimize the impact on a particular port or sector of the fishing industry.
 - f. Consider the distribution of projects and their cumulative effects.
3. Navigation
 - a. Minimize disruption to traditional and heavily used vessel transit routes, particularly those navigation lanes that are federally-designated or negotiated with other users.
4. Recreation
 - a. Minimize restrictions on public access, particularly in areas with high intensity of use or with a community of historical users.
 - b. Minimize impacts to areas with unique or special qualities, including the natural environment and aesthetics, associated with recreational use relative to the state or region.
 - c. Include measures that ensure protection of public health and safety.

4.7 Project Construction and Operation Plan

An applicant must submit a construction and operation plan as a condition of approval for a state permit, license, lease, or other authorization [insert relevant RCW/WAC language]. The construction and operation plan must describe the procedures and methods the operator will employ to ensure facility compliance with standards and other conditions of the permit, license related to effects on the

environment, safety and coastal uses. At a minimum, the construction and operation plan must include the following components:

1. **Facility Development Plan**, which describes the detailed physical and operational components of the proposed facility and includes technical information on the installation and deployment activities and methods, structures, easements, vessels, and construction schedule.
2. **Contingency Plan**, which describes how facility operator will respond to emergencies caused by a structural or equipment failure due to human error, weather, geologic or other natural event.
3. **Inspection Plan**, which describes the routine inspection program to ensure mechanical, structural and operational integrity of facilities.
4. **Monitoring Plan**

Agencies shall require applicants to provide pre-project environmental baseline inventories and assessments and monitoring of ocean uses when little is known about the effects on marine and estuarine ecosystems, renewable resource uses and coastal communities or the technology involved is likely to change. [WAC 173-26-360(7)(v)]

A monitoring plan provides for a standardized program to assess for potential impacts identified by the inventory and effects evaluation. Impacts of particular concern to address, where applicable, include:

- An invasive species prevention, monitoring and control plan for projects that pose a risk for invasive species introductions. [WCMAC 1.3.4]
- A plan to monitor structures for fishing gear and other debris entanglement and a plan to mitigate impacts. [WCMAC 1.2.7]
- For aquaculture facilities: prevention, monitoring and response plans that address escapement, disease and nutrient pollution. [WCMAC 2.1.1]

Monitoring shall be sufficient to accurately document and quantify the short-term and long-term effects of the actions on the affected resources and uses. At a minimum, monitoring plans shall describe:

- a. Specific study objectives and methods, including collection of baseline data, hypotheses tested, field sampling and data analysis, and controls (such as control sites).
 - b. Documentation that study design is scientifically appropriate and adequate to address objectives.
 - c. Methods for reporting and delivering data, analyses to agencies and for public involvement in review of monitoring activities.
5. **Adaptive Management Plan**, which provides a mechanism for incorporating new information and findings into the operation and management of the project. The plan shall describe processes for applying adaptive measures. When monitoring results indicate standards are not being met, adaptive measures designed to bring the operation into compliance will be applied to operation of the project.

6. Decommissioning Plan

An applicant must demonstrate that “plans and sufficient performance bonding are provided to ensure that the site will be rehabilitated after the use or activity is completed” [RCW 43.143.030(2)(g)]. The decommissioning plan³¹ must include:

- a. A proposed schedule and description of removal methods.
- b. Plans for disposing of the removed facilities.
- c. The resources, conditions and uses that could be affected by the decommissioning activities and methods for minimizing impacts to renewable ocean uses such as fishing [WAC 173-26-360(7)(y)].
- d. Mitigation to protect sensitive resources during decommissioning
- e. Use of new information and new technologies about environmental impacts to ensure state-of-the-art technology and methods are used [WAC 173-26-360(7)(h)].
- f. Methods to survey area after removal to determine any effects on marine life
- g. Rehabilitation measures to restore seabed to original state to the maximum extent feasible [WAC 173-26-360(7)(y)].

7. Financial Assurance Plan

The applicant shall provide a financial assurance compliance plan that describes how the holder will comply with the state requirements for financial assurance. The plan must assure insurance, bonds or other financial securities are adequate to address: resources required to decommission and rehabilitate the site, “the effects of planned and unanticipated closures, completion of the activity, reasonably anticipated disasters, inflation, new technology, and new information about the environmental impacts to ensure that state of the art technology and methods are used” [WAC 173-26-360(7)(h)]. Washington State Department of Natural Resources has authority to require financial security based on the cost of enforcing terms and conditions for leases of state-owned aquatic lands [RCW 79.105.330 and WAC 332-30-122].

4.8 Standards Specific to New Use type

Since different uses may generate different impacts, this section provides the additional, existing requirements and standards that are specific to a particular types of new ocean uses³² based on their potential effects to specific coastal resources or uses of concern, including offshore aquaculture, energy production, ocean mining, and ocean disposal.

³¹ Discontinuance or shutdown of oil and gas, mining or energy producing ocean uses should be done in a manner that minimizes impacts to renewable resource ocean uses such as fishing, and restores the seabed to a condition similar to its original state to the maximum extent feasible. [WAC 173-26-360(7)(y)]

³² The MSP scope specifically address certain other new ocean uses, however, existing ocean use regulations in WAC 173-26-360 provide standards specific to these other uses such as ocean research, ocean salvage, transportation and oil and gas activities.

Table 4.8-1: Additional Requirements Specific to New Use Type

Ocean Use	Definition	Effects Evaluation	Use-Specific Standards	Other related recommendations or requirements
Offshore Aquaculture	ADD DEFINITION...	Assess the risk of pesticide controls [WCMAC 2.1.4]	Avoid and minimize impacts to pinnipeds, cetaceans, sharks and other species through facility design, siting and operation. [WCMAC 2.1.2]	Deny permits for offshore aquaculture facilities with species that pose a significant risk of introducing disease, impairing fish health, or potentially introducing genetic pollution into the area, in accordance with WAC 276-76-100. ³³ [WCMAC 2.1.3]
Ocean mining	Ocean mining includes such uses as the mining of metal, mineral, sand, and gravel resources from the sea floor. [WAC 173-26-360(9)]	Assess effects on beach and sediment processes.	Located and operated to: <ul style="list-style-type: none"> • Avoid detrimental effects on ground fishing or other renewable resource uses. • Avoid detrimental effects on beach erosion or accretion processes. [WAC 173-26-360(9)(a)(b)]	Consider habitat recovery rates in reviewing permits. [WAC 173-26-360(9)(c)]
Energy production	Energy production uses involve the production of energy in a usable form directly in or on the ocean rather than extracting a raw material that is transported elsewhere to produce energy in a readily usable form. [WAC 173-26-360(10)]	Assess the effect on upwelling and other oceanographic and ecosystem processes. [WAC 173-26-360(10)(b)]	Located, constructed and operated in manner that: <ul style="list-style-type: none"> • Has no detrimental effects on beach accretion or erosion and wave processes • Located in existing utility rights of way and corridors whenever feasible, rather than creating new corridors (associated distribution facilities) [WAC 173-26-360(10)(c)]	

³³ WAC 276-76-100: A permit may be denied based on the determination by the director [of Washington Department of Fish and Wildlife] of significant genetic, ecological or fish health risks of the proposed fish rearing program on naturally occurring fish and wildlife, their habitat or other existing fish rearing programs.

Ocean Use	Definition	Effects Evaluation	Use-Specific Standards	Other related recommendations or requirements
Ocean disposal	Ocean disposal uses involve the deliberate deposition or release of material at sea, such as solid wastes, industrial waste, radioactive waste, incineration, incinerator residue, dredged materials, vessels, aircraft, ordnance, platforms, or other man-made structures. [WAC 173-26-360(11)]	Habitat enhancement.	Sites: <ul style="list-style-type: none"> Located and designed to prevent, avoid, and minimize adverse impacts on environmentally critical and sensitive habitats, coastal resources and uses, or loss of opportunities for mineral resource development. For which the primary purpose is habitat enhancement may be located in a wider variety of habitats. [WAC 173-26-360(11)(c)] 	<ul style="list-style-type: none"> Storage, loading, transporting, and disposal of materials shall be done in conformance with local, state, and federal requirements for protection of the environment. Allowed only in sites that have been approved by Ecology, DNR, US EPA, and US Army Corps of Engineers, as appropriate. [WAC 173-26-360(11)(b)] Sited in areas where the (dredge) disposal will provide beneficial use to the greatest extent possible. [WCMAC 1.2.2]
Oil and gas uses and activities	Oil and gas uses and activities involve the extraction of oil and gas resources from beneath the ocean. ³⁴ [WAC 173-26-360(8)]		Sites: <ul style="list-style-type: none"> When feasible, facilities located and designed to permit joint use in order to minimize adverse impacts to coastal resources and uses and the environment. Upland disposal of oil and gas construction and operation materials and waste products such as cuttings and drilling muds should be allowed only in sites that meet applicable requirements. [WAC 173-26-360(8)(a)(f)] Facilities including pipelines should be located, designed, constructed, and maintained in conformance with	Special attention to: <ul style="list-style-type: none"> The availability and adequacy of general disaster response capabilities in reviewing ocean locations for oil and gas facilities. The response times for public safety services such as police, fire, emergency medical, and hazardous materials spill response services in providing and reviewing onshore locations for oil and gas facilities. Adequacy of plans, equipment, staffing, procedures, and demonstrated financial and performance capabilities for preventing, responding to, and

³⁴Note: RCW 43.143.010(2) prohibits leasing of Washington's state waters for oil or gas exploration, development or production.

Ocean Use	Definition	Effects Evaluation	Use-Specific Standards	Other related recommendations or requirements
			applicable requirements but should at a minimum ensure adequate protection from geological hazards such as liquefaction, hazardous slopes, earthquakes, physical oceanographic processes, and natural disasters. [WAC 173-26-360(8)(e)].	mitigating the effects of accidents and disasters such as oil spills. If a permit is issued, it should ensure that adequate prevention, response, and mitigation can be provided before the use is initiated and throughout the life of the use. [WAC 173-26-360(8)(c)]
Transportation	Ocean transportation includes such uses as: Shipping, transferring between vessels, and offshore storage of oil and gas; transport of other goods and commodities; and offshore ports and airports. Addresses transportation activities that originate or conclude in Washington's coastal waters or are transporting a nonrenewable resource extracted from the outer continental shelf off Washington. [WAC 173-26-360(12)]	<ul style="list-style-type: none"> Assess impact on renewable resource activities such as fishing and on environmentally critical and sensitive habitat areas, environmental and scientific preserves and sanctuaries. [WAC 173-26-360(12)(a)]	Siting: <ul style="list-style-type: none"> When feasible, hazardous materials such as oil, gas, explosives and chemicals, should not be transported through highly productive commercial, tribal, or recreational fishing areas. If no such feasible route exists, the routes used should pose the least environmental risk. Located or routed to avoid habitat areas of endangered or threatened species, environmentally critical and sensitive habitats, migration routes of marine species and birds, marine sanctuaries and environmental or scientific preserves to the maximum extent feasible. [WAC 173-26-360(12)(b)(c)]	
Ocean research	Ocean research activities involve scientific investigation for the purpose of		<ul style="list-style-type: none"> Located and operated in a manner that minimizes intrusion into or disturbance of the coastal waters environment consistent with the 	<ul style="list-style-type: none"> Complies with scientific collection requirements per RCW 77.12.047, if relevant. Encourage:

Ocean Use	Definition	Effects Evaluation	Use-Specific Standards	Other related recommendations or requirements
	furthering knowledge and understanding. ³⁵ [WAC 173-26-360(13)]		<p>purposes of the research and the intent of the general ocean use guidelines</p> <ul style="list-style-type: none"> Completed or discontinued in a manner that restores the environment to its original condition to the maximum extent feasible, consistent with the purposes of the research. <p>[WAC 173-26-360(13)(c)(d)].</p>	<ul style="list-style-type: none"> Coordination with other ocean uses occurring in the same area to minimize potential conflicts. Public dissemination of ocean research findings. <p>[WAC 173-26-360(13)(a)(e)]</p>
Ocean salvage	<p>Ocean salvage uses share characteristics of other ocean uses and involve relatively small sites occurring intermittently. Historic shipwreck salvage which combines aspects of recreation, exploration, research, and mining is an example of such a use.</p> <p>[WAC 173-26-360(14)]</p>		<p>Nonemergency ocean salvage:</p> <ul style="list-style-type: none"> Conduct in a manner that minimizes adverse impacts to the coastal waters environment and renewable resource uses such as fishing. Not be conducted in areas of cultural or historic significance unless part of a scientific effort sanctioned by appropriate governmental agencies. <p>[WAC 173-26-360(14)(a)(b)]</p>	

³⁵ WAC 173-26-360 also states: "Investigation activities involving necessary and functionally related precursor activities to an ocean use or development may be considered exploration or part of the use or development. Since ocean research often involves activities and equipment, such as drilling and vessels, that also occur in exploration and ocean uses or developments, a case by case determination of the applicable regulations may be necessary." RCW 43.143.010(2) prohibits leasing of state waters for oil or gas exploration, development or production.

Citations

Andrews, K. S., Coyle, J. M., & Harvey, C. J. (2015). *Ecological indicators for Washington State's outer coastal waters*. Seattle, WA: Northwest Fisheries Science Center. Report to the Washington Department of Natural Resources. Retrieved from http://www.msp.wa.gov/wp-content/uploads/2015/03/NWFSC_EcosystemIndicatorReport.pdf [Source type 11].

Decker, K. (2015). *Economic Indicators Report* (Prepared for: The Washington Coastal Marine Advisory Council by Washington Sea Grant). Retrieved from http://www.msp.wa.gov/wp-content/uploads/2015/03/SeaGrant_EconomicIndicatorReport.pdf [Source type 11]

Poe, M. R., Watkinson, M. K., Trosin, B., & Decker, K. (2015). *Social indicators for the Washington coast integrated ecosystem assessment* (A report to the Washington Department of Natural Resources; Interagency Agreement No. IAA 14-204). Retrieved from http://www.msp.wa.gov/wp-content/uploads/2015/03/SeaGrant_SocialIndicatorsReport.pdf [Source Type 11]