



# Oregon Territorial Sea Plan: Part Four

Uses of the Seafloor

Adopted **Insert Date Here**

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# Oregon Territorial Sea Plan: Part Four

Uses of the Seafloor

Adopted **Insert Date Here**

*These amendments were adopted by the Land Conservation and Development Commission on December 1, 2000, based on a recommendation from the Ocean Policy Advisory Council, January 28, 2000. These amendments are consistent with administrative rules adopted by the Oregon State Land Board in August, 1999, governing easements for submarine fiber-optic cables.*

**Commented [LA\*D1]:** Will be updated to reflect OPAC and LCDC dates for the recommendation and approval of the amendments to Part Four.

## UNDERSEA CABLES, PIPELINES, AND OTHER UTILITIES OR FIXTURES

### 1 The State Perspective

#### 1.1 Purpose

Part Four of the Oregon Territorial Sea Plan provides a strategic framework for the decision-making process, partnerships, and collaborative relationships for undersea infrastructure on, affixed to, or buried under the seafloor in the state territorial sea.

#### 1.2 Goal

This strategic framework aims to maintain the long-term protection of marine ecosystems, preservation of their ecological functions, economic and social services, and, at the same time, protection of infrastructure on, affixed to, or buried under the seafloor in the state territorial sea from potential threats in order to preserve the services provided by the infrastructure for Oregonians.

#### 1.3 Objectives

This strategic framework identifies the following objectives to be achieved:

- a. Maintain and protect marine ecosystems, biological resources, migratory species, and areas that are of economic (e.g., fisheries, navigation), aesthetic, recreational, social, or historical importance to the people of Oregon, and could be impacted by infrastructure on, affixed to, or buried under the seafloor in the state territorial sea.
- b. Implement policies and recommendations for routing and landing, installation, maintenance, decommission, and recycling of infrastructure on, affixed to, or buried under the seafloor in the state territorial sea.
- c. Engage communities, ocean users, industries, research institutes, and technical experts in decision-making.

- d. Facilitate coordination and cooperation among federal, state, local agencies, and tribal governments for permitting and planning infrastructure on, affixed to, or buried under the seafloor in the state territorial sea, to streamline the permitting process and to ensure that mitigation and accident response plans are developed and updated.
- e. Promote resilience of infrastructure on, affixed to, or buried under the seafloor in the state territorial sea to climate change, natural disasters, extreme weather events, and human-made activities.
- f. Coordinate the development and installation of infrastructure on, affixed to, or buried under the seafloor in the state territorial sea with the growing development of renewable energy facilities in the Pacific Northwest (e.g., offshore wind farms, wave, solar, and hydrogen technologies).
- g. Continue current, and promote future, compatible use of the seafloor between various ocean users.

## **2. Background**

Oregon's coast is a prime landing zone for fiber-optic telecommunication cables that cross the ocean floor from sites around the Pacific Rim. Other types of utilities such as ocean outfall pipes also make use of the seafloor. In the future, utilities such as pipelines and power transmission cables from renewable energy facilities, may eventually be routed across Oregon's Territorial Sea bed. Proper placement of easements and installation of infrastructure on, affixed to, or buried under the seafloor in the state territorial sea is required to avoid damage to or conflict with other ocean uses, such as commercial fishing, and to avoid, minimize, and mitigate adverse effects on natural resources, marine habitats, and coastal communities.

State agencies, such as the Department of State Lands, the Department of Environmental Quality, the Department of Fish and Wildlife, the Oregon Parks and Recreation Department, and the Department of Land Conservation and Development, need clear policies and standards for reviewing and approving the routing and installation of infrastructure on, affixed to, or buried under the seafloor of the Oregon Territorial Sea. The policies and standards within the Territorial Sea Plan can also assist federal agencies in the siting and regulation of infrastructure located in federal waters adjacent to the territorial sea.

### **2.1 International Law and Treaties Obligations**

In implementing this strategic framework, the state should consider the following (but not limited to) international treaties to ensure adequate oversight and protection of federal and state concerns regarding seafloor development actions:

- International Convention for the Protection of Submarine Telegraph Cables (1884).
- The United Nations Convention on the Continental Shelf (1958).
- The United Nations Convention on the High Seas (1958).

- The United Nations Convention on the Law of the Sea (1982).
- The United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (1997).
- The United Nations Framework Convention on Climate Change (1992) and the Paris Agreement (2015).

In addition to the international considerations listed above, various federal, state, and local agencies and authorities are involved in the permitting process for seafloor development in Oregon. The routes of seafloor infrastructure can pass through many jurisdictions, and therefore require permits or licenses from multiple agencies for installation and construction.

## 2.2 Federal

The state should consider the following (but not limited to) federal agencies with a role in permitting seafloor development: The National Oceanic and Atmospheric Administration (NOAA) and the United States Army Corps of Engineers (USACE). Additionally, for offshore renewable energy: the Bureau of Ocean Energy Management (BOEM) and the Federal Energy Regulatory Commission (FERC) play roles in permitting and leasing. In addition to federal agencies and their roles in the permitting process for seafloor development, recognition should be given to the tribal peoples native to Oregon. Not only are there state and federal laws in place that ensure communication and coordination between the state and the federally recognized tribes, but it is important to protect tribal cultural resources and learn traditional ecological knowledge and perspective that the tribes have to offer.

## 2.3 State

Seafloor development within the Territorial Sea may require permits, certifications, determinations, and easements from the following (but not limited to) agencies: Oregon Department of State Lands (DSL), Oregon Department of Parks and Recreation (OPRD), Oregon Department of Environmental Quality (ODEQ), and Oregon Department of Land Conservation and Development (DLCD).

## 2.4 Local

If a seafloor development has an onshore component, local counties, municipalities, or special districts may have jurisdiction and will have their own permitting requirements. The most common permits required include, but are not limited to, conditional use permits or development permits.

## 2.5 Critical Infrastructure

Undersea cable systems are, and pipelines and other utilities may also be, considered vulnerable critical infrastructure. The USA PATRIOT Act of 2001 and the Critical Infrastructure Information Act of 2002 aim to protect critical infrastructure and facilitate sharing of critical infrastructure information among the owners and operators of the facilities and government agencies with infrastructure protection responsibilities.

**Commented [MC2]:** Removed the detailed section on cable systems development. A point was made that this document is not the place for such a detailed section when the document can reference already existing documents. I did keep the section provided by DSL about Critical Infrastructure as I think it is an important point when talking about seafloor utilities and cables etc. We can discuss this change during the April Working Group Meeting

**Commented [CM\*D3R2]:** Original comment: I don't see the need for this section in this document. Remember that TSP Part 4 has not been updated in 23 years, so imagine how dated this information could be in another 20 years. This level of detail seems out of place in this document, in my opinion. I do think this information is useful in a companion document like the best practices document, but just not in the body of TSP4 itself.

The Cybersecurity and Infrastructure Security Agency (CISA) considers 16 critical infrastructure sectors, including communication, energy, information technology, and water and wastewater systems<sup>1</sup>.

Critical infrastructure is subject to risks associated with physical threats and natural disasters. It is also now increasingly exposed to cyber risks. In addition, connections and interdependencies between infrastructure elements and sectors mean that damage, disruption, or destruction to one infrastructure element can cause cascading effects, impacting the continued operation of another.

In April 2019, CISA released a set of 55 National Critical Functions (Appendix B) to manage the most strategic risks more effectively. The functions were developed in coordination with the sector, state, local, tribal, and territorial partners and enabled the critical infrastructure community to analyze complex challenges that cannot be easily identified, understood, or examined within the existing risk management structures for cyber and physical infrastructure.

A Guide to Critical Infrastructure Security and Resilience prepared by CISA<sup>2</sup> highlights the Cascadia Subduction Zone earthquake preparedness in the Pacific Northwest as a case that requires cooperation among Federal, state, local agencies, and the private sector to improve the resilience of critical infrastructure, including telecommunication cables, pipelines, and other utilities.

*[NOTE: In approving these plan policies for submittal to the Land Conservation and Development Commission in [INSERT DATE], the Ocean Policy Advisory Council approved the addition of explanatory background text, maps, and illustrations prior to publication of the amended plan. This background material will in no way affect the mandatory policies of this section.]*

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<sup>1</sup> The Department of Homeland Security Critical Infrastructure Sectors <https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/critical-infrastructure-sectors>

<sup>2</sup> A Guide to Critical Infrastructure Security and Resilience <https://www.cisa.gov/sites/default/files/publications/Guide-Critical-Infrastructure-Security-Resilience-110819-508v2.pdf>

### 3. Policies

The following policies and implementation requirements are mandatory. Decisions of state agencies with respect to approvals of permits, licenses, leases or other authorizations to construct, operate, maintain, or decommission any cables, pipelines, utilities or fixtures on, affixed to, or buried under the seafloor in Oregon's territorial waters and or connected from the seafloor to the ocean shore must comply with the requirements mandated in the Territorial Sea Plan. Once NOAA/OCRM approves the incorporation of the enforceable policies of the Territorial Sea Plan into the Oregon Coastal Management Program, they are applicable to those federal actions that affect Oregon's coastal zone and are subject to the federal consistency requirements of the federal Coastal Zone Management Act.

An applicant for a project or development action within or directly affecting the Oregon Territorial Sea shall:

Design and site projects and infrastructure responsibly such that proposed seafloor development actions will maintain and protect to the maximum extent practicable, natural resources, ecosystem integrity, marine habitat, and areas important to fisheries, navigation, recreation and aesthetic enjoyment from adverse effects that may be caused by said development actions. For purposes of this section, 'Maintain and protect' means following the process of mitigation by taking one or more of the following actions listed in order of priority:

- 1) Avoiding the impact altogether by not taking a certain development action or parts of that action;
- 2) Minimizing impacts by limiting the degree or magnitude of the development action and its implementation;
- 3) Rectifying the impact by repairing, rehabilitating, or restoring (with either active or passive restoration) the affected environment when the infrastructure is decommissioned, including the potential removal of infrastructure (see *also* Statewide Planning Goal 19, Ocean Resources and the Oregon Territorial Sea Plan);
- 4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the development action and by monitoring and taking appropriate corrective measures; and
- 5) Compensating for the impact by replacing or providing comparable substitute resources or environments.

When making decisions to approve projects or development actions regulating state agencies shall:

- 1) Require applicants to engage with local, state and federal agencies, community stakeholders, tribal governments and affected ocean users in a collaborative agreement-seeking process prior to formally requesting authorization to initiate a project or development action.

**Commented [ARA\*O4]:** Good concept, but what action would this imply? For the seafloor, the question would be what natural characteristics need to be restored, and that's pretty squishy. Cable removal is a transient disturbance; the disturbance may have a temporary negative ecological effect, but the natural re-settlement that will follow is not a process that we can speed up or enhance.

**Commented [MC5]:** Keep hierarchy of "avoid, minimize, mitigate" throughout the document

**Commented [ARA\*O6]:** (3) Mitigate for adverse effects that occur during the lifetime of the project by taking appropriate corrective or compensatory measures through adaptive management; and

**Commented [TB7R6]:** Like this detail addition

**Commented [ARA\*O8]:** Can this be rephrased to "Applicants shall engage...."?

- 2) Promote direct communication and collaboration between the applicant and affected ocean users and coastal communities to resolve or avoid conflicts and require written evidence of conflict avoidance among the parties when necessary to ensure communication and memorialize agreements.

**Commented [MC9]:** Request to require evidence of lasting impact to coastal communities

**Commented [CM\*D10]:** There is concern from industry representatives that this section is vague as far as who an applicant will be required to have written agreements with

#### 4. Implementation Requirements

Applicants shall adhere to the following implementation requirements (detailed below) during all project phases related to infrastructure on, affixed to, or buried under the seafloor within the Oregon Territorial Sea. This includes utility cables that transmit electrical energy from a renewable energy facility to the onshore substation, as prescribed in Part Five of the Territorial Sea Plan, Use of the Territorial Sea for the Development of Renewable Energy Facilities or Other Related Structures, Equipment or Facilities. The requirements in Part Two, Making Resource Use Decisions, sections A and B will not apply to development actions related to cables, pipelines, or other utilities or fixtures on, affixed to, or buried under the seafloor within the Oregon Territorial Sea.

When approving development actions state agencies shall mitigate (See definition in Appendix A) conflicts or adverse effects on natural resources or other ocean users through the following measures:

**Commented [ARA\*O11]:** Has it been resolved that Part 4 can say what feds shall do without diminishing the ability to apply this policy to FC review?

##### 4.1. Agency Communication, Coordination, and Review Process

State agencies shall apply the policies and provisions of the Oregon Ocean Resources Management Plan, Oregon Territorial Sea Plan, and Statewide Planning Goals as required to comply with State Agency Coordination Programs (OAR chapter 660, divisions 30 and 31). In accordance with the federal Coastal Zone Management Act, federal consistency regulations (15 CFR Part 930), and ORS 196.435, the Department of Land Conservation and Development will review the consistency certification together with required necessary data and information submitted by the applicant for federal authorization for development actions related to cables, pipelines, or other utilities or fixtures on, affixed to, or buried under the seafloor within the Oregon Territorial Sea to ensure the development action is consistent with enforceable policies of the Oregon Coastal Management Program, including the Territorial Sea Plan.

The Department of State Lands (DSL) shall coordinate the review of applications for easements and permits in the Territorial Sea in consultation with the Joint Agency Review Team (JART) as described below.

##### 4.2 Joint Agency Review Team

The purpose of the JART is the coordination and communication between regulatory agencies in the early stages of project planning. When an applicant requests a pre-application meeting with DSL, DSL shall convene the JART for the pre-application meeting and application meeting. If the cable or fixture is associated with a renewable energy facility, the JART convened under Part Five shall also serve as the JART for purposes of Part Four coordination, with any additional membership needed to meet the requirements below. The JART may also be convened by DSL as necessary for follow-up meetings in order to facilitate the coordination of state and federal agencies, and local

**Commented [BT12]:** Added language to try to address the overlap with Part 5 JART.

jurisdictions, as they apply their separate regulatory, proprietary, or other authorities to the review of a proposed project within the state territorial sea.

**4.2.1** DSL shall invite representatives from the following state agencies to the coordination meetings:

- 1) Departments of Fish and Wildlife, Parks and Recreation, Environmental Quality, Land Conservation and Development, and Geology and Mineral Industries, and other agencies with regulatory or planning authority, or advisory expertise, applicable to the proposed project or development action and location as necessary;

DSL shall invite representatives from the following agencies, jurisdictions, and organizations to the coordination meetings once knowledge of the areas affected by the proposed project or development action have been identified:

- 2) Federal agencies, as invited, with regulatory or planning authority applicable to the proposed project or development action and location;
- 3) Federally recognized Coastal Tribes in Oregon;
- 4) Local jurisdictions including representatives from affected cities, counties, and their affected communities, and affected special districts as appropriate; and,
- 5) Statewide and local organizations and advisory committees such as the Ocean Policy Advisory Council, as invited, to participate in the JART application of specific standards, including but not limited to those addressing areas important to fisheries, ecological resources, recreational and visual impacts.

**4.2.2 JART Roles and Responsibilities**

- 1) The JART will coordinate with DSL on the pre-application review process, and comment on the adequacy of the resource inventories and effects evaluations required under subsection 4.3 (Resource and Use Inventory and Effects Evaluation).
- 2) The JART will make recommendations to DSL on the approval of Territorial Sea easements and other authorizations, and to other applicable regulatory agencies on their decision to permit, license or authorize a proposed project or development action in the state territorial sea.

**Commented [ARA\*O13]:** ODFW feels that the Joint Agency Review Team should be just that, the agencies who are reviewing the project. They should hold a pre-application and coordination meeting that includes statewide and local organizations and the feds, but the JART should be distinct from that.

**Commented [BT14]:** Make reference to Part V - took a stab at language. Also suggest we recommend amending Part V language on JART to make clear we're only looking for DSL to convene one JART for renewable energy projects including associated cables.



- 3) The JART recommendations are advisory; regulating agencies who are members of the JART still operate in accordance with their own rules and statutory mandates.
- 4) DSL may acquire the services of technical experts at the expense of the applicant to assist the JART as necessary to conduct the application review.
- 5) The JART shall identify affected ocean users, local communities, and representatives that applicants must consult with in order to mitigate potential conflict.
- 6) The JART shall act as representative of affected stakeholders

#### **4.3. Resource and Use Inventory and Effects Evaluation**

An applicant shall provide the regulating agencies the data and information to complete the Resource and Use Inventory and Effects Evaluation, prior to the regulating agencies making any decision. An applicant may use relevant inventory information included in a project application to a federal agency to meet the requirements of this subsection.

##### **4.3.1. Purpose of the Resource and Use Inventory and Effects Evaluation**

The purpose of the Resource and Use Inventory and Effects Evaluation is to provide the regulating agencies the data and information necessary to make a decision based on the project or development action's potential effects. The Resource and Use Inventory and Effects Evaluation will help identify if the applicant needs to address potential conflicts with the proposed project or development action. The regulating agency will use the evaluation to develop specific measures for environmental protection and mitigation as well as measures to protect other ocean uses.

##### **4.3.2. Sufficiency of Resource and Use Inventory and Effects Evaluation**

An applicant must provide, during the pre-application and application phases, information and data to complete the Resource and Use Inventory and Effects Evaluation that is sufficient to identify and quantify the short-term and long-term effects of the proposed project or development action in the state territorial sea on the affected natural resources and uses.

##### **4.3.3. Use of Available Environmental Information**

Regulating agencies may allow the applicant to use existing data and information from other authoritative sources, when complying with the requirements for the Resource and Use Inventory and Effects Evaluation.

##### **4.3.4. Inventory Content**

To evaluate the scope of the proposed project or development action, the likelihood of effects, and the significance of the potential effects to natural resources and uses, regulating agencies shall require that the applicant include consideration of certain factors in the inventory. The Resource and Use Inventory and Effects Evaluation listed below apply to all proposed pipelines, utilities or fixtures within the territorial sea for which an

**Commented [BT15]:** This is a bit confusing given not all of the things listed below actually apply to undersea cables. Suggest we edit language to be more clear. However, after re-reading, I don't see why we would exempt any information for undersea cables.

applicant pursues a DSL Territorial Sea easement, unless the requirements are waived by DSL or otherwise addressed in another part of the Territorial Sea Plan. Undersea cables installed on or under the territorial sea do not need to include those items that are specifically identified for pipelines, utilities or fixtures.

**4.3.4.1. Information to be provided by applicants about the proposed project or development action within the Oregon Territorial Sea:**

- (a) Location (using maps, charts, descriptions, etc.);
- (b) Numbers and sizes of equipment, structures;
- (c) Methods, techniques, activities to be used;
- (d) Transportation and transmission systems needed for service and support;
- (e) Materials to be disposed of and method of disposal;
- (f) Physical and chemical properties of materials, if any, to be used or produced (e.g. chemicals used in Horizontal Directional Drilling, materials which may be transported by a pipeline, etc.); and
- (g) Proposed time schedule.

Commented [TB16]: Would not limit this to only hazardous materials.

**4.3.4.2. Location and description of all affected areas, including, but not limited to:**

- (a) Proposed route of the cable, pipeline, or other utility; and
- (c) Onshore facilities.

**Additionally for pipelines or other utilities or fixtures:**

- (a) Adjacent areas that may be affected by physical changes in currents and waves caused by the project or development action;

**4.3.4.3. Physical and chemical conditions including, but not limited to:**

- (a) Bathymetry (bottom topography) and Shoreline Topography, including profile of water depth along the route;

**Additionally for pipelines or other utilities or fixtures:**

- (a) wave regime;
- (b) typical and maximum current velocities; and
- (c) dispersal characteristics

**4.3.4.4. Geologic structure, including, but not limited to:**

- (a) Geophysical imaging and geotechnical investigation of full planned horizontal directional drilling (HDD) routes across the shoreline sufficient to characterize subsurface geotechnical properties and plan HDD construction in a way that avoids drill pipe breakage, inadvertent return, surface settlement, and other complications.
- (b) Geologic hazards, such as faults or landslides;
- (c) Mineral deposits; and
- (d) Seafloor substrate type

**4.3.4.5. Biological and ecological features affected by the project or development action, including, but not limited to:**

- (a) All habitats along the proposed route, specifically including critical marine habitats (see Part Four, Appendix A)
- (b) Recreationally or commercially important finfish or shellfish species;
- (c) Benthic flora and fauna that may be affected by the project or development action; and
- (d) Other ecosystem elements that may be affected by the project or development action.

**4.3.4.6. Cultural, economic, and social uses affected by the project or development action, including, but not limited to:**

- (a) Commercial and sport fishing;
- (b) State or federally protected areas including but not limited to marine reserves, marine protected areas, essential fish habitat designations, critical habitat designations, rocky habitat designations under the Territorial Sea Plan Part Three;
- (c) Scientific research;
- (d) Ports, navigation, and dredge material disposal sites;
- (e) Recreation;
- (f) Coastal community economy;
- (g) Aquaculture facilities;
- (h) Wastewater or other discharge;
- (i) Utility or pipeline corridors and transmission lines;
- (j) Military uses; and
- (k) Aesthetic resources.

**4.3.4.7. Significant historical, cultural or archeological resources.**

**4.3.4.8. Other data that the regulating agencies determine to be necessary and appropriate to evaluate the effects of the proposed project or development action.**

**Commented [ARA\*O17]:** I think Part 4 should include information about benthic species for all projects whereas the water column communities/characteristics are less relevant. That is not the case if Part 4 is applied to facilities in estuaries, wetlands, waterbodies, etc.

**Commented [RAA18]:** In a list of requirements, what does this mean? Does it mean "any other ecosystem elements that may be adversely affected by the project?"

**Commented [ARA\*O19]:** Does this apply beyond the seafloor? May affect which are included.

#### **4.3.5. Written Evaluation**

Regulating agencies shall require the applicant to submit a written evaluation of all the reasonably foreseeable adverse effects associated with projects or development actions within the Oregon Territorial Sea. For purposes of the evaluation, the submittal shall base the determination of “reasonably foreseeable adverse effects” on scientific evidence and how the applicant mitigated any impacts in the design and siting phases of a project or development action. The evaluation shall describe the potential short-term and long-term effects of the proposed project or development action to marine resources and uses of the Oregon territorial sea, continental shelf, onshore areas and coastal communities based on the inventory data listed above and the following considerations:

- 4.3.5.1. Biological and Ecological Effects:** Biological and ecological effects include those on marine habitats and on the species those habitats support. The evaluation need not discuss highly speculative consequences. However, the evaluation shall discuss possible outcomes that are either likely to occur or catastrophic environmental effects of low probability. Factors to consider include, but are not limited to:
- (a) The time frames/periods over which the effects will occur;
  - (b) The maintenance of ecosystem structure, biological productivity, biological diversity, and representative species assemblages;
  - (c) Maintaining populations of threatened, endangered, or sensitive species;
  - (d) Vulnerability of the species, population, community, or the habitat to the proposed actions; and
  - (e) The probability of exposure of biological communities and habitats to adverse effects from construction, operating or decommissioning procedures, or accidents.
- 4.3.5.2. Current Uses:** Evaluate the effects of the project or development action on current uses and the continuation of a current use of ocean resources. Factors to consider include, but are not limited to:
- (a) Local and regional economies;
  - (b) Archeological and historical resources;
  - (c) Transportation safety and navigation.
  - (d) Recreational uses;
  - (e) Fisheries;
  - (f) Cultural uses; and,
  - (g) Aesthetics
- 4.3.5.3. Natural and Other Hazards:** Evaluate the potential risks to the project or development action, in terms of its vulnerability to certain hazards and the

probability that those hazards may cause loss, dislodging, or drifting of infrastructure. Consider both the severity of the hazard and the level of exposure it poses to natural resources and coastal communities. Hazards to be considered shall include slope failures and subsurface landslides, faulting, tsunamis, variable or irregular bottom topography, weather related, or due to human cause. Additionally, evaluate potential for horizontal directional drilling complications that would affect natural resources and coastal communities and describe plans to minimize these hazards based on site-specific subsurface geotechnical characteristics.

- 4.3.5.4. Cumulative Effects:** Evaluate the cumulative effects of a project or development action, including the onshore component, in conjunction with effects of any past projects, other current projects, and probable future projects. The evaluation shall analyze the biological, ecological, physical, cultural, and socioeconomic effects of the proposed project or development action and other projects along the Oregon coast, while also taking into account the effects of existing and future human activities and the regional effects of global climate change.

In conducting the cumulative effects analysis, the applicant shall focus on the specific resources and uses, as detailed under section 4.3.4 that may be affected by the incremental effects of the proposed project or development action and other projects in the same geographic area. The evaluation shall include but not be limited to consideration of whether:

- i. the resource and uses are especially vulnerable to incremental effects;
- ii. the proposed project or development action is one of several similar projects in the same geographic area;
- iii. other developments in the area have similar effects on the resources and uses;
- iv. these effects have been historically significant for the resource and uses; and
- v. other analyses in the area have identified a cumulative effects concern.

#### 4.4 Routing and Landing

Locations for new infrastructure within the state territorial sea shall preserve access to available to ocean fisheries to the extent practicable, prevent or avoid conflicts with other uses, protect marine habitats, and minimize adverse effects on other natural resources of the seafloor or ocean shore. DSL shall consider the benefit of implementing corridors for infrastructure crossing the territorial sea while maintaining adequate distance for servicing of infrastructure and shall determine when the territorial sea has reached carrying capacity for new easements. New rights of way may be required to be located as close to existing rights of way as possible or with sufficient capacity to enable future expansion within the approved right of way. DSL shall not permit easements through marine reserves, marine protected areas, rocky habitats designated under TSP Part Three, and shall avoid all rocky habitat areas within the territorial sea.

**Commented [ARA\*O20]:** Suggest we define what the definition of "same geographic area" means

**Commented [BT21]:** Should this be a "shall"?

## **4.5 Installation**

### **4.5.1 Cable Burial.**

#### **4.5.1.1 In state waters:**

All undersea cables crossing or affixed to state lands of the territorial sea lying seaward of Extreme Low Water (which is the seaward boundary of the Ocean Shore Recreation Area) shall be buried so as to ensure continuous burial unless the approving state agencies make findings that burial would do more damage than not burying the cable or burial cannot be practicably achieved without significant impacts to the marine environment. The state shall require, as necessary, formal written agreements between affected ocean users as evidence that potential adverse effects of not burying the cable have been mitigated to the maximum extent practicable.

#### **4.5.1.2 In federal waters:**

Burial of cables crossing or affixed to the seabed of the outer continental shelf (beneath federal waters) to a depth of 1500 meters, or to a latitude/longitude agreed to by the approving state agencies, off Oregon will be deemed consistent with this state policy. When a federal agency does not require burial in waters to this depth, the state may concur that the decision is consistent with state policy if the federal agency makes findings that burial cannot be practically achieved. The state shall require, as necessary, formal written agreements between affected ocean users as evidence that potential adverse effects of not burying the cable have been mitigated to the maximum extent practicable.

**4.5.1.3** The applicant shall verify burial to the target burial depth to the easement-granting agency by written assurance. The state may require photographic or other evidence of burial from the applicant.

## **4.6 Maintenance**

The easement-granting agency shall require that cables, pipelines, utilities, or fixtures shall be inspected as part of installation. Inspections after installation shall occur as otherwise required by a regulatory agency, and after any major geologic event, such as subduction-zone earthquake, to ensure continued burial and or infrastructure integrity.

## **4.7 Decommission and Recovery**

Infrastructure should be decommissioned and may be required to be removed by the authorized user from the seabed at the end of their useful or operational/design life to avoid overtime infrastructure exposure and continue sustainable activity in terms of the use of the state waters as well as maintain the long-term protection of marine ecosystems, preservation of their ecological functions, and economic and social services.

### **4.7.1 Undersea Cables**

The owner or operator of the undersea cable shall submit to the Department of State Lands for approval a decommissioning plan and follow the process for decommissioning and recovery highlighted in Section 1 of House Bill 2603 and DSL Easement Term and Conditions.

There may be cases where the removal of an undersea cable is more environmentally damaging than leaving the cable in situ. In such cases, DSL shall require the environmental impact assessment from the authorized user to demonstrate the level of damage to the environment caused by cable removal and may allow the cable to remain buried in the seabed.

#### 5 Communication and Cooperative Mechanisms

Written agreements between the applicant and fishers or other users shall be required by the easement-granting agency as evidence of communication and coordination when necessary to provide evidence that conflict has been mitigated to the maximum extent practicable. Such agreements may coordinate work, determine routing, identify routes, respond to emergencies, provide for mitigation of adverse effects, or specify procedures for on-going communication. Written agreements, when required, shall specify how fishers or other users and the applicant will resolve disputes over lost fishing gear, damage to seafloor utilities, damage to natural resources or liability for such actions.

Commented [BT22]: How is "user" defined?

#### 6 Territorial Sea Plan Review

Territorial Sea Plan Part Four shall be subject to review by the Ocean Policy Advisory Council (OPAC) no longer than seven years after it has been adopted. OPAC may, at any time, choose to initiate an amendment of the plan through the process described under Part One, section F.2, Changing the Plan and ORS 196.443(1)(a).

### Part Four Appendix A: Definitions and Terms

The following definitions shall apply to Part Four, unless the context requires otherwise:

**Affix(ed):** To attach to the seafloor in a permanent way. Examples include but are not limited to: partial burial, permanently attaching to rocky substrate, burial with loose rubble on the surface of the seafloor.

**Archaeological Resources:** Those districts, sites, buildings, structures, and artifacts which possess material evidence of human life and culture of the prehistoric and historic past. (See Historical Resources definition.)

**Areas important to fisheries:** (Goal 19)

- a.) areas of high catch (e.g., high total pounds landed and high value of landed catch);
- b.) areas where highly valued fish are caught even if in low abundance or by few fishers;
- c.) areas that are important on a seasonal basis;
- d.) areas important to commercial or recreational fishing activities, including those of individual ports or particular fleets; or
- e.) habitat areas that support food or prey species important to commercially and recreationally caught fish and shellfish species.

Commented [BT23]: Not only habitat of food or prey but spawning and other important habitat areas. What about specifically referencing EFH?

**Applicant:** The person or party responsible for acquiring a state permit, license, lease or other authorization for the evaluation, siting, routing, placement, operation, or removal of a cable, pipeline, utility or fixture placed on, affixed to, or buried under the seafloor in the state territorial sea will be referred to as "the applicant".

**Avoid:** To prevent or eliminate an effect from a project or development action.

**Benthic:** Living on or within the bottom sediments in water bodies.

**Burial:** To place into the seabed below the local mean surface of the ocean floor at the time of burial.

Commented [CM\*D24]: Need to have defined

**Cable(s):** includes a cable used to conduct electricity or light that is placed on, affixed to, or buried under state-owned submerged or submersible lands within the territorial sea and any facilities within the territorial sea associated with the cable.

**Carrying Capacity:** Level of use which can be accommodated and continued without irreversible impairment of natural resources productivity, the ecosystem and the quality of air, land, and water resources.

**Coastal Zone:** The area lying between the Washington border on the north to the California border on the south, bounded on the west by the extent of the state's jurisdiction, and in the east by the crest of the coastal mountain range, with the exception of: (a ) The Umpqua River basin, where the coastal zone shall extend to Scottsburg; (b) The Rogue River basin, where the coastal zone shall extend to Agness; (c) The Columbia River basin, where the coastal zone shall extend to the downstream end of Puget Island. (Formerly ORS 191.110)

**Conserve:** To manage in a manner that the integrity, diversity, stability, complexity, and the productivity of marine biological communities and their habitats are maintained or, where necessary, restored. Accommodating the needs for economic development while avoiding wasteful uses and maintaining future availability.

**Conservation:** a principle of action guiding Oregon's ocean-resources management, which seeks to protect the integrity of marine ecosystems while giving priority to the protection and wise use of renewable resources over nonrenewable; as used in the Oregon Ocean Resources Management Plan, the act of conservation means 'that the integrity, diversity, stability, complexity, and the productivity of marine biological communities and their habitats are maintained or, where necessary, restored' and 'accommodate(ing) the needs for economic development while avoiding wasteful uses and maintaining future availability.'

**Continental Shelf:** The area seaward from the ocean shore to the distance when the ocean depth is 200 meters, or where the ocean floor slopes more steeply to the deep ocean floor. The area beyond the state's jurisdiction is the OUTER Continental Shelf.

**Critical infrastructure:** Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

**Critical marine habitat:** means one or more of the following land and water areas:

- a.) areas designated as "critical habitat" in accordance with federal laws governing threatened and endangered species; or
- b.) areas designated in the Territorial Sea Plan as:
  - 1.) as needed for the survival of animal or plant species listed by state or federal laws as

Commented [BT25]: Consider adding EFH and HAPCs to this definition



“threatened”, “endangered”, or “sensitive”. Such areas might include special areas used for feeding, mating, breeding/spawning, nurseries, parental foraging, overwintering, or haul out or resting. This designation does not limit the application of federal law regarding threatened and endangered species;

2.) “unique” (i.e. one of a kind in Oregon) habitat for scientific research or education within the territorial sea. (Territorial Sea Plan, Part Two); or,

3.) “rocky habitat conservation areas” designated under Part Three;

c.) areas designated as essential fish habitat

d.) areas designated as marine reserves or marine protected areas.

**Develop:** To bring about growth or availability; to construct or alter a structure, to conduct a mining operation, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights to access.

**Development:** The act, process or result of developing.

**Development Action:** Any activity related to infrastructure on, affixed to, or buried under the seafloor within or directly affecting the state territorial sea which is subject to regulation by local, state, or federal agencies that could result in adverse impacts to natural resources or conflict with other ocean users. Development actions also include, but are not limited to, subsequent re-permitting for activities with new impacts or continued impacts that have not been mitigated consistent with current standards.

**Diversity:** The variety of natural, environmental, economic, and social resources, values, benefits, and activities.

**Ecosystem:** the living and non-living components of the environment which interact or function together, including plant and animal organisms, the physical environment, and the energy systems in which they exist. All the components of an ecosystem are interrelated. (Oregon Statewide Planning Goals)

**Ensure:** Guarantee; make sure or certain something will happen.

**Fill:** The placement by man of sand, sediment, or other material, usually in submerged lands or wetlands, to create new uplands or raise the elevation of land.

**Fixture(s)** includes any infrastructure affixed to or permanently placed on the seafloor, not otherwise defined in this glossary, including but not limited to scientific and research devices, observation devices, or other infrastructure requiring a Territorial Sea Easement but not otherwise governed by another section of the Territorial Sea Plan.

**Geologic:** Relating to the occurrence and properties of earth. Geologic hazards include faults, land and mudslides, and earthquakes.

**Habitat:** the environment in which an organism, species, or community lives. Just as humans live in houses, within neighborhoods, within a town or geographic area, within a certain region, and so on, marine organisms live in habitats which may be referred to at different scales. (see also “critical marine habitat”, “important marine habitat”)

**Historical Resources:** Those districts, sites, buildings, structures, and artifacts which have a relationship to events or conditions of the human past. (See

Archaeological Resources definition.)

**Impact:** is the severity, intensity, or duration of the effect, and can be either or both positive or negative outcomes.

**Important marine habitat:** (Goal 19) are areas and associated biologic communities that are:  
a.) important to the biological viability of commercially or recreationally caught species or that support important food or prey species for commercially or recreationally caught species;  
b.) needed to assure the survival of threatened or endangered species;  
c.) ecologically significant to maintaining ecosystem structure, biological productivity, and biological diversity;  
d.) essential to the life-history or behaviors of marine organisms;  
e.) especially vulnerable because of size, composition, or location in relation to chemical or other pollutants, noise, physical disturbance, alteration, or harvest; or  
f.) unique or of limited range within the state.

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

**Infrastructure:** The physical assets that provide the foundation or basic framework for a utility (telecommunications, energy, material transfer, etc) on, affixed to, or buried under the seafloor within or directly affecting the state territorial sea. Examples include, but are not limited to, telecommunications cables, power transmission cables, pipelines, and fixtures.

**Integrity:** The quality or state of being complete and functionally unimpaired; the wholeness or entirety of a body or system, including its parts, materials, and processes. The integrity of an ecosystem emphasizes the interrelatedness of all parts and the unity of its whole.

**Intertidal:** Between the levels of mean lower low tide (MLLT) and mean higher high tide (MHHT).

**LCDC:** The Land Conservation and Development Commission of the State of Oregon. The members appointed by the Governor and confirmed by the Oregon Senate in accordance with the requirements of ORS 197.030.

**Maintain:** Support, keep, and continue in an existing state or condition without decline.

**Minimize:** to reduce or limit the effect to the maximum extent practicable.

**Mitigate:** taking one or more of the following actions listed in order of priority:

- (a) Avoiding the impact altogether by not taking a certain development action or parts of that action;
- (b) Minimizing impacts by limiting the degree or magnitude of the development action and its implementation;
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the development action and by monitoring and taking appropriate corrective measures;

(e) Compensating for the impact by replacing or providing comparable substitute resources or environments.

**Natural Resources:** Air, land and water and the elements thereof which are valued for their existing and potential usefulness to man.

**Pipeline(s)** includes any line of pipe, with or without equipped pumps, valves, and other control devices, used to move liquids, gasses, and/or slurries.

**Practicable:** capable of being put into practice or of being done or accomplished.

**Preserve:** To save from change or loss and reserve for a special purpose.

**Project:** the evaluation, siting, routing, placement, operation, decommission, or removal of infrastructure on, affixed to, or buried under the seafloor in the state territorial sea

**Protect:** Save or shield from loss, destruction, or injury or for future intended use.

**Provide:** Prepare, plan for, and supply what is needed.

**Quality:** The degree of excellence or relative goodness.

**Recreation:** Any experience voluntarily engaged in largely during leisure (discretionary time) from which the individual derives satisfaction.

Coastal Recreation occurs in offshore ocean waters, estuaries, and streams, along beaches and bluffs, and in adjacent shorelands. It includes a variety of activities, from swimming, scuba diving, boating, fishing, hunting, and use of dune buggies, shell collecting, painting, wildlife observation, and sightseeing, to coastal resorts and water-oriented restaurants.

Low-Intensity Recreation does not require developed facilities and can be accommodated without change to the area or resource. For example, boating, hunting, hiking, wildlife photography, and beach or shore activities can be low intensity recreation.

High-Intensity Recreation uses specially built facilities, or occurs in such density or form that it requires or results in a modification of the area or resource.

Campgrounds, golf courses, public beaches, and marinas are examples of high intensity recreation.

**Regulating agency or regulating agencies:** State agencies making decisions to authorize Projects or development actions on, affixed to, or buried under the seafloor in the state territorial sea.

**Restore:** Revitalizing, returning, or replacing original attributes and amenities, such as natural biological productivity, aesthetic and cultural resources, which have been diminished or lost by past alterations, activities, or catastrophic events. For the

purposes of Part Four of the Territorial Sea Plan restoration means to revitalize or reestablish functional characteristics and processes of the seafloor diminished or lost by past alterations, activities, or catastrophic events.

**Active Restoration:** involves the use of specific positive remedial actions, such as removing fills and infrastructure (Cables, pipelines, other utilities or fixtures).

**Passive Restoration:** Allowing natural processes, sequences, and timing to occur in an ecosystem after removing a source of disturbance to return a site to functional and sustainable use.

**Seafloor:** The solid surface underlying the ocean. Specifically, within part four of the Oregon Territorial Sea plan, the submerged or submersible lands within the boundaries of the Oregon Territorial Sea.

**Shoreline:** The boundary line between a body of water and the land, measured on tidal waters at mean higher high water, and on non-tidal waterways at the ordinary highwater mark.

**Substrate:** The medium upon which an organism lives and grows. The surface of the land or bottom of a water body.

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

**User:** an individual, group or entity that makes use of the territorial sea and adjacent rocky intertidal, whether it is for traditional, recreational, educational, commercial or other purposes.

**Utility/utilities** includes any infrastructure affixed to or placed on the seafloor, not otherwise defined in this glossary, which provide the public with an essential good or service (heat, gas, electricity, water, sewage treatment, data, etc).

## **Appendix B: Images, Maps, and Charts**

The 55 National Critical Functions are listed below:

CONNECT 	DISTRIBUTE 	MANAGE 	SUPPLY 
<ul style="list-style-type: none"> <li>▪ Operate Core Network</li> <li>▪ Provide Cable Access Network Services</li> <li>▪ Provide Internet Based Content, Information, and Communication Services</li> <li>▪ Provide Internet Routing, Access and Connection Services</li> <li>▪ Provide Positioning, Navigation, and Timing Services</li> <li>▪ Provide Radio Broadcast Access Network Services</li> <li>▪ Provide Satellite Access Network Services</li> <li>▪ Provide Wireless Access Network Services</li> <li>▪ Provide Wireline Access Network Services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Distribute Electricity</li> <li>▪ Maintain Supply Chains</li> <li>▪ Transmit Electricity</li> <li>▪ Transport Cargo and Passengers by Air</li> <li>▪ Transport Cargo and Passengers by Rail</li> <li>▪ Transport Cargo and Passengers by Road</li> <li>▪ Transport Cargo and Passengers by Vessel</li> <li>▪ Transport Materials by Pipeline</li> <li>▪ Transport Passengers by Mass Transit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Conduct Elections</li> <li>▪ Develop and Maintain Public Works and Services</li> <li>▪ Educate and Train</li> <li>▪ Enforce Law</li> <li>▪ Maintain Access to Medical Records</li> <li>▪ Manage Hazardous Materials</li> <li>▪ Manage Wastewater</li> <li>▪ Operate Government</li> <li>▪ Perform Cyber Incident Management Capabilities</li> <li>▪ Prepare For and Manage Emergencies</li> <li>▪ Preserve Constitutional Rights</li> <li>▪ Protect Sensitive Information</li> <li>▪ Provide and Maintain Infrastructure</li> <li>▪ Provide Capital Markets and Investment Activities</li> <li>▪ Provide Consumer and Commercial Banking Services</li> <li>▪ Provide Funding and Liquidity Services</li> <li>▪ Provide Identity Management and Associated Trust Support Services</li> <li>▪ Provide Insurance Services</li> <li>▪ Provide Medical Care</li> <li>▪ Provide Payment, Clearing, and Settlement Services</li> <li>▪ Provide Public Safety</li> <li>▪ Provide Wholesale Funding</li> <li>▪ Store Fuel and Maintain Reserves</li> <li>▪ Support Community Health</li> </ul>	<ul style="list-style-type: none"> <li>▪ Exploration and Extraction Of Fuels</li> <li>▪ Fuel Refining and Processing Fuels</li> <li>▪ Generate Electricity</li> <li>▪ Manufacture Equipment</li> <li>▪ Produce and Provide Agricultural Products and Services</li> <li>▪ Produce and Provide Human and Animal Food Products and Services</li> <li>▪ Produce Chemicals</li> <li>▪ Provide Metals and Materials</li> <li>▪ Provide Housing</li> <li>▪ Provide Information Technology Products and Services</li> <li>▪ Provide Materiel and Operational Support to Defense</li> <li>▪ Research and Development</li> <li>▪ Supply Water</li> </ul>