

Oregon Territorial Sea Plan: Part Four

Uses of the Seafloor
Adopted Insert Date Here

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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.

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 in undersea infrastructure development 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 these projects 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 projects on, affixed to, or buried under the seafloor in the state territorial sea. ↓

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- Implement policies and recommendations for routing and landing, installation, maintenance, decommission, and recycling of projects 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, Jocal agencies, and tribal governments for permitting and planning projects 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 projects 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 projects 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 natural gas and hydrogen pipelines and power transmission cables from offshore wind farms, may eventually be routed across Oregon's Territorial Sea bed. Proper placement of easements and installation of projects 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 projects on, affixed to, or buried under, the seafloor of the Oregon Territorial Sea. The policies, standards, data and information within the Territorial Sea Plan can also assist federal agencies in the siting and regulation of projects Jocated in federal waters adjacent to the territorial sea.

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Coordinate permitting processes between appropriate state and federal agencies, local and tribal governments for the placement of undersea utilities.

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2.1 International Law and Treaties Obligations

In implementing this strategic framework, the state should consider the following international treaties to ensure adequate oversight and protection of federal and state concerns regarding undersea cable projects:

- 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).

2.2 Federal

Describe existing legislation, regulations, standards, permits, licenses, project-based authorizations at the federal level, and any bilateral and regional agreements (e.g., Memorandum of Understanding, Letter of Cooperation, etc.). Consider the following:

- Federal agency's responsibilities (e.g., BOEM, NOAA, USACE, Federal Energy Regulatory Commission, others).
- Permitting procedures and points of contact (e.g., Nationwide #12 Permit or Standard Individual 404 Permit, USACE).
- Federal consistency.
- Cable protection law (ICPC BP 5).
- Cable protection measures directed at fishing and anchoring risks (ICPC BP 2).
- Research institutes and facilities.

2.3 State

Describe existing legislation, regulations, standards, permits, licenses, project-based authorizations at the state level, and bilateral and regional agreements (e.g., California, Washington). Consider the following:

- State agency's responsibilities (e.g., DLCD, DSL, OPRD, ODFW, DEQ, others).
- Permitting procedures, points of contact (e.g., easement authorization, removal-fill permit, 401 water quality certificate, ocean shore alteration permit, fish and wildlife authorization), and public consultations.
- Federal consistency review.
- Oregon Statewide Planning Goal 19.
- Research institutes and facilities.

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International Convention for the Protection of Submarine Telegraph Cables (Paris Convention, 1884). ¶

The Convention currently has 36 State Parties obligated to protect submarine cables. The United States ratified this Convention on April 16, 1885.¶

The United Nations Convention on the Law of the Sea (1982).¶

The Convention established rules governing all uses of the oceans, seas, and their resources. It addresses the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, areabased management tools, including marine protected areas, environmental impact assessments, capacity-building, and the transfer of marine technology.¶

The United States did not ratify this treaty. Still, it ratified the Agreement relating to the Implementation of Part XI of the Convention to address certain difficulties with the seabed mining provisions on July 29, 1994. ¶

The United Nations Convention on the High Seas (1958).¶

The Convention requires states to draw up regulations to prevent pollution of the sea by oil from ships and pipelines or resulting from the exploration and exploitation of the seabed and its subsoil (Article 24). In addition, states also should take measures to prevent pollution of the sea from the dumping of radioactive wastes (Article 25). The United States ratified this Convention on April 12,

1961.¶ ¶

The United Nations Convention on the Continental Shelf (1958).¶

The Convention recognizes sovereign rights of the coastal State over the continental shelf for the purpose of exploring it and exploiting its natural resources. Subject to its right, the coastal State may not impede the laying or maintenance of submarine¶ cables or pipelines on the continental shelf. ¶ The United States ratified this Convention on April 12, 1961.¶

Deleted: [NOTE: In approving these plan policies for submittal to the Land Conservation and Development Commission in January, 2000, 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.]¶

2.4 Local

Describe existing regulations, standards, permits, licenses, project-based authorizations at the local level (county and city), and bilateral and local agreements with tribes and communities.

- Local governments' responsibilities (e.g., county and city).
- Permitting procedures and points of contact (e.g., conditional use permit, development permit, floodplain development permit) and public hearings.
- Research observation and facilities.

2.5 Critical Infrastructure

Undersea cable systems (pipelines, and other utilities may also be) are 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.

The Cybersecurity and Infrastructure Security Agency (CISA) considers 16 critical infrastructure sectors, including communication, energy, information technology, and water and wastewater systems1,

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, 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.

Thus, state agencies, such as the Department of State Lands, the Department of Fish and

https://www.cisa.gov/sites/default/files/publications/Guide-Critical-Infrastructure-Security-Resilience-110819-508v2.pdf

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Commented [MC4]: 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 thin 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*D5R4]: 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.

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

² A Guide to Critical Infrastructure Security and Resilience

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, installation, maintenance, and decommissioning of <u>critical infrastructure projects</u> on the seafloor of Oregon and adjacent federal waters as well as a coordinated permitting process between state agencies, local and tribal governments.

[NOTE: In approving these plan policies for submittal to the Land Conservation and Development Commission in January, 2000, 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.]

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 utilities or fixtures on 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.

When proposing a project an applicant shall:

- a. Maintain and protect <u>natural resources</u>, ecosystem integrity, marine habitat, and areas important to fisheries, navigation, recreation and aesthetic enjoyment from adverse effects that may be caused by <u>projects on, affixed to, or buried under the seafloor in the state territorial sea. Such projects are required to:</u>
 - 1.) Avoid adverse effects to the integrity, diversity, stability and complexity of the marine ecosystem and coastal communities, and avoid conflicts between commercial or recreational fishing, or other ocean/coastal-use activities and utilities, and give first priority to the conservation and use of natural resources;
 - 2.) Minimize any adverse effects when conflicts cannot be avoided;
 - Mitigate for adverse effects that occur during the lifetime of the project by taking appropriate corrective or compensatory measures through adaptive management; and
 - 4.) Restore the natural characteristics of a site to the maximum extent practicable when the project is decommissioned, (see also Statewide Planning Goal 19, Ocean Resources and the Oregon Territorial Sea Plan)

When making decisions to approve projects regulating state agencies shall:

1) Strongly encourage applicants to engage with local, state and federal agencies,

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community stakeholders, tribal governments and affected ocean users in a collaborative agreement-seeking process prior to formally requesting authorization to initiate a project.

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

4. Implementation Requirements

Applicants shall adhere to the following implementation requirements (detailed below) when implementing, a project related to cables, pipelines, utilities or other fixtures within the Oregon Territorial Sea. This includes the utility cables that transmit the 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 projects related to cables, pipelines, or other utilities or fixtures within the Oregon Territorial Sea.

When approving projects state agencies shall avoid, minimize, and mitigate conflicts or adverse effects on natural resources or other ocean users through the following measures:

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 projects related to cables, pipelines, or other utilities or fixtures within the Oregon Territorial Sea to ensure the project 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 <u>purpose of the JART</u> is <u>the coordination and communication between regulatory</u> agencies in the early stages of project planning. When an applicant requests a preapplication meeting with DSL, <u>DSL</u> shall convene the JART for the pre-application meeting and application meeting. The <u>JART may also be convened by DSL</u> as necessary for follow-up meetings in order to facilitate the coordination of state and federal agencies, and local jurisdictions, as they apply their separate regulatory, proprietary, or other authorities to the

Commented [MC12]: Request to require evidence of lasting impact to coastal communities

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Describe existing legislation, regulations, standards, permits, licenses, project-based authorizations at the federal level, and any bilateral and regional agreements (e.g., Memorandum of Understanding, Letter of Cooperation, etc.). Consider the following:

Federal agency's responsibilities (e.g., BOEM, NOAA, USACE, Federal Energy Regulatory Commission, others).¶

Permitting procedures and points of contact (e.g., Nationwide #12 Permit or Standard Individual 404 Permit. USACE).¶

Permit, USACE).¶
Federal consistency. ¶
Cable protection law (ICPC BP 5).¶

Cable protection measures directed at fishing and anchoring risks (ICPC BP 2).¶
Research institutes and facilities. ¶

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review of a proposed <u>project on, affixed to, or buried under the seafloor in the state</u> territorial sea,

4.2.1 DSL will invite representatives from the following agencies, jurisdictions and organizations to the coordination meetings:

JART Membership:

- 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 and location as necessary;
- Federal agencies, as invited, with regulatory or planning authority applicable to the proposed project and location;
- 3) Local jurisdictions including representatives from affected cities, counties, and their affected communities, and affected special districts as appropriate;
- 4) Statewide and local organizations and advisory committees, 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; and,
- 5) Federally recognized Coastal Tribes in Oregon.

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).
- 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 on, affixed to, or buried under the seafloor in the state territorial sea.
- The JART recommendations are advisory; regulating agencies who are members of the JART still operate in accordance with their own rules and statutory mandates.
- 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.

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4.3 Resource and Use Inventory and Effects Evaluation

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An applicant must 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

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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's potential effects. The Resource and Use Inventory and Effects Evaluation will help identify if the applicant needs to address deficiencies in the proposed project or with the proposed siting or routing. 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

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An applicant must provide, <u>during the pre-application and application phases</u>, 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 <u>project on</u>, <u>affixed to</u>, <u>or buried under the seafloor in the state territorial sea</u> on the affected natural resources and uses.

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4.3.3. Use of Available Environmental Information

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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

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To evaluate the scope of the proposed project, the likelihood of project 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 undersea cable projects in the territorial sea and associated landing sites for which an 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. Projects in the territorial sea related to pipelines, utilities or fixtures have additional data Inventory contents specifically mentioned.

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

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(a) Loca	ation (using maps, charts, descriptions, etc.);	
(b) Nun	nbers and sizes of equipment, structures;	
(c) Met	hods, techniques, activities to be used;	
(d) Trar	nsportation and transmission systems needed for service and support;	
(e) Mate	erials to be disposed of and method of disposal;	
(e.g	sical and chemical properties of materials, if any, to be used or produced . chemicals used in Horizontal Directional Drilling, materials which may be sported by a pipeline, etc.); and	
(g) Prop	posed time schedule.	Commented [TB24]: Would not limit this to only
4. <u>3</u> ,4.2.	Location and description of all affected areas, including, but not limited to:	hazardous materials.
	posed route of the cable, pipeline, or other utility; and	Formatted: Font: (Default) Arial Deleted: 4
. , .		
. ,	hore facilities.	
	onally for pipelines or other utilities or fixtures:	
	acent areas that may be affected by physical changes in currents and waves sed by the project;	
4. <mark>3</mark> ,4.3.	Physical and chemical conditions including, but not limited to:	Deleted: 4
	nymetry (bottom topography) and Shoreline Topography, including profile of er depth along the route;	
Additio	onally for pipelines or other utilities or fixtures:	
(c) typic	re regime; cal and maximum current velocities; and ersal characteristics	
4. <u>3</u> ,4.4.	Geologic structure, including, but not limited to:	Deleted: 4
(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, 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;
 - (f) Other ecosystem elements; and
 - (g) Community composition of resident and migratory species.
- **4.3.4.6.** Cultural, economic, and social uses affected by the project, including, but not limited to:
 - (a) Commercial and sport fishing;
 - (b) State or federally protected areas;
 - (c) Scientific research;
 - (d) Ports, navigation, and dredge material disposal sites;
 - (e) Recreation;
 - (f) Coastal community economy;
 - (g) Aquaculture;
 - (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.

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 related to cables, pipelines, utilities or other fixtures within the Oregon Territorial Sea. For purposes of the evaluation, the submittal shall base the determination of "reasonably foreseeable adverse effects" on scientific evidence. The evaluation shall describe the potential short-term and long-term effects of the proposed project 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:

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Commented [ARA*O25]: 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.

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Commented [RAA26]: 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 [RAA27]: This language is too vague. Does it mean infaunal invertebrate relative abundance? Does migratory mean squid and herring? Seems that C above covers the need.

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4.3.5.1. Biological and Ecological Effects: Biological and ecological effects include Deleted: 4 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 procedures, or accidents. 4.3,5.2. Current Uses: Evaluate the effects of the project on current uses and the Deleted: 4 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) Local and regional economies; (b) Archeological and historical resources; and (c) Transportation safety and navigation. 4.3.5.3. Natural and Other Hazards: Evaluate the potential risks to the project, in Deleted: 4 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 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.

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Cumulative Effects: Evaluate the cumulative effects of a project, 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, and socioeconomic effects of the proposed project 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

(a) In conducting the cumulative effects analysis, the applicant shall focus on the specific resources and uses, as detailed under section 4.4.4 that may be affected by the incremental effects of the proposed project and other projects in

4.3.5.4.

climate change.

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 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 cables, pipelines, or other utilities shall conserve areas available to ocean fisheries, prevent or avoid conflicts with other uses, protect marine habitats, and minimize adverse effects on other natural resources of the seafloor or ocean shore. 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.

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 cannot be practically achieved and all affected parties agree that adverse effects of not burying the cable have been avoided, minimized and or mitigated to the maximum extent practicable.

4.5.1.2 In federal waters:

Decisions to permit 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 affected stakeholders, 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. 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 all affected parties agree that adverse effects of not burying the cable, pipeline, other utility or fixture, have been avoided, minimized, and or mitigated to the maximum extent practicable.

4.5.1.3 Burial shall be verified to the target burial depth by the applicant to the easement-granting agency.

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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,

Projects should be decommissioned and 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, 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 of or 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 may require the environmental impact assessment from the authorized user to demonstrate the level of damage to the environment caused by cable removal and 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. Such agreements may coordinate work, determine routing, identify routes, respond to emergencies, provide for mitigation of adverse effects, or specify procedures for ongoing 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.

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:

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of the undersea cable shall submit to the Department of State Lands for approval a decommissioning plan¶ that includes:¶

A cost estimate, prepared by a person qualified by experience and knowledge to prepare the estimate, for decommissioning the cable and restoring the area authorized by the easement to a natural condition;¶

A detailed description of and proposed schedule for the decommissioning and restoration work, including any corrective action that may be required under the easement:¶

¶

A detailed description of segments of bore pipe and undersea cable proposed to be left in place to avoid or minimize impacts to aquatic resources; and ¶

¶
A proposed form of financial assurance in an amount equal to the cost estimate under paragraph (a) of this

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subsection.¶

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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.

Adverse Effect for Ecological Resource Protection Standards: degradation in ecosystem function and integrity (including but not limited to direct habitat damage, burial of habitat, habitat erosion, reduction in biological diversity) or degradation of living marine organisms (including but not limited to abundance, individual growth, density, species diversity, species behavior).

Adverse Effect for Fisheries Use Protection Standards: a significant reduction in the access of commercial and recreational fishers to an area spatially delineated as an area important to a single fishing sector, multiple combined sectors, or to the fishing community of a particular port.

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".

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.

Burial:

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."

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

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and endangered species; or

- b.) areas designated in the Territorial Sea Plan as either:
- 1.) as needed for the survival of animal or plant species listed by state or federal laws as "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; or
- 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)

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)

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") (Territorial Sea Plan Appendix A: Glossary of Terms)

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).

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

Minimize: to reduce or avoid the effect to the maximum extent practicable.

Mitigate: is the avoidance or minimization of a direct or indirect ecological effect or impact on a receptor through engineering or operational modification of the project. Mitigation does not refer herein to so-called "offsite" mitigation or to compensatory mitigation (i.e., paying or compensating for environmental damage).

Precautionary Approach: the application of a planning and regulatory decision making system that accounts for circumstances where information about marine resources and uses is limited, and there are increased levels of risk and uncertainty related to the outcome of the

action. The principle of the precautionary approach is found in the Management Measures provided in Part One, section G. and in Goal 19 Ocean Resources.

Presumptive Exclusion for Ecological Resource Protection Standards: the assumption that the distribution and importance of ecological resources within an area would preclude the siting of a project on, affixed to, or buried under the seafloor in the state territorial sea based on the potential adverse effects of that development on those identified resources.

Presumptive Exclusion for Fisheries Use Protection Standards: the assumption that the distribution and importance of fisheries use within an area would preclude the siting project on, affixed to, or buried under the seafloor in the state territorial sea based on the potential adverse effects of that development on those identified resources and uses.

Project: includes evaluation, siting, routing, placement, operation, decommission, or removal of a cable, pipeline, ↓utility, or fixture on, affixed to, or buried under the seafloor in the state territorial sea

Regulating agency or regulating agencies: State agencies making decisions to authorize the siting, development and operation projects on, affixed to, or buried under the seafloor in the state territorial sea...

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.

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

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.

Utility/utilities includes any infrastructure affixed to <u>or placed on</u> 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).

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

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.)

BEACH. Gently sloping areas of loose material (e.g., sand, gravel, and cobbles) that extend landward from the low-water line to a point where there is a definite change in the material type or landform, or to the line of vegetation.

BENTHIC. Living on or within the bottom sediments in water bodies.

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<u>CARRYING CAPACITY</u>. 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.

CITIZEN. Any individual within the planning area; any public or private entity or association within the planning area, including corporations, governmental and private agencies, associations, firms, partnerships, joint stock companies and any group of citizens.

<u>COASTAL WATERS.</u> Territorial ocean waters of the continental shelf; estuaries; and coastal lakes.

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)

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.

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.

<u>DIVERSITY</u>. 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 inter-related.

ENCOURAGE. Stimulate; give help to; foster.

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.

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

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. The consequences of a course of action; effect of a goal, guideline, plan or

decision.

INSURE. Guarantee; make sure or certain something will happen.

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.

MITIGATION. For the purposes of Part Four of the Territorial Sea Plan, the restoration, or enhancement of an area to maintain the functional characteristics and processes of the area, such as its natural biological productivity, habitats, and species diversity, unique features and water quality.

NATURAL AREAS. Includes land and water that has substantially retained its natural character, which is an important habitat for plant, animal, or marine life. Such areas are not necessarily completely natural or undisturbed, but can be significant for the study of natural, historical, scientific, or paleontological features, or for the appreciation of natural features.

NATURAL RESOURCES. Air, land and water and the elements thereof which are valued for their existing and potential usefulness to man.

OCCDC. Oregon Coastal Conservation and Development Commission created by ORS 191; existed from 1971 to 1975. Its work is continued by LCDC.

PLANNING AREA. The air, land and water resources within the jurisdiction of a governmental agency.

POLLUTION. The violation or threatened violation of applicable state or federal environmental quality statutes, rules and standards.

PRESERVE. To save from change or loss and reserve for a special purpose.

PROGRAM. Proposed or desired plan or course of proceedings and action.

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.

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

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

<u>Campgrounds, golf courses, public beaches, and marinas are examples of highintensity recreation.</u>

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: is the use of natural processes, sequences, and timing which occurs after the removal or reduction of adverse stresses without other specific positive remedial action.

SEDENTARY. Attached firmly to the bottom, generally incapable of movement.

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.

SIGNIFICANT HABITAT AREAS. A land or water area where sustaining the natural resource characteristics is important or essential to the production and maintenance of aquatic life or wildlife populations.

SOCIAL CONSEQUENCES. The tangible and intangible effects upon people and their relationships with the community in which they live resulting from a particular action or decision.

<u>SUBSTRATE</u>. The medium upon which an organism lives and grows. The surface of the land or bottom of a water body.

SUBTIDAL. Below the level of mean lower low tide (MLLT).

TERRITORIAL SEA. The ocean and seafloor area from mean low water seaward three nautical miles.

Appendix B: Images, Maps, and Charts

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The 55 National Critical Functions are listed below:

DISTRIBUTE COMMANAGE SUPPLY CONNECT Operate Core Network Provide Cable Access Network Services Provide Internet Based Content, Information, and Communication Services Provide Internet Routing, Access and Connection Services Provide Porticioning, Newfaction, and Timing Services Provide Radio Broadcast Access Network Services Provide Setallite Access Network Services Provide Setallite Access Network Services Provide Setallite Access Network Services Provide Wireless Access Network Services Exploration and Extraction Of Fuels Fuel Refining and Processing Fuels Generate Electricity Manufacture Equipment Produce and Provide Agricultural Products and Services Produce and Provide Human and Animal Food Products and Services Conduct Elections Develop and Maintain Public Works and Services Educate and Train Enforce Law Maintain Access to Medical Records Distribute Electricity Maintain Supply Chains Transmit Electricity Transport Cargo and Passengers by Air Manage Hozardous Materials Manage Watetwester Operate Government Perform Oyber Incident Management Capabilities Preserve Constitutional Rights Provide Capatil Markstructure Provide Transport Cargo and Passengers by Rail Transport Cargo and Passengers by Road Transport Cargo and Passengers by Vessel Transport Passengers by Mass Transit Provide Wireless Access Network Services Provide Wireline Access Network Services Services Provide Funding and Liquidity Services Provide Identity Management and Associated Trust Support Services Provide Insurance Services Provide Medical Care Provide Payment, Clearing, and Settlement Services Provide Public Safety Provide Whiteleaster Funding Provide Prunc Galey Provide Wholesale Funding Store Fuel and Maintain Reser Support Community Health

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