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The State of Oregon is amending the Territorial Sea Plan which establishes the state policies, review standards, and program requirements for management of ocean resources. The responsibility for reviewing and recommending amendments to the Territorial Sea Plan (TSP) is one of the authorized duties of the Ocean Policy Advisory Council (OPAC) under ORS 196.443. The TSP amendment process is being conducted in accordance with ORS 196.471, Territorial Sea Plan review requirements, which specifies that a recommendation to amend the plan must include findings that the amendments; "(a) carry out the policies of ORS 196.405 to ORS 196.515; and (b) are consistent with applicable statewide planning goals, with emphasis on the four coastal goals." All state agencies are required under the state agency coordination requirements prescribed in ORS 196.485, to take actions that are consistent with the TSP. The information in this document is being provided to assist OPAC in its duties and to inform the public on the activities of state agencies in support of OPAC.

Goal 19 Ocean Resources and the Territorial Sea Plan
Data Mapping Methods and Criteria

Background

The state is amending the Territorial Sea Plan (TSP) to aid in the siting of marine renewable energy development. The amendment will include maps that identify and delineate the ecological and biological resources and human uses of the territorial sea, and areas that might be appropriate for siting marine renewable energy facilities. The purpose of this document is to describe the decision criteria and methods used by the Oregon Department of Land Conservation and Development (DLCD) and Department of Fish and Wildlife (ODFW) to collect data, conduct a spatial analysis, and produce the map overlays that are needed to draft plan designations for marine resources and uses. DLCD and ODFW provided the map overlays and draft planning designations to the Ocean Policy Advisory Council (OPAC) to assist the Council in formulating a recommendation to amend the TSP specifically for siting marine renewable energy conversion (MREC) development, which is also commonly referred to as wave energy. The plan amendment is intended to select areas for MREC development up to the size needed for full commercial build out.

The state is conducting this amendment to complete **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. Section B.1 of Part Five contains the requirements for siting renewable energy facilities in state waters as follows:

> *Pursuant to the requirements for amending the Territorial Sea Plan under ORS 196.471, to carry out the policies of the Oregon Ocean Resources Management Act and consistent with the statewide planning goals, the Land Conservation and Development Commission will designate areas of the territorial sea appropriate for the development of renewable energy facilities.*[i] *(See appendix C map). Renewable energy facilities development of the state lands of the territorial sea lying seaward of Extreme Low Water (which is the seaward boundary of the Ocean Shore State Recreation Area) shall be sited within the areas designated for that use so as to avoid, minimize or mitigate the adverse effects of that development, and to protect: renewable marine resources, biological diversity and functional integrity of marine ecosystem, important marine habitat, and areas important to fisheries, as defined in Statewide Planning Goal 19 Ocean Resources.*

Once OPAC has formulated a recommendation, it will submit the recommendation to the Land Conservation and Development Commission (LCDC), who will complete the amendment process by adopting the maps into the existing TSP as appendix C, through an administrative rule change. DLCD will submit the completed plan to the National Oceanic and Atmospheric Administration (NOAA) for incorporation into the state's federally approved coastal zone management program, and to the Federal Energy Regulatory Commission (FERC), as a state comprehensive plan that will be used to guide FERC permitting decisions for projects in Oregon's Territorial Sea. When this process is complete state and federal agencies will use the plan to guide decisions on the siting and review of proposed MREC developments.

The overview below provides a brief explanation of how state agencies followed the standards and requirements of Goal 19 Ocean Resources to conduct a geospatial analysis and delineate corresponding levels of protection and use for ocean resources and uses. It includes a description of the process the state followed to create an inventory of the spatial data it used to map the Goal 19 resources and uses, and the planning framework that was used to analyze the data and create spatial overlays or maps. After providing an overview of Goal 19, this document ocvers three sections that correspond to the categories of ocean resources and uses Goal 19 designates for protection; (A) Areas of Important Marine Habitat, (B) Areas Important to Fisheries, and (C) Beneficial Uses. Each section consists of an overview of the applicable Goal 19 Implementation Requirement standards used to identify the resources and uses that were mapped for the planning process. This is followed by a discussion of the data collection and analysis methods that were used by the state agencies to create draft data inventory lists and map overlays in compliance with the relevant Goal 19 requirements. Each section then describes the criteria state agencies used to categorize and assign specific levels of protection for those marine uses and resources overlays. The last section describes the MarineMap system which is used to display geospatial data and create maps.

Overview: Goal 19 Ocean Resources (OAR 660-015-0010(4))

Goal 19 is the primary statewide planning goal applicable to the TSP amendment process. It provides the planning framework and standards for drafting the plan amendment, and state agencies have produced the data and information provided to OPAC in order to comply with the requirements of the goal. Goal 19 requires state and federal agencies to take actions that are reasonably likely to protect living marine organisms from adverse effects of development on non-renewable (i.e. non-living) marine resources, uses of the ocean floor, or other actions. The action state agencies will be taking in this case is the adoption of an amendment to the TSP that state agencies will be required to implement through their existing permit review, consultation, regulatory and leasing roles and responsibilities.

Goal 19 instructs state and federal agencies to take a precautionary approach to decisions about marine resources and uses when information is limited. Most MREC technologies are still in an early developmental stage. There are no significant deployments of the MREC devices now that would provide information about the impacts of this type of industrial development in the marine environment. Though considerable research efforts are being conducted, there remains a significant scarcity of information about the possible effects of MREC development on ocean resources and uses in general, even as technologies continue to change and new devices are introduced. There is even less information currently available that addresses the potential impacts of MREC development on the resources and uses of Oregon's Territorial Sea. The wide range of prospective technologies, lack of reliable data on potential MREC impacts, and scale and variability of the ecology of Oregon's territorial sea, make it impossible to conduct a site compatibility analysis for the entire area. Given the lack of information, state agencies have chosen to apply a precautionary approach in developing a siting plan.

The Planning Framework:
The objective of the TSP planning process is to site MREC development in a manner that is consistent with Goal 19, which requires that specific resources and uses be protected from the potential adverse impacts of that development. The state agencies adopted a planning framework that applied the standards and requirements of Goal 19 to conduct an analysis of relevant geospatial data and to use the output of that analysis to generate a series of draft plan options for the selected resources and uses. The basic premise of the analysis was to assess the relative distribution, significance, and sensitivity of Goal 19 uses and resources throughout the territorial sea, and to suggest specific levels of protection that the plan needed to provide so as to avoid potential adverse impacts on those resources and uses from MREC development. This planning framework follows the model that the OPAC Territorial Sea Plan Working Group presented to the public at a series of work sessions it conducted in the Spring of 2011.

The steps to the planning process that the agencies have been following are described in this document. Each step in the planning process involves public review through the OPAC and Territorial Sea Plan Working Group public processes, as well as other independent review. The steps are:

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1. Identify Planning Objectives (Amend TSP for siting MREC)
2. Define Statutory and Regulatory Perimeters (Goal 19 and the TSP)
3. Acquire and Catalog Relevant Data (Goal 19 resources and uses)
4. Conduct Geospatial Data Analysis (Use conflict, sensitivity and compatibility)
5. Define Planning Options and Select Zoning Model (Options 2 – 4)
6. Adopt Geospatial Data Analysis to Planning Model
7. Draft Plan

The planning process is now in the final stages of adopting the geospatial data analysis to the selected planning model and drafting a plan that is spatially explicit in delineating areas that are protected or made available for potential renewable energy development.

Data Collection Protocols: The state agencies adhered to several basic protocols for the data that was included in the inventories. The first protocol was that the data layers being used to create the map overlays be applicable to an extensive portion of the territorial sea rather than a single area or sub region. Though there are many research projects being conducted that focus on a specific aspect of the marine ecology at a selected location, that type of information was not considered useful for doing an analysis of many resources on a much larger scale. Second, the agencies required that any data being collected was obtained using a scientific method that is both objective and repeatable. This is standard quality control practice that ensures that the data and the products derived from using the data, stand up to both scientific and legal scrutiny. Lastly, the data used had to follow the basic Federal Geographic Data Committee (FGDC) standards for geospatial information.

Goal 19 Resource and Use Inventories: The DLCD and ODFW spent much of the past few years working with a variety of other state and federal agencies, researchers, academic institutions, foundations, advisory groups, and consultants collecting the data needed to do an analysis of the Goal 19 resources and uses. DLCD and ODFW compiled that information into three separate aggregate data inventories to coincide with the categories of resources addressed by Goal 19; ecological resources, fisheries, and beneficial uses. The agencies applied the data collection protocols listed above to the data that was included in the inventories.

The Use of a Planning Grid:
To facilitate the planning process, the state applied a planning grid to the territorial sea which effectively divides the entire area into 1260 one square mile cells. The state's planning grid is an extension of the three square mile grid used by the U.S. Bureau of Ocean Energy Management and other federal agencies for planning energy lease sales in federal waters of the outer continental shelf. The planning grid is a "course filter" tool that enables the state agencies to display and analyze the numerous spatial data sets that may be relevant to any particular location. It is needed because marine resources and uses all have different spatial footprints. Some are large swaths of ocean areas such as the fishing grounds and marine habitat data, while others are distinct features or locations like a fiber optic cable corridor or a seabird nesting colony. These resources and uses often share the same ocean space and the spatial data representing them will

necessarily overlay each other. By putting all the data sets together in the planning grid, state agencies are able to use other geospatial tools to assess and analyze the relative importance of the resources and uses present within any particular area. This grid cell analysis approach was used to develop draft planning options and to identify areas of the territorial sea where marine renewable energy is least likely to conflict with other marine resources and uses.

The use of the planning grid does have an exaggerating effect on the way the underlying data is visualized. If a resource or use is present within any area of a cell, the entire cell is displayed as having that resource within it. That means that when data is visualized as grid cells, the total area shown as a spatial overlay for a specific use or resource within the planning grid is greater than the actual footprint for that resource. For instance, if a grid cell contains a cable line, the entire cell will indicate the presence of a use within it. To some degree, the exaggerating effect of the grid cell map applies to all the data being mapped. Once OPAC has made some preliminary choices about the type of plan it would like to consider, the grid cell can be removed and the original spatial data will be used to develop the plan boundaries for delineating areas for various levels of management and use.

Protection of Goal 19 Resources and Uses: The agencies adopted a system that assigns a level of protection to each area based on a descending numeric scale from level 1 (highest) to level 3 (lowest). The level of protection attributed to an area is based on an analysis that considers a range of factors including: avoiding conflict with protected uses and resources; the sensitivity of those resources and use to the potential impacts of MREC development; or the compatibility of the resources and uses with MREC development. The level of protection that was assigned to an area was predicated on the basic assumption that MREC development, at a commercial scale, would cause significant changes to the ecology of the affected location and would displace or disrupt other beneficial uses. Since there is very little information about the potential impacts of MREC development, and the technologies span such a wide and evolving range, it is not yet possible to determine the compatibility of MREC with all the Goal 19 resources and uses on the scale that would be needed for this planning effort. However, the agencies involved in this planning process have assumed that MREC development is not compatible with existing beneficial uses of specific sites for which the users have some form of exclusive state or federal authorization, or the U.S. Coast Guard has asked the state to create a navigational safety corridor.

(A) Important Marine Habitat

The first category of marine resources listed under Goal 19 Section 1.b. (1) is "renewable marine resources," which are defined as "living marine resources" in keeping with the primary policy of Goal 19 which is "*to give higher priority to the protection of renewable marine resources – i.e., living marine organisms-than to the development of non-renewable ocean resources.*" The protection afforded renewable marine resources by Goal 19 is dependent on preserving the biological diversity and functional integrity of the marine ecosystem. This is achieved through the protection of marine habitat areas and biological communities which Goal 19 specifically identifies as being:

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; or

b.) needed to assure the survival of threatened or endangered species; or

c.) ecologically significant to maintaining ecosystem structure, biological productivity, and biological diversity; or

d.) essential to the life-history or behaviors of marine organisms; or especially vulnerable because of size, composition, or location in relation to chemical or other pollutants, noise, physical disturbance, alteration, or harvest; or

e.) unique or of limited range within the state

Data Sources and Methods

The task of collecting and mapping important marine habitat was conducted by ODFW. The agency used the Goal 19 description of important marine habitat areas to target the type of data it needed to collect to develop draft map overlays of these resources. Based on the Goal 19 marine habitat descriptors, ODFW produced a list of ecological resources that needed to be assembled into spatial overlays. These data comprise the Nearshore Ecological Data Atlas (NEDA), which consists of data layers on the basic ocean ecosystem species and habitat, fish distribution, seabirds, marine mammals and other species. The current list of data sets in NEDA is attached as appendix A. (ODFW – please insert a description of the use of Marxan in providing the course screening analysis for marine habitat areas based on the a wide range of data inputs)

Use Conflict Protection Levels

The first category of Goal 19 resource use protection is level 1, which denotes areas containing marine habitat resources that the state analysis has deemed to be spatially discrete, critical to the functional integrity of the marine ecosystem, and are incompatible with the co-location of marine renewable energy development. The data layers listed below indicate the corresponding resource description provided under Goal 19 important marine habitat. The level 1 resource areas comprised 60% of the territorial sea using the course grid cell analysis.

- Rocky shores habitat (c, d, f)
- Subtidal rock reefs (a, c, f)
- Kelp Beds (a, c, d, f)
- Seabird nesting colonies (d, e, f)
- Pinniped haulouts (d, e, f)
- ESA critical habitat (Stellar, plover) (b)
- Marxan outputs – core "hotspots" (c)

The second category of Goal 19 resource and use protection is level 2, which denotes non-exclusion areas containing resources and uses in a more distributed concentration, or where the information that is available for those resources is not available or is less reliable. Marine habitats that are assigned Level 2 protection are those that may be compatible with the co-location of marine renewable energy development, depending on the type and scale of technology, and the specific location it would be deployed. Listed below are some of the resource data used to determine areas that are proposed for level 2 protection. The level 2 resource areas comprised 22% of the territorial sea using the course grid cell analysis.

- Level II Marxan (moderate hotspots) (c)
- Grey Whale foraging areas (b, d)
- Marbled Murrelet (b, d)

The final category of protection is level 3, where the information that is available indicates that the Goal 19 resources and uses present within the area are not of a significant concentration or significance to indicate a direct conflict with the introduction of marine renewable energy development as a compatible use. A level 3 area contains resources and uses in all three Goal 19 categories, but they are more dispersed or of lesser value. The level 3 resource areas comprised the remaining 18% of the territorial sea using the course grid cell analysis.

<u>(B) Areas Important to Fisheries</u>
The second category of marine resources and uses that Goal 19 specifies for protection are areas important to fisheries. These areas are further defined as:

a.) areas of high catch (e.g., high total pounds landed and high value of landed catch); or

b.) areas where highly valued fish are caught even if in low abundance or by few fishers; or

c.) areas that are important on a seasonal basis; or

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

Data Source

The areas important to fisheries are represented by a comprehensive series of maps illustrating the commercial, charter, and recreational fishing use patterns and values along the entire Oregon coast, from Astoria to Brookings, based on the expert knowledge of fishermen. The three core elements of the fisheries mapping were the commercial, charter and recreational fishing grounds mapping. [Who] conducted the commercial and charter fishing grounds mapping efforts using peer-reviewed methodologies developed and used by Ecotrust in California and elsewhere. The recreational fishing grounds mapping was conducted using an online tool for surveying private-vessel recreational fishermen and in-person interviews with key recreational fishermen in each port community. The datasets were combined in each port to create the "cross-sector combined value map" products which were submitted to DLCD. These maps express spatially explicit information on the extent and relative importance of ocean areas in a series of port specific color contour "heat" maps illustrating the aggregate cross-sector fishing effort for each port. The maps present this information as a range of concentric light to dark color contours, with the darker contour areas representing increasing levels of fishing activity. Generally, the combined-sector maps for each port incorporate aggregated data on fishing grounds for commercially and recreationally caught species such as crab, salmon, halibut and groundfish. There are no sector-specific maps for the entire territorial sea or for individual ports.

The mapping method used by Ecotrust was designed to capture data for individual ports and fishing sectors, and was based on ODFW landings data. The ports included were Astoria, Pacific City, Garibaldi, Depoe Bay, Newport, Florence, Winchester Bay/Reedsport, Coos Bay/ Charleston/ Bandon, Port Orford, Gold Beach, and Brookings. The mapping process was facilitated through the participation of port and fishing advisory groups including; Fishermen Interested in Natural Energy (FINE) of Newport, Southern Oregon Ocean Resource Coalition (SOORC) in Reedsport, Coos Bay, Charleston and Bandon, Port Orford Ocean Resource Team (POORT), Nearshore Action Team (NSAT) of Depoe Bay, Florence Oregon Ocean Resources Coalition (FOORC) and the Oregon Trawl Commission. A total of 244 commercial fishermen, 63 charter operators/ owners, and 237 recreational fishermen participated in the mapping project.

The spatial data analysis used by DLCD to delineate the areas important to fisheries included the maps from the above port groups for commercial fisheries, with the exclusion of Pacific City, though the Pacific City Dorymens Association, Inc., has submitted a map to OPAC of areas that are fished by its members. The charter port fisheries analysis also used the same port groups as commercial with the exclusion of Garibaldi, whose charter did not participate, and Port Orford, which did not have any charter boats. The recreational fisheries analysis included the same port groups as commercial with the addition of Salmon River. Not all user groups or fisheries are represented in all ports.

Use Conflict Protection Levels

The combined-sector port maps, alone, are not a complete enough data set to determine areas important to fisheries directly and with a high degree of confidence and certainty. In terms of mapping (a.) areas of high catch (e.g., high total pounds landed and high value of landed catch), the cross-sector combined value maps provide a proxy for the actual volume and value of the

local fishery. It is assumed that areas that have the highest concentration of aggregated fishing effort also produce the most combined fish weight landed and relative economic value.

The combined –sector maps do not delineate (b.) areas where highly valued fish are caught even if in low abundance or by few fishers. There is technical analysis that can disaggregate the combined-sector maps into sector maps for individual species such as crab or salmon. There may be areas that are important as fishing grounds for a specific high value species that are located outside of the areas where the most effort occurs, but there is simply no way of analyzing the combined-sector maps to obtain that information.

The combined-sector value maps do act as a proxy for delineating (c.) areas that are important on a seasonal basis. The maps are drawn from data that covers a wide range of sectors and were developed with input from a statistically robust percentage of the fishing community. It is possible to assume that the data addresses the differences, over time, in seasonal fisheries.

The combined-sector value maps are statistically valid for delineating the areas that are (d.) important to commercial and charter recreational fishing communities, including those of individual ports or particular fleets. However the data collection was not as robust for the private recreational fishers who are not active through the port groups. A separate project was conducted using an online survey system, to try to obtain a wider range of inputs from the recreational fishing community outside of the port groups, but it also failed to provide the level of statistically valid data that would be needed to delineate the areas that are most likely to be used by the private recreational fishing, and was not used in the development of the plan map overlays.

The data and map overlays for delineating (e.) habitat areas that support food or prey species important to commercially and recreationally caught fish and shellfish species, was produced by ODFW as one of the NEDA data sets and included in the map overlays described under the Marine Habitat (B) description above.

The cross-sector aggregate maps are social value maps illustrating the level of fishing effort. It is not possible to extrapolate from the contours of the cross-sector aggregate maps the actual economic value derived from the fisheries for a specific area or within a specific contour, or to compare the relative economic values of the areas within the contours. Therefore DLCD has taken a conservation approach in using the maps to determine the areas important to fisheries, and has based the level of protection afforded specific areas in accordance with the level of fishing effort they represent by selecting the areas with the highest concentrated level of effort for higher levels of protection.

The DLCD used best professional judgment in how to apply the port maps to delineate the areas important to fisheries for general planning purposes on a coast-wide basis. The objective was to choose areas for which the maps provide a high level of confidence and commensurate degree of certainty, for accurately delineating the variations in the level of fishing effort. This approach translated into the use of several criteria to select the areas important to fisheries. First, the

agency selected the areas or contours that the maps indicate as having the most concentrated use, or fishing effort, on an aggregated cross-sector basis. Then, the same spatial contours were derived from each port map for each level of protection, so that every port is given equal protection at every level.

The level 1 areas comprised 45% of the territorial sea using the course grid cell analysis. It is assumed that these areas contain the most concentrated level of fishing effort across all sectors, equally distributed for each port. The agency selected an area comprising an additional 24% of the territorial sea as level 2 areas, using the course filter grid analysis. The remaining level 3 areas comprised 18% of the territorial sea using the course grid cell analysis.

(C) Beneficial Uses

The last category listed in Goal 19 applies to a range of "beneficial uses" of ocean resources. Under this subsection, agencies are required to protect and encourage uses such as navigation, food production, recreation, aesthetic enjoyment and uses of the seafloor, provided the activities do not have an adverse effect on ecological or fishing resources listed above, and avoid conflicts with other ocean uses. The goal does not further define "beneficial use" as it did for ecological resources and fisheries. Nor does the goal provide additional descriptors for certain types of ocean use activities that are not directly regulated by state or federal agencies such as recreation and aesthetic enjoyment. Instead, the beneficial uses described in this category are to be managed so that they do not have an adverse effect on marine renewable resources or each other.

Goal 19 Section 1.c. requires that agencies, through programs, approvals, and other actions, shall

1.) protect and encourage the beneficial uses of ocean resources--such as navigation, food production, recreation, aesthetic enjoyment, and uses of the seafloor--provided that such activities do not adversely affect the resources protected in subsection 1., above; avoid, to the extent possible, adverse effects on or operational conflicts with other ocean uses and activities; and
2.) comply with applicable requirements of the Oregon Territorial Sea Plan.

Data Sources

This category includes activities that are permitted, leased or managed through some form of state or federal regulatory authority, as well as unmanaged and unpermitted activities like towlane agreements and recreational uses. DCLD staff used information that it collected about these activities to develop map overlays depicting the locations of these uses and managed areas. Much of the spatial data for existing authorized uses was derived from the locational attributes contained in permit or lease documents. Information about managed uses was obtained through the maps and geospatial references used to delineate management plans for parks, reserves or protected areas. Finally, original research was conducted by the department to discover and delineate the location of research facilities and research project areas within the territorial sea.

Use Conflict Protection Levels

Goal 19 does not apply the same type of protection to beneficial uses of the ocean as it does to marine habitat and fisheries. First, beneficial uses are not a defined class of uses, but are an open ended category of uses that Goal 19 does not afford the same direct prescriptive type of protection that is given marine habitat or fisheries. Instead, Goal 19 requires state and federal agencies to analyze the effect that any new beneficial use would have on marine habitat and fisheries resources before taking action to approve or authorize the use. Second, it calls for an analysis of the adverse effects of the new use on other existing uses. These types of analysis are imbedded into the existing regulatory review requirements of state and federal agencies and in the Territorial Sea Plan, and are routinely applied through the permitting or leasing process.

The state analysis placed the beneficial uses into three level of protection to comply with the method being used to delineate marine habitat and fisheries resources and uses. However, given the distinction in the way that Goal 19 addresses beneficial uses, and the various types of existing uses that have been authorized or are subject to an existing management plan, DLCD applied a different set of criteria to determine the level of protection it assigned to them. The criteria are based on the Goal 19 requirements to avoid adverse environmental effects and user conflicts, and may be considered more of compatibility assessment than the type of sensitivity analysis that was applied to the ecological and fisheries resource areas.

Level 1 beneficial uses are deemed to be incompatible with the co-location of marine renewable energy development. These uses have some form of existing authority or lease to occupy or operate in a specific location. Though the specific use authorizations may not necessarily exclude all other uses, it is presumed that those other uses are temporary and minimal in their impact and would not infringe on or inhibit the function for which the underlying authorization has been issued. The state analysis assumed that the regulatory analysis that agencies conducted prior to issuing the permit or lease addressed the potential conflict that the authorized use would have on other beneficial uses. Examples of non-conflicting beneficial uses include the right of ships or boats to navigate over a submerged cable, or through an area designated as an offshore dredge material disposal site. The second criteria that the state analysis applied to delineate a level 1 beneficial use area was navigational safety. In the case of the shipping lanes, the U.S. Coast Guard requested that the state apply a 2-mile wide safety corridor for shipping lanes emanating from deep draft ports to allow enough area for large vessels to navigate freely in emergencies or extreme sea conditions.

Using the course filter grid analysis, DLCD designated areas comprising 32% of the territorial sea as level 1 beneficial use areas. The data sets that were used to map the existing level 1 beneficial uses and the agency of data origin include:

- Dredge Material Disposal Site (ACOE)
- Coastal Discharge Permitted Sites (DEQ/DLCD)
- Telecommunication Cables (OFCC)
- Deep Draft Shipping Lanes (NOAA)
- Nearshore Research Inventory (DLCD)

- Oregon Islands National Wildlife Refuges (USFWS)
- Oregon Marine Garden, Refuge or Research Reserves (DLCD TSP)
- Oregon Marine Reserves Areas of Work (ODFW)
- OPT Reedsport Project Site (FERC Docket No, P-12713-002)

Existing uses that are assigned level 2 protection are those that may be compatible with the co-location of marine renewable energy development, depending on the type and scale of technology, and the specific location it would be deployed. These uses do not typically rely on some form of existing authority to operate or to use any specific location. Level 2 beneficial uses also normally co-locate with other ocean uses with minimal or no impact. Examples of level 2 existing uses are marine recreation, aesthetic enjoyment, some forms of ocean research, and towlane agreements. Using the course filter grid analysis, DLCD designated areas comprising 38% of the territorial sea as level 2 beneficial use areas. The data sets that were used to map the existing level 2 beneficial uses and the agency of data origin include:

- Nearshore Research Inventory (DLCD)
- Shallow Draft Navigation Channels (NOAA)
- Inactive Dredge Material Disposal Sites(ACOE)
- Oregon State Parks Ocean Shore Recreation Survey(OPRD)
- Crab Tugboat Agreement Lanes
- Non Consumptive Ocean Recreation (Surfrider)
- Navigation Aids (NOAA ENC)
- Towlane Agreement (WA Sea Grant)

Level 3 beneficial use areas are those wherein the data indicates there are no or few potential conflicts between an existing beneficial use and a potential MREC development. Using the course filter grid analysis, DLCD selected areas comprising 30% of the territorial sea as level 3 beneficial use areas.

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[i] ORS 196.471, entitled "Territorial Sea Plan review requirements, provides in part:

> "(1) The Land Conservation and Development Commission shall review the Territorial Sea Plan and any subsequent amendments recommended by the Ocean Policy Advisory Council to either the Territorial Sea Plan or the Oregon Ocean Resources Management Plan and make findings that the plan or amendments:
>
> > "(a) Carry out the policies of ORS 196.405 to 196.515; and
> >
> > "(b) Are consistent with applicable statewide planning goals, with emphasis on the four coastal goals.
>
> "(2) After making the findings required by subsection (1) of this section, the commission shall adopt the Territorial Sea Plan or proposed amendments as part of the Oregon Coastal Management Program."