The Oregon Territorial Sea Plan for Marine Renewable Energy Development

On January 24th, 2013, the Oregon Land Conservation and Development Commission adopted amendments to the Territorial Sea Plan (TSP) for siting and regulating marine renewable energy development. It's the first marine spatial plan in the U.S. to address all forms of marine renewable energy (MRE) technology and was the product of an intensive planning process that included over a hundred public meetings held by Ocean Policy Advisory Council (OPAC), the Territorial Sea Plan Advisory Committee (TSPAC), and the Department of Land Conservation and Development. It represents the culmination of this lengthy public participation process in addition to input from coastal communities, stakeholders, state and federal agencies including NOAA. That process produced a broad consensus on the changes to Part Five of the TSP, including the spatial plan map, policies, procedures, operational requirements and the project review standards for protecting fisheries, ecological, recreation and visual resources.

Background

The planning process was initiated by Governor Kulongoski's March 26, 2008 Executive Order No. 08-07, directing the department to seek recommendations from OPAC for amending the TSP to address wave energy development. On that same day, the State of Oregon and Federal Energy Regulatory Commission signed an **MOU** for cooperation on the siting of marine renewable energy development, and adopting the use of a state comprehensive plan to guide that process. Those initiatives resulted in the 2009 amendment of the TSP with the inclusion of Part Five, which governed the use of the Territorial Sea for the development of marine renewable energy facilities. This initial effort resulted in a set of policies, resource inventory, and operational requirements, but did not include a spatial plan map for siting projects.

The Plan Overview

As required by the state's Ocean Resources Goal (19) and the TSP, Oregon's plan for marine renewable energy development takes a *precautionary approach* that is designed to protect its unique and valuable ecological resources and existing beneficial uses, while identifying the areas and conditions that are appropriate for the development of a wide variety of marine renewable energy technologies. Oregon's plan emphasizes the acquisition of site specific baseline data*, pilot projects and phased development*, impact *monitoring*, and *adaptive management* as the path to full commercial scale project development. This is coupled with a *participatory and inclusive project review* and oversight process involving state and federal agencies, affected local governments and others, in a Joint Agency Review Team.

The siting and regulation of MRE projects is dictated by the new plan map, which divides the territorial sea into a series of areas, which were delineated based on the concentration and significance of the marine resources and uses present within them. One of the primary objectives of the plan is to provide flexibility for the MRE industry to find locations that meet the physical requirements of the varied technologies while avoiding harmful impacts to ecological resources or other marine resource users. This is achieved by applying specific project review standards to potential MRE projects within each type of area included in the plan. The basic objective is to ensure that potential MRE projects would have minimal adverse impacts on the important resources and uses at any site.

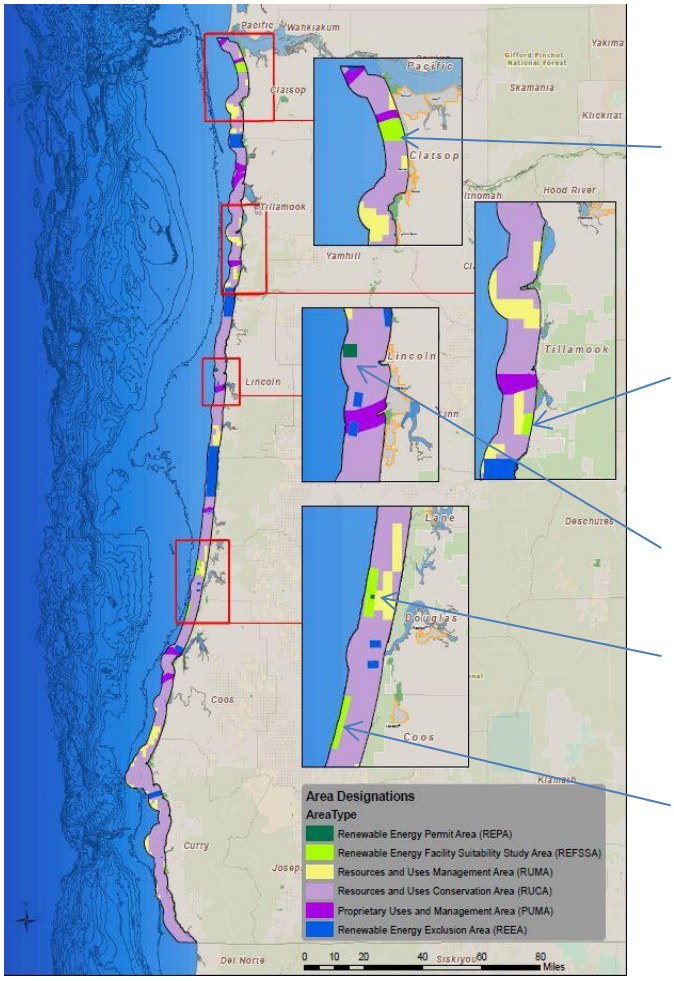
Siting and Standards

Most of Oregon's 1260 sq. mile territorial sea is included in the Resources and Uses Conservation Areas (RUCA), which take up 900 sq. mi. (72%), and the Resources and Uses Management Areas (REMA), of 136 sq. mi. (13%). The special project review standards for the RUCA are very protective, while those for the RUMA are somewhat less restrictive. The Renewable Energy Exclusion Areas (REEA) which are made up of the state's marine reserves and dredge material disposal sites take up 130 sq. mi. (10%), within which no MRE development would be

allowed to occur. The Proprietary Use Management Areas (PUMA) at 68 sq. mi. (5%) are areas where there are other existing uses such as navigation channels, fiber optic cable corridors, federal wildlife refuges, and other permitted or managed uses, which also restrict MRE development depending on their compatibility. There are 2 very small sites totaling 2 sq mi. (0%), where state and federal permits have already been issued for projects that make up the Renewable Energy Permit Areas (REPA). Those sites are the National Northwest Marine Renewable Energy Center site in Newport, and the Ocean Power Technology (OPT) 10 buoy permit site off of Reedsport.

In addition to the standards that apply to these areas, all projects are subject to special review standards to *protect visual and recreational resources* throughout the territorial sea.

Most of the attention has been on the 4 Renewable Energy Facility Suitability Study Areas (REFSSA), which add up to 22 sq. mi. <u>or less than 2%</u> of the territorial sea. REFFSA have the least restrictive project review standards and are intended as areas where industry should consider siting MRE projects.



This is the TSP Part Five plan map with the REFSSA sites shown as magnified cut-outs.

The Camp Rilea REFSSA is the largest of this type and was modified to account for the fiber optic cable corridor underlying the PUMA along the northern boundary. It is under the control of the Oregon Military Department.

The Nestucca site was modified to avoid the mouth of the Nestucca estuary and the high value fishing grounds, and is restricted to technologies that are sub-surface or have limited visual resource impact.

The REPA for the NNMREC facility in Newport

The Reedsport REFSSA is the site where OPT holds a FERC Preliminary Permit for a 50MW project. Within it is the OPT 10 buoy project REPA site.

The Lakeside REFSSA is a narrow band along the outer edge of the territorial sea which could accommodate technologies requiring deeper water.

The plan also includes a comprehensive set of uses and resources maps which provide additional data and information and that will be valuable for conducting project reviews.

This information is available from the department or online at http://OregonOcean.info and http://Oregon.MarineMap.org.

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