# GOAL 19: OCEAN RESOURCES BACKGROUND REPORT

PURPOSE: To assure that marine resource management and development in the territorial sea adjacent to Clatsop County occurs in a manner that conserves beneficial use of these resources.

# HISTORIC PERSPECTIVE

Statewide Planning Goal 19 was originally adopted in 1977 and updated in 2000. Clatsop County's compliance with Goal 19 was deemed acknowledged in 2012 (Ordinance 12-04). Goal 19 deals with matters such as dumping dredge spoils and discharge of waste products into the open sea, and prioritizes the protection of renewable marine resources over the development of non-renewable resources. It outlines the state's interest in conserving resources within the Ocean Stewardship Area. The area includes Oregon's territorial sea extended out three nautical miles from shoreline, as well as the continental margin seaward to the toe of the continental slope, and adjacent ocean areas.

The Ocean Resources Goal (Goal 19) was developed amid national concerns about federal offshore oil and gas drilling as well as regional concerns about foreign fishing fleets and overfishing on or near the U.S. continental shelf. Accordingly, the Ocean Resources Goal established a priority for renewable resources, emphasized optimum-yield management for fisheries, and established a decision-making process that required adequate inventory information and the assessment of impacts from development actions.

# **CURRENT CONDITIONS**

# **Oregon Coastal Management Program**

The Oregon Coastal Management Program (OCMP), approved by the National Oceanic and Atmospheric Administration in 1977, is the state of Oregon's implementation of the national Coastal Zone Management Program, which was created to address coastal issues nationally. The OCMP is a network of multiple agencies within Oregon's Territorial Sea with the Oregon Department of Land Conservation and Development (DLCD) acting as the lead administrative agency. Oregon's coastal resources are managed by federal agencies, state agencies, city jurisdictions, and county jurisdictions under the OCMP.

#### **Rocky Shores Management Strategy**

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# **CLATSOP COUNTY COMPREHENSIVE PLAN**

Part Three of the Territorial Sea Plan, updated in 2022, the Rocky Habitat Management Strategy aims to be a framework for coordination and adaptive planning for the long-term protection of ecological resources and coastal biodiversity within Oregon's marine rocky habitats, including those in Clatsop County. The Rocky Habitat Management Strategy supports the maintenance, protection, and restoration of rocky habitats and biological communities, the implementation of holistic management, the fostering of personal stewardship through education, interpretation, and outreach, the fostering of research and monitoring, and cooperation among local, state, and federal resource management agencies and tribal governments.

Clatsop County contains two rocky habitat areas Arch Cape and Arcadia Beach, and Haystack Rock, designated as a Marine Garden. DLCD maintains information on all sites included in the Rocky Shores Management Strategy and designated sites may change. For more information, please contact DLCD.

# House Bill 3375

House Bill 3375 (HB 3375), passed on April 27, 2021, in part requires the Oregon Department of Energy to review the benefits and challenges of implementing floating offshore wind energy production. HB 3375 details the precarious nature of importing power onto the Oregon coast through existing means, and recognizes the opportunity of increasing Oregon's renewable energy inventory.

# **Oregon Department of Energy Floating Offshore Wind Study**

The Floating Offshore Wind Study, created by the Oregon Department of Energy, is being prepared to address the requirements of HB 3375. The Floating Offshore Wind Study will contain a review of existing literature detailing the benefits and challenges of integrating up to three gigawatts of floating offshore wind energy into Oregon's electric grid by 2030, and feedback from stakeholders including state and federal departments, energy commissions, research groups, and members of the public. The Oregon Department of Energy will prepare and submit a final report to the Legislature which will contain recommendations and strategies for meeting the requirements of HB 3375. The Bureau of Ocean Energy Management, the federal agency with leasing authority, has announced Call Areas on the outer continental shelf in southern Oregon. The information obtained from these pilot sites will influence the recommendations made to Legislature and, if successful, additional pilot sites or full facilities may be proposed in the territorial sea adjacent to Clatsop County.

# NOAA Coastal Management Fellowship / Clatsop County, Warrenton, Fort Stevens State Park

The Oregon Department Land Conservation and Development, through the National Oceanic and Atmospheric Administration's Coastal Management Fellowship Program has secured a fellow to assist local jurisdictions on the implementation of sea level rise planning. Clatsop County and other coastal jurisdictions will work with DLCD on creating and implementing adaptable guidelines and regulations to address future planning needs associated with rising sea levels.

# **CLATSOP COUNTY COMPREHENSIVE PLAN**

# **Oregon Marine Reserves**

Oregon's five marine reserve sites are areas in the ocean dedicated to conservation and scientific research. In the marine reserves all ocean development and removal of marine life is prohibited. In associated marine protected areas ocean development is prohibited but other limitations vary by site. Management and scientific monitoring of the sites is overseen by the Oregon Department of Fish and Wildlife. The northernmost site, Cape Falcon Marine Reserve is in southwest Clatsop County off Falcon Cove Beach and Oswald West State Park.

# **Oregon Beach Monitoring Program**

The Oregon Beach Monitoring Program of the Oregon Health Authority monitors the waters along Oregon's coastline for the presence of fecal bacteria and reports elevated levels to the public. Marine waters are tested for enterococcus, which is an indicator of the presence of other bacteria. Enterococcus is present in human and animal waste and can enter marine waters from a variety of sources such as streams and creeks, storm water runoff, animal and seabird waste, failing septic systems, sewage treatment plant spills, or boating waste. When levels exceed state thresholds, Beach Advisory Notices are released, cautioning the public. Such advisories periodically occur in the nearshore ocean off the coast of Clatsop County, especially in summer months.

# **FUTURE CONDITIONS**

# **Climate Change and Sea Level Rise**

The Oregon Department of Land Conservation and Development, in conjunction with federal agencies, states in their Future Climate Projections for Clatsop County (2020) that the County risks experiencing increased sea level rise, increased frequency of extreme storms, and increased wave height as a result of global climate change. The extent of these impacts is difficult to gauge but are expected to impact the fishing industry, future offshore renewable energy facilities, and Oregon beaches and rocky shores.

#### **Impacts on Fisheries**

Fisheries in Clatsop County rely on ocean resources, estuarine habitats, and upland streams and rivers. Climate change endangers the balance of these three ecosystems. As sea levels rise and extreme storms become more frequent, estuary habitats, streams, and rivers in Clatsop County may experience increased erosion and flooding. Extreme weather events may cause the damming of critical salmon runs and other habitats. Oregon State University valued Clatsop County's fishery industry at approximately \$57.5 million in 2021. The fishing industry in Clatsop County provides jobs for commercial fishers, restaurants, the tourism industry, and more. For further information on the economic value of fisheries in Clatsop County, please refer to Clatsop County Comprehensive Plan Goal 9, Economic Development.

# **CLATSOP COUNTY COMPREHENSIVE PLAN**

## **Impacts on Offshore Energy Facilities**

The state of Oregon is enacting plans and policies, such as HB 3375, to analyze the effects of utilizing more renewable energy facilities. Climate change and rising sea levels will impact many of these, including floating offshore wind turbines. Increased wave height and an increased frequency of extreme storms may create significant enough impacts to render floating offshore wind turbines infeasible.

## **Ocean Acidification and Pollution**

Ocean acidification, caused by global climate change, is the process by which the average pH of ocean water globally decreases, resulting in water which is acidic enough to disrupt normal fish and shellfish reproduction, causing concern for the collapse of existing marine food webs and impacting ecosystems. The Great Barrier Reef of Australia, famous for it's extensive and biodiverse coral reef system, has already experienced a great decline in ecosystem viability by a small change in ocean pH, a process known as coral bleaching. Shellfish such as crabs, a vital component of the local fishery industry, may also see their population decline as ocean acidification continues. A shellfish's shell becomes weaker, or could fail to form in more acidic waters, resulting in increased vulnerability for these species. House Bill 3114, passed in 2021, provided \$1.9 million to fund research and monitoring of ocean acidification and hypoxia, an ecosystem stressor caused by a reduction in water ocean oxygen levels, along the Oregon coast and estuaries, develop best management practices, and conduct outreach and education. ODFW will receive \$470,000 of this funding to assess shellfish and habitat in estuaries and map estuaries to document long-term ocean acidification/hypoxia impacts.

Globally, the vast majority of marine pollution comes from land. In Clatsop County, the majority of pollution comes from non-point sources such as garbage, sewage, livestock manure, sediments, automotive oil and tire debris, pesticides, and other chemicals. In addition to locally based pollution, global pollution also poses significant threats. The Great Pacific Garbage Patch is formed of two distinct patches of plastic waste stuck within the North Pacific Subtropical Gyre, a large area spanning most of the Pacific Ocean north of the equator. The Great Pacific Garbage Patch and other sources of ocean pollution, can impact our local fisheries by spreading contaminants which disrupt lifecycles, impacting the food web. Clatsop County has many rivers, sloughs, and tributaries that bring non-point source pollutants to the ocean if proper mitigation does not take place. It is vital to create and implement best management practices which aim to reduce non-point source pollution before it can enter our waterways.

Noise pollution contributes to ocean noise, a type of pollution caused by human activities which interferes with or obscures the ability of marine animals to hear natural sounds in the ocean. When natural ocean sounds are obscured, marine animals which rely on sound for hunting, communication, evading predators, and navigation are impacted. Proposed development in Oregon state's territorial sea adjacent to Clatsop County could increase ocean noise, leading to negative impacts on ocean animals and the ecosystem.