

Appendix A – Ocean and Estuarine Monitoring (RFP Projects 1, 2, and 3)

Background

A series of monitoring networks are currently in operation in Oregon that produce limited long-term time series in its nearshore ocean and estuaries. However, large gaps exist in Oregon's monitoring data sets that should be filled to provide a more complete understanding of temporal and geospatial dynamics within nearshore ocean and estuarine waters. These key data gaps have been documented in several reports and inventories such as:

- [2018 Pacific Coast Collaborative West Coast OA and Hypoxia Asset Inventory](#)
- [Oregon Department of Environmental Quality \(DEQ\) - 2018/2020 Integrated Report](#)
- [Oregon Department of Environmental Quality \(DEQ\) – Triennial Methodology Assessment](#)

The OOST and the OAH Council are dedicated to filling strategic monitoring gaps, especially in locations that have direct impacts on Oregon's ability to conduct long-term planning. Applicants are required to justify the type of monitoring (chemical and/or biological) and the parameters and metrics collected considering State planning and management needs. Projects should focus primarily on the collection of biological and/or chemical data, by following methods and variables compatible with [Oregon's marine water quality standards](#) (e.g., pH, dissolved oxygen). Awardees must provide data and products in accessible formats that can be readily incorporated into ongoing regional analyses of biological data and development of water quality criteria. Project funds can be used for data mining of existing datasets. However, prioritization will be given to projects that provide Oregon with new data and/or monitoring capacity.

The projects below represent key monitoring gaps identified in the Oregon OAH Action Plan:

- 1. \$97,500 for intertidal OAH monitoring in Oregon marine reserves;**
- 2. \$287,625 for subtidal OAH monitoring in Oregon marine reserves; and**
- 3. \$97,500 for OAH monitoring in Yaquina Bay, Oregon.**

INTERTIDAL AND SUBTIDAL OREGON MARINE RESERVES

(RFP Projects 1 and 2)

Purpose:

The mission of Oregon's Marine Reserve system is to conserve marine habitats and biodiversity by protecting a limited system of ecologically special places in Oregon's Territorial Sea. Through this framework, the State aims to build long-term OAH monitoring into Oregon's Marine Reserves management plans and evaluations, to provide biological-oceanographic coupled observations, and to maximize Oregon's investment in the Marine Reserves.

Geographic Scope:

Eligible sampling locations are indicated in the [Oregon Department of Fish and Wildlife \(ODFW\) regulatory maps](#). This includes intertidal (between high tide and lowest low tide lines) and subtidal (below lowest tide line) sites in the five State recognized Marine Reserves (Cape Falcon, Cascade Head, Otter Rock, Cape Perpetua, and Redfish Rocks).

Intertidal/subtidal locations within Marine Reserve comparison areas (as defined by the ODFW Marine Reserve Research Program), associated Marine Protected Areas, and associated Shoreline Areas may also be considered as sampling sites in conjunction with sites located in the Marine Reserve. Sample locations must be justified in project descriptions as to their relevance to Oregon OAH Action Plan monitoring goals and other State planning needs.

Deliverables:

Data collected as a result of this RFP should have applicability to evaluating whether Oregon's Marine Reserves could be used in State adaptation and resilience strategies as well as if Reserves represent OAH hotspots and/or refugia for marine species. Data should be applicable to State processes and considerations by the Oregon Ocean Policy Council (OPAC) Science and Technical Advisory Committee (STAC) (e.g., Oregon Marine Reserves 2023 assessment report).

Applicants are encouraged to consider Marine Reserve Management and [Marine Reserves Monitoring Plans](#) in conjunction with additional tribal government, local government, and industry planning documents relevant to the geographic area of study.

- [2021 Cape Falcon Management Plan](#)
- [2020 Cape Perpetua Management Plan](#)
- [2017 Cascade Head Management Plan](#)
- [2012 Otter Rock Management Plan](#)
- [2012 Redfish Rocks Management Plan](#)

YAQUINA BAY

(RFP Project 3)

Purpose:

Oregon aims to maintain and support chemical and biological monitoring at significant estuarine research reference sites that provide high value to the State's mission for OAH adaptation and mitigation. Specific sites, including Yaquina Bay, have been selected for their prior State and Federal investments, geographic location, and/or historical data collection activities.

Geographic Scope:

Eligible locations are indicated in the [Oregon Coastal Atlas](#) and should be located within the estuary system of Yaquina Bay.

Deliverables:

Proposals should focus on establishing or re-establishing estuarine monitoring activities to complement historical time-series in Yaquina Bay (an important economic, research, and management hub for Oregon). Projects are encouraged to consider the OAH Council's [2020 Yaquina Bay Planning Document](#) in conjunction with additional tribal government, local government, and industry planning documents relevant to the Bay and the surrounding area.

Applicants should describe how their findings will aid in larger regional and national assessments, such as the [Federal Environmental Protection Agencies \(EPA\) National Estuary Programs](#), the [2021 report Measuring Coastal Acidification Using In Situ Sensors in the National Estuary Program](#), and [the South Slough National Estuarine Research Reserve](#). Data collected as a result of this RFP should consider the use of Yaquina Bay as a reference site for OAH change in Oregon's estuaries, and how this site might compare with other Oregon estuaries. Although RFP funds are to be spent in Yaquina Bay, projects can leverage other regional ongoing projects or historical datasets from other Oregon bays (e.g., Tillamook Bay, Coos Bay) in their comparisons.