Oregon Ocean Science Trust Strategic Planning Summary
Wednesday, April 5, 2023 9:00 AM to 3:00PM

Hatfield Marine Science Center, Library Seminar Room – Guin Library
2030 SE Marine Science Drive, Newport Oregon 97365

Meeting documents are posted on the Oregon Ocean Science Trust (OOST) webpage:
https://www.oregon.gov/dsl/OOST/Pages/OOST.aspx

OOST Members present
Chair Laura Anderson, Dr. Christine Moffitt, Krystyna Wolniakowski, Steve Marx, Dr. Karina Nielsen

Interested parties
Lisa DeBruyckere, Creative Resource Strategies

Welcome and Introductions
Chair Anderson called the meeting to order at 9:00 AM.

Strategic Action Planning session
Lisa DeBruyckere led the board through a Strategic Action Planning session. The meeting summary is contained in the attached Draft Action Plan.

Public Comment
None

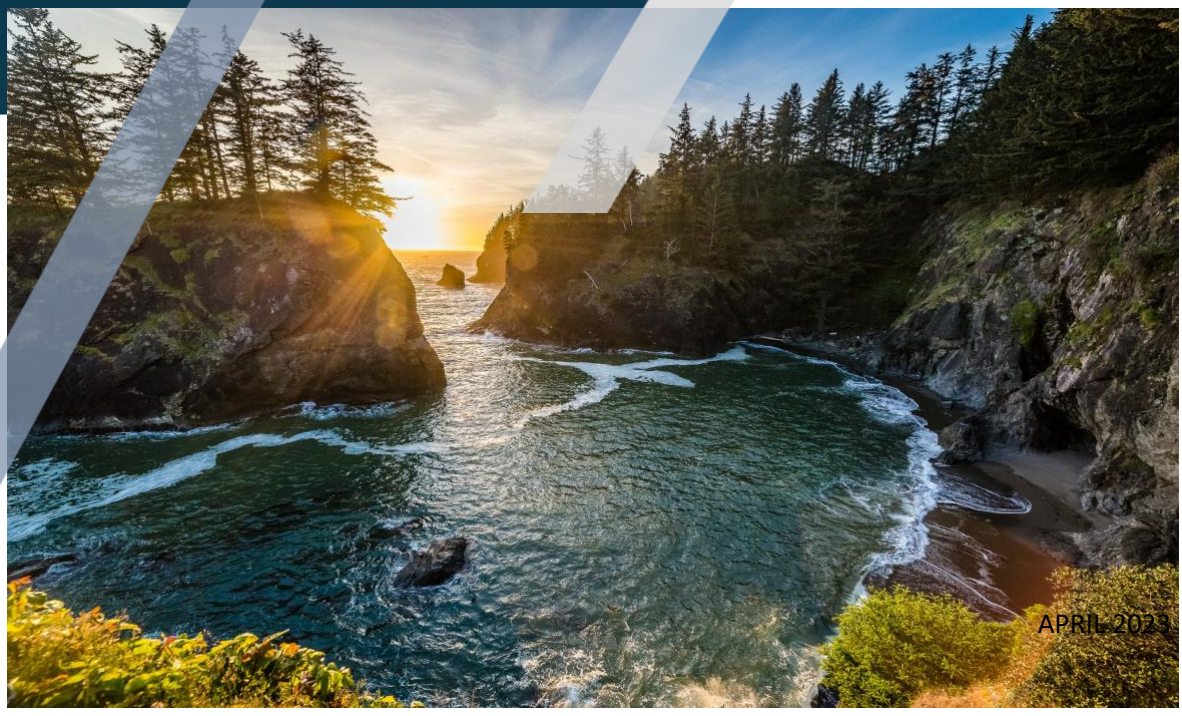
Other Business
Motion – Move to select Karina Neilson to serve as Vice Chair of the OOST.
Krystyna Wolniakowski moved; Steve Marx seconded the motion to approve.
Motion carried unanimously.

Adjourn
Chair Anderson adjourned the meeting at 3:00 PM

Appendix
Draft Action Plan

OREGON OCEAN SCIENCE TRUST

STRATEGIC ACTION PLAN



APRIL 2023

EXECUTIVE SUMMARY

The OOST Board convened in April 2023 to review its history and accomplishments, discuss strengths, challenges, and opportunities, and describe actions seeks to take in the next five years to achieve its statutory mission and support the highest priority ocean and coastal research in Oregon.

Senate Bill 737 created the OOST in 2013 to enhance capacity to promote and conduct ocean and coastal research using innovative, collaborative, community-oriented, multi-institutional approaches. In 2016, the OOST conducted a summit to identify the highest priority ocean and coastal research needs. In 2021, OOST helped solicit and coordinate funding for an assessment of marine reserves. In both 2021 and 2022, OOST received $1 million in funding from the Oregon Legislature, which it disbursed, via a competitive grant proposal process, to seven and six priority research projects, respectively.

This action plan includes strategies to enhance capacity, ensure sustainable funding, strengthen OOST communications and outreach, and enhance OOST capacity.

- **Enhancing state capacity** – Three strategies will help inform synergies and gaps relative to Oregon's ocean and coastal research needs, identify the highest priority ocean and coastal research needs, and develop and enhance the state's capacity to conduct high priority ocean and coastal research by advancing networks with California Current scientists and investigators and their respective organizations.
- **Sustainable funding** – Five strategies will result in the OOST disbursing $2-3 million in competitive grants annually, diversity the OOST funding portfolio, strengthen the relationship with the OOST and the Coastal Caucus to ensure annual General Fund requests are submitted in a timely manner, and ensure that adequate funding is available for OOST administration.
- **Communications and outreach** – Three strategies are intended to raise awareness, understanding, and support for OOST's mission, including contracting with a communications consultant to develop and implement a communications plan (including a legislative outreach component), providing presentations to key state agencies and commissions bi-annually, and ensure OOST is recognized as a supporter of grant recipient project presentations and publications.
- **Administration/Board** - Three strategies increase the administrative capacity of the OOST, ensure the OOST statute is updated, and create an OOST Advisory Committee.

A Decade in Review

"We can only sense that in the deep and turbulent recesses of the sea are hidden mysteries far greater than any we have solved."

From *The Sea Around Us (1951) by Rachel Carson*

Our Mission

Senate Bill 737, enacted in the 2013 Oregon Legislative session, created the Oregon Ocean Science Trust (OOST). It's five-member board, appointed by the State Land Board, was given mandates to:

- Promote peer-reviewed, competitive research and monitoring that leads to increased knowledge and understanding of Oregon's ocean and coastal resources;
- Promote innovative, collaborative, community-oriented, multi-institutional approaches to research and monitoring related to Oregon's ocean and coastal resources;
- Enhance this state's capacity for peer-reviewed scientific ocean and coastal research; and
- Subject to available funding, establish and execute a competitive grant program to conduct research and monitoring related to Oregon's ocean and coastal resources.

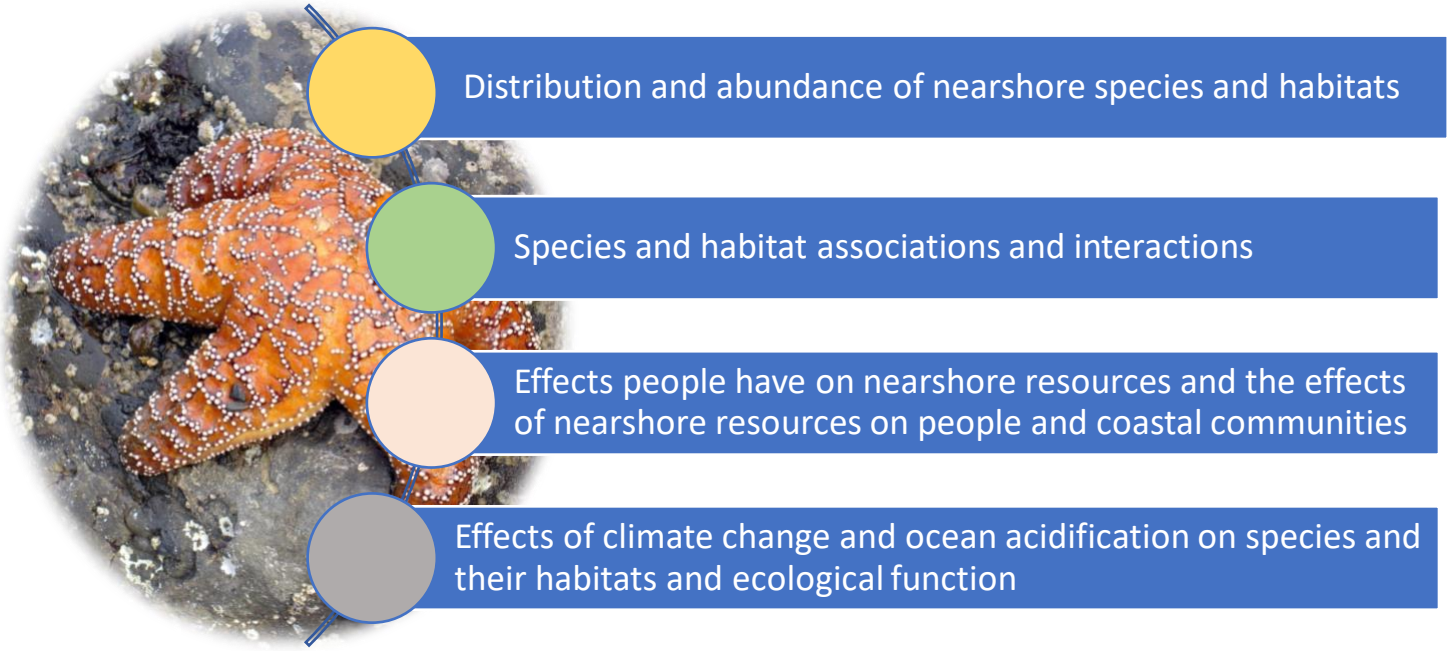
Accomplishments

Creating the Framework

The first few years after the Oregon Legislature created the OOST, efforts were focused on developing the infrastructure needed for the OOST to function, including developing relationships with the Oregon Community Foundation to receive donations from a variety of sources, engaging with the Oregon Department of State Lands for administrative support and fiscal agent services to receive and process state funding, and identifying high priority ocean and coastal research needs.

2016 Ocean and Coastal Research Summit

In 2016, the OOST convened 45 ocean and coastal experts and agency decision makers in Newport, Oregon to identify priority research and monitoring needs for Oregon's nearshore area, scalable to budget resources available. The proposed research topics were intended to provide baseline and trend data and inform key research questions related to changing ocean conditions as a result of climate change, shifts in marine habitat, and changes in marine fish and wildlife populations. Summit participants identified and prioritized research and monitoring needs in four categories:



Ocean and Coastal Research Projects Funded by OOST

OOST helped coordinate and solicit $156,000 for a marine reserves assessment conducted by Dr. Wilson White at Oregon State University. The assessment was intended to determine 1) if Oregon's marine reserves and associated marine protected areas were effectively designed and implemented to achieve their original goals, and 2) if the Oregon Department of Fish and Wildlife successfully executed the legislative mandates regarding reserve implementation.

In 2021, House Bill 3114 provided $1 million to support ocean acidification and hypoxia research. The OOST conducted a competitive Request for Proposal process and awarded funding for seven projects (Appendix A).

In 2022, House Bill 5202 provided $1 million to support science and monitoring on nearshore keystone species, including sea otters, nearshore marine ecosystems, kelp and eelgrass habitat, and sequestration of blue carbon. The OOST conducted a competitive Request for Proposal process and awarded funding for six projects (Appendix A).

New OOST Website and Logo

OREGON OCEAN SCIENCE TRUST

In 2022, OOST launched a new website (www.oregonoceanscience.com) to share its mission, accomplishments, and progress in achieving its statutory mandates and vision.

Action Plan, 2023–2028

The following actions and priorities were described by the OOST Board in April of 2023. A SWOT analysis was conducted in March of 2023, using the results of a stakeholder survey and discussion with Board members regarding strengths, weaknesses, opportunities, and threats to the OOST.

A. Enhancing State Capacity

1. By September 2023, conduct an inventory/gap analysis of entities in Oregon addressing ocean science, policy, and research issues[1] to address synergies and gaps relative to Oregon's ocean and coastal research needs. Produce a state of the science report that is an inventory of science that includes all research and data needs. Assess existing capacity, the potential to expand that capacity, and the resources needed to do so.
    a. **Lead:** OOST Grantee
    b. **Participants:** Oregon Governor's Natural Resource cabinet agencies, key federal agencies, Tribes, nonprofit organizations, watershed councils, pertinent commissions
    c. **Performance metric:** Inventory/gap analysis is conducted to inform understanding of the synergies and gaps relative to Oregon's ocean and coastal research needs.

2. By December 1, 2023, convene a summit/think tank of Oregon researchers and policy makers to identify the highest priority ocean and nearshore research priorities and key science questions for Oregon. Develop a horizon planning mechanism in Oregon that feeds priority emerging ocean and coast science priorities to the State of Oregon on a consistent basis.
    a. **Lead:** OOST Board and staff
    b. **Participants:** Oregon ocean and coastal researchers
    c. **Performance metric:** Summit is conducted and report is produced that articulates the highest priority ocean and coastal research issues in Oregon as well as a horizon planning mechanism to inform priority emerging ocean and coastal research priorities on a consistent basis.

3. By 2026, develop and enhance the state's capacity to conduct high priority ocean and coastal research by advancing networks with California Current scientists and investigators and their respective organizations.
    a. **Lead:** OOST Board and staff

[1] Examples provided include Oregon Department of Fish and Wildlife, Oregon Department of State Lands, Oregon Department of Land and Conservation Development, Oregon Parks and Recreation, Oregon Department of Forestry, Oregon Department of Environmental Quality, Oregon Department of Agriculture, Governor's office, National Oceanic and Atmospheric Administration Northwest Science Center, DFW, DSL, DLCD, Parks and Recreation, NOAA NW Science Center, nonprofit organizations, Tribes, watershed councils, fish commissions and organizations (e.g., Dungeness, Trawl), relevant federal agencies.

b. **Performance metric:** Networks are strengthened such that interdisciplinary teams of researchers from throughout the West Coast are conducting research in Oregon to address the highest priority ocean and coastal research issues.

B. Sustainable Funding

1. By 2024, contract with a development fundraiser to achieve OOST financial goals.
    a. **Lead:** OOST Board and staff
    b. **Performance metrics:**
        i. By 2026, OOST will have a diversified funding portfolio and achieve its fundraising goals in support of organizational operations and its competitive ocean and coastal grant program.

2. Oregon legislators demonstrate increased awareness and support for OOST ocean and coastal research funding.

3. By 2026, implement a $2–3 million annual funding competitive grant program to address Oregon's ocean and coastal research priorities.
    a. **Lead:** OOST Board and staff
    b. **Participants:** DSL staff
    c. **Performance metric:** OOST disburses $2–3 million in competitive grants annually.

4. By 2028, diversify the OOST funding portfolio through national-based ocean funding relationship building as well as grant writing.
    a. Explore the potential for OOST to secure funding for ocean and coastal research from offshore lease payments and mitigation funding.
    b. Explore the potential for climate resilience funding and other federal funding to support OOST research.
    c. Explore the potential to engage with Oregon Sea Grant on grant opportunities.
        i. **Lead:** OOST Board and staff
        ii. **Participants:** Oregon Community Foundation staff
        iii. **Performance metric:** OOST funding consists of a diversity of federal, state, and private fund sources

5. By 2024, strengthen the relationship with the Coastal Caucus and other ocean-related legislators to ensure that OOST General Fund requests are submitted per legislative schedules.
    a. **Lead:** OOST Board and staff
    b. **Participants:** Coastal Caucus fellows
    c. **Performance metric:** OOST requests for legislative funds are submitted in a timely manner for consideration during each legislative session.

6. Annually ensure that a percentage of funds received by the OOST is dedicated to supporting OOST administration.
    a. **Lead:** OOST Board
    b. **Performance metric:** OOST has adequate funding to support its administrative needs focused on its competitive grant award program.

C. Communications and Outreach

1. By 2024, contract with a communications consultant to develop and implement an outreach strategy, including materials and messaging using a variety of formats, to key audiences, including decision makers. Implement a legislative outreach strategy in 2024 to ensure Oregon legislators are aware of OOST priorities, accomplishments, and funding needs.
    a. **Lead:** OOST Board and staff
    b. **Participants:** OOST target audiences, Oregon legislators
    c. **Performance metrics:**
        i. By 2028, Oregon decision makers and key target audiences are aware of, understand, and support the mission of the OOST and the needs for ocean and coastal research.
        ii. Oregon legislators demonstrate increased awareness and support for OOST ocean and coastal research funding.

2. Bi-annually present to the Governor's Natural Resource Policy Cabinet, the State Land Board, the Ocean Policy Advisory Council, Oregon Department of Fish and Wildlife Commission, Coastal Caucus, and others on OOST achievements and priorities.
    a. **Lead:** OOST Board and staff
    b. **Participants:** Oregon natural resource agencies and ocean-related groups
    c. **Performance metric:** The OOST presents to each of these groups at least once every two years.

3. Ensure OOST is included in all media and outreach associated with grant deliverables.
    a. **Lead:** OOST staff
    b. **Participants:** OOST grant recipients
    c. **Performance metric:** OOST grant recipients acknowledge the OOST as a supporter of OOST-funded research in all publications and presentations.

D. Administration/Board

1. By 2024, increase the administrative capacity of OOST by supporting, via contract, an operational/program coordinator to support the expansion of OOST programming and oversee contractual work in three areas: communications consulting, development director, grant writing.
    a. **Lead:** OOST Board and staff

b. **Performance metric:** Capacity exists to oversee and administer additional contracts that expand the capacity of the OOST in these areas.

2. By 2025, review the legislation that created the OOST and propose changes to address the Executive Director designation.
    a. **Lead:** OOST Board
    b. **Participants:** DSL staff
    c. **Performance metric:** Desired changes to the statute that created the OOST are made.

3. By 2024, create an OOST Advisory Committee to ensure there is a diversity of representation associated with OOST activities.
    a. **Lead:** OOST Board and staff
    b. **Participants:** Advisory Committee members
    c. **Performance metric:** Advisory Committee members advance understanding of and actions the OOST can take to ensure diversity, equity, and inclusion are a cornerstone of its operations.

Thematic Area and Strategies	Timeline	Lead/Participant	Metric	Status
A. Enhancing State Capacity				
1. Conduct an inventory/gap analysis of entities in Oregon addressing ocean science, policy, and research issues to address synergies and gaps relative to Oregon's ocean and coastal research needs. Produce a state of the science report that is an inventory of science that includes all research and data needs. Assess existing capacity, the potential to expand that capacity, and the resources needed	October 2023	**Lead:** OOST Grantee **Participants:** Oregon Governor's Natural Resource cabinet agencies, key federal agencies, Tribes, nonprofit organizations, watershed councils, pertinent commissions	Inventory/gap analysis is conducted to inform understanding of the synergies and gaps relative to Oregon's ocean and coastal research needs.	
2. Convene a summit/think tank of Oregon researchers and policy makers to identify the highest priority ocean and nearshore research priorities and key science questions for Oregon. Develop a horizon planning mechanism in Oregon that feeds priority emerging ocean and coast science priorities to the State of Oregon on a consistent basis.	December 2023	**Lead:** OOST Board and staff **Participants:** Oregon ocean and coastal researchers	Summit is conducted and report is produced that articulates the highest priority ocean and coastal research issues in Oregon as well as a horizon planning mechanism to inform priority emerging ocean and coastal research priorities on a consistent basis.	
3. Develop and enhance the state's capacity to conduct high priority ocean and coastal research by advancing networks with California Current scientists and investigators and their respective organizations.	December 2025	**Lead:** OOST Board and staff	Summit is conducted and report is produced that articulates the highest priority ocean and coastal research issues in Oregon as well as a horizon planning mechanism to inform priority emerging ocean and coastal research priorities on a consistent basis.	
B. Sustainable Funding				
1. By 2024, contract with a development fundraiser to achieve OOST financial goals.	January 2024	**Lead:** OOST Board and staff	OOST hires a development fundraiser by 2024.	
2. Implement a $2–3 million annual funding competitive grant program to address Oregon's ocean and coastal research priorities.	December 2025	**Lead:** OOST Board and staff **Participants:** DSL staff	OOST disburses $2–3 million in competitive grants annually.	
3. Diversify the OOST funding portfolio through national-based ocean funding relationship building as well as grant writing.	December 2027	**Lead:** OOST Board and staff **Participants:** Oregon Community Foundation staff	OOST funding consists of a diversity of federal, state, and private fund sources	
4. Strengthen the relationship with the Coastal Caucus and other ocean-related legislators to ensure that OOST General Fund requests are submitted per legislative schedules.	December 2023	**Lead:** OOST Board and staff **Participants:** Coastal Caucus fellows	OOST requests for legislative funds are submitted in a timely manner for consideration during each legislative session.	
5. Annually ensure that a percentage of funds received by the OOST is dedicated to supporting OOST administration.	Annually	**Lead:** OOST Board	OOST has adequate funding to support its administrative needs focused on its competitive grant award program.	

Thematic Area and Strategies	Timeline	Lead/Participant	Metric	Status
C. Communications and Outreach				
1. Contract with a communications consultant to develop and implement an outreach strategy, including materials and messaging using a variety of formats, to key audiences, including decision makers. Implement a legislative outreach strategy in 2024 to ensure Oregon legislators are aware of OOST priorities, accomplishments, and funding needs.	December 2023	**Lead:** OOST Board and staff **Participants:** OOST target audiences, Oregon legislators	By 2028, Oregon decision makers and key target audiences are aware of, understand, and support the mission of the OOST and the needs for ocean and coastal research. Oregon legislators demonstrate increased awareness and support for OOST ocean and coastal research funding.	
2. Present to the Governor's Natural Resource Policy Cabinet, the State Land Board, the Ocean Policy Advisory Council, Oregon Department of Fish and Wildlife Commission, Coastal Caucus, and others on OOST achievements and priorities.	Bi-annually	**Lead:** OOST Board and staff **Participants:** Oregon natural resource agencies and ocean-related groups	The OOST presents to each of these groups at least once every two years.	
3. Ensure OOST is included in all media and outreach associated with grant deliverables.	Continuous	**Lead:** OOST staff **Participants:** OOST grant recipients	OOST grant recipients acknowledge the OOST as a supporter of OOST-funded research in all publications and presentations.	
D. Administration/Board				
1. Increase the administrative capacity of OOST by supporting, via contract, an operational/program coordinator to support the expansion of OOST programming and oversee contractual work in three areas: communications consulting, development director, grant writing.	December 2023	**Lead:** OOST Board and staff	Capacity exists to oversee and administer additional contracts that expand the capacity of the OOST in these areas.	
2. Review the legislation that created the OOST and propose changes to address the Executive Director designation.	December 2024	**Lead:** OOST Board **Participants:** DSL staff	Desired changes to the statute that created the OOST are made.	
3. Create an OOST Advisory Committee to ensure there is a diversity of representation associated with OOST activities.	December 2023	**Lead:** OOST Board and staff **Participants:** Advisory Committee members	Advisory Committee members advance understanding of and actions the OOST can take to ensure diversity, equity, and inclusion are a cornerstone of its operations.	

Appendix A. List of OOST-funded projects.

Intertidal ocean acidification monitoring in Oregon's marine reserves	• Improve monitoring to inform geography of ocean acidification risk, integrate knowledge of ocean change and marine reserves, assess innter-shelf and intertidal carbonate chemistry dynamis across coastal regions.
A subtidal ocean acidification and hypoxia monitoring network at Oregon marine reserves	• Sustain time-series ocean acidification observations at Cape Perpetua, increase statewide capacity for ocean acidification and hypoxia monitoring and real-time data access across Oregon's marine reserve system.
Marine Science Center Climate Monitoring Station	• Collect climate-grade temperature, salinity, dissolved oxygen, turbidity, conductivity, total algae, nitrate, chlorophyll a, CDOM, pCO_2, and TCO_2 from Yaquina Bay, and share near real-time with the public.
Evaluating the interaction of water quality and eelgrass in Coos Bay, Oregon using a biophysical model	• Understand the dynamics of pH, dissolved oxygen, and eelgrass in Coos Bay using a biogeochemical ecosystem model to understand the ecohydrological dynamics and learn how absence of eelgrass alters pH and dissolved oxygen.
Science-based best management practices for co-management of Oregon submerged aquatic vegetation and shellfish	• Determine environmental interactions between shellfish and submerged aquatic vegetation (SAV), how shellfish and SAV interact within regulatory and management landscape, and how stakeholder groups perceive co-management.
Olympia oyster growth and survival with climate change: space for time field experiments	• Assess shell and tissue growth of Olympia oysters in Yaquina bay, collect water chemisty and other parameters, and model and identify timescales and processes altering local conditions that influence oyster fitness, growth, and survival.
Oregon ocean acidification and hypoxia messaging campaign	• Develop 3-5 messages on ocean acidification and hypoxia that resonate with target audiences, a toolkit that provides materials and training, and a plan that describes rollout of messages locally, regionally, and statewide.

Seafloor mapping of nearshore habitats of the Rogue River Reef Complex	• Collect high-resolution seafloor mapping data for nearshore rocky habitats off Gold Beach, Oregon, filling a major gap in the understanding of Oregon's nearshore ecosystems and informing future studies of rocky seafloor habitats.
Kelp communities in transition: A spatial mosaic among changing populations of bull kelp, sea urchins, and sea stars within rocky reef habitats along the southern Oregon coast	• Assess how the ecological characteristics of rocky reef habitats deffer between areas that have experienced kelp loss versus areas where kelp beds persist, and conduct outreach to share new data and raise awareness of the impacts of kelp bed and rocky reef habitat shifts along Oregon's south coast.
The missing link: Quantifying juvenile dynamics of key commercially and recreationally important fishes along Oregon's nearshore	• Characterize the importance of nearshore habitat for recruiting fishes, identify commercially and recreationally important species to inform stock assessments, expand time series, and evaluate whether marine reserves serve as refuges for fishes.
Do tipping points loom? Extending 20+ years of long-term monitoring to assess impacts of climate change on rocky shore macrophyte assemblages	• Quantify the abundance and reproductive status of low intertidal zone kelps, quantify annual losses of low zone macrophytes and changes in species composition, and test resilience and recovery of macrophyte communities.
Trophic modeling of Oregon's nearshore reefs	• Model kelp-forest community dynamics to forecast consequences of alternative management activities, including how kelp forests respond to urchin culling, how kelp restoration would affect urchin and abalone, how reintroducing sea otter would affect urchin, abalone, and crab, and potential for restoration success.
Oregon nearshore data management, portals, and hubs assessment	• Identify the best approach to enahnce data access, storage, dissemination, and archival for Oregon nearshore ocean data through an online survey and research on data hubs.