Oregon Sea Grant Natural Resource Policy Fellowship
Host Descriptions 2023-2024

About the Natural Resource Policy Fellowship: The Natural Resource Policy Fellowship (NRPF) places a graduate student fellow with an agency or nonprofit in Oregon. This fellowship is intended to give the fellow first-hand experience in natural resource policy related to marine and coastal issues. For additional details visit: https://beav.es/4zz

Please note, the Oregon Sea Grant Scholars Program is focused on broadening participation and diversity by restructuring our recruitment and review processes to be more equitable. Our intent is to be inclusive of applicants from various cultural, ethnic, and socioeconomic backgrounds with unique lived experiences, skills, and interests; including applicants that may have had fewer opportunities in the marine policy field.

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*Hybrid working arrangements from an alternative primary location are possible.
Position 1: Restoration Project Impact Analyst for Coastal Watersheds

Host Office: Tillamook Estuaries Partnership (TEP)

Position Location: Garibaldi, OR. The fellowship will start in-person in the Garibaldi office. Winter months have hybrid and remote options. The remainder of the fellowship will be a combination of in-person office work in Garibaldi and field work throughout Tillamook County.

Program Overview: TEP, a 501(c)(3) non-profit organization, is a part of the National Estuary Program. Our mission is to conserve and restore Tillamook County’s watersheds through active stewardship, scientific inquiry, community engagement, and education. We are a growing organization, currently with 15 employees who work at the main office in Garibaldi and at the native plant nursery just south of Tillamook. We follow a Comprehensive Conservation and Management Plan (CCMP), which incorporates many federal, state, and local marine and coastal policies into our 10-year action agenda.

How this position specifically relates to marine and coastal policy: TEP’s projects are funded by federal and state agencies (e.g. EPA, NOAA, BLM, USFWS, DEQ, OWEB, ODFW). TEP uses these funds to implement habitat restoration and water quality projects which, in turn, implement the marine and coastal policies that fall under these agencies’ jurisdictions. For example, nearly all of TEP’s projects directly benefit at least the ESA Recovery Plan for Oregon Coast Coho Salmon and the Clean Water Act. One of the goals of this position is to communicate the connection between the outcomes for several of TEP’s projects to the objectives of the marine and coastal policies that the respective funding agencies are committed to implement.

Summary of the fellow’s day-to-day activities and how these tasks fit within a larger project scope: The scoping phase of the project will consist of the fellow meeting with TEP team and agency partners, reviewing project histories, visiting sites, and outlining project goals. Once scoping is complete, the fellow will manage day-to-day activities in order to conduct background research into policies; compile past project funding data; collect field data, photos, and videos; engage with partners and stakeholders about the projects’ outcomes and benefits; and begin assembling information into templates for Restoration Project Impact Summaries. The fellow will edit videos, create project maps, and work with TEP’s contract webmaster to post content to our website. In the spring and summer, the fellow will collaborate with TEP’s monitoring team to collect field data such as in-water videos, stream temperatures and canopy heights, plant species and abundance, and other environmental parameters as needed to finish telling the story of each project. The individual project summaries will be compiled by the fellow to show the overall long-term impact of TEP’s habitat restoration projects. These summaries will be used as part of our 30th anniversary outreach materials in 2024 as well as for legislative and grant funder communications.

Our grants typically require us to conduct post-restoration monitoring for only three years. The information we have been required to report has been minimal, as seen on our soon-to-be-retired restoration webpage. TEP is completely revamping its website, which is expected to go live around August 2023, and we want to demonstrate the long-term positive impacts that our grant funders’ investments have made in our rural community. Not only do we want to show the number of acres and stream miles of fish habitat restored, we also want to answer some of these questions: What restoration sites look like 10, 15, and 20+ years post-implementation? How much money was invested and how many jobs were created? What ecosystem services have been provided by these restored sites? Which marine and coastal policies are being implemented through these projects? How has water quality...
improved in some of these areas? Has habitat for fish actually been restored? What are some of the other benefits for the local communities as a result of these projects? In other words, has this been money well spent? We also want to share this information with our funders and, ultimately, with the legislators who passed the funding budgets and the marine/coastal policies.

Approximate breakdown of field/office work:
We typically work Mon-Thu, 7:00am – 5:30pm including a 30 minute lunch break.

- Sept-Oct: Approx. 80% office work during project scoping with restoration site visits
- Nov–Mar: Hybrid and remote options; field work would be weather dependent, coordinated with high tides and high water flows
- Apr – Jul: Approx. 50/50 field/office as needed to collect field data and to take high quality photos and videos (weather dependent)
- Aug: Approx. 90% office work during project reporting, archiving, wrap-up

Communities, partners, or interested parties with which the fellow may engage:
- TEP restoration, fiscal, monitoring, and communication team members, including our contract webmaster
- Restoration project technical or communications team members
- Federal and state grant funders responsible for implementing marine and coastal policy
- Interested parties in the community who benefit from the restored locations

Desired products from the fellow:
- 12-15 Restoration Project Impact Summaries for TEP’s new website with maps, photos, videos (where possible), policy connections, benefits to community, ecosystem services, project investment, etc.
- Legislative/Executive Summary (1-pager) of impact all projects combined
- Content for TEP’s 30th Anniversary outreach in 2024, print materials, and social media taken from Project Impact Summaries

Potential benefits of this position to the fellow:
- See how the National Estuaries Program works in rural, coastal Oregon
- Learn how small organizations partner together to pool expertise and resources to accomplish amazing work
- Gain familiarity with non-profit grant funding and reporting necessary to implement restoration projects
- Networking opportunities!

Skills required:
- Excellent time management and organizational skills and ability to meet deadlines
- Willing to carry out tasks and respond to situations as they arise with minimal supervision
- Strong, creative writing skills
- Demonstrates a concern for accuracy (e.g. regularly produce accurate, thorough, professional work)
- Work harmoniously with others and effectively complete tasks in an open office environment
- Proficiency with Word, Excel, Powerpoint, Outlook, and Adobe or other similar software.
Skills preferred:
- ARC GIS for mapping project locations
- Familiarity with Canva, InDesign, or other graphic design software
- Familiarity with video editing software
Position 2: Ocean Shore Decision Support Development Fellow

**Office:** Oregon Parks and Recreation Department (OPRD), Central Operations, Ocean Shore Program.

**Position Location:** OPRD headquarters (Salem), Coastal Region Office (Seal Rock), or an alternative primary reporting location, with hybrid telework options.

**Program Overview:** Oregon Parks and Recreation Department (OPRD) fulfills its mission to “Provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations” by operating a system of State Parks, Recreation, Historic and Natural Areas; by managing special programs including Scenic Rivers, Recreation Trails, Historic Preservation, and Ocean Shores; and by providing assistance to local governments for recreation and heritage conservation. This fellowship would be located within the Ocean Shore Program. The Ocean Shore State Recreation Area was established to preserve and protect scenic and recreational use of Oregon’s beaches. It is managed by OPRD to ensure that the public has free and uninterrupted use for recreational activities. On the ocean shore, permits are required for non-recreational activities like events or large gatherings, commercial activities, operating a motor vehicle in sections not open to vehicle use, building or construction activities, and removal of natural products. The permit program is in the early stages of modernization efforts, including identifying future rulemaking needs and moving toward online forms and processes. This position will support efforts and tools to facilitate program development.

**Describe how this position specifically relates to marine and coastal policy:** The ocean shore is the interface between the built environment and the marine environment. While protected as a State Recreation Area, there are increasing threats to the valuable natural and recreational resources located on the ocean shore, including sea level rise, erosion, and potential cumulative impacts from continued development such as the installation of beachfront protective structures (e.g., riprap and seawalls). This position will help improve efficiency of decision-making by ocean shore permitting staff, partner agencies, and policy makers by providing up-to-date information on permitted activities, permit compliance and non-permitted activities, and information necessary for understanding cumulative impacts to the ocean shore.

**Brief summary of the fellow’s day-to-day activities and how these tasks fit within a larger project scope:** The fellow will primarily use GIS and other computer software to:

1. Complete a recently initiated project to digitize permit files. This will include georeferencing the structural elements permitted in the files such as beach access-ways and shoreline protection structures and assisting with development of associated GIS support tools. This will enable the agency to efficiently and spatially identify permitted activities.
2. Develop and implement a pilot project using GIS, aerial imagery, site visits, and other resources to evaluate the extent of encroachments and unpermitted activities on a sampling of the ocean shore. This work will set the foundation for OPRD and partners to better quantify and define the extent of this issue and enable staff and decision-makers to identify the necessary approach and resources needed to further research or address this problem.
3. As time allows, use the newly digitized permit files and other GIS support, to create written or digital resources that contain updated ocean shore statistics and decision support tools for use in future ocean shore planning efforts. This could include identifying the extent and concentration of shoreline protection and other types of development such as private accessways. For example, the fellow could explore rates of activities (permitted and not) over
the last ‘X’ years (as well as the frequency of repair requests) relative to shoreline change rates and/or development change. Other products could include an evaluation of cumulative impacts or change over time and potential resource concerns, identifying target areas for future compliance efforts, or performing background research or support for future program-related evaluation and visioning efforts.

**Approximate breakdown of field/office work:** About 85-90% of the working time will be spent in an office environment (including attending meetings and communicating with program staff and other agencies (via email, phone or video-conference)). About 10-15% of work time could be spent driving or riding to work sites along the coast and working outdoors – potentially in rough terrain (e.g., sandy beaches), and inclement weather conditions. Typical work hours are Monday through Friday, 8am to 5pm (with an hour lunch break), however, several staff work modified work schedules such as 7:30am to 4 pm (with a ½ hour break). There may be occasional early mornings, late nights, or weekend work depending on meeting schedules, travel, or partner needs but there will not be more than 40 hrs/week. There is some flexibility to allow for less than 40 hrs/week if mutually agreed upon. Mentor/fellow check-ins will be frequent to ensure the work environment and project are tracking with expectations.

**Communities, partners, or interested parties with which the fellow may engage:**
1. OPRD GIS staff – access to relevant data and information, coordination during GIS project development and implementation, assistance with development of GIS-related information or tools.
2. Department of Land Conservation and Development coastal program staff – access to relevant data and information, coordination with staff during project development and implementation, identifying needs for reports and decision support tools.
3. Department of Geology and Mineral Industries coastal hazards staff – access to relevant data and information, coordination with staff during project development and implementation, identifying needs for reports and decision support tools.
4. Ocean shore partners, academic researchers, NGOs, and management – with ocean shores staff, present and discuss newly developed resources, findings, and recommendations.

**Desired products from the fellow:**
- Georeferenced permit files for structural elements on the ocean shore and associated GIS support tools.
- Pilot project to evaluate the extent of encroachments and unpermitted activities on a sampling of the ocean shore.
- If time, written or digital resources that contain updated ocean shore statistics and decision support tools for use in future ocean shore planning efforts.

**Potential benefits of this position to the fellow:**
- Flexible work schedule and location.
- Being part of a small, focused team tasked with protecting Oregon’s unique shoreline resulting from landmark legislation, commonly referred to as the “Beach Bill”. The input of the fellow will have a direct impact on how Oregon’s ocean shore is managed.
- Knowledge and experience in local and state coastal management system operations, policy and day-to-day management.
- Exposure to a complex regulatory and natural resource program.
- Experience supporting regulatory and resource program improvements.
• Experience working with GIS tools, digital resources, and GIS staff to develop decision support tools.
• Experience developing and implementing program evaluation with use of GIS based tools.

Skills required:
• Ability to use Microsoft Office applications (Word, Excel, PowerPoint, Outlook, Teams)
• Basic knowledge of procedures and techniques necessary to collect, organize, QA/QC, analyze, and report data both in narrative and numerical format
• Experience with GIS programs, databases, and other software applications to query, acquire, evaluate, clean, analyze, and visualize data and information.
• Ability to drive a state vehicle

Skills preferred:
• Communication skills (written and verbal).
• Highly organized and detail oriented.
• Experience supporting regulatory and resource program improvements.
• Basic familiarity with natural resources and management challenges on Oregon’s coast.
• Knowledge and/or interest in ocean and coastal processes.
• Comfortable working independently, self-starter.
• Ability to design and implement a sampling project that is desktop based with field verification.
• Ability to provide recommendations for future program development and information needs to program staff and management in either written or verbal format.
Position 3: Tribal Climate Adaptation Specialist

Office: The Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI)

Position Location: Hybrid: position is flexible to work remotely and in between various physical offices as needed. Data analysis and writing can be done either remotely or in CTCLUSI’s Coos Bay, Florence, or Eugene outreach offices. Site visits recommended and will be spread across CTCLUSI’s 5 County Service Area (Coos, Curry, Douglas, Lincoln, Lane).

Program Overview: The CTCLUSI Department of Culture and Natural Resources’ (DCNR) mission is to research, monitor, assess, manage, conserve, protect, enhance, utilize, and restore the cultural and natural resources within the Tribe’s area of interest. Natural resources are cultural resources, and many of the Tribe’s values, meanings, and identities are closely linked with features of this landscape. The environmental programs within the DCNR work to support monitoring for the health and protection of these resources and the landscape. DCNR staff implement various plans for monitoring of baseline environmental trends and investigate pollution due to spills, disturbance, climate change, ocean acidification, etc., undertake damage assessments, and implement restoration and effectiveness monitoring where possible. Staff work collaboratively to merge western science and indigenous knowledge through various programs for the benefit of Tribal membership and future generations.

How this position specifically relates to marine and coastal policy: CTCLUSI’s Ancestral Territory spans over 1.6 million acres and over 80 miles of coastline. This defined area consists of countless resources significant to the Tribe, but all relate to the marine, estuarine, and freshwater ecosystems of the Coos, Lower Umpqua, and Siuslaw estuaries. The Tribe manages over 15,000 acres of fee, trust, and reservation land across five counties in Oregon: Curry, Coos, Douglas, Lane, and Lincoln. As such, the Tribe lives and operates as a community within many communities and seeks to protect resources for the health of the Tribal community as well as the community as a whole.

As climate change impacts increase in severity and intensity, the Tribe seeks to better understand the implication of these changes and methods for mitigation. This position will be responsible for researching and analyzing climate related impacts to CTCLUSI’s Tribal property and natural resources. The outcome of this work will be an analysis of climate impacts and recommendations for mitigation strategies, and to influence management strategies for climate change mitigation at the local, state, and regional level.

Brief summary of the fellow’s day-to-day activities and how these tasks fit within a larger project scope:

- Meet with environmental staff and CTCLUSI’s partners and stakeholders to discuss Tribal Ecological Knowledge, including but not limited to historical knowledge and history of climate patterns and current or recent visible changes to Tribal property and natural resources.
- Use recognized western scientific literature to identify climate change impacts and projections for area of interest and develop recommendations for mitigation strategies.
- In collaboration with Tribal staff, draft a Climate Change Vulnerability Analysis.
- Communicate with Tribal staff, Tribal partners, stakeholders, and state and federal agencies on the findings and potential resource risks. Provide input on the Tribe’s management and mitigation strategy for climate change impacts and develop outreach materials.
- Present findings to Tribal Council for discussion and feedback. Present findings at pertinent meetings and conferences, as available.
Approximate breakdown of field/office work:
The working conditions and environment:
- 40 hours per week.
- Generally Monday through Friday 8am to 5pm with possible occasional evening and weekend work for meetings, local area travel for meetings and conferences.
- Mix of department programs allows for a fun, diverse environment, working with different specialists and fields. However, expect to work effectively in a negotiating environment where others (especially external agencies and interested parties) may have diverse and competing interests and may be uncooperative or adversarial.
- Work attire is business casual.

Detailed breakdown:
- Within the first 9 months, visit selected Tribal properties and watersheds with supervisor and relevant Tribal staff (e.g. Tribal Historic Preservation Officer, Director of Forestry Department, etc).
- Meet with mentor at least twice a month to review progress on all project outcomes (literature review, climate vulnerability analysis, management and mitigation strategy recommendations, outreach materials), address questions, and ensure Fellow has access to required resources.
- Approximately 1 week per month on outreach and education, attendance in meetings with staff and partners for management strategies. This can be remote or in Tribal offices.
- Approximately 2 or 3 weeks total attending meetings and conferences to discuss activities and findings of analysis, with potential for travel.

Communities, partners, or interested parties with which the fellow may engage:
- This fellow may interact with local government, industry, and agencies.
- This fellow will accompany other staff in meetings and consultations with agencies. These agencies seek input on Tribal perspectives regarding resource protection, but also seek collaboration and idea-sharing.
- This fellow may perform outreach to Tribal members and Tribal Council, which may include website or newsletter announcements, educational presentations to Tribal youth.

Desired products from the fellow:
- Working in tandem with the CTCLUSI environmental staff to draft Climate Change Vulnerability Analysis.
- Education and outreach media pertaining to climate change adaptation and mitigation.

Potential benefits of this position to the fellow:
- Gained experience in understanding climate change impacts in 5 counties in coastal Oregon.
- Oral and written skill development, especially related to diplomacy.
- Improved understanding of coastal environments and ecosystems, as well as traditional Tribal knowledge of the landscape.

Skills required:
- Knowledgeable about climate impacts on the Oregon Coast
- Must have a valid driver’s license and the ability to be insured to drive tribal vehicles.
- Must be proficient in Microsoft Office Suite.
• Effective communication both orally and in writing including technical, regulatory, and persuasive writing skills.
• Experience reviewing scientific literature and applying critical thinking skills for assessing potential climate change vulnerabilities and mitigation strategies.
• Must possess reasonable ability to communicate in English.
• This position is subject to preliminary drug testing and criminal history background check, which includes fingerprinting, as required by CTCLUSI.

Skills preferred:
• Post graduate degree in any natural resource, cultural resource, or environmental field.
• Experience with policy writing and research.
• Experience with science communication and sharing information in a format relevant to the audience.
• Comfort and experience presenting data and research.
Position 4: Tribal Algae Taxonomist and Biologist

**Office:** The Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI)

**Position Location:** Hybrid: position is flexible to work remotely, and in between various physical offices as needed. Laboratory analysis needs to be performed in Coos Bay, but data analysis and writing can be done either remotely or in CTCLUSI’s Coos Bay, Florence, or Eugene outreach offices.

**Program Overview:** The CTCLUSI Department of Culture and Natural Resources’ (DCNR) mission is to research, monitor, assess, manage, conserve, protect, enhance, utilize, and restore the cultural and natural resources within the Tribe’s area of interest. Natural resources are cultural resources, and many of the Tribe’s values, meanings, and identities are closely linked with features of this landscape. The environmental programs within the DCNR work to support monitoring for the health and protection of these resources and the landscape. DCNR staff implement various plans for monitoring of baseline environmental trends and investigate pollution due to spills, disturbance, climate change, ocean acidification, etc., undertake damage assessments, and implement restoration and effectiveness monitoring where possible. Staff work collaboratively to merge western science and indigenous knowledge through various programs for the benefit of Tribal membership and future generations.

**How this position specifically relates to marine and coastal policy:** CTCLUSI’s Ancestral Territory spans over 1.6 million acres and over 80 miles of coastline. This defined area consists of countless resources significant to the Tribe, but all relate to the marine, estuarine, and freshwater ecosystems of the Coos, Lower Umpqua, and Siuslaw estuaries. The Tribe manages over 15,000 acres of fee, trust, and reservation land across five counties in Oregon: Curry, Coos, Douglas, Lane, and Lincoln. As such, the Tribe lives and operates as a community within many communities and seeks to protect resources for the health of the Tribal community as well as the community as a whole.

Since 2016, the Tribe has continuously augmented its laboratory testing capability, including for the analysis of harmful algal blooms (HABs). Using their new FlowCam Cyano, Tribal staff are able to screen for all particulates in a water sample and use the sophisticated software to identify phytoplankton and zooplankton, including algae. This position will be responsible for the analysis of particulates in water samples in marine, estuarine, and freshwater in Coos, Douglas, and Lane counties. The outcome of this work provides awareness to local and regional communities on the occurrence of HABs in these locations, and influences management strategies for water quality issues at the local, state, and regional level.

**Summary of the fellow’s day-to-day activities and how these tasks fit within a larger project scope:**
- Meet with environmental staff and CTCLUSI’s partners and stakeholders to discuss historical knowledge and history of known HABs, water quality issues, monitoring activities, and current management strategies.
- This position will be responsible for independently and collaboratively undertaking field sampling in Coos, Douglas, and Lane counties for 9 months, spanning 4 seasons. More frequent sampling may occur during warmer months when HABs may have more presence.
- Within 3 days of each sampling event, process the water samples on the Tribe’s FlowCam Cyano.
- Using recognized scientific literature and personal communications with agency/partner scientists as well as Tribal water quality specialists, identify algae present in water samples as identified by the FlowCam Cyano in addition to commonly occurring phytoplankton and zooplankton.
• Following positive identification, build digital libraries in the FlowCam Cyano’s software from these samples and apply to previous and future samples.
• Using built libraries, apply statistical analysis from sample data using the FlowCam Cyano software to understand the presence/absence of specific algae, potentially other phyto/zooplankton, and cyanobacteria. Statistical analysis may also lead to suggested modifications to sample analysis parameters, and how the software performs either image captures or statistical analysis.
• Draft standard operating procedures (SOP) for operation of the FlowCam Cyano, as well as sample analysis (image capture) and statistical data analysis within the FlowCam Cyano’s software. Using the statistical results of algae, cyanobacteria, and potentially other zooplankton/phytoplankton presence in Tribal waters, research the human health exposure and impact as evidenced through scientific literature and communications with Tribal water quality specialists, Tribal partners, stakeholders, and state and federal agencies.
• In collaboration with Tribal staff, draft a publication on the findings of the analysis on HABs.
• Communicate with Tribal staff, Tribal partners, stakeholders, and state and federal agencies on the findings, including potential human health risks on exposure to HABs. Collaborate with Tribal staff on outreach to these entities and create public notices to further community awareness on the presence of HABs and health risks associated with exposure. Provide input on the Tribe’s management strategy for HABs on Tribal waters.
• Present findings to Tribal Council for discussion and feedback. Present findings at pertinent meetings and conferences, as available.

**Approximate breakdown of field/office work:**
The working conditions and environment:

• 40 hours per week.
• Generally Monday through Friday 8am to 5pm with possible occasional evening and weekend work for meetings, local area travel for meetings and conferences.
• Mix of department programs allows for a fun, diverse environment, working with different specialists and fields. However, expect to work effectively in a negotiating environment where others (especially external agencies and stakeholders) may have diverse and competing interests and may be uncooperative or adversarial.
• Work attire is business casual.

Detailed breakdown:

• Within the first 9 months, at least 3 days to 1 week per month field sampling.
• Within the first 9 months, at least 1 day per month laboratory sample processing.
• At least 1 week per month data analysis, library development, and writing an SOP. This can be remote or in Tribal offices.
• Approximately 1 week per month on outreach and education, attendance in meetings with staff and partners for management strategies. This can be remote or in Tribal offices.
• Approximately 2 or 3 weeks total attending meetings and conferences to discuss activities and findings of analysis, with potential for travel.

**Communities, partners, or interested parties with which the fellow may engage:**

• This fellow may interact with local government, industry, and agencies.
• This fellow will accompany other staff in meetings and consultations with agencies. These agencies seek input on Tribal perspectives regarding resource protection, but also seek collaboration and idea-sharing.
• This fellow may perform outreach to Tribal members and Tribal Council, which may include website or newsletter announcements, educational presentations to Tribal youth.
• Communicate with Tribal staff, Tribal partners, stakeholders, and state and federal agencies on the findings, potential health risks on exposure to HABs. Collaborate with Tribal staff on outreach to these entities and create public notices to further community awareness on the presence of HABs and health risks associated with exposure. Provide input on the Tribe’s management strategy for HABs on Tribal waters.

Desired products from the fellow:
• Processing and analysis of particulates in samples collected from marine, estuarine, and fresh waterbodies in Lane, Douglas, and Coos counties using the CTCLUSI Environmental Testing Laboratory’s FlowCam Cyano instrument.
• FlowCam Cyano digital library development for positively identified algae from sampled water bodies. Library development for other commonly identified zooplankton and phytoplankton a bonus.
• Drafted standard operating procedure (SOP) for analysis of water samples using the FlowCam Cyano.
• Education and outreach media pertaining to health risks associated with HABs exposure, specific to waterbodies where HABs have been identified (i.e. newsletter and newspaper articles, signs posted near Tribal waters, outreach to the Oregon Department of Environmental Quality and Oregon Department of State Lands on other public notices.)
• Working in tandem with the CTCLUSI environmental staff, a draft publication featuring conclusions on algae species in the sampled waterbodies, with potential additions for comparison with other present/absent zooplankton and phytoplankton.

Potential benefits of this position to the fellow:
• Gained experience in understanding water column composition in marine, estuarine, and fresh waterbodies throughout 3 counties in coastal Oregon.
• Part of a team in showcasing evidence-based water quality issues in coastal Oregon, health risks associated with HABs exposure, and contributions towards water management strategies.
• Oral and written skill development, diplomacy.
• Improved understanding of coastal environments and ecosystems, as well as traditional Tribal knowledge of the landscape.

Skills required:
• Experience with taxonomic identification of zooplankton and phytoplankton.
• Must have a valid driver’s license and the ability to be insured to drive tribal vehicles.
• Must be proficient in Microsoft Office Suite.
• Effective communication both orally and in writing including technical, regulatory, and persuasive writing skills.
• Experience reviewing scientific literature and applying critical thinking skills for species identification and assessing potential HAB human health risks.
• Must possess reasonable ability to communicate in English.
• This position is subject to preliminary drug testing and criminal history background check, which includes fingerprinting.

**Skills preferred:**

• Experience in taxonomic identification of algae and understanding of harmful algal blooms (HABs).
• Understanding or familiarity with water quality monitoring techniques and applications in the laboratory setting, such as for bacteria, nutrients, basic water quality parameters (DO, pH, salinity, etc).
• Experience with water quality monitoring in the field setting, such as for macroinvertebrate surveys, bacteria sampling, DNA sampling, nutrient sampling, sonde deployment, hiking and/or boating.
• Development of outreach materials and accessible science communication skills.
• Working knowledge with Clean Water Act.
Position 5: Human Dimensions Research Fellow

Office: Oregon Department of Fish and Wildlife/ Marine Reserves Program
Position Location: Newport, OR – ODFW South Beach Annex (in-person or hybrid)

Program Overview: The Oregon Department of Fish and Wildlife (ODFW) oversees the management and scientific monitoring of Oregon’s marine reserve system — which includes five marine reserves and nine Marine Protected Areas (MPAs). The ODFW marine reserves program is a six-person, interdisciplinary team responsible for the management, scientific research, outreach, and community engagement for the sites, all key mandates set by the State Legislature for Oregon’s marine reserves.

Marine reserves are areas in Oregon’s coastal waters dedicated to conservation and scientific research. All removal of marine life is prohibited, as is ocean development. They serve as living laboratories where we can learn about Oregon’s nearshore ocean and the effects that protections have over time on the marine environment. Local communities worked with state officials to site the reserves in areas that would provide ecological benefits while also avoiding significant negative impacts to ocean users and coastal communities.

Implementation of Oregon’s marine reserve system is the first long-term nearshore ocean conservation and monitoring program executed by the state. This is the only ecosystem-focused, fisheries-independent monitoring program designed to track and understand ocean changes in Oregon’s state waters. This is also the first comprehensive human dimensions research program focused on examining the economic, social, and cultural dynamics of the Oregon coast and coastal communities in relation to marine resources.

How this position specifically relates to marine and coastal policy: This position is responsible for updating the Human Dimensions Monitoring Plan that describes the Marine Reserve Program’s socioeconomic studies and research tools, survey design and frequency, and highlights collaborations that expand beyond internal ODFW efforts. The Monitoring Plan will be a public facing document, available on the ODFW Marine Reserves website to inform stakeholders, partners, decision makers, and the general public about the Human Dimensions research and monitoring efforts. This work requires close collaboration and coordination with the Marine Reserves Human Dimensions Project Leader, scientific researchers, partners, and community teams.

Human Dimensions monitoring and research are part of the key mandates set by the State Legislature for Oregon’s marine reserves. The Governor’s Office, Legislature, and constituents have significant expectations about the successful implementation of this work. The Oregon marine reserves program just completed a comprehensive overview of the first 10 years of marine reserves implementation. This position will help set the course for human dimensions (socio-economic) monitoring and research for the program related to communities of place, communities of interest and the general public for the next five to ten years.

Summary of the fellow’s day-to-day activities and how these tasks fit within a larger project scope: It is anticipated that day to day activities of the fellow will vary. Working hours may vary from day to day but are typically from 9 to 5. Some early mornings, evenings or overnight trips may be required for meetings with collaborators, outreach, or community engagement events. There may be a possibility to
work remotely, but time in the office will be required each week. You will be working as part of an inter-disciplinary team. Attire in the office is business casual (jeans + office appropriate top).

The main project of the fellow is to develop the next human dimensions monitoring plan in collaboration with the human dimensions project leader. This will involve understanding the results and outcomes from the last decade of Marine Reserve Human Dimensions monitoring and research efforts and using that to inform research and study design for the program into the future. This will involve consulting, collaborating, and engaging with partners to determine a sustainable long-term socio-economic research and monitoring plan given capacity and funding constraints. An expert workshop will need to be organized that includes socio-economic natural resource scientists from North America. This workshop will bring together experts to discuss advice and brainstorm the next steps in socio-economic monitoring for the ODFW Marine Reserves Program and serve as a launching pad for a marine focused human dimensions working group/forum/network of professionals in the Pacific Northwest. It will be up to the fellow to organize and coordinate this workshop, including but not limited to identifying and securing participation from relevant experts – both current program collaborators and new external experts.

The fellow may also engage and work with the marine reserve community teams to share relevant takeaways from the last decade of socio-economic research for each marine reserve.

**Approximate breakdown of field/office work:** 80% office work; 20% travel for meetings w/ collaborators

**Communities, partners, or interested parties with which the fellow may engage:**
The fellow will interact with various communities of interest and communities of place such as:
- Constituents
- General Public
- ODFW Staff
- Other Agencies
- NGOs
- University Researchers
- Fishermen – both recreational and/or commercial
- Marine Reserve Community Team members

**Desired products from the fellow:**
- Host and organize a marine focused human dimensions expert workshop to advance ideas related to ODFW Marine Reserve Human Dimensions Monitoring & Research
- Develop a new Human Dimensions Monitoring Plan
- Make contributions to the program newsletter / social media / outreach events
- Produce individual one-pagers for community teams highlighting relevant socio-economic research for each marine reserve

**Potential benefits of this position to the fellow:**
- Experience in marine human dimensions research and monitoring, including study design & adaptive management
- Experience organizing, coordinating logistics, hosting and facilitating an expert workshop in marine human dimensions research

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- Experience generating science communication content about marine focused socio-economic research
- Experience working with an interdisciplinary team of scientists, stakeholders, government agency staff, marine reserve community teams, and local fishermen on marine reserve research
- Opportunity to work at the interface of science, policy and communications

**Skills required:**
- Excellent writing, editing and verbal communication skills
- Excellent interpersonal skills working in team setting
- Experience in outreach and/or community engagement
- A basic knowledge of marine science and/or natural resource social science

**Skills preferred:**
- Knowledge of marine protected areas and/or social-ecological systems
- Experience studying knowledge, attitudes and awareness of the general public
- Experience in qualitative or quantitative social science or economic research
- Experience interacting with diverse stakeholders for outreach and engagement
- Familiarity with pacific NW marine species, ecosystems, or fisheries
- Experience hosting and/or organizing events
Position 6: Seafood Education Fellow

Host Office: Oregon Sea Grant, South Coast office in Coos Bay

Position Location: Coos Bay or other South Coast location, with the potential for the position to be partially remote for an outstanding candidate

Program Overview: This position would be embedded with Oregon Sea Grant Extension’s Fisheries and Aquaculture Extension Team and assist with our public facing seafood consumer education efforts. The fisheries and aquaculture extension team works on a wide range of seafood education projects (Eat Oregon Seafood, Discover West Coast Seafood video series currently in development), safety at sea training and promotion (FFAST training), aquaculture extension (e.g. Guide to Oregon Aquaculture, analysis of barriers, opportunities, and policy recommendations), and collaborative facilitation and research to address various fisheries conflicts and issues (e.g. Workshop on improving gear marking in the sablefish pot fleet, research on minimizing seabird bycatch in trawl and longline fisheries, etc.).

How this position specifically relates to marine and coastal policy: This fellowship provides an opportunity to gain familiarity with Oregon’s commercial fisheries and aquaculture industries, fisheries management, and the complex policy and market landscape that affects local seafood availability and economic impact. Public education programs often involve answering questions about fisheries policy, sustainability, quality, and economic and community impacts and requires nuanced framing to ensure that information is accurate and provides a balanced representation of the range of different fisheries, gear types, and business models (e.g. smaller vessels to larger vessels) involved in harvesting local seafood.

Summary of the fellow’s day-to-day activities and how these tasks fit within a larger project scope: This fellowship seeks to expand public engagement with and awareness of local seafood (wild capture and aquaculture) through expanding the Discover West Coast Seafood efforts and Shop at the Dock. Discover West Coast Seafood is an expansion of OSG’s Eat Oregon Seafood awareness campaign, which began in early 2020 during COVID-19 lockdowns to promote local food systems and food security. In partnership with Washington Sea Grant and California Sea Grant, we are expanding seafood education resources to help the public understand and access local seafood products across the full West Coast. Shop at the Dock (SATD) is an experiential educational program currently operating in Newport that helps people feel competent and empowered to purchase their own seafood both directly from commercial fishermen and from local seafood specialty markets. Past SATD tours have been organized in Garibaldi and Warrenton, and we are interested in restarting tours in Garibaldi and expanding these learning opportunities to the Southern Oregon Coast.

The fellowship includes: making contacts with local partners in each focal port, conducting a needs assessment with direct marketers in each port to help guide SATD program development and inform related Discover West Coast Seafood project efforts, developing a template itinerary for seafood education tours in South Coast ports (likely Charleston, Port Orford and Brookings), deliver pilot tours in south coast communities, assist with program delivery in Garibaldi and Newport, and develop a coastwide implementation plan that would be sustainable beyond the fellowship duration. In support of the Discover West Coast Seafood Campaign, the fellow would develop social media content and cross promote a social media campaign led by Washington Sea Grant, develop content and assist with Discover West Coast Seafood website currently under development, assist with developing outreach.
materials based on frozen seafood shelf life testing, and work on updating existing handouts, tabling materials, and other public outreach materials with newly acquired communications assets (illustrations, photos, videos, etc.).

Bulleted summary of responsibilities:
- Work with the Oregon Sea Grant Fisheries and Aquaculture team.
- Expand Shop at the Dock programming to the Southern Oregon Coast (focus on ports of Charleston, Port Orford, and Brookings)
- Scope the development of aquaculture tours modeled off of SATC
- Support Eat Oregon Seafood and Discover West Coast Seafood website development and educational campaigns
- Other duties as assigned
  - General support of the regional West Coast seafood education project (with partners in CA and WA)
  - Support seafood educational efforts at inland locations (e.g., Eugene, Portland, Roseburg, Ashland)

Approximate breakdown of field/office work: 70-80% office based, 20-30% field based (e.g., site visits, meeting with partners, program delivery)

Communities, partners, or interested parties with which the fellow may engage:
- Commercial Fishermen
- Seafood buyers and processing managers
- Port staff
- Seafood specialty market owners and staff
- Community Supported Fisheries Businesses
- Local food systems promotion community organizations
- Tourism Destination Management organizations (e.g. OCVA)
- Local community members
- Visitors to the Coast

Desired products from the fellow:
- Report that summarizes results of a needs assessment of commercial fishermen doing direct or alternative marketing in Charleston, Port Orford, and Brookings (existing survey from WSG can provide starting point for needs assessment)
- Itineraries for experiential seafood tours in Charleston, Port Orford, and Brookings.
- Pilot experiential seafood tours in South Coast communities
- Proposal for a coastwide implementation plan for seafood experiential learning opportunities (SATD-style or similar), taking into account community resources and OSG staff capacity.
- Social media posts in support of the Discover West Coast Seafood public education and seafood promotion campaign
- Website content for the Discover West Coast Seafood website

Potential benefits of this position to the fellow:
- Learn about Oregon’s seafood and local food systems
- Opportunity to gain experience working with members of the commercial fishing community.
• Work with a team that has deep experience working in Oregon’s coastal communities on a variety of marine and coastal issues.
• Develop stronger public communication and extension education skills through on the ground experience, feedback, and mentorship by experienced practitioners.
• Varied tasks that include a mix of creative communications work and practical, hands-on program implementation.
• Involvement in a regional Sea Grant network project, with opportunities to make connections with Sea Grant staff at California Sea Grant and Washington Sea Grant.

Skills required:
• Interpretive skills and/or field-based teaching for adult learners
• Experience public speaking to groups of at least 15-20 people
• Knowledge of and interest in coastal and marine topics, issues, or science
• Experience using Microsoft Office software

Skills preferred:
• Knowledge of Oregon’s fishing industry
• Passion for educating people about local and sustainable seafood
• Familiarity with albacore tuna and other off the dock species in Oregon
• Effective use of social media for professional purposes (e.g. on behalf of a business or organization)
• Experience with event planning and logistics
• Experience with visual design software (e.g Canva, InDesign)
• Interest in basic video editing for social media content
• Experience working with Oregon’s South Coast communities