

Oregon Sea Grant Natural Resource Policy Fellowship Host Descriptions 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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1	Restoration Project Impact Analyst for Coastal Watersheds	Tillamook Estuaries Partnership (TEP)	Garibaldi*	2
2	Ocean Shore Decision Support Development Fellow	Oregon Parks and Recreation Department (OPRD), Central Operations, Ocean Shore Program.	Salem or Seal Rock*	5
3	Tribal Algae Taxonomist and Biologist	The Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians	Coos Bay, Florence, or Eugene*	8
4	CoastWatch Mile Adoption and Co-Science Fellow	Oregon Shores Conservation Coalition, CoastWatch Program	Astoria, Portland, Across Oregon*	12
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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 inperson 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 <u>National Estuary</u> <u>Program</u>. 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 <u>Comprehensive Conservation and Management Plan (CCMP)</u>, 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 <u>soon-to-be-retired</u> <u>restoration webpage</u>. TEP is completely revamping its website, which is expected to go live soon, 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.

- 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:

- 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:

- 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

- 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 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 zookplankton 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.

- 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 4: CoastWatch Mile Adoption and Co-Science Fellow

Office: Oregon Shores Conservation Coalition, CoastWatch Program **Position Location**: Remote location, Oregon. This position will be a remote-working position, with occasional travel to Portland and Astoria to collect data reports and have in-person meetings.

Program Overview: In Oregon, the beaches belong to the people. Oregon Shores Conservation Coalition's tradition of environmental stewardship empowers citizens through education and conservation action to learn about, enjoy, and defend the Oregon coast.

The 1967 Beach Bill guaranteed public access to Oregon beaches. After the Beach Bill became law, advocates for the Beach Bill formed Oregon Shores as a watchdog nonprofit to protect beaches and ensure retention of public access. Since then, we recognized the inadequacy of protecting beaches in isolation. We now work to protect beaches in concert with coastal and nearshore ecosystems, communities, and upland watersheds.

Oregon Shores is unique because:

- we have a coast-wide perspective;
- we advocate for the public through land use planning and policy implementation when developments threaten ecosystems or public access;
- we work as a coalition and partner with allies to accomplish larger goals;
- we are people-powered and have 1,700+ volunteers who adopt-a-mile through our CoastWatch program (founded in 1993) and participate in co-science projects. CoastWatch engages Oregonians in stewardship of their shoreline. Volunteers adopt mile-long segments of Oregon's coast, observing and reporting natural changes and human-induced impacts seasonally. Each CoastWatch volunteer adopts a segment of Oregon's coast; any number of people can adopt a particular mile. We are the only organization in which volunteers have adopted every coastal mile of our state.
- Finally, we build stewardship in future generations through our CoastWatch in the Schools program, in which schools adopt miles of shoreline and use these miles as place-based opportunities for outdoor education, STEAM skills, and increased ocean literacy.

This fellowship supports the CoastWatch and CoastWatch in the Schools programs by analyzing the previous 30 years of data to inform future programmatic directions.

How this position specifically relates to marine and coastal policy: Oregon Shores' work directly influences marine and coastal policy in multiple ways. First, our legal and land use advocacy work upholds land use laws put in place by the Department of Land Conservation and Development (DLCD). Our conservation work (Campaign for Oregon's Estuaries, floating offshore wind, marine reserves, drone regulations, etc.) seeks to work with allied partner organizations and empower communities to change and influence current coastal and marine policy for future generations. Our CoastWatch program (the focus of this fellowship) seeks to educate individuals, organizations, and schools to engage them in environmental stewardship, which can influence marine and coastal policy through individual and collective behavior changes. In this project, the fellow will analyze 30 years of CoastWatch mile reports to show changes and trends on Oregon's coast over time. We are the only organization that has this type of data for every mile of Oregon's coast for this time period. This information may be used by scientific organizations as a baseline for assessing climate change impacts and developing proactive climate change policies for Oregon's coast.

Summary of the fellow's day-to-day activities and how these tasks fit within a larger project scope: The fellowship will begin in early 2024 and last for up to 1 year, timing may be flexible based on the needs of the fellow and organization. In that time, the fellow, directed by Oregon Shores' CoastWatch Program Manager, will compile 30 years of CoastWatch mile reports (both paper/digital versions) collected by Oregon Shores volunteers on 362 miles of Oregon coastline, and will conduct a retrospective analysis on the observational data, to identify trends, patterns, & changes in the coastal ecosystems.

By the end of the fellowship, the fellow will have written a paper synthesizing the major trends, patterns, & changes to Oregon's coast evident in the mile reports. If applicable, this paper will include statistical analysis & visual representations (graphs, charts, maps, etc.) that will be easily digestible to the public. Additionally, this fellow will create GIS mapping representations of the trends indicated in the paper, overlaid with available climate change data, to be shared on Oregon Shores' website. Finally, the fellow will produce a visual representation (video, photo montage, etc.) of the changes to Oregon's coast over the study period, and recommendations to the Oregon Shores' staff and board.

For the analysis, we are interested in answering questions, including: has there been an increase in visitation to Oregon's beaches? Has there been an increase in illegal activities on the beaches? Has there been an increase in stranded marine mammals on Oregon's beaches, and can that data be correlated with any climate change factors? Has there been a change in the number of CoastWatchers submitting mile reports over the 30 year period, or the miles being reported on? Is there a change in the amount and locations of marine debris washed up on the beaches, and can this information be correlated with data about King Tides or sea level rise? Etc.

Our target audience:

- Our internal board & staff, to inform strategic planning of the CoastWatch mile adoption program;
- CoastWatch volunteers who submit mile adoption reports. This analysis will illustrate the "why" behind the 30 years of data collection.
- Our funders, so they continue to support our programs and work
- Allied partner nonprofits & governmental agencies (like the Oregon Coast Visitors Association and Oregon Parks and Recreation Department) who will use this observational data available through our website when making decisions about sustainable use, tourism, and beach regulations.
- Legislators and governmental personnel who determine marine/coastal policies and climate resiliency decisions that affect Oregon's coastal management.

This analysis will inform strategic planning for Oregon Shores' CoastWatch mile adoption program. For example, this analysis may illuminate gaps in data depicting how Oregon's coastline has changed over time, which is critical for proactive climate change measures. As a result, we may alter the questions posed in our mile adoption form, add or pivot our current co-science projects, or add a staff member to our team.

After the initial scoping of the project is complete, the fellow will meet with the CoastWatch Program Manager on a weekly basis, to assess the progress of the project, provide feedback, and create professional development opportunities. The fellow will also provide reports for board meetings every other month (6 times per year), and will be invited to attend board meetings.

Approximate breakdown of field/office work:

- We typically work Monday-Friday, 9am-5pm. However, work days and hours are flexible as long as the fellow is able to meet the communication and product needs of this fellowship.
- The majority of work will be in an office setting, including attending meetings and communicating with the CoastWatch Program Manager.
- However, Jesse Jones (the CoastWatch Program Manager) will take the fellow to specific sites
 on Oregon's coast to demonstrate first-hand how to collect data for mile adoption reports and
 co-science projects. This field orientation will occur near the beginning of the fellowship,
 weather permitting.
- The fellow may also attend meetings or events with allied partner organizations to gain a better understanding of our co-science partners.
- Mentor/fellow check-ins will be frequent to ensure the work environment and project are tracking with expectations.
- The fellow may also conduct some field work near the end of the project term, to conduct interviews and collect video footage of CoastWatchers surveying their adopted miles and conducting co-science projects.
- Potential flexibility for number of hours worked per week

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

- Oregon Shores' staff members, including CoastWatch Program Manager, Executive Director, Communications Coordinator, and Conservation Team
- CoastWatch program volunteers (diverse community members throughout Oregon)
- Citizen/community/co-science partners, including COASST, MARINe, Oregon Marine Mammal Stranding Network, NOAA, Oregon Coastal Management Program, and Oregon State University
- Schools and school districts in Oregon's 7 coastal counties
- Oregon Shores' allied partners, including OPRD, DLCD, ODFW, Sitka Center for Art and Ecology, Oregon Coast Aquarium, Seaside Aquarium, etc.

Desired products from the fellow:

- Analysis of 30 years of CoastWatch mile reports (reports currently in both digital and hard copy formats), including a written summary of major patterns/trends/changes
- The analysis will include statistical analysis with graphs/charts where appropriate
- If there is time, the analysis will include Spanish translation
- The analysis will include visual GIS maps that depict the changes to Oregon's coast over the 30-year period, where appropriate
- These maps will be embedded in our WordPress website
- If appropriate, a visual depiction (video, photo montage, etc.) of the changes to Oregon's coast over the study period
- This visual depiction will be embedded in our WordPress website
- The analysis will be done through a climate change lens, and will include an overlay with available climate change data/research about Oregon's coast
- For example, if our data shows an increase in jellyfish washed ashore on certain beaches, overlay that map with one showing changing ocean acidification rates, etc.
- Recommendations to Oregon Shores' staff/board about the future directions of the CoastWatch mile adoption and co-science program, based on the analysis
- If there is time, the analysis will be accompanied by interviews with CoastWatch volunteers, to capture "shoreline stories" about their CoastWatch experiences

Potential benefits of this position to the fellow:

- Experience generating science communication content about long-lasting coastal citizen/community/co-science projects
- Experience communicating with diverse volunteers
- Learn how a small nonprofit collaborates with a diverse group of volunteers
- Networking opportunities
- Flexible work schedule and location
- Experience developing and implementing data analysis using GIS, video/visual tools, and creating program recommendations.
- 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 Oregon Shores' CoastWatch program going forward.

Skills required:

- Basic knowledge of procedures and techniques necessary to collect, organize, analyze,
- and report data in narrative, numerical, and visual formats
- Experience with GIS programs, databases, and other software applications to query, acquire,
- evaluate, clean, analyze, and visualize data and information. Ability to map location-based project patterns and trends over time.
- Familiarity with WordPress web design and embedding maps, graphics, videos on a web page
- Background in statistical analysis and data analysis
- Basic familiarity with effects of climate change on natural resources and management on Oregon's coast.
- Ability to provide recommendations for future program development and information needs to
- program staff and management in either written or verbal format.
- Comfortable working independently, self-starter.
- Demonstrates a concern for accuracy (e.g. regularly produce accurate, thorough, professional
- work)
- Excellent English communication skills (written and verbal)
- 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
- Work harmoniously with others and effectively complete tasks in a team environment
- Proficiency with Word, Excel, Powerpoint, Google Drive, or other similar software.

- Familiarity with Canva, InDesign, or other graphic design software
- Familiarity with video creation and editing software
- Fluency in Spanish: able to translate report into Spanish
- Experience with citizen/community/co-science projects

Position 5: Oregon Sea Grant Research & Scholars Program Coordination Fellow

Office: Oregon Sea Grant – Research & Scholars Program

Position Location: Corvallis, OR (in-person, hybrid, or remote possibilities)

Program Overview: Oregon Sea Grant, based at Oregon State University since 1971, is one of 34 Sea Grant College Programs established by Congress as a partnership between universities and the National Oceanic and Atmospheric Administration. Through research, Extension and education, Oregon Sea Grant sparks discovery, understanding, and collaboration to foster healthy, inclusive, and resilient coastal communities and ecosystems. Oregon Sea Grant funds research projects, manages fellowships and internships, and implements Extension and education programs to help coastal communities address timely issues. Oregon Sea Grant also operates a public marine science Visitors Center and K-12 educational programs at the Oregon State University Hatfield Marine Science Center in Newport. Oregon Sea Grant funds research at Oregon colleges and universities, including Oregon State University, the University of Oregon, Portland State University and Oregon Health and Science University. In partnership with the Oregon State University Extension Service, Oregon Sea Grant helps Oregonians prepare for natural disasters, address development issues, learn about fisheries and aquaculture, engage in outdoor tourism, guard against aquatic invasive species, and keep waterways clean. Oregon Sea Grant engages with the public through social media, workshops, publications, videos, conferences, and trainings. Oregon Sea Grant is one of OSU's Centers and Institutes housed in the Research Office and our Extension faculty work in close collaboration with the Division of Extension and Engagement.

How this position specifically relates to marine and coastal policy: The Oregon Sea Grant mission is to spark discovery, understanding, and collaboration to foster healthy, inclusive, and resilient coastal communities and ecosystems. Important coastal and marine issues confronting Oregon include: kelp forest declines, marine renewable energy, marine mammal conservation and entanglements, proposed reintroduction of sea otters, harmful algal blooms, microplastics and marine debris, shifting distribution of marine species, coastal erosion and inundation, tsunami risk assessment and preparedness, emerging and displaced fisheries, blue carbon storage, dam removals, sustainable aquaculture, and invasive species. Oregon Sea Grant is uniquely qualified to help communities address these issues and connect with researchers, Extension specialists, and educators in ways that are equitable, inclusive, collaborative, and that contribute to the socio-ecological resilience of the coastal zone. This position supports these activities by supporting OSG's research and scholarship activities.

Summary of the fellow's day-to-day activities and how these tasks fit within a larger project scope:

This position reports to the Oregon Sea Grant (OSG) Associate Director for Research and Scholars to support the management of Oregon Sea Grant's research portfolio, help coordinate the student scholars program, and assist in writing outcome reports related to that funding. The position may also prepare/deliver presentations and work on special projects to support existing Oregon Sea Grant activities and implement the Oregon Sea Grant Strategic Plan.

- The primary role of this position will be to support OSG staff in Scholars' program activities, including Graduate Fellowship Recruitment and Project Management.
- Become familiar with the Oregon Sea Grant program and activities. Increase your understanding
 of the Sea Grant Network and how individual programs and people support national activities.

- Gather information from previously supported scholars (email, internet) to update and populate
 the <u>Where are They Now?</u> OSG scholars' database and map. Suggest improvements to the
 current format and implement them.
- Attend program and network meetings to observe and learn, with occasional note-taking responsibilities (for example, Quarterly National Research and Fellowship Coordinators' Network Meetings and others as they arise.)
- Assist with communications and application review as appropriate for several upcoming
 graduate and undergraduate fellowship competitions (e.g., OSG Natural Resource Policy
 Fellowship, NOAA Coastal Management Fellowship, Sea Grant Knauss Fellowship, OSG state
 fellowships and scholarships).
- Involvement in OSG reporting activities, including but not limited to receiving and organizing progress and completion reports, reviewing and summarizing materials for use in program reporting, which may include occasional follow-up with investigators, as needed.
- Help execute and facilitate OSG application workshops for undergraduate and graduate students in Oregon. Locations may include Chemeketa Community College or other minority serving institutions in the area.
- Support OSG staff needs for the upcoming State of the Coast Conference (November 2024), especially related to early-career programming and events (e.g., student poster sessions, professional development and networking event).
- Provide leadership for the OSG Graduate Scholars Community of Practice through coordinating meetings and facilitating connection in conjunction with other members of the CoP, with possible intersections with the National Sea Grant Fellowship Coordinator's Network Professional Development Series.
- Other activities of interest to the fellow may be assigned, especially in developing knowledge of Sea Grant or understanding grants management from the funder's perspective.

What is the approximate breakdown of field/office work? 90-95% Office with about 5-10% attending meetings throughout the state/region. Potential for remote or hybrid work is available. Office space is available in Corvallis.

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

- Oregon Sea Grant host agencies and entities including the Oregon Department of Fish & Wildlife (ODFW) Oregon Department of Land Conservation (DLCD), The Confederated Tribes of the Coos Lower Umpqua, and Siuslaw Indians (CTCLUSI), Oregon Department of Environmental Quality (DEQ), and others
- Oregon research community
- Oregon-based students and early career professionals
- Oregon Sea Grant and National Sea Grant Network

Desired products from the fellow:

- Written products may include draft comments and recommendations for program and process improvements, fellowship onboarding materials, as well as synopses of OSG project reports.
- Updated or refreshed database / web interface for OSG's *Where are they Now?* scholars tracking.
- Leadership and plan for OSG Graduate Fellows Community of Practice (CoP) 2024.
- Support for upcoming meetings (State of the Coast, OSG Fellows CoP).

Potential benefits of this position to the fellow:

- Gain research and project management skills
- Engage with the Oregon Sea Grant network as well as the National Sea Grant Network

Skills required:

- Excellent oral and written communication skills.
- Demonstrated ability to set priorities and meet deadlines.
- Demonstrated ability to manage multiple projects/activities simultaneously, solve problems, make effective decisions, and work independently.
- Demonstrated ability to work effectively as part of a team.
- Demonstrated interest in and evidence of a commitment to promoting and enhancing diversity, equity, and inclusion.
- Interest in and familiarity with coastal issues for Oregon and the region.

- Experience with responsibility for program or project management, monitoring and coordination.
- Experience with synthesis reporting.
- GiS experience or interest.