

**Oregon Sea Grant Natural Resource Fellowship Host Descriptions 2019-2020\***

*\*Host descriptions are subject to change, please check back periodically for updates to this document.*

**We anticipate filling the following two fellowship positions pending the availability of funding:**

<b>Fellow Position Title</b>	<b>Host Office</b>	<b>Location</b>	<b>Page #</b>
<i>Climate and Fisheries Fellow</i>	The Nature Conservancy	Portland, OR	2
<i>Marine Reserves Human Dimensions Research Fellow</i>	Oregon Department of Fish and Wildlife - Marine Reserves Program	Newport, OR	4

**Funding is available for one additional fellowship. We anticipate filling one of the following three opportunities:**

<b>Fellow Position Title</b>	<b>Host Office</b>	<b>Location</b>	<b>Page #</b>
<i>Federal Waters Policy and Data Fellow</i>	Oregon Coastal Management Program (OCMP)/ Oregon Department of Land Conservation and Development (DLCD)	Newport or Salem, OR	6
<i>Ocean Acidification and Hypoxia (OAH) Marine Policy Fellow</i>	Oregon Department of Fish and Wildlife- Marine Resources Program (MRP)	Newport, OR	9
<i>Pollution Prevention Fellow</i>	Department of Environmental Quality (DEQ) -Headquarters: Operations Division	Portland, OR	11



**Office:** The Nature Conservancy

**Fellow Position Title:** Climate and Fisheries Fellow

**Fellow Position Location:** Portland, Oregon

**Funding Status:** We anticipate filling this position, pending the availability of funds.

**Program Overview:**

The Nature Conservancy (TNC) is the largest environmental organization in the world with 4,000 employees working in 72 countries. TNC's Oregon Chapter has a Coast and Marine Team (Team) that focuses on estuarine and marine habitat conservation and restoration and fisheries conservation.

**How this position specifically relates to policy:**

The Fellow will assist the Team with three projects: (1) Climate change scenario planning for federally managed fisheries. This cutting-edge work will allow fishery participants and managers to develop adaptations for business and fishery policies to account for changes in ocean conditions and stock availability. This is the first scenario planning exercise conducted by a regional fishery management council and will set the stage for the other seven councils as they embark on similar work. (2) Climate change scenario planning for the state managed Dungeness crab fishery. (3) Exploration of best available science, Oregon policies, and available strategies beyond fisheries to buffer against climate impacts in the ocean (e.g. kelp farms as buffers). The Fellow will spend 80% of their time on the first two projects and 20% on the third.

**Fellow's day-to-day activities and how these tasks fit within a larger project scope:**

Day-to-day work will be split between the office and the field. In the office, the Fellow will conduct literature reviews of existing climate change and species research and collate publicly available fishery data to inform community vulnerability analysis. The Fellow may conduct a survey to determine views of climate change, collect fishermen knowledge of ocean changes, help organize workshops, and develop white papers to inform policy and scenario planning discussions. In the field, the Fellow will interact directly with non-profit organizations, government entities including the tribes, fishery managers, members of industry, and community members. In addition, the fellow will be integrated into TNC's daily operations. The Fellow will have office space and be included in all TNC staff meetings, conservation and science gatherings. The fellow will directly report to the Marine Fisheries Project Manager in close coordination with the Coast and Marine Director and the Director of Conservation Science.

**List the communities or stakeholders with which the fellow may engage:**

- The Fellow will work with state and federal fishery managers, scientists, the commercial fishing industry, commodity commissions, non-governmental organizations, tribes and the targeted audiences of the public.
- The Fellow will work with above listed partners one-on-one and in workshop settings.
- Work may be presented to the public at professional meetings (e.g., Oregon AFS), Pacific Fishery Management Council, Oregon Department of Fish and Wildlife, the Oregon Fish and Wildlife Commission, Ocean Policy Advisory Committee, Science and Technical Advisory Committee as well as other climate forums.

**Desired products from the fellow:**

- A review of existing climate impact information on the Dungeness crab stock.

- Analysis of existing management tools utilized by fisheries on the West Coast, other regions of the U.S., and those employed in similar fisheries around the world.
- Development and implementation of a survey, white papers, workshop outcomes and summary reports (as needed).
- Documentation of the methodology used and lessons learned for all three projects.
- Preparation of a draft journal article for potential publication with other TNC scientists on climate scenario planning (tasks 1 and/or 2).

**Potential benefits of this position to the fellow:**

- Real world experience working with resource managers, resource users, and the public on natural resource and socioeconomic policy issues.
- Participation in cutting edge policy work that will guide future work nationally and globally.
- Possible publication of a peer reviewed journal article.

**Skills required:**

- Excellent oral and written communication and interpersonal skills.
- The ability to interact with and receive input from a wide variety of people with differing perspectives.
- Excellent writing skills and experience developing planning documents.
- General understanding of biological and ecological principles.
- Broad understanding of sustainable fishery management practices.

**Skills preferred:**

- General understanding of marine fish life history and habitats, as well as knowledge of fisheries management practices.
  - Understanding of social and economic aspects of natural resource policy development.
  - Knowledge of climate change mechanisms in the ocean.
  - Ability to critically evaluate and synthesize scientific literature
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**Office:** Oregon Department of Fish and Wildlife Marine Reserves Program

**Fellow Position Title:** Marine Reserves Human Dimensions Research Fellow

**Fellow Position Location:** Newport, Oregon

**Funding Status:** We anticipate filling this position, pending the availability of funds.

**Program Overview:**

The Oregon Department of Fish and Wildlife (ODFW) manages the state marine reserves. The ODFW Marine Reserves Program includes both ecological and social science research projects. The Human Dimensions Project conducts research to assess the socioeconomic impact of marine reserve implementation on coastal communities and ocean users. A comprehensive investigation of reserve impacts, this research involves collaboration with scientists across a wide range of social science disciplines. Broadly stated, this research agenda could be construed as a complex interdisciplinary effort at policy analysis related to marine reserves.

The Human Dimensions Research Fellow will be engaged across this entire body of research. Assessment of reserve impacts will require replication of earlier studies to evaluate any changes that may have occurred since reserve implementation. Numerous studies will soon be initiated including intercept and mail surveys and studies compiling secondary community socioeconomic data to perform time series analyses. The Fellow will assist in planning and implementing these studies. This individual will also assist with organizing a comprehensive report covering this research over the last decade, to provide a synthesis report for the planned legislative evaluation of the Oregon Marine Reserve System in 2022 - 2023.

**How this position specifically relates to policy:**

The ODFW Marine Reserves Human Dimensions Project research agenda is specifically designed to provide the state legislature with critical information concerning the socioeconomic impacts of the marine reserves on coastal communities and ocean users. During the legislative evaluation of the reserve system, this information will be used to make informed decisions related to the Oregon Marine Reserves System and related marine conservation policies into the future.

**Fellow's day-to-day activities and how these tasks fit within a larger project scope:**

Typical activities will include literature reviews, study design, agency meetings related to planning for the marine reserve evaluation, and day-to-day project management.

Working with the project leader, the Fellow will help review and organize all previous related studies. This work will then facilitate outlining and writing parts of the synthesis report necessary for legislative evaluation of the reserves. Other literature reviews will also be a part of this effort.

New studies will include writing questionnaires, developing sample designs, and data collection. Studies completed during the Fellowship will also involve data entry, analysis, and report composition. Survey research efforts will entail working with other collaborators, including faculty and consultants. The intent is to describe coastal Oregon socioeconomic changes since marine reserve implementation.

The Marine Reserves Program is involved in a complex planning process related to the legislative evaluation. The Fellow will be an integral team member in this process. Meetings will include advisory teams of professionals and regular ODFW Marine Reserves Program staff. The Fellow will also attend more formal committee meetings, such as the state Ocean Policy Advisory Committee and the related

Science and Technical Advisory Committee, to further the educational aspect of the fellowship experience.

**List the communities or stakeholders with which the fellow may engage:**

The Human Dimensions Project, by definition, interacts with the full range of coastal community members and stakeholders, including educational and government entities, stakeholders (fishers, recreationists, NGO's), and the general public.

**Desired products from the fellow:**

- Meeting planning
- Research project planning, design, and execution
- Literature reviews
- Statistical analyses
- Report writing and related presentations

**Potential benefits of this position to the fellow:**

- Exposure to a broad range of social science projects and professionals
- Hands on experience with research projects
- Interaction with state agency marine resource management efforts
- Attendance at important meetings related to state marine conservation policy
- Mentoring of other students during field work
- Opportunities to also experience aspects of the ecological team's field work

**Skills required:**

- Degree in biological science
- Familiarity with marine resource management and policy
- Broad knowledge of social sciences
- Familiarity with applied social science data collection methods
- Technical writing experience
- Working knowledge of statistics (SPSS or R)
- Working knowledge of MS Office
- Experience in mentoring students
- Ability to continuously multitask in a challenging setting
- Ability to interact with the general public and diverse stakeholders
- Good public speaking capabilities

**Skills preferred:**

- Familiarity with Oregon Marine Reserve System
- 1 – 2 years of marine resource management agency experience
- Experience in applied social science research
- Advanced statistics

**Office:** Oregon Coastal Management Program (OCMP) within the Oregon Department of Land Conservation and Development (DLCD); Oregon Department of Fish and Wildlife Oregon (ODFW)

**Fellow Position Title:** Federal Waters Policy and Data Fellow

**Fellow Position Location:** DLCD offices in Newport or Salem, Oregon

**Funding Status:** Funding is potentially available for this position. We anticipate filling one fellowship among three positions offered.

**Program Overview:**

The [Oregon Coastal Management Program \(OCMP\)](#) works in partnership with 42 local governments, 11 state agencies, multiple federal agencies, 4 federally recognized tribal governments, and many other stakeholders to ensure that Oregon's coastal and ocean resources are managed, conserved, and developed consistent with [statewide land use planning goals](#), state laws, and local land use regulations. The Program coordinates and integrates across the levels of government to support Oregon's unique land use planning program with a specific focus on local planning and management to protect and restore coastal natural resources. The OCMP accomplishes much of its work through financial and technical support for natural resource planning.

As a federally approved coastal program under the Coastal Zone Management Act (CZMA) the OCMP has the authority (also known as [Federal Consistency authority](#)) to review federal agency actions and activities that affect our coastal zone, a legally defined geography that stretches from the crest of the coast range out to the extent of state waters (3 nautical miles from shore) in the ocean. The CZMA specifies that federal activities must align with selected state laws, statewide planning goals, and local government comprehensive plans. The Federal Consistency review process ensures that Oregon's interests are considered when federal actions or permits decisions are made. Comprehensive, timely, and relevant natural resource and socio-economic information is crucial for evaluating proposed activities and their consistency with existing policies and goals within the OCMP's approved program.

The Oregon Department of Fish and Wildlife (ODFW), a key partner agency within the OCMP, is the primary agency responsible for scientific data collection and monitoring in the marine environment. These data are critical to supporting informed management of resources in the coastal zone.

**How this position specifically relates to policy:**

Oregon's Outer Continental Shelf (OCS) waters exist as part of the California Current Large Marine Ecosystem, an interconnected ecosystem spanning the Pacific west coast of North America. Although state jurisdiction (and Oregon's Coastal Zone) reaches 0-3 miles from shore, Federal Consistency authority expands beyond this geography to review actions that may impact Oregon ocean resources. To improve the OCMP's ability to complete Federal Consistency review of activities beyond Oregon's Coastal Zone, the agency is planning to submit to NOAA Geographic Location Descriptions (GLD) that document the state's existing natural resource and human use impact concerns.

The Federal Waters Policy and Data Fellow will be responsible for helping to prepare an analysis of the potential impacts from proposed future uses of the Oregon OCS waters, with a focus on applying the information to potential Federal Consistency review. The Fellow will work directly with OCMP's State-Federal Relations Coordinator, Marine Affairs Coordinator, and the ODFW Marine Resources program to

synthesize information and prepare GLD's for submission to NOAA. The state is considering the development of GLD's for marine pollution, offshore oil and gas development, and offshore aquaculture. Overall, the fellow will have a unique opportunity to learn about and participate in science-based policy decision-making at the state and federal level and will be able to influence policy development through implementation of the Coastal Zone Management Act.

**Fellow's day-to-day activities and how these tasks fit within a larger project scope:**

The fellow will be stationed in the OCMP, within the Oregon Department of Land Conservation and Development (DLCD) and mentored primarily by the Marine Affairs Coordinator, but will also work closely with the Program Manager. The Fellow will work with ODFW marine program staff on the analysis and compilation of marine data for use in the GLD submissions. The fellow will be tasked with a number of support services for the GLD creation process. Activities include, but are not limited to the following:

- Coordinate with natural resource management staff from agencies and researchers to map areas of resource concern
- Compile an update of relevant natural resource and human use data for topics including but not limited to-
  - Offshore water quality
  - Offshore oil and gas
  - Offshore aquaculture
- Facilitate the preparation of data and informational materials
- Develop GLD documents and supporting maps
- Communication between state agencies and the NOAA Office for Coastal Management to help streamline the GLD creation and approval process
- Learning about the Federal Consistency process and how enforceable policies and GLDs are created and implemented in different management plans
- Building an understanding of potential stressors in federal waters off Oregon
- Presentations to coastal stakeholders on draft work products

Additionally, the fellow will have an opportunity to work with other staff members in the Salem, Portland, and Newport offices as desired for professional development and to learn more about working in a state agency and federally approved coastal program.

**List the communities or stakeholders with which the fellow may engage:**

- Diverse agency representation – state (multiple departments), federal, and local governments
- Coastal community members - through presentations to the Ocean Policy Advisory Council and the Land Conservation and Development Commission

**Desired products from the fellow:**

- Process documents including agendas, meeting summaries, reports, and policy summaries.
- Geographic Location Description(s) and supporting documents
- Supporting maps

**Potential benefits of this position to the fellow:**

- Applicants interested in the junction of natural resources and policy are highly encouraged to apply.
- Extensive networking and collaborative work with state and federal partners.
- Learning how a nationally approved coastal program functions.
- Working in a small agency with exposure to many of the primary marine managers, policy

makers, and planners in Oregon.

- Experience facilitating and supporting a complex decision-making process incorporating the principles of ecosystem-based management and working with multiple stakeholders related to Oregon coastal zone management.
- Directly influencing and supporting science-based policy in an applied governmental process.
- Increased policy and scientific knowledge and expertise regarding ocean resource management.
- Experience evaluating multiple types of ecosystem and human use data and building GIS products.
- Experience compiling and evaluating ecological and human use data.
- Access to extensive professional development tools and opportunities.

**Skills required:**

- Research and literature review experience
- Technical writing skills
- Ability to think critically about, and synthesize, natural resource data
- Geospatial Information Technology (experience using ArcGIS for spatial analysis)

**Skills preferred:**

- A fellow with the following qualities would greatly benefit from this experience-
  - Highly organized
  - Independent
  - Self-starter
  - Creative
  - Adaptable
- Broad understanding of Oregon's marine environment

**Office:** Oregon Department of Fish and Wildlife - Marine Resources Program (MRP)

**Fellow Position Title:** Ocean Acidification and Hypoxia (OAH) Marine Policy Fellow

**Fellow Position Location:** Newport, Oregon

**Funding Status:** Funding is potentially available for this position. We anticipate filling one fellowship among three positions offered.

**Program Overview:**

Oregon was one of the first places in the world to observe direct OAH impacts. As OAH continues to intensify, there are now clear signs that OAH is undermining Oregon's iconic fisheries, ecosystems, and coastal communities. The Oregon Department of Fish and Wildlife (ODFW)'s Marine Program manages marine fish and wildlife resources in Oregon, and is lead for the state on OAH policy development. This fellowship position will support the Marine Program and activities related to Oregon's OAH policy and outreach.

In 2017, the passage of Oregon Senate Bill 1039 created the Oregon Coordinating Council on OAH to provide guidance to the state on how to respond to OAH. The OAH Council consists of agencies, Tribal interests, academics, and stakeholders, who advise and develop recommendations for the state on actions to support OAH science, adaptation, and mitigation. The OAH Council submitted their first biennial report to the State legislature on September 2018, which has acted as a framework for the creation of Oregon's OAH Action Plan that will be submitted to the Governor's office for adoption in August 2019. Through this position, the Fellow will have opportunities to participate in the planning, design, and implementation of the OAH Council's second biennial report due in September 2020.

**How this position specifically relates to policy:**

This Fellow will work with ODFW Marine Program biologists and managers to respond to policy directives from the Oregon State Legislature and Governor. The Fellow will also have the opportunity to participate with agencies in the development of OAH-related management approaches. This will include observing and participating in state and regional policy meetings throughout the year. The Fellow will learn first-hand the process of policy development and will interact with various stakeholders to learn how policies affects communities on a local, state, regional, and international scale.

**Fellow's day-to-day activities and how these tasks fit within a larger project scope:**

The fellow will:

- Work in an office with periodic day travel and rare overnight travel. With large documents due from the OAH Council in the next 12 months, this will be a fast-paced year for the Fellow. Daily tasks will vary in response to the development of these documents.
- Help convene and manage the Oregon OAH Monitoring Group (OOMG), a group of Oregon monitoring professionals in who meet quarterly to improve the state's monitoring network.
- Assist the Marine Program staff in preparing reports and other work products for the OAH Council (including writing, formatting, and graphic design).
- Develop and provide OAH informational and outreach materials, public-oriented brochures, fact-sheets, FAQ documents, white papers, website content, and social media (including using graphic design programs).

- Provide logistical assistance with OAH Council meetings and regional workshops (including content and agenda development, scheduling, meeting facilitation, as well as note taking and final synthesis).

**List the communities or stakeholders with which the fellow may engage:**

- Oregon Ocean Monitoring Group (OOMG)
- Oregon OAH Coordinating Council
- Pacific Coast Collaborative (PCC), OA Sub-Committee
- International OA Alliance

**Desired products from the fellow:**

- Policy documents – drafting of white papers and report text/graphics
- Outreach materials – drafting of graphics and hands on activities
- Website materials – drafting of informational pages and materials
- Workshop development – “State of Oregon’s OAH impacts and solutions”

**Potential benefits of this position to the fellow:**

- First-hand experience interacting with the processes involved in marine policy development and implementation.
  - Interaction with marine policy leaders in Oregon, the West Coast, and internationally.
  - Interaction with scientists who are engaged in OAH and nearshore monitoring in Oregon and the West Coast.
- Formulation of strong public outreach and communication skills.

**Skills required:**

- Working on controversial issues involving natural resources and climate
- Excellent communication skills (both oral and written)
- Analytical thinking skills
- Familiarity with Pacific Northwest marine ecosystems and policy

**Skills preferred:**

- Website and graphic design skills
- Outreach material development

**Office:** Department of Environmental Quality (DEQ) -Headquarters: Operations Division

**Fellow Position Title:** Pollution Prevention Fellow

**Fellow Position Location:** Portland, Oregon (*specific office location may vary*)

**Funding Status:** Funding is potentially available for this position. We anticipate filling one fellowship among three positions offered.

**Program Overview:**

The Department of Environmental Quality (DEQ)'s mission is to be an active leader in restoring, maintaining and enhancing the quality of Oregon's air, water, and land. DEQ pursues its mission through expressing the agency's values of environmental results, customer service, partnership, excellence and integrity, employee growth, teamwork, and diversity, and works cooperatively with all Oregonians for a healthy, sustainable environment.

The fellow would work with DEQ's Land Quality Division's Hazardous Waste and Tanks program which includes the Toxics Use and Hazardous Waste Reduction (TUHWR) program. The TUHWR program *wants chemicals, materials, and products that are safe for people and ecosystems throughout their life cycle.*

Our approach seeks to reduce harmful environmental effects by managing hazardous materials through all life stages. We aim to eliminate toxic chemicals through measurable, transformational actions using innovative tools and guiding principles where we will:

- Develop Meaningful Programs
- Leverage Imaginative Partnerships and
- Make Measurable Progress

**How this position specifically relates to policy:**

The purpose of this fellow is to support the protection of human health and the environment by reducing generation of toxics. The fellow will gather information to inform policies, procedures and guidance necessary to implement the programs and related activities, such as pollution prevention, chemical policy reform, green chemistry and sustainability.

This position will inform decisions for rulemaking and associated program development (with the TUHWR), provide information to create new programs that will encourage use of safe chemicals (Safer Choice program), support workforce development and projects that prevent waste (Oregon Applied Sustainability Experience (OASE) Internship program) and gather and summarize information to inform program implementation (Metals Industry Outreach program).

**Fellow's day-to-day activities and how these tasks fit within a larger project scope:**

- Find data/information, summarize the information in a paper or other written format
- Investigate current industry methods and new science (metal industry best practices, green chemistry methods)
- Talk to people on the phone about your work and find out about their work; build networks
- Coordinate logistics of workshops, trainings/presentations & other events
- Coordinate logistics of OASE intern program, track student progress, assist with business recruitment, outreach and marketing (writing web pages content, social media content, etc.)

Office Culture:

- Typical work hours will apply - 8a.m. to 5p.m., Monday-Friday
- Communication Style: emails, short meetings

- Attire: business casual-mostly working inside office
- Teamwork: very teamwork orientated, share ideas/work product to achieve shared outcomes, supportive of each other's work and workload

**List the communities or stakeholders with which the fellow may engage:**

- Engagement: attend meetings and conferences for networking; contact business associations (call/email); provide program information to trade associations, local governments and special interest groups in a variety of public forums
- Stakeholders: EPA, DEQ staff and many types of businesses

**Desired products from the fellow:**

- Toxics Use and Hazardous Waste Reduction program fee analysis
- Creation of a "Oregon Safer Choice community of practice"
- Metals Industry Outreach analysis (includes analysis of toxics used by sectors, compilation of current best practices and green chemistry opportunities)
- Various products that support the OASE Internship program

**Potential benefits of this position to the fellow:**

- Flexible and supportive working atmosphere. *We would like your career goals to be met while gaining the experience you want.*
- Provide assistance to and suggest future improvements for various DEQ programs.
- Work closely with partnering organizations (U.S. Environmental Protection Agency (US EPA), Metro).
- Improve knowledge of toxics use reduction policy, sustainability, B-Corporations, Safer Choice program, metals industry, OASE intern program, pollution prevention and more.
- Job shadow with highly trained staff at DEQ office locations of Fellow's choice.
- Establish professional working relationships with various stakeholders.
- Gain experience with data organization, databases, data analysis, effective communications, marketing, outreach, and building networks with Oregon businesses and partners.

**Skills required:**

- Proficient in Microsoft office
- Ability to populate excel spreadsheets with numbers and enter calculations
- Self-motivated and well-organized
- Strong interpersonal skills
- Ability to think holistically and without bias
- Ability to write a clear and concise research paper (proper references, proof of data, etc.)
- Ability to effectively communicate to a variety of stakeholders
- Ability to interact with a variety of people and organizations
- Efficient research skills to explore new practices and current resources
- Capable of working independently

**Skills preferred:**

- Knowledge of pollution prevention, toxics use reduction methods
- Knowledge of environmental management, sustainability and basics of toxic chemicals
- Creative thinker
- Passionate about environmental health
- Ability to work in fast-pace environment
- Experience in project management
- Experience in marketing and outreach methods, including reaching various types of audiences
- Experience summarizing technical information for diverse audiences