

Planning for Sea Change

Fostering Local Capacity for Sea Level Rise Adaptation Planning on the Oregon Coast

Proposal for NOAA Coastal Management Fellow, 2022 – 2024

NOAA Coastal Services Center

October 15th, 2021



Seaside, OR during a king tide event. Credit: Oregon Surfrider Foundation and LightHawk, 2018

Oregon Coastal Management Program
635 Capitol St. NE, Suite 150
Salem, Oregon 97302
Phone: 503-373-0050

A handwritten signature in black ink, appearing to read "Patricia Snow".

Patricia Snow, Program Manager

Background and Introduction

The Oregon coast's small, rural, and dispersed communities already feel the effects of climate change, including sea level rise, but most are unable to integrate adaptive strategies into their comprehensive plan because of a lack of knowledge about how to use specialized data and tools, and capacity to take on additional planning tasks.

The Fellow will provide direct support to several communities on the Oregon coast to develop sea level rise adaptation action plans. The Fellow will use resources developed by the Department of Land Conservation and Development (DLCD) and our partners to engage local officials and the public in a sea level rise adaptation planning process, culminating in an action plan. This work directly supports the coastal program's 2021-2025 309 Strategy¹ to enhance local government resilience planning.

Clatsop County region – specifically the City of Warrenton, Clatsop County (unincorporated areas), and Fort Stevens State Park have committed to working with a Fellow throughout a two-year project. This area of the coast is low-lying and already prone to flooding. It is also experiencing high development pressures (particularly in wetland areas).

Background: The foundation of Oregon's land use planning program, approved in 1973 and administered by DLCD, is a set of 19 Statewide Land Use Planning Goals. All Oregon cities and counties must adopt comprehensive plans that reflect these Statewide Land use Planning Goals. Cities and counties within Oregon's coastal zone also must plan for coastal assets (estuaries, coastal shorelands, and beaches and dunes) in accordance with the federally recognized Oregon Coastal Management Program (OCMP). A priority of the OCMP is to assist our partners in addressing climate impacts through policy and management strategies and to utilize best available science.

Project Need: While, the State of Oregon is increasingly prioritizing climate change mitigation and adaptation, the OCMP and its network of small coastal communities need support to complete climate change adaptation planning. In response, DLCD is in the final stages of developing a sea level rise land use planning guide, to be released in January 2022. While DLCD staff are available to assist with implementing the tools presented in the guide, no one person is fully dedicated to work with willing communities on this process.

DLCD plans to include the Sea Level Rise Planning Guide into a comprehensive Coastal Resilience Planning Guide to stitch together many stand-alone resources and build upon them to create a more comprehensive and coordinated set of resources for communities to increase resilience to both acute and chronic coastal hazards, which will be exacerbated by climate change. The lessons learned while implementing the Sea Level Rise Planning Guide will inform the Coastal Resilience Planning Guide.

Goals and Objectives

The Oregon Coastal Management Program seeks a NOAA Coastal Management Fellow with an interest in coastal management and climate change resilience, knowledge of or interest in land use planning, the ability to work well with diverse groups and complimentary projects, and the desire to make a difference in the future management of Oregon's coast.

¹ OCMP Assessment & Strategy: https://www.oregon.gov/lcd/OCMP/Documents/OCMP_309Assessment_Strategy_2021-2025_Final.pdf.

The overarching goal of this project is to provide capacity to advance climate adaptation planning at the local government level using existing and emerging data and resources. The Fellow will focus on sea level rise planning on the northern Oregon coast.

The objectives of the project are to:

- Provide capacity to two to four local governments and a state park in Oregon's coastal zone to develop and implement a sea level rise adaptation action plan using information and resources created by the Oregon Coastal Management Program and our partners.
- Connect the Fellow, the OCMP, and participating communities with university and non-profit organization research, tools, and expertise and adapt that research to local needs.
- Synthesize 'lessons learned' from the Fellow's work with local partners to inform and revise existing resources and research to continue to advance adaptation planning on the Oregon coast and beyond.
- Increase Fellow's awareness of coastal management issues, policies, and solutions as they relate to sea level rise, coastal hazards, and other pressing issues.

Milestones and Outcomes

Tasks and Deliverables	Time Period
Task 1: Become familiar with the State of Oregon and its sea level rise resources and expertise Deliverable: Knowledge and understanding of Oregon's policy setting and the fellowship work plan <ul style="list-style-type: none"> • Orientation to the Oregon Coastal Management Program (OCMP) and Oregon's Statewide Land Use Planning Programs. • Review existing resources and ongoing complimentary initiatives, including DLCD's Sea Level Rise Planning Guide, OSU research projects, and local comprehensive plans. • Meet with county, city, and state park officials to identify their concerns and issues related to sea level rise, and what challenges the area faces. • Attend fall coastal management program network and annual "State of the Coast" meetings. 	August 1, 2022 to September 30, 2022
Task 2: Become familiar with the cultural, socioeconomic, and physical setting of Clatsop County Deliverable: Equitable community engagement strategy <ul style="list-style-type: none"> • Meet with tribes, community-based, and business organizations to identify their concerns, introduce them to the project, and learn what they would need to effectively participate. • Utilize existing engagement platforms, such as the Oregon King Tides Project, to engage with communities on the topic of sea level rise. • Draft an equitable community engagement strategy, paying particular attention to ensuring that diverse and underrepresented viewpoints are incorporated into the project. 	October 1, 2022 to February 28, 2023
Task 3: Complete a sea level rise vulnerability assessment for Clatsop County, the City of Warrenton, and Fort Stevens State Park Deliverable: Sea level rise vulnerability assessment for each entity <ul style="list-style-type: none"> • Complete worksheets provided in the Sea Level Rise Guide for each jurisdiction in one or more public workshops, or other venues as described in the community engagement strategy. Utilize processes demonstrated by other climate adaptation workshops in the State. 	March 1, 2023 to July 31, 2023

<ul style="list-style-type: none"> • Compile results in a sea level rise vulnerability assessment. One each for Warrenton, Clatsop County, and Fort Stevens State Park. 	
Task 4: Identify and prioritize candidate sea level rise adaptation measures Deliverable: Prioritized potential adaptation measures <ul style="list-style-type: none"> • Match potential adaptation measures (from Sea Level Rise Guide) with who and what is at risk of harm as discovered during Task 3. • Attend north and south coast spring coastal management program network meetings to share results of vulnerability assessment with coastal planners. • Meet with community and park officials to determine how to prioritize potential actions. • Select and prioritize appropriate short- and long-term actions. 	August 1, 2023 to October 31, 2023
Task 5: Prepare and evaluate sea level rise action plans Deliverable: Sea Level Rise Adaptation Action Plan for each entity <ul style="list-style-type: none"> • Considering dependencies and limitations, prepare a draft sea level rise adaptation action plan for each participating community and state park. • Share with and solicit feedback from tribes, community officials, residents, business owners, and park officials; modify as necessary into a final action plan. 	November 1, 2023 to February 29, 2024
Task 6: Develop implementation and funding strategies and tools Deliverable: Implementation strategies tailored to each entity <ul style="list-style-type: none"> • Prepare implementation and funding strategies based on adaptation measures developed in each action plan. • Describe implementation tools, such as model code and new policies. • Share project results and lessons learned at conferences and meetings. 	March 1, 2024 to May 31, 2024
Task 7: Document lessons learned and recommend modifications to DLCD guidance, including to the Sea Level Rise Guide Deliverable: Lessons learned and recommendations <ul style="list-style-type: none"> • Document “lessons learned” from throughout fellowship project. • Recommend modifications to existing DLCD guidance and practices. • Present project to the Land Conservation & Development Commission. 	June 1, 2024 to July 31, 2024

Project Description

The project will bring relevant information and capacity to Clatsop County, the City of Warrenton, and Fort Stevens State Park for the purpose of developing and beginning to implement a sea level rise adaptation plan. Lessons learned throughout the process will be documented and integrated into existing and new climate change planning products.

Connect Communities with Relevant Scientific and Technical Information and Expertise

DLCD’s Sea Level Rise Planning Guide, as well as guidance and technical information available from NOAA, provides basic information about where and how sea level rise may affect the user’s community. More detailed information will likely be needed for each decision-making entity to describe specific effects and develop adaptive responses. In some cases, the Fellow will need to interpret and “translate” scientific data into information understandable and usable by local government. DLCD’s Coastal Management Program partners with many state agencies and maintains relationships with NOAA and university researchers to ensure that the latest policy and science is applied on the Oregon coast. Specifically, the duration of the fellowship will overlap with a significant project that has the potential to contribute expertise.

The National Science Foundation recently selected Oregon State University and the University of Washington to lead the Cascadia Coastlines and Peoples Hazards Research Hub focused on

increasing resiliency among coastal communities in the Pacific Northwest over the next five years.² The hub will provide an avenue for coordinating research in Pacific Northwest coastal communities among numerous academic and government organizations to inform and enable integrated hazard assessment, mitigation, and adaptation in collaboration with local communities. The OCMP is a partner on this research hub and the Fellow will be able to work closely with students and investigators during their project to bring specialized knowledge to local governments.

The Fellow will be expected to become familiar with grant funding opportunities available from the Federal Emergency Management Agency (FEMA) through the Oregon Office of Emergency Management, Oregon Watershed Enhancement Board (OWEB), NOAA's Office for Coastal Management, Business Oregon, university-based projects, and several philanthropic organizations operating in Oregon. These organizations play a key role in ensuring that adaptation actions identified in local plans can be implemented.

Work with Tribes, Officials, Residents, and Businesses

This is a hands-on project working with local tribes, officials, residents, and businesses to develop implementable sea level rise action plans. The Fellow will be expected to build relationships with participating communities to gain a comprehensive understanding of what they value today, what their needs and concerns are, what constraints they face, and their vision for the future.

Of particular interest to the state and our funding partners is ensuring that adaptive actions are developed and applied in ways that respond equitably and inclusively, in recognition of the diverse populations that live and work on the Oregon Coast. This focus requires that the Fellow be aware of and sensitive to the social, as well as scientific environments in which they will work. An equitable Community Engagement Plan will be developed as part of the project to ensure that traditionally underrepresented voices are heard. It is DLCD's fervent hope that the Fellow will be able to meet with community officials, residents, and business owners in person. If this option remains unavailable due to COVID-19 restrictions, DLCD has the technology and skill to conduct virtual events for the entirety of the fellowship if needed.

Prepare Sea Level Rise Adaptation Action Plans with Communities

Candidate climate change adaptations can range from short-term coping actions intended to address immediate needs arising from sea level rise to long-term adaptation actions that may require significant planning and fund-raising to implement. The actions may require modifications to policy, regulations, and practices, or involve physical modifications to infrastructure or natural areas. Projects might also involve establishing community-based monitoring or educational programs.

The Fellow will be expected to craft, with community participation, a sea level rise action plan that addresses both short-term needs and long-term adaptive responses. This may involve assisting the community with setting priorities and selecting the specific projects that best address those priorities. The action plan will roughly outline the steps needed to fund, permit, and execute selected actions.

² News Release: <https://today.oregonstate.edu/news/oregon-state-lead-national-science-foundation-funded-research-hub-coastal-resiliency>.

Lead the Way towards Implementing the Plan

One of the primary objectives of this project is to leave participating communities with a sea level rise adaptation action plan that they can implement without needing significant expert support. Working with DLCD planners and other state agency personnel, the Fellow will compile aids to help guide implementation of the sea level rise action plan. Such aids might include model policy language and implementing regulations, detailed project descriptions, or an annotated list of potential funding options. Example language might be developed to include in future grant applications, such as descriptions of the project need and expected outcomes.

The communities that the Fellow will work with have limited financial resources. FEMA, OWEB and others provide a rich source of funding to perform climate change related adaptive actions. The Fellow will prepare educational material describing how to access grants and their intended purposes. Exactly what products will be produced will be determined by community needs and in consultation with project mentors.

Lessons Learned

Throughout the project the Fellow will use existing and draft guidance documents prepared by DLCD and others. Experience using these guides may reveal areas where they can be improved. Likewise, the Fellow's experience working with community officials, members, and businesses may reveal "lesson's learned" that can be transmitted to other professionals and local government officials. The Fellow, working with DLCD mentors, will document these findings, which may include revisions to guidance documents. The Fellow also can document their project as a case study in the newly developed Coastal Hazard Case Study Mapper hosted by Oregon Sea Grant, which will serve as a repository for their project to be shared and utilized.

Diversity, Equity, Inclusion, and Justice

Climate change poses one of the most significant threats to Oregon's economy, environment, and way of life. These impacts will affect all Oregonians, but will hit low-income communities, communities of color, and rural communities the hardest. DLCD is committed to fostering a diverse, equitable, and inclusive environment while working to address the effects of climate change.

Unlike other coastal states, the Oregon coast, including Clatsop County, is predominantly composed of small rural communities, most of which have populations of 5,000 people or less and are under-resourced. The Oregon Health Authority classifies Clatsop County as having high or medium social vulnerability on measures of demographics, socioeconomic status, and health.³

In recognition of the social vulnerabilities present, this project will reach out to local community-based organizations, religious institutions, and social service providers to ensure that people who have been traditionally underrepresented in hazard reduction planning processes are actively included by using practices that recognize their participatory challenges, including holding meetings after work hours, providing childcare, providing translation services, or other measures indicated during production of the project's communications and outreach strategy.

Fellow Mentoring

Who: The Fellow will be co-mentored by experienced coastal staff at OCMP: Meg Reed, Coastal Shores Specialist (primary) and Christine (Chris) Shirley, Climate Change Resilience

³ Climate Change and Public Health. 2015. [Social Vulnerability Assessment](#). Oregon Health Authority.

Coordinator. Both Chris and Meg will provide guidance on project management, community engagement, climate change resilience, land use planning, and coastal zone management. Both mentors will establish regular check-ins throughout the fellowship and will be available as needed. The Fellow will also confer regularly with the Coastal Program Manager, Patty Snow, and periodically with other DLCD staff (such as the Natural Hazard Team, National Flood Insurance Coordinator, Coastal Policy Specialist, and North Coast Regional Representative). The Fellow will be expected to participate in monthly Coastal staff meetings typically held in the main DLCD office in Salem (or virtually) and in semi-annual coastal network meetings with program partners and local planners. In addition, each project community will provide the Fellow with one main point of contact with whom to engage for the duration of the fellowship.

DLCD recognizes the challenges associated with completing a project that relies on sustained cooperation from local governments. Project mentors will be available to work with the Fellow to overcome these challenges by providing additional support or relocating the project if needed.

Value to Fellow: The Fellow will be welcomed as a member of the Oregon Coastal Management Program staff, and will:

- Be provided opportunities to join staff on field visits, at internal and external meetings and at a range of regional coastal events;
- Have opportunities to meet and engage with coastal specialists from local governments, state and federal agencies, nonprofit groups, and academic institutions;
- Be supported to participate in initiatives outside of project work, as time and interest allow, including DLCD's Diversity, Equity, and Inclusion Committee;
- Be encouraged to use initiative and creativity in developing the project;
- Be encouraged to communicate about their work at regional and national meetings.

This project will provide the fellow with an excellent opportunity to:

- Complete a well-defined project that will significantly enhance sea level rise adaptation planning for Oregon's coast communities;
- Gain experience in transforming data and guidance into actionable planning documents or projects to support practical decision-making needs;
- Establish productive working relationships with a variety of coastal professionals;
- Gain experience working in a state coastal management program;
- Spend two years working in a positive and inclusive environment with opportunities to contribute to the direction of future work.

Office Environment

The Fellow will have the choice of being based in the DLCD office in Salem or Newport and will have the option to telework up to four days per week. During the first month of the fellowship, the Fellow will be expected to work in-office five days a week. Fellowship check-ins with mentors will be a combination of virtual and in-person formats. Meg is based in the Newport office, while Chris is based in the Salem office. Where the Fellow chooses to live is flexible but must be within driving distance of the Newport or Salem office.

Additionally, because of the nature of the project, significant travel will be required to partner communities, which are located on the northern Oregon coast. A state or rental vehicle will be available for the Fellow's use, as well as reimbursement for travel in accordance with state travel rules. It is anticipated that the Fellow will engage with communities and in other agency events and meetings in-person to the maximum extent practical. However, if COVID restrictions require it, DLCD has the technology and skill to conduct virtual events and meetings for the entirety of the fellowship. DLCD has successfully hosted multiple Fellows and limited duration employees under fully or partially remote working conditions since the start of the pandemic.

A computer workstation and appropriate software will be provided by DLCD, along with necessary office supplies and materials. Software employed by DLCD includes Microsoft Office, and ESRI and Adobe products. The agency is PC-based with each staff member assigned a cell phone, laptop computer, docking station, two computer monitors, headset, mouse, and keyboard, as well as access to an equipment pool that includes printers, scanners, projector, and digital camera. The Fellow must provide their own internet connection for telework.

Project Partners

Local Governments: The central focus of this fellowship project is providing capacity to local governments and their diverse communities. Two jurisdictions have been identified as willing participants in this adaptation planning process: City of Warrenton and Clatsop County.

Oregon Parks and Recreation Department (OPRD): Fort Stevens State Park will also participate in the project. The state park is one of the largest in Oregon and is located at the mouth of the Columbia River and adjacent to the City of Warrenton. As a popular tourist destination and surrounded by ocean and riverine waters, sea level rise adaptation planning will be essential for this area.

Cascadia CoPe Hub: This Cascadia Coastlines and Peoples Hazards Research Hub funded by the National Science Foundation will provide an avenue for coordinating research in Pacific Northwest coastal communities among numerous academic and government organizations to inform and enable integrated hazard assessment, mitigation, and adaptation in collaboration with local communities.

Columbia River Estuary Study Taskforce (CREST): CREST is a community organization specializing in environmental planning and habitat restoration for fish and wildlife. This fellowship project will engage with CREST to further assist the local governments in their sea level rise adaptation action planning.

Other state agencies, most of which are networked partners of the OCMP, will be consulted throughout the duration of the project as needed, especially regarding data and funding programs for adaptation actions (e.g., Oregon Watershed Enhancement Board, Oregon Department of Environmental Quality, and the Oregon Office of Emergency Management).

Cost-Share Description

The State of Oregon will contribute both in-kind services and a \$15,000 non-federal cash match. The Department of Land Conservation and Development will contribute this \$15,000 from its general fund (state dollars) in the beginning of the fellowship. DLCD will also provide in-kind match in the form of workspace, equipment, materials and supplies, and support services at either the Newport or Salem office locations. DLCD will provide access to a state vehicle and cover in-state travel related expenses.

Strategic Focus Areas

This proposal addresses elements of the three strategic focus areas identified by NOAA for the 2022-2024 coastal management fellowship program:

Vibrant and Sustainable Coastal Economies

- *Coastal communities invest in actions that reduce vulnerability, particularly vulnerabilities related to repetitive natural hazards.*
- *Protect economic investments along the coast, including important ecological, cultural, and historical areas, for public enjoyment.*

This proposal will address coastal hazards from expected sea level rise impacts by comprehensively guiding communities through a transparent adaptation planning process to address identified vulnerabilities and appropriate adaption actions to address them, thus leading to the protection of economic, cultural, and ecological assets and investments.

Healthy Coastal Ecosystems

- *Facilitate use of the best available science by delivering integrated data, tools, and information to guide decisions about complex ecosystem and coastal management challenges.*
- *Provide training, guidance, and best practices that help coastal decision makers and coastal management officials understand and apply the science-based tools that inform effective policies and management approaches.*

By facilitating a process that allows coastal communities to engage in addressing vulnerabilities to sea level rise by utilizing science-based tools, both the fellow and the communities they work with will receive training, guidance, and best practices in effective coastal decision-making to address complex issues. The fellow will share lessons learned from this process with local, state, regional, and national audiences.

Resilient Coastal Communities

- *Provide coastal hazard- and climate change-related data, tools, guidance, training, and technical assistance to people working to enhance community resilience and to communicate risk to the public.*
- *Increase public awareness of current and future coastal hazard risks and impacts, and of actions undertaken to reduce loss of life, property, and economic opportunity.*
- *Increase understanding of the equity issues that arise as communities face coastal hazard and climate impacts, and foster inclusion and meaningful assistance for all.*

The project is intentionally flexible to allow for both the Fellow and the communities that they work with to develop an adaptation action plan that works best for their specific geographic, social, and cultural contexts. The created plans and implementing actions may include identifying construction projects and grant funding opportunities to apply for or drafting updated comprehensive plan and land use ordinance language to incorporate sea level rise adaptation. These processes will ensure that staff, elected officials, and the public are learning about coastal hazards and climate change and are incorporated into the outcomes. Equity and inclusiveness will be incorporated throughout the adaptation planning process to ensure that adaptive actions are developed and applied in ways that recognize the diverse populations that live and work on the Oregon Coast.



Clatsop County

Community Development – Planning

800 Exchange St., Suite 100
Astoria, OR 97103
(503) 325-8611 phone
(503) 338-3606 fax
www.co.clatsop.or.us

October 11, 2021

Margaret Allen, Fellowship Coordinator
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405

Dear Ms. Allen,

Clatsop County staff would like to acknowledge our support and collaboration for the NOAA Coastal Management Fellowship proposal of the Oregon Department of Land Conservation and Development (DLCD) entitled, "Planning for Sea Change: Fostering Local Capacity for Sea Level Rise Adaptation Planning on the Oregon Coast." This project proposes to develop sea level rise adaptation action plans for participating coastal communities, including Clatsop County.

The County, with a countywide population of 41,072, is bounded on the west by the Pacific Ocean and on the north by the Columbia River. Elevations along the Pacific Coast and lands immediately adjacent to the Columbia River are generally at sea level. While dunes and headlands may rise steeply once past the vegetative line, coastal erosion has been a significant issue within the southwest quadrant of the County. In 2020, king tides and winter storms accelerated erosion and property damage in this area, impacting both private properties and public beach access points. The northern section of the County, which is bordered by the Columbia River, contains high-value agricultural resource lands that have been created through a system of dykes. Over time, many of the diking districts have dissolved, resulting in deferred maintenance to those dykes. As Clatsop County seeks to increase its resiliency levels, local agricultural sources will play a prominent role.

Clatsop County is also in the third and final year of updating its Comprehensive Plan and is working to develop climate change adaptation policies based upon the most current scientific data available. The County will also be completing work on a Tsunami Evacuation Facilities Improvement Plan, which is being conducted with TGM grant funding. The project's primary focus is to identify existing and needed routes that can be used year-round for recreational purposes, while also doubling as evacuation routes during and after an emergency.

Community Development has four land use planners, including myself (Director), Planning Manager, one senior planner and one planner. A second planner has been hired and is scheduled to begin work on December 1, 2021. GIS support staff are available. Through the Comprehensive Plan update process there is an established communication network that reaches out to all areas of Clatsop County. The County also has the ability to live-stream

meetings and continues to develop a more robust distance participation program, in light of the COVID situation.

County staff are excited to continue our long-standing collaboration with the Oregon Department of Land Conservation and Development and to participate in this sea level rise adaptation action planning process on the northern Oregon coast. The proposed fellowship project will provide much needed capacity and facilitation in bringing together the latest scientific information, guiding the Clatsop County community in identifying adaptation actions, and providing a jumpstart to implementation of those actions.

Please accept this letter of support for the fellowship proposal and we look forward to this collaborative opportunity.

Sincerely,



Gail Henrikson, AICP, CFM
Community Development Director



P.O. BOX 250 ■ WARRENTON, OR 97146 -0250 ■ OFFICE: 503.861.2233 ■ FAX: 503.861.2351

October 13, 2021

Margaret Allen, Fellowship Coordinator
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405

Dear Margaret Allen,

The City of Warrenton would like to acknowledge our support and collaboration for the NOAA Coastal Management Fellowship proposal of the Oregon Department of Land Conservation and Development (DLCD) entitled, "Planning for Sea Change: Fostering Local Capacity for Sea Level Rise Adaptation Planning on the Oregon Coast." This project proposes to develop sea level rise adaptation action plans for participating coastal communities, including the City of Warrenton.

The City of Warrenton is especially excited about this opportunity due to the geographic location of Warrenton, the opportunity to collaborate on a regional scale, and the peace of mind knowing that the city is as well prepared as it can be. Efforts are currently being made to update multiple long range planning documents and the city believes this position would assist those documents in becoming the most useful iteration of themselves.

City staff are excited to continue our long-standing collaboration with the Oregon Department of Land Conservation and Development and to participate in this sea level rise adaptation action planning process on the northern Oregon coast. The proposed fellowship project will provide much needed capacity and facilitation in bringing together the latest scientific information, guiding the Clatsop County community in identifying adaptation actions, and providing a jumpstart to implementation of those actions.

Please accept this letter of support for the fellowship proposal and we look forward to this collaborative opportunity.

Sincerely,

Linda Engbretson
City Manager

"Making a difference through excellence of service"



Oregon

Kate Brown, Governor

Parks and Recreation Department

725 Summer St. NE, Suite C

Salem, OR 97301-1271

(503) 986-0980

Fax (503) 986-0794

stateparks.oregon.gov

October 13, 2021

Margaret Allen, Fellowship Coordinator
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405

Dear Margaret Allen,

The Oregon Parks and Recreation Department (OPRD) would like to acknowledge our support and collaboration for the NOAA Coastal Management Fellowship proposal of the Oregon Department of Land Conservation and Development (DLCD) entitled, "Planning for Sea Change: Fostering Local Capacity for Sea Level Rise Adaptation Planning on the Oregon Coast." This project proposes to develop sea level rise adaptation action plans for participating coastal communities, including Fort Stevens State Park.

The mission of the Oregon Parks and Recreation Department (OPRD) is to provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations. OPRD also has authority, jurisdiction, and responsibility for Oregon's Ocean Shore Recreation Area (aka the public beach). Therefore, planning for sea level rise in our parks is essential to our mission and viability. Fort Stevens State Park is a major recreation site for local citizens and tourists alike. With over 4,000 acres of land, much of which is vulnerable to flooding and sea level rise planning for future realities is critical.

OPRD staff are excited to continue our long-standing collaboration with the Oregon Department of Land Conservation and Development and to participate in this sea level rise adaptation action planning process on the northern Oregon coast. The proposed fellowship project will provide much needed capacity and facilitation in bringing together the latest scientific information, guiding the Clatsop County community in identifying adaptation actions, and providing a jumpstart to implementation of those actions.

Please accept this letter of support for the fellowship proposal and we look forward to this collaborative opportunity.

Sincerely,

Justin Parker
OPRD North Coast District Manager



**College of Earth, Ocean, and
Atmospheric Sciences**

Oregon State University
104 CEOAS Admin Bldg.
Corvallis, Oregon 97331-5503

P 541-737-1239

F 541-737-2064

peter.ruggiero@oregonstate.edu

10/11/2021

Margaret Allen, Fellowship Coordinator
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405

Dear Margaret Allen,

The Cascadia Coastlines and Peoples Hazards Research Hub (Cascadia CoPes Hub) would like to acknowledge our full support and intended collaboration for the NOAA Coastal Management Fellowship proposal of the Oregon Department of Land Conservation and Development (DLCD) entitled, “Planning for Sea Change: Fostering Local Capacity for Sea Level Rise Adaptation Planning on the Oregon Coast.” This project proposes to develop sea level rise adaptation action plans for participating coastal communities. This effort compliments much of the work of the Cascadia CoPes hub and will provide significant collaborative potential.

The vision of the Cascadia CoPes hub is to inform and enable integrated hazard assessment, mitigation, and adaptation in the region—including comprehensive planning, policy making, and engineering—through targeted scientific advances in collaboration with communities. The Cascadia CoPes hub is designed to test two overarching hypotheses: (1) fundamental advances in convergent coastal hazard sciences will transform understanding of the risks coastal communities face and (2) an inclusive, co-produced approach to advancing hazard assessment and mitigation will increase coastal communities’ adaptive capacity and broaden participation in achieving equitable and just disaster risk reduction. DLCD’s proposed fellowship project is an ideal opportunity to further leverage the research proposed by the hub and bring coordination to the local government level. The Fellow will be able to work closely with students, postdocs, and faculty investigators participating in the hub to inform research projects that will add the most benefit and value to the local communities they are working with.

Researchers and students alike are very excited to continue our collaboration with the Oregon Department of Land Conservation and Development and to participate in this sea level rise adaptation action planning process on the northern Oregon coast. The proposed fellowship project will provide much needed capacity and facilitation in bringing together the latest scientific information, guiding the Clatsop County community in identifying adaptation actions, and providing a jumpstart to implementation of those actions.



Please accept this letter of support for the fellowship proposal and we look forward to this collaborative opportunity.

A handwritten signature in purple ink, reading 'Peter Ruggiero'.

Peter Ruggiero
Director, Cascadia Coastline and Peoples Hazards Research Hub
Professor, Oregon State University