

**Maine Coastal Program/Maine Department of Marine Resources
Proposal - Coastal Management Fellowship Program 2023-2025
Submitted electronically - October 14, 2022**

Applicant: Maine Coastal Program/Maine Department of Marine Resources (MCP)
21 SHS, Augusta, ME, 04333.

Fellowship Title: Implementing Maine’s Climate Action Plan through Innovation in Municipal
Training and Technical Assistance (TA)

Focus Area: Resilient Coastal Communities

I. Background and Introduction

Maine’s climate is changing, and the effects are already being seen along our entire 5,300-mile coastline. Sandy beaches in densely developed Southern Maine are eroding, unstable bluffs in the MidCoast region are losing ground, and warming waters have changed the geographic distribution and abundance of the iconic Maine lobster. Coastal residents are increasingly pursuing engineered solutions, marine-dependent businesses are struggling to maintain waterfront infrastructure, and our need for upgraded culverts and roads in low-lying areas persists in both urban and rural parts of coastal Maine.

With the election of Governor Mills in 2019, preparing for climate change commenced in earnest. “*Maine Won’t Wait*”, the state’s new five-year climate plan, calls for coastal municipalities to prepare for 2 feet of sea level rise by 2050 and 4 feet of rise by 2100. The Plan recommends the development of a robust and effective municipal technical assistance program to help towns and tribal governments meet these climate challenges.

At present, although new head count has been created, the State’s coastal land use technical assistance program is outdated, under capacity, splintered among three state agencies and not sufficiently focused on coastal resiliency. While critical partners such as Maine Sea Grant, the Wells Reserve, the Island Institute, and the Maine Chapter of The Nature Conservancy have increased their staff capacity to provide climate resiliency programming, we lack a cohesive approach among partners - we use different projections, tools and methods, and have different capacities to work intensively at the community level. Each organizations’ staff has different, but complementary skill sets. This leaves coastal communities without a one-stop opportunity to access accurate climate projections, a lack of skills to interpret the information, lack of model ordinances and case studies, and limited to no hands-on assistance to develop, raise funds for, and implement hazard resiliency measures.

While MCP has assisted more than twenty communities in developing resiliency plans, fewer than ten have enacted new regulatory and non-regulatory climate strategies and funded capital improvements. The remaining 120 coastal towns and three federally recognized coastal tribes are at different stages of resiliency planning. These stages range from towns that do not consider climate change to be a municipal priority, to communities that have had one-time educational presentations only, to communities that have created coastal resiliency committees, budgeted for infrastructure improvements, and implemented strategies.

Working with a team of advisors comprised of coastal climate practitioners listed below, the Maine coastal fellow will evaluate current strategies, identify gaps, create new programming, and help organize a cohesive effort among many partners. Drawing on their recent academic experience, they

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will bring the latest tools and outreach methods, new thinking, and youthful enthusiasm to the Maine Coastal Program.

We seek a coastal fellow with a degree in Municipal Planning, Coastal Management, Public Administration, Anthropology, Communication and Media, or similar disciplines. Key skills will include the ability to communicate with diverse and challenging individuals, ability to translate science into understandable information, ability to develop content for workshops and lead sessions, and the ability to design and evaluate programs. A Maine coastal fellow must possess strategic planning skills, big picture thinking, and the ability to make and maintain effective partnerships.

II. Goals and Objectives

Fellowship Project Goal:

Maine's coastal communities and Tribal Nations understand their coastal hazards risks, plan effectively and implement adaptation measures such that their infrastructure, economies, and neighborhoods are resilient to storm surge, flooding, and sea level rise. As used in this proposal, we define "resilient communities" as those that have minimal disruption from flooding, less storm damage to public and private property, less interruption in vital social and community services, and less disruption to daily business operations.

Project Objectives:

- Design and implement a high-quality coastal resiliency technical assistance program that offers one stop shopping to users and reaches at least twenty-five communities in two years.
- Work with at least ten towns defined as underserved or underrepresented communities with severe capacity needs.
- Five organizations participate in a train-the-trainer program and enhance the capacity of state staff and regional planning commission staff to reach communities.
- Through a pilot TA effort in one region, at least ten towns adopt new measures to increase coastal hazard resiliency.
- Retain 100% of project partners over the course of the fellowship, and add 1-2 new TA partners
- New TA program is publicized throughout Maine's coastal zone in 75% of coastal weekly newspapers, one major newspaper, one television station, and Maine Public Broadcasting.
- Project receives regional and national recognition by winning 1-2 national or regional awards.

Potential Evaluative Measures for Determining Project Success (to be finalized by the Fellow):

Output Measures

- # of coastal communities and tribes that have accessed the new TA program
- # of communities/tribes that rate materials as "extremely useful"
- # of communities that create official coastal hazard resiliency committees
- # of communities that compete successfully for funding opportunities
- # of communities that adopt climate resiliency/coastal hazard plans

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Outcome Measures

- # of communities that implement hazard resiliency measures, catalogued by type of measure

III. Milestones and Outcomes – We anticipate the following as milestones and outcomes for our Maine fellow, recognizing that the successful candidate will be given the opportunity to hone their workplan and schedule and present ideas for additional outcomes and products.

Note that some milestones are not scheduled below, but will happen throughout the term of the fellowship, including NOAA OCM Fellow trainings, workshops and meetings, poster sessions and full presentations at conferences such as OCM's Social Coast, Restore America's Estuaries or similar, attendance and presentations (along with other Northeast OCM Fellows) at twice-yearly meetings of the Northeast Regional Ocean Council and the US/Canadian Gulf of Maine Council on the Marine Environment, and participation in trainings and professional development opportunities.

- Spring 2023 – Maine participates in the NOAA Office for Coastal Management matching workshop and successfully matches with a fellow.
- Early Summer 2023 - Fellow visits Maine, MCP provides financial support and assistance for the trip and assistance with contacts for housing and other needs.
- August 2023 – settle in Maine and complete orientation to the agencies, co-workers, and nongovernmental partners. Understand previous and current resiliency efforts, and complete training in state procedures and practices.
- September 2023 – identify needed training and professional development goals to be accomplished in the first six months.
- October 2023 – finalize the draft workplan provided in this proposal, create indicators of success, finalize milestones and outcomes.
- November – December 2023 – convene coastal service provider advisory team, complete a gap and capacity analysis, and visit coastal towns in different regions.
- January 2024 – Formal six-month review
- January 2024 – Design and apply a survey instrument or similar tool in coastal municipalities to understand their needs.
- March 2024 – develop concept TA ideas and present to service provider advisory group.
- Spring – Summer 2024 – develop written materials, videos, tutorials, checklists, discussion outlines, and similar technical assistance materials.
- Fall 2024– Finalize TA materials, develop a train-the-trainer program and develop implementation schedule.
- January 2025 through June 2025 – execute technical assistance program in one coastal region.
- June 2025 to July 2025– Design and carry out an evaluation of the pilot program and provide recommendations for the future.
- August 2025 – Fellow completes their time with MCP and is offered and accepts a position in Maine or obtains a position in coastal management or related field

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in another state or territory.

Project Description

The Maine Coastal Fellow will evaluate MCP's current methods of climate resiliency technical assistance and that of our project partners. They will identify practices and methods that should continue and identify new approaches and methods to reach underserved communities and audiences. They will assemble an advisory committee, and lead its meetings. They will develop concepts for review by their advisory committee and produce programming accordingly. Materials will include written fact sheets and print tutorials, web-based courses, in-residence institutes, workshops, checklists, and conversation guides. The fellow will oversee creation of these materials, hire contractors and manage a budget to produce them. They will pilot new programming in one region of the state, evaluate its success and help ensure its continuation after the fellowship ends. The fellow will create a joint strategy and workprogram to be carried out in a coordinated manner throughout coastal Maine by project partners and launch a train-the-trainer approach to expand municipal assistance coastwide. The fellow will formalize the technical assistance partnerships with MOUs or similar agreements, and leverage OCM and state funds with non-governmental contributions. The following tasking sequence is envisioned, although the fellow will customize their workplan to both maximize their own skill set and include tasking that will provide a challenge for them.

- Task 1 Assemble a project advisory team and conduct an initial meeting. Conduct in-depth interviews with these and other coastal resiliency service providers in Maine to understand their strategic plans, geographic areas of focus, programming and materials, ability to assist communities in-person and for what period of time, and staff capacity and skills at each organization.
- Task 2 Design a survey or other instrument for assessing municipal and tribal resiliency training needs. Conduct the survey, analyze and share results.
- Task 3 Research innovative and successful outreach efforts that address the needs identified above and show promise for use in Maine and develop concepts for improved technical assistance for Maine's coastal towns using known tools, including storyboards, videos, on-line training tutorials, in-person multi-day "institute", one-day workshops and new innovative methods.
- Task 4 Test concepts in focus groups and other methods.
- Task 5 Develop priorities for new technical assistance programs, create budgets and roll-out plans and create materials.
- Task 6 Pilot materials in one underserved region of the state and evaluate programming and finalize materials based on pilot stage.
- Task 7 Develop and execute a train-the-trainer approach for delivery of materials, schedule and lead in-person sessions, track use of materials and make recommendations for future enhancements.

Diversity, Equity, Inclusion, and Justice

Maine Governor Janet Mills has established a DEI/J standing committee which is finalizing its recommendations for requirements and best practices in ME state government. According, MCP considers DEI/J throughout our program. MCP will seek to recruit a fellow who brings diversity (geography, race, gender identify, age, sexual preference, etc.) The fellow will be trained in DEI/J principles and practices upon starting with MCP. Since the fellow will be working with coastal municipalities of various sizes and levels of knowledge, technical assistance workshops, written

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material and all media products must be designed with user input and be tailored towards reaching underserved communities and Tribal governments in Maine (i.e., those with under 5,000 in population, rural and remote areas, flood prone neighborhoods, concentrations of poverty and other social capacity indicators, areas lacking planning staff, and towns lacking a regional planning provider). The coastal fellow will “meet communities where they are” with respect to knowledge of sea level rise, storm surge and flooding and incorporate traditional knowledge, resident observations and citizen science in their work.

Fellow Mentoring

Maine’s Coastal Fellow will be co-mentored by Judy East, Bureau Chief, Bureau of Resource Information and Land Use Planning at the Department of Agriculture, Conservation and Forestry (DACF) and Kathleen Leyden, Director of the Maine Coastal Program at the Maine Department of Marine Resources. DACF is a networked partner agency in the Maine Coastal Program and the lead agency for coastal technical assistance in all areas of land use planning, including coastal resiliency. Judy and Kathleen each have 30 years of experience in natural resource management and community planning, and have supervised, mentored and supported tens of new professionals and students.

The fellow will be integrated into the staff of both agencies and will be advised by group of hazard resiliency technical assistance providers. We will expose the fellow to many different aspects of state government, including high-level policy discussions and meetings of the Maine Climate Council and participation in its Resiliency Working Group (East serves as Chair), its Coastal and Marine Working Group (Leyden serves as Chair), and its standing Equity Committee. The fellow will participate in weekly staff meetings, project scoping sessions, and attend agency-wide retreats. The fellow will be encouraged to meet and interview a variety of state agency staff to understand the range of professional opportunities in coastal management. The fellow mentors will discuss professional development needs throughout the fellowship terms and dedicated time will be set aside for self-study, on-line and in-person workshops. East and Leyden will use their professional and personal networks to help the fellow advance to their next position.

Office Environment

While some state employees have returned to the office after vaccinating and boosting for Covid 19, it is anticipated that all state employees will officially return to their physical offices on 11/1/22. The state’s new telework policy allows for remote work upon approval by the employee’s supervisor (mentor) and the agency Commissioner and are subject to evaluation. Employees are required to attend in-person meetings as required by the supervisor or the Commissioner. Spikes in Covid 19 infections in the state may alter these plans. When in the office in Augusta, (DMR and DACF are co-located on a campus on the Kennebec River), the fellow will have a shared office space and will be provided with all needed state equipment. Maine has hosted many NOAA OCM fellows over the years. Many choose to live in Portland, a vibrant small city in Southern Maine; a one-hour drive to the state offices in Augusta. Vanpools and carpools are available. Maine State Government is committed to work/life balance for its employees.

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Existing Activities

Maine's Climate Plan is being aggressively implemented by state agencies and our academic, industry and non-profit partners. Efforts related to hazard resiliency include:

- Creation of the Governor's Office of Policy Innovation and Future (GOPIF) and launching of three regional resiliency pilot programs and a pilot municipal grant program.
- Continual updates of Maine's Scientific and Technical Assessment of Climate Change
- A vulnerability assessment of coastal state roads (ME DOT)
- Coastal Community Grants for climate resiliency planning (annual competition)
- Shore and Harbor planning grants for waterfront resiliency planning (annual competition)
- Creation of a State Infrastructure Resiliency Fund
- Review of Maine's land use and environmental laws and development of legislation that addresses climate resiliency in these state laws
- Formalization of DEIJ criteria in state grant programs and all climate programming
- Recent successful climate adaptation projects on Vinalhaven Island (raising of Main St. and stormwater management) and Spruce Head in South Thomaston (elevation of a causeway accessing a major working wharf).
- The recent addition of one land use planner and one marine geologist at the Department of Agriculture, Conservation and Forestry

Project Partners and Roles

- NOAA-OCM – Administers Coastal Fellowship Program (training, employment assistance and support for fellow mentors)
- ME Dept of Agriculture, Conservation and Forestry – Municipal Planning Assistance Program, Floodplain Management Program, and Maine Geological Survey (mentoring, Project Advisory Group, office support and funding for project implementation)
- Maine Department of Marine Resources – lead agency for Coastal Zone Management (mentoring, Project Advisory Committee, office support, funding for project implementation).
- Governor's Office of Policy Innovation and the Future – (Project Advisory Committee and funding for project implementation).
- University of Maine Mitchell Institute, UMaine Sea Grant, UMaine Cooperative Extension, Wells National Estuarine Research Reserve Coastal Training Program – (Project Advisory Team and “trained trainers”, i.e., users of the Fellows technical assistance materials).
- Coastal Regional Planning Organizations – Southern ME Planning and Development Commission, Greater Portland Council of Governments, Midcoast Council of Governments, Lincoln County Regional Planning Commission, Hancock County Regional Planning Commission, Eastern Maine Development Corporation, Washington Council of Governments. (Assistance with focus groups and completion

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of municipal interviews, reviewers of concept and draft materials, “trained trainers”
i.e., users of Fellow’s materials.

Cost-Share Description

Maine will meet its \$15,000 cost-share with state General Funds from the Department of Marine Resources and the Maine Department of Agriculture, Conservation and Forestry. In addition, the agencies will cover the Fellow’s professional development (travel, registration, meals/lodging) and will support the Fellow’s travel and associated costs for a summer 2023 visit to Maine. We will also provide funds for creation of TA materials and implementation of the new TA effort.

Strategic Focus Area – Resilient Coastal Communities

Maine’s 2023-2025 Fellowship proposal is centered around this NOAA OCM strategic focus area - the creation of Resilient Coastal Communities. In Maine, resilient coastal communities spend less on infrastructure repair and maintenance, their roads, bridges, and stormwater infrastructure achieve their full design life, residents and visitors are safe during storm events, residents and businesses owners understand their risk and improve their structures are improved to withstand flooding. To get there, coastal municipalities need credible scientific information customized to their needs, educational programs designed for adult learners of different levels, incentives to participate in workshops, logistics that enable participation, a variety of case studies, model ordinances and best practices to draw on and intensive handholding from initial workshops through implementation.