

REQUEST FOR PROPOSALS

TECHNICAL SERVICES FOR COASTAL SITE ASSESSMENT, HYDROLOGICAL MODELING, AND ADAPTATION DESIGN

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Proposals Due: ~~November 22, 2024~~ **December 6, 2024**

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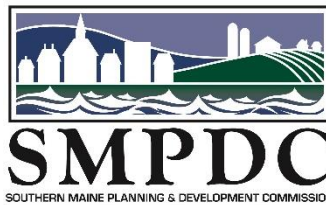
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INTRODUCTION & PROJECT BACKGROUND

Southern Maine Planning and Development Commission (SMPDC) is soliciting proposals for consultant services to support a two-year coastal resilience project funded through the National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund (NCRF). The selected consultant (Consultant) will be responsible for conducting site assessments, completing hydrologic modeling, and developing preliminary adaptation designs for two sites in Kittery, Maine to increase resilience of infrastructure and the natural environment: (1) the U.S. Route 1 crossing over Spruce Creek and (2) Route 103/ Whipple Road near the Gate 2 entrance to the Portsmouth Naval Shipyard. Firms submitting proposals should have specialized expertise in coastal adaptation, nature-based solutions, hydrodynamic modeling, infrastructure resilience, design and permitting of coastal resilience projects, and working collaboratively with partners/clients.

Kittery is Maine's southernmost coastal municipality and home to ecologically significant coastal habitat and wildlife, a robust year-round population, and thriving coastal tourism activity. The Portsmouth Naval Shipyard (PNS), a keystone of Kittery's waterfront, is a critical U.S. military installation responsible for overhauling the nation's nuclear submarines. Dense development, low-lying infrastructure, existing water quality issues, and increasing population in Kittery contribute to the community's significant vulnerability to coastal hazards and climate change.

PNS is located on Seavey Island situated within the tidal Piscataqua River and is the region's largest employer, employing more than 8,000 workers. Access to the island is limited to only two bridges, one of which is connected to a low-lying stretch of municipally owned roadway (Route 103/Whipple Road) that is extremely vulnerable to flooding, particularly near the Gate 2 entrance to PNS. The roadway is not only a critical access point for PNS and significant local road, but also an emergency evacuation route. U.S. Route 1, another critical road for local and regional travel and a State emergency evacuation route, crosses Spruce Creek, a designated priority impaired waterbody with saltmarsh habitat, and is vulnerable to sea level rise. In addition to the roadways, municipal stormwater and sewer infrastructure located adjacent to and under the roads are vulnerable to coastal flooding, exacerbating the threat to community resilience and coastal water quality. Upland areas around Spruce Creek are vulnerable to sea level rise and are a patchwork of dense development and forested areas containing significant habitat and wildlife.

The Whipple Road, U.S. Route 1 Spruce Creek Crossing, and 5.25-mile long tidal Spruce Creek areas have been identified as local and regional priorities for resilience action by several coastal planning projects due to the co-occurrence of hazard exposure, vulnerable populations and infrastructure, economic importance, and presence of significant wildlife and habitat. The areas were deemed critical for coastal adaptation action through the Town of Kittery's climate planning efforts, including its Climate Action Plan, and through *Climate Ready Coast – Southern Maine (CRCSM)*, a recently-completed regional coastal resilience planning project funded through the NCRF. Notably, the Whipple Road site is one of 15 regional priority areas for resilience action identified by CRCSM project.

The request for proposals is for technical services for conducting site assessments of both the U.S. Route 1/Spruce Creek crossing and Route 103/Whipple Road area near PNS Gate 2; completing hydrologic modeling of Spruce Creek to evaluate flood risk and vulnerabilities; developing three concept designs for adaptation strategies to address local vulnerabilities and enhance resilience at each of the two sites; support the project team with community engagement efforts; and develop one preliminary design (50-60% design) for each site. The Consultant's work should build off of previous planning and assessment efforts, including the Kittery Climate Action Plan, CRCSM project, and Joint Land Use Study (JLUS), as well as utilize input from Kittery municipal staff and community members, PNS, and the project team.

The project is being led by a team comprised of staff from SMPDC, the Town of Kittery, Portsmouth Naval Shipyard (PNS), and the Wells National Estuarine Research Reserve (Wells NERR). A Collaborative Advisory Group (CAG) comprised of municipal staff from the Town of Kittery, Kittery Water District and Sewer Department, leadership personnel from PNS, and Maine Department of Transportation staff, will oversee the project and ensure the work aligns with and accounts for the needs, conditions, values, and operational resilience of the Town, PNS, MDOT, the Kittery community, and other key stakeholders. The CAG will help guide the work of the selected Consultant and provide input regarding concerns, challenges, and needs associated with two project sites and conceptual and preliminary adaptation designs.

SCOPE OF SERVICES

The anticipated timeline for the proposed work is December 2024 to June 2026.

The Consultant will complete the following tasks:

Task 1: Project Management

In addition to the task-specific work and meeting/workshop events outlined below, the Consultant will participate in monthly project check-in meetings with the project team throughout the duration of the project to discuss tasks, share progress updates, present draft materials, and review next steps. It is anticipated that most, if not all, of the project check-in meetings will be held virtually and last for one hour. More or fewer meetings may be necessary, as determined and agreed upon by the project team and Consultant. The Consultant is expected to assist the project team with agenda development for check-in meetings.

All draft project deliverables should be submitted to the project team for review and comment prior to public release.

Anticipated Timeframe: Dec '24 – June '26

Task 2: Site Assessments and Hydrologic Modeling

- a) Site Assessments: The Consultant will conduct an assessment of each the two sites and adjacent coastal habitat to determine current conditions; identify existing flood risk and future flood risk and vulnerabilities associated with climate change; define physical and practical constraints to adaptation designs; and determine critical elevations of existing infrastructure and adjacent land. It is expected that the site assessments will include both in-situ assessment and desktop assessment work. The assessments should incorporate information and data from relevant previous and ongoing planning and assessment work (e.g., Kittery Climate Action Plan, Climate Ready Coast – Southern Maine, Joint Land Use Study (JLUS)).

Anticipated Timeframe: December '24 – May '25

Deliverables: Summary reports, one for each site, of assessment results and key findings; technical report of assessment methodology and data sources; spreadsheets and /or geospatial files of assessment data.

- b) Hydrologic Modeling: The Consultant will develop and apply a model to assess future sea level rise and coastal storm water surface elevations at both sites and assess two other tidal crossings over Spruce Creek that are upstream of the Route 1 crossing to evaluate potential impacts of altering crossings, impacts on upstream tidal flow, and subsequent impacts on the salt marsh and flood risk. The Consultant will conduct a mapping evaluation of opportunities and constraints to restore

Spruce Creek salt marsh resources. The model should produce information about flood risk, as well as potential opportunities for salt marsh restoration and enhancement and enable consideration by the CAG of alternatives and cost-benefit analysis of design elevations for the conceptual and preliminary (50-60%) designs. The information developed through this task is intended to assist the CAG and stakeholders with decision-making regarding design elevations that achieve desired risk-reduction and are cost-effective. If relevant, the modeling work should incorporate information and data from previous and/or ongoing projects (e.g., Kittery Climate Action Plan, Climate Ready Coast – Southern Maine, Joint Land Use Study (JLUS)).

Anticipated Timeframe: January '24 – May '25

Deliverables: Technical report describing model methodology, data sources, assumptions, and limitations; model output data (boundaries of inundation extent, depth grids, etc.) in appropriate formats (e.g., spreadsheets and /or geospatial files); maps and/or web mapping tool displaying model outputs; summary report of model results/findings and opportunities and constraints to restore Spruce Creek saltmarsh resources; rough cost estimates for saltmarsh restoration efforts and resilience action at the two sites associated with different design elevations.

- c) Site Visits: The Consultant, with support from the project team and partners, will plan and lead two site visits (one per site) to share findings of the site assessments with the project team, CAG, and other interested stakeholders. During the site visits, the Consultant will present information about current and future flood risk, habitat and water quality issues; and impacts to community resilience and facilitate discussions among the CAG and other stakeholders regarding thoughts, concerns, and ideas for enhancing resilience of the sites to coastal flood hazards. The input gathered during the visits should inform the concept designs and 50-60% designs.

Anticipated Timeframe: May '25

Deliverables: Process agendas and informational materials for site visits.

- d) Workshop: The Consultant will participate in one in-person workshop during which the CAG and stakeholders will determine design elevations to utilize in the conceptual designs. During the workshop, the Consultant will present findings of the site assessments, hydrologic modeling, and site visits and facilitate, with support from the project team, discussions about existing and future water elevations; potential design impacts on tidal flow, flood risk, and habitat; general cost considerations associated with designing infrastructure to different elevations; and benefits and challenges of different design elevations. The project team will plan the workshop with support from the Consultant.

Anticipated Timeframe: June '25 – July '25

Deliverables: Workshop materials, including those identified by the project team and CAG as being necessary for assisting with determining design elevations for infrastructure adaptation strategies.

Task 3: Conceptual Designs

- a) Conceptual Designs: The Consultant will develop three conceptual designs per site (for a total of six conceptual designs) for increasing the resilience of each site to coastal flooding. The designs should incorporate nature-based strategies as well as elements that enhance the resilience of road, water, sewer, and wastewater infrastructure to flooding from current storms and future sea level rise and that provide benefits to adjacent natural habitat. They should be informed by the site assessments, hydrologic modeling, technical input from the CAG and project team, and information gathered through stakeholder engagement efforts, including the site visits noted in Task 1 as well as engagement that the project team will be leading. Designs should also incorporate elements of the Maine CoastWise approach (a set of best practices for designing safe, cost-effective, ecologically supportive, and climate-resilient tidal crossings), as appropriate. Wells Reserve project partners will provide technical expertise and support to the Consultant on the Maine CoastWise approach to facilitate integration of approach principles in the designs. Importantly, the conceptual designs should incorporate elements of adaptive management to ensure flexibility to allow adaptation over time as conditions (e.g., flood hazards) change.

The Consultant, with support from the project team, should solicit input from relevant regulatory entities, including U.S. Army Corps of Engineers and Maine Department of Environmental Protection, regarding permitting considerations and the Maine DOT regarding other considerations that might impact adaptation designs. The Consultant will produce information outlining permitting considerations for the designs.

The project team will design and facilitate a deliberative decision-making process to guide the CAG through selecting the two conceptual designs, or selected elements of the conceptual designs, that are advanced to the preliminary (50-60%) phase.

Anticipated Timeframe: July '25 – December '25

Deliverables: Three conceptual designs per site (six total conceptual designs); general permitting information associated with each design; rough

cost estimates for each design (and/or design element); informational materials, as needed and feasible, to support CAG's selection of designs to advance to preliminary phase.

- b) Workshops: The Consultant will attend two in-person workshops, one for each site, to present conceptual designs and receive feedback and answer questions from the CAG and other stakeholders. The workshops will entail small group discussions and a follow-up survey to solicit additional feedback. The information gathered will inform the CAG's decision about what adaptation elements the preliminary (50-60%) designs include. It is expected the Consultant will assist the project team with planning the workshops.

Anticipated Timeframe: October '25 – November '25

Deliverables: Workshop materials necessary, and agreed upon by Consultant and project team, for enabling CAG's consideration and decision-making related to advancing conceptual design elements to preliminary design.

Task 4: Preliminary Designs

- a) Preliminary Designs: Based on input from the CAG and other stakeholders gathered in previous project tasks by both the Consultant and project team, the Consultant will develop one preliminary (50-60%) design for each of the two sites. The Consultant will identify and summarize permitting considerations and requirements, as well as rough cost estimates, for the designs. One of the objectives of this project is to produce preliminary designs that can be advanced to final design and ultimately construction, either through NCRF funding pipeline and/or other funding opportunities. As such, the designs and supporting materials developed by the Consultant should include relevant information that will enable the project team to pursue funding for final design, specifically through the National Fish and Wildlife Foundation's National Coastal Resilience Fund grant pipeline. As with the conceptual designs, the preliminary designs should incorporate elements of adaptive management so that, if and when implemented, they are flexible enough to be adapted over time as conditions (e.g., flood hazards) change.

Anticipated Timeframe: January '26 – March '26

Deliverables: One preliminary (50-60%) design for each of the two project sites for enhancing resilience of the built and natural components of the site to coastal flooding and sea level rise; supporting information about the designs' impacts on flood risk, wildlife and habitat, infrastructure resilience,

and benefits to the community; cost estimates for each design and for advancing the designs to a final design stage; permitting considerations for each design.

- b) Public Meeting: The Consultant will attend an in-person public meeting to present the final preliminary 50-60% designs for both sites to the CAG and other stakeholders. During the meeting, the CAG will participate in a deliberative decision-making process designed and facilitated by the project team to determine whether or not to advance the preliminary designs to a final stage through subsequent efforts outside of the scope of this project. It is anticipated that the Consultant will assist the project team with planning this meeting. The consultant is also expected to participate in meeting discussions and answer questions that the CAG and other stakeholders might have about the designs.

Anticipated Timeframe: April '26 – May '26

Deliverables: Meeting materials necessary, and agreed upon by Consultant and project team, for the public meeting.

BUDGET

The total budget available for consultant services for the requested scope of work is not-to-exceed \$380,000.

SUBMISSION REQUIREMENTS

Proposals must contain the following information and must be no longer than eight pages. Cover letter and resumes of key personnel do not count toward the page limit.

- **Cover Letter**
 - Name of firm(s) submitting the proposal.
 - Name, title, and contact information of the individual who will serve as the primary representative for the Respondent.
 - A brief summary of the proposal and Respondent's relevant experience, capabilities, and project approach.
 - Signature of an individual authorized to negotiate and execute a contract on behalf of the Respondent.
- **General Information & Qualifications**
 - Name(s), address(es), and website(s) of each participating firm, including major subcontractor(s).
 - A description of the roles and responsibilities of each participating firm.
 - A narrative of the technical and professional capabilities of each participating firm.
 - Brief description and references for up to three (3) similar projects completed or in progress by the Respondent.
- **Scope of Work and Project Approach**
 - Provide a detailed scope of work and anticipated deliverables by task and description of the approach to providing the level and nature of services required as outlined in this RFP.
 - Note: The project team welcomes suggested modifications to the scope and/or anticipated deliverables that the Consultant thinks would improve the project process, outcomes, and outputs and that would not exceed the maximum budget stated in this RFP.
- **Project Timeline**
 - Proposed timeline by task. Please note instances of the proposed timeline differing from the project timeline included in the PROJECT BACKGROUND section of this RFP.
- **Project Budget**
 - A total project cost and fee schedule and hours breakdown for each task and subtask of the Scope of Work including all personnel and sub-contractors (if applicable) that will be working on this project.

- **Resumes of Key Project Personnel**
 - Please keep resumes to no more than one page per person.
- **Assurances:** Provide a signed statement that certifies the following for the Respondent, its principals, and any subcontractors named in the proposal submitted in response to this RFP:
 - Representation that the candidate firm or consulting team will, in all aspects, conform to and comply with Equal Opportunity Employment requirements.
 - Assurance that this agreement will not result in a conflict of interest.
 - Certification that the Respondent, its principles, and sub-consultants:
 - Are not debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from bidding or working on contracts issued by any governmental agency.
 - Have not within three (3) years of submitting the Proposal for this contract been convicted of or had a civil judgment rendered against them for:
 - fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government transaction or contract;
 - violating Federal or State antitrust statutes or committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - are not indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
 - have not within a three (3) year period preceding this Proposal had one or more federal, state or local government transactions terminated for cause or default.

Proposals must be submitted electronically via email to Abbie Sherwin at asherwin@smpdc.org with the subject “Proposal: Flood Resilience Assessment, Modeling, and Design Services”. Proposals are **due by 5:00 pm on Friday, November 22nd, 2024 December 6, 2024**. Proposals shall be submitted as a single PDF.

SMPDC welcomes questions about this RFP. Questions must be submitted via email to Abbie Sherwin (asherwin@smpdc.org) by 5:00 pm on ~~November 14th, 2024~~ **November 27, 2024**. All questions and responses will be posted on a rolling basis on SMPDC’s [Jobs and Active Bids webpage](#).

SMPDC will not accept responsibility for any costs incurred by respondents in the preparation of their proposal.

SELECTION PROCESS

Proposals will be evaluated by a selection committee that will consist of project team members. The committee will review, evaluate, and rate each proposal based on the following selection criteria: consultant qualifications, previous experience, project understanding, project approach, and cost. The committee may consider any other criteria that it deems relevant and appropriate for the evaluation of proposals. The committee may choose to hold interviews with respondents to this RFP. Interviews will be conducted remotely.

All respondents to this RFP will be notified via email of whether or not they have been selected by the committee to serve as the project consultant.

All procurement for contractual services will be in accordance with 2CFR Part 200.318-327, all applicable State of Maine and local laws and regulations, and applicable Federal laws and standards.

CONFIDENTIALITY

The information contained in proposals submitted for SMPDC consideration will be held in confidence until all reviews are concluded and the award notification has been made. At that time, the full content of the proposals becomes public record and is therefore available for public inspection upon request.

According to state procurement law, the content of all proposals, correspondence, addenda, memoranda, working papers, or any other medium which discloses any aspect of the request for proposals process will be considered public information when the award decision is announced. This includes all proposals received in response to this RFP, both the selected proposal and the proposal(s) not selected and includes information in those proposals which a Proposer may consider to be proprietary in nature.