OneShoreline
Building Solutions for a Changing Climate

San Mateo County
Flood and Sea Level Rise
Resiliency District

Requests for Proposals for

Colma Creek Watershed Plan of
Opportunities and Feasibility to Meet
Long-term Multi-Benefit Resilience Objectives

RFP Number FSLRRD-2025-01-27

Release Date: January 27, 2025

Deadline to Respond:

February 28, 2025 at 5:00 PM

Pre-Proposal Workshop:

February 11, 2025 at 10:00 AM

Deadline for Questions:

February 18 at 5:00 PM

Table of Contents

Introduction

The San Mateo County Flood and Sea Level Rise Resiliency District, also known as OneShoreline, is seeking services to model stormwater management opportunities and provide planning recommendations for the Colma Creek Watershed.

This process is to inform realization of a Colma Creek that is vital for flood resilience, natural systems, clean water, and healthy communities. A wide range of conceptual opportunities are to be considered including nature-based solutions, public access and amenities, and recent land use decisions by local jurisdictions. Scope will work from long-term contemplation of channel configurations to recommendations for priority next steps.

OneShoreline

Given regional extreme vulnerability to the water-related impacts of climate change, State legislation established OneShoreline in 2020 to address the challenges of sea level rise, extreme storms, drought, coastal erosion, and shallow groundwater rise. OneShoreline works across jurisdictional boundaries with a wide range of stakeholders to build aligned resilience for developed and natural areas, and to plan land use and infrastructure for immediate and future climate-driven conditions.

Submittal Process

Please submit electronic copy of the proposal by:

February 28, 2025, 5:00 PM Pacific Time, to:

Johnathan Perisho, Project Manager
San Mateo County Flood and Sea Level Rise Resiliency District
Projects@OneShoreline.org

Proposals must be in font size 11 pt and not exceed 20 pages, including any supporting materials.

We encourage prospective consultants to participate in a pre-proposal workshop on February 11, 2025 at 10:00 AM Pacific Time via Zoom. Registration can be completed here.

Additionally, questions submitted by email to Projects@OneShoreline.org with the subject line “Colma Creek Watershed Plan RFP” by February 18 at 5:00 PM will be answered in a FAQ document posted at OneShoreline.org/document-library by February 20 at 5:00 PM, along with any RFP addenda. Proposals shall be valid for one hundred twenty (120) days.

Interviews of prospective consultants may be expected to occur March 17, 18, and 19 in person at OneShoreline’s offices at 1700 South El Camino Real, San Mateo, CA.

Project Budget

All Tasks described, including any suggested modifications, shall be itemized and included within the proposal Fee Schedule.

Project Schedule

The Colma Creek Watershed Plan of Opportunities and Feasibility to Meet Long-term Multi-Benefit Resilience Objectives (Project) will begin with contract execution on approximately April 1, 2025. A proposed schedule must be included with the response to this RFP. All tasks described within the enclosed Scope of Work shall be included within proposal schedule,

detailing the date of commencement, interim milestone dates, the time required for completion of each portion of work, critical path, and the date of substantial completion.

Proposal Requirements

Responses to this Request for Proposals (RFP) should include the following:

1. Cover letter identifying the materials submitted and the name/title of the person to contact regarding the proposal, signed by an individual authorized to execute legal documents for the proposer.
2. Title page and table of contents. Number all pages of the proposal.
3. Exceptions to the RFP requirements or to the final revised RFP, if any.
4. Organizational chart of the Project team, including team leads and key staff who will be actively working on the Project.
5. Technical Proposal, including:
    - Overview diagram of Project Workplan;
    - High-level discussion of the Project vision and approach, including any suggested modifications to the Project tasks;
    - Detailed outline addressing Tasks in this RFP in the order presented, including technical approach, a summary of key deliverables listed at the end of each task, how these deliverables will be developed, and any assumptions.
6. Project schedule with milestones, deliverables, dates, and a management plan.
7. Itemized fee schedule, by task
    - Include a Labor Hours and Cost Table that provides the estimated labor hours and cost by job classification for each resource per task and subtask
    - Subconsultant team staff should be listed separately to clearly show percent markup sub-totals
8. List of team members who will be assigned to the Project, their role on the Project, and experience relevant to their role. Substitutions will need to be submitted to OneShoreline for approval before charging to the Project. This includes:
    - Biographies or resumes of key technical staff;
    - List of any subconsultants, their roles, and personnel assigned to the Project;
    - All applicable licenses and license numbers relevant to the Project, the names of the holders of those licenses, and the names of the agencies issuing the licenses.
9. Description of previously completed projects of similar scope and services to those proposed in this RFP, and two references regarding each of those experiences. A minimum of three (3) project descriptions shall be provided. Include the project name, owning agency, capital cost and design fees, start/end dates, primary team members, and summary of key technical elements.
10. Description of any pending litigation or litigation against the firm, or any of its proposed subconsultants that is active or has been settled in the past three (3) years.
11. Acceptance of:
    - OneShoreline's Standard Agreement and Insurance Requirements

- OneShoreline's Non-Collusion and Conflict of Interest Statement
- Both templates are available for review at OneShoreline.org/document-library. Potential applicants should be confident in their ability to comply with the provisions contained within these documents prior to submitting a proposal.

OneShoreline reserves the right to modify the RFP's scope of work, make corrections, and reject any or all proposals. OneShoreline may also correct errors in the RFP and contact the proposers with any clarifications. Consultant shall ensure full compliance with Federal, State and local laws, directives, and executive orders regarding California Public Contract Code and other provisions of laws applicable to this Project.

Proposal Evaluation

OneShoreline staff and others will evaluate the proposals provided in response to this RFP based on the following criteria:

- Engineer shall hold a current State of California Professional Engineer's license, with proven experience analyzing hydraulic and structural feasibility for similar infrastructure improvements;
- Experience of the firm(s) and the staff to be assigned to the Project, including experience with projects of similar scope and complexity with focus on experience and expertise in hydrology & hydraulic studies, including watershed modeling, conversion of channelized stormwater infrastructure to naturalized conveyance, land use planning, and stormwater capture.
- Quality, responsiveness, and completeness of proposal;
- Quality of the proposed solution, products, and services to be provided;
- Project cost;
- Ability to perform work within the proposed timeline and in a professional, thorough manner;
- Proposer's record of compliance with applicable laws, regulations, policies, guidelines, and orders governing prior or existing contracts performed by the Consultant.

OneShoreline may invite multiple consultants to be interviewed. Final decisions regarding consultant selection will be based on evaluation of the written proposals and interviews, in accordance with the Evaluation Criteria. OneShoreline will ultimately contract with a single consultant who may manage a consultant team. The selection process should be finished within 60 days of the submission of responses.

Goals

Inform priority projects for stormwater management in the Colma Creek Watershed to improve and support:

- Increase of system capacity to reduce flood risks
- Water quality
- Resilience for infrastructure, ecological functions, and recreational opportunities
- Public safety along creek banks

Background

OneShoreline is the first independent countywide government agency in California to work across jurisdictional boundaries with a wide range of stakeholders to plan for, and build resilience to, climate change. Resilience to this transformative challenge requires a holistic approach to:

- Geography: OneShoreline is a vehicle through which San Mateo County and its cities can align efforts across jurisdictions
- Threats: OneShoreline focuses on climate change's multiple water-related impacts
- Objectives: OneShoreline reduces these threats and incorporates natural infrastructure, recreation, and public and private land into its efforts

San Mateo County has already been, and will increasingly be, affected by the water-related impacts of climate change, including extreme storms, drought, coastal erosion, and shallow groundwater rise. Sea level rise threatens more people and property here than in any other county in California.

The Colma Creek Watershed is the largest in San Mateo County, draining approximately 16.6 square miles from five municipalities as well as unincorporated County communities: South San Francisco, Colma, Daly City, San Bruno, and Pacifica. The watershed has relatively steep coastal headwaters, concentrated runoff from a largely urbanized area, aged infrastructure, and strong tidal influence near confluence with San Francisco Bay.

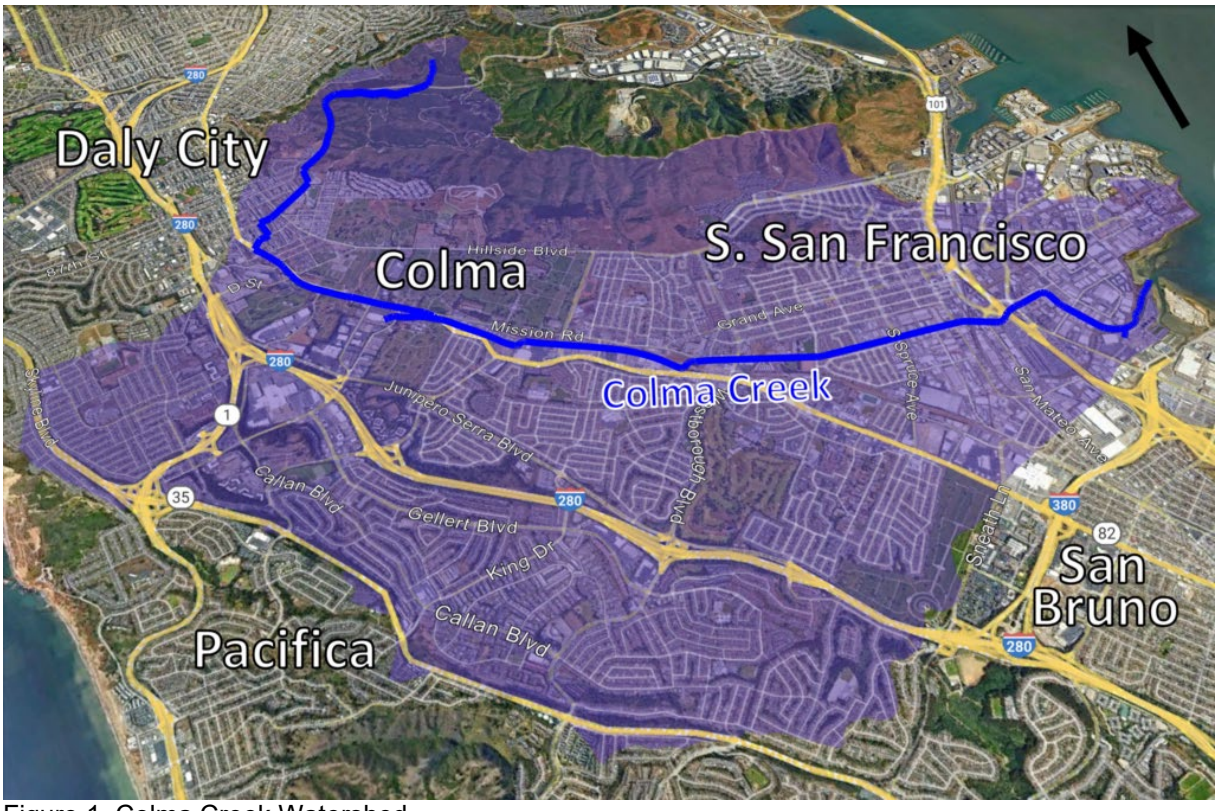

Figure 1. Colma Creek Watershed

Existing facilities have been designed for a historic 50-year 6-hour design storm with 2 feet freeboard. The region has been growing with substantial land use planning updates and redevelopment in the vicinity of Colma Creek. Maintenance access and multimodal transit are considerations. Colma Creek, headwaters, and bay wetlands present significant resources for ecological resilience.

Substantial work has been undertaken in the area to inform study and plan work. A Colma Creek Hydrology and Hydraulic Model was completed in 2018 and updated in 2021. The assessment identified current and projected capacity deficiencies, considering climate change-related to precipitation intensity-duration-frequency and sea level rise scenarios. Local municipalities have stormdrain master plans with an update ongoing in South San Francisco, green infrastructure plans, and specific projects and plans have included modeling work and evaluations with data that may be shared including but not limited to the Colma Creek Restoration and Adaptation Plan, Orange Memorial Park Stormwater Capture Project, and Lindenville Specific Plan. The San Francisco Estuary Institute (SFEI) has also developed relevant reports and data.

OneShoreline will be the lead agency of the Project that is the subject of this RFP. Other project partners will include municipal and county staff who will be engaged through a Project Technical Advisory Committee (TAC). OneShoreline also convenes a Colma Creek Citizens Advisory Committee including representatives from all five municipalities that are part of the Flood Zone on a quarterly basis where updates will be made.

The following are Project objectives:

- Update 2021 H&H analysis to incorporate City stormwater model updates and best available science on extreme precipitation
- Identify and evaluate a range of configurations and projects to reduce peak inflows, increase capacity, reduce flood risks, and improve natural system functions
- Develop list of priority multi-benefit projects and define an actionable plan to advance implementation

A nearer-term planning and design project will be completed in the same period as this proposed watershed plan on a discrete reach of Lower Colma Creek between San Mateo Avenue to Utah Avenue. The RFP for that project was released January 7 linked here. The two scopes are to be separate and distinct. However, as described in Scope of Work Task 1.0 Project Management and Partner Engagement limited communications are to be assumed to ensure reasonable consistency between these efforts.

Quality Management

The standard of care applicable to the Engineer's work under the Agreement will be the degree of skill and diligence ordinarily employed by engineers performing the same or similar services, under the same or similar circumstances, in the State of California. The Consultant will provide Quality Assurance/Quality Control ("QA/QC") on all services performed by the Consultant.

Close coordination between Consultant, OneShoreline, and other OneShoreline-designated Project partners throughout the course of the Project is required. This will ensure that critical information will be made available to the appropriate Project team members in a timely manner.

The administrative draft and draft version of each deliverable will be submitted to OneShoreline for review and comment. OneShoreline will provide the consolidated comments of all Project partners to Consultant, and these consolidated comments shall serve as the basis for the final version of the document. For technical memoranda and other deliverables, OneShoreline review period will be 2-3 weeks. For larger deliverables, OneShoreline review period will be 4-5 weeks.

Consultant Qualifications

Qualified consultant teams must have significant experience and demonstrated success in:

- Developing hydrology & hydraulic studies, including watershed modeling and flood risk assessment
- Applying software tools such as HEC-HMS, HEC-RAS, SWMM, or other relevant modeling platforms to similar watershed-scale analyses
- Developing similar studies and stormwater planning, including experience working with local government, environmental regulatory agencies, and environmental organizations; scenario development and analysis; land use planning; and project definition and prioritization
- Interpreting complex hydrological and hydraulic data and policy information and producing clear, actionable recommendations
- Demonstrated expertise in California climate science, ecology, and policy guidance (e.g., land use, stormwater management)
- Demonstrated experience with landscape architecture associated with wet weather flow management
- Preparing detailed project documentation and reporting
- Solicitation of meaningful input and coordination with project partners

Consultant Responsibilities

- Consultant is responsible for performing this scope in compliance with all applicable federal, state, and local laws, regulations, standards, and guidelines
- Consultant will submit deliverables including all materials developed through Project in electronic format unless otherwise directed by OneShoreline
- Consultant will provide Quality Assurance/Quality Control (“QA/QC”) on all services performed by the Consultant
- Throughout the Project, Consultant will coordinate with OneShoreline on all aspects of the work

Scope of Work

The Project is to include the following major tasks:

Task 1.0 — Project Management and Partner Engagement
Task 2.0 — Review Existing and Ongoing Plans and Reports
Task 3.0 — Develop Planning Criteria and Assumptions
Task 4.0 — Develop and Assess Scenarios
    - Channel Capacity Scenarios
    - Watershed Stormwater Capture Projects
    - Floodplain and Setback Analysis in Concert with City Land Use Decisions
Task 5.0 — Evaluate Projects and Develop Implementation Plan
Task 6.0 — Final Report

Task 1.0: Project Management and Partner Engagement
The Consultant will provide project management services during the term of the Agreement. The Consultant's project manager will be responsible for providing any needed subconsultants, managing of the Consultant team, monitoring the Project budgets and schedules, providing status updates, and maintaining an efficient and effective document tracking system.

The following is included in Task 1:

- **Manage Schedule, Invoices, Progress Reports, and Scheduling Revisions:** Consultant will update the Project schedule as needed and e-mail updates to the OneShoreline Project Manager. Consultant will submit invoices with activities and milestones, progress reports, and Project schedule reports. These documents and their content will be prepared in an agreed-upon format between Consultant and OneShoreline.

- **Attend Project Management Meetings:** Consultant will prepare for and facilitate monthly Project management meetings with OneShoreline. Consultant will prepare the meeting agendas and action items in consultation with the OneShoreline Project Manager. These meetings will be conducted remotely or in-person at OneShoreline's offices.

- **Project Partner Engagement:** The objective of this task is to inform both Project Partners and Project development through presentations and structured conversations. Throughout the Project the Consultant will support OneShoreline updates to the Colma Creek Citizens Advisory Committee, Technical Advisory Committee, appropriate City Council/planning commissions, and coordination with municipal staff that serve communities within the Colma Creek Flood Zone: South San Francisco, Colma, Daly City, San Bruno, Pacifica, and unincorporated San Mateo County. Consultant may assume that they will participate in up to eight (8) meetings directly. Additionally, up to four (4) meetings a year may be assumed for coordination with the team of a planning and design project specific to the reach of Colma Creek between San Mateo Avenue and Utah Avenue.

- **Project Advisory Committee:** Up to twelve (12) meetings may be assumed and draft materials will be shared with project partners for review.

    Deliverables
    - Work plan, schedule, invoices, status reports, and Project schedule updates.
    - Meeting agendas, presentation materials, and summaries of meeting action items

Task 2.0 Review Existing Plans and Reports
Consultant is to review existing reports, collect information and data, meet with Project Partners to review information, and identify gaps to prepare for conducting Tasks 3–5. Relevant reports include, but are not limited, the resources listed in Background. This task will involve both content assessment of relevant documents and data sources, and providing recommendations for model improvements or alternative modeling techniques.

Deliverables
- Inventory of plans, reports, papers, and available data
- Requests for Information

- Summary of findings and recommendations

Task 3.0 Develop Planning Criteria and Assumptions
The objective of this task is to establish baseline assumptions and variables for Task 4 Develop and Assess Scenarios and Task 5 Evaluate Projects and Develop Implementation Plan. Consultant is to work with OneShoreline and Project Partners to confirm Project technical approach, planning criteria, design storms and sea level rise scenarios, concepts to be evaluated, etc. A comprehensive range of concepts are to be considered, including nature-based solutions and ecological restoration. This scope may be assumed to include three focused meetings/inter-agency workshops, providing recommendations, and drafting of outline. Project Partners are to be included in review of administrative draft and draft outline.

Deliverable
- Project Criteria and Assumptions Outline/Tables
- Planning Criteria and Assumptions PowerPoint

Task 4.0 Develop and Assess Scenarios
The objective of this task is to inform a comprehensive understanding of both feasible and suitable flood risk reduction opportunities across the Colma Creek Watershed.

- **Channel Scenarios:** Consultant is to spatially model the stormwater performance of the Colma Creek channel to determine the volume necessary to accommodate design storms/scenarios/level of service goals established in Task 3.
    - *Initial Models and Evaluation:* Scope to include up to four channel design scenarios/configurations with up to three design storm events defined in Task 3. Design scenarios are to include assumptions of physical conditions, such as concrete channel, elevated concrete flood walls with soft bottom, woody vegetation, expanded channel/floodplain widths, floodable parks, etc. Initial model results will be reviewed with OneShoreline and the TAC to inform selection of refined modeling scenarios.
    - *Refined Models and Evaluation:* Scope is expected to include design scenario variations with combinations of initial model design scenarios. Scope to include up to two design scenarios with up to two design storm events.
    - *Final Model and Evaluation:* Concurrent with Task 5 integrate estimated stormwater capture into final model design scenario based on outcomes of Refined Models, Evaluation and Watershed Stormwater Capture, and Task 5 evaluation and prioritization.

- **Watershed Stormwater Capture:** This scope is to inform opportunities and priorities for dampening peak stormwater flows upgradient of Colma Creek. Stormwater runoff and high tide estimates are to be spatially modeled for up to three design storm events across the watershed to identify potential locations for concept interventions identified in Task 3.
    - *Project Identification:* Consultant to analyze model results, watershed characteristics, aerial imagery, and other data to identify locations at the parcel scale with strong potential for stormwater capture. Estimates of potential stormwater capture and Colma Creek peak flow dampening are to be calculated by concept interventions based on prevailing conditions and scale. Estimates of potential water capture in table format organized by individual concept intervention, concept type, and subwatershed.

- *Land Use Estimates:* In order to inform potential land use policy considerations and project types, consultant to develop generalized estimates of stormwater capture potential of conceptual projects by land use type to be identified in Task 3. Generalized estimates are to be scaled across spatial land use data for all area within the Colma Creek Flood Zone: South San Francisco, Colma, Daly City, San Bruno, Pacifica, and unincorporated San Mateo County.

- **Floodplain and Setback Analysis:** Consultant to prepare guidelines and recommendations for development and zoning setbacks from the existing Colma Creek channel based on analysis of Channel Scenarios, Watershed Stormwater Capture results, and modeled potential flood risks.

  Deliverables:
  - Electronic model files, inputs, and outputs in both table and spatial map (ArcGIS with metadata) formats; parcel and land use GIS file with metadata
  - Floodplain and Setback Guidelines and Recommendations Technical Memorandum

Task 5.0 Evaluate Projects and Develop Implementation Plan

The findings of Tasks 2, 3, and 4 are to inform actionable recommendations for strategy and project prioritization and next steps. Develop and apply evaluation criteria to screen and prioritize project opportunities in consideration of multi-benefit outcomes, complexity, capital and lifecycle costs, and other considerations. Consider phasing and bundling of projects. For each project, identify lead and partner agencies, estimated implementation cost, funding status, grant opportunities, and implementation timing. This scope will highlight key findings and propose phasing for stormwater management opportunities that have been demonstrated to have significant impact and suitability for prevailing conditions.

Deliverables:
- Memorandum summary of key findings and recommendations
- Spatial graphics (pdfs and GIS files) and associated tables for recommended priority projects
- Channel Scenarios and Watershed Stormwater Capture Technical Memorandum to be included in Final Report

Task 6.0 Final Report

The objective of this task is to summarize study findings and recommended next steps. Deliverables for Tasks 3–5 shall be compiled and presented in a format accessible by both technical and non-technical audiences. Presentations of findings are to be included under Task 1 Project Management and Partner Engagement.

Deliverable:
- Annotated Outline
- Final Report (administrative draft, draft, and final)