Request for Proposals

For

The Development of a Planning Guide for the Planning of a Channel Depth Restoration Program for the South Delta Channels

Release Date: September 23, 2020

Responses must be Received by October 23, 2020, 5:00 p.m. Pacific Standard Time

SECTION I – GENERAL INFORMATION

A. STATEMENT OF INTENT

As outlined in more detail in Section II – Scope of Work, this Request for Proposals (RFP) seeks water resources engineering, environmental planner and associated consultant services needed for the development of a strategy to guide the planning (Planning Guide) of a channel depth restoration program (Program) for the Sacramento-San Joaquin River Delta channels with initial emphasis on the South Delta channels.

The Planning Guide shall outline the framework for developing and managing the Program, that includes the problems identification associated with sedimentation in the channels and a recommendation for reasonable approach for sediment removal to reestablish and maintain adequate channel depth. It shall include all the necessary planning tasks for the implementation of the Program, describe their scope in detail, identify the associated deliverable work products, and estimate their costs and length of time to complete them. Further, it shall identify the tasks' sequencing and relations, and present the critical path to complete all the planning tasks. The Planning Guide should also include potential funding sources to budget the Program or any of its elements, and practicable cost and time saving measures for the planning and subsequent implementation of the Program.

The Planning Guide will be deployed at the direction of the members of the Delta Dredging Work Group as part of a separate contract.

B. BACKGROUND

Channels of the Sacramento-San Joaquin Delta, particularly those in the southern Delta, suffer from diminished capacity due to siltation. The siltation impacts:

- Net flow in the channels (reduced)
- Water temperature (increased)
- Dissolved oxygen (reduced)
- Salinity ("hot spot" buildup)
- Concentration of constituents of concern (increased)
- Toxic algae blooms (increased)
- Navigation (impeded)
- Flood response and levee maintenance (compromised)
- Invasive species (expanded)

Sedimentation is reasonably expected to continue to occur in the future.

The South and Central Delta channels convey irrigation water for agricultural water users and water supply for the CVP and SWP. Extensive sedimentation has reduced the depth and conveyance capacities of channels and causes significant problems for the water diverters in operating their diversion works.

The Program area lies in the south and central portions of the Sacramento San Joaquin River Delta with Bouldin Island to the north and the Pescadero Reclamation District to the south. The area includes the extents of the South and Central Delta Water Agencies and areas to the west of the water agencies. The vicinity of the Sacramento-San Joaquin River Delta is shown in **Attachment A1** and the vicinity of the South Delta is shown in **Attachment A2**. The channels subject to dredging in the south Delta with the proposed dredging limits, under the Program, are shown in **Attachment B**.

A group of stakeholders have voluntarily convened to address the sedimentation issues through the development and implementation of the Program. The stakeholders include: South Delta Water Agency, Central Delta Water Agency, Department of Water Resources, Delta Water Master, State Water Resources Control Board, Bureau of Reclamation, San Luis Delta-Mendota Water Authority and the State Water Contractors. Collectively, this group is the Delta Dredging Work Group (Work Group). Additional stakeholders may join the Work Group. The Work Group's problem statement is enclosed as **Attachment C**.

C. THE REQUEST FOR PROPOSAL PROCESS

This RFP seeks the submission of proposals to provide services from any and all interested and qualified proposers. On behalf of the Work Group, the State Water Contractors (SWC) seeks by way of this RFP to obtain the listed services in a manner that maximizes the quality of services while also maximizing value to the Work Group. Proposers must be able to show that they are capable of performing the services requested. Such evidence includes, but is not limited to, the respondent's demonstrated competency and experience in delivering services of a similar scope and type and local availability of the proposer's personnel and equipment resources.

SECTION II – SCOPE OF WORK

A. DESCRIPTION

The scope of services shall include the preparation of the Planning Guide for the planning of the Program, generation and verification of support information, and participation in meetings.

The Planning Guide shall provide a comprehensive and clear step-by-step guidance to the Work Group for the planning of the Program with the level of detail that is necessary for contracting all the planning tasks in the future under separate contract(s). The Planning Guide shall provide estimated costs for the completion of each of the tasks to support the Work Group's budgeting of the tasks. The Planning Guide shall further include potential funding sources and cost saving measures to complete the tasks and the subsequent implementation of the Program. The Planning Guide will include all the tasks leading to final design, construction plans, and specification.

The scope of work consists of seven tasks, each with identified deliverables. The Planning Guide shall compile the deliverables of Task No 2 thought 7 in a report format. The draft Planning Guide shall be submitted by the Contractor to the Work Group's review and comments. The Contractor shall revise the draft and submit the second draft for review and comments to the Work Group. Upon the Work Group's direction, the Contractor shall finalize the Planning Guide.

The State Water Contractors' Contract Manager is Eric Chapman (EChapman@swc.org) and will provide liaison between the Contractor and the Work Group. The Contractor shall coordinate all activities with the Contract Manager and follow his direction in completing the tasks. The Contractor shall seek the Contract Manager's guidance and direction for gathering technical information and data from the Work Group.

The Services to be provided by Contractor shall include but are not limited to the following tasks:

Task No 1. Prepare for and Participate in Meetings

Contractor shall keep the Work Group informed of the work progress and advise the Work Group as appropriate.

Deliverables for Task No 1:

Participate in four biweekly coordination team meetings to brief the Work Group on the status of the work.

Task No 2. Complete Literature Search

Contractor shall research literature for

- framework of comparable channel maintenance dredging programs, and
- planning of comparable channel maintenance dredging programs and projects, including their permitting, mitigation, and design.

Deliverables for Task No 2:

Attach the researched literature to the appendix of the Planning Guide with a summary of the information and an explanation of comparability to the Program.

Task No 3. Prepare the Outline

Contractor shall draft an annotated outline for the Planning Guide including brief descriptions of its Planning Guide's chapters/sections.

Deliverables for Task No 3:

Planning Guide outline with brief description of chapters/sections.

Tasks No 4. Identify Sedimentation Problem in the South Delta Channels

For the inclusion in the Planning Guide, the Contractor shall estimate the quantity of sediment to be removed from each South Delta channels at a reconnaissance level using bathymetry (https://gis.water.ca.gov/app/bathymetry/ and other recent useful data) and target elevations, to be furnished by DWR, and prepare a preliminary dredging plan. The Contractor shall also develop a workplan for the design of the sediment removal and for estimating the quantities of sediment need to be removed from each channel to convey the desired water quantities to the water diversion points at an elevation that supports reliable and continuous operations of the diversion works. The workplan shall present all the tasks and associated deliverables needed to be completed for the completion of the design. The workplan shall also include the estimated cost for performing each of the tasks.

Deliverables for Task No 4:

(1) Reconnaissance level quantity estimate for sediment removal.

(2) Preliminary dredging plan that includes the existing and target elevations, dredging length, and typical cross-sections by locations.
(3) Workplan for sediment removal design, including recommendation for the starting point and how to proceed with the sediment removal.

Task No 5. Develop Real Estate Plan for the Sediment Removal

Based on the reconnaissance level quantity estimates from Task 4, Contractor shall estimate the real estate needs for dewatering, disposing the sediment to be removed from the channels, and identify potential temporary and permanent disposal sites and uses for the removed sediment.

Deliverables for Task No 5:

(1) Description of the real estate plan that includes
- Description of the task, deliverables, cost estimate.
- The vicinity and acreage need for the Program.
- Map showing the dewatering, and potential temporary and permanent disposal sites.

(2) Description of potential uses of sediment.
(3) Describe regulatory limitations associated with sediment reuse.

Task No 6. Identify of the Best Dredging Method

Contractor shall list and evaluate the alternative suitable dredging methods to recommend the best viable method to be used for (1) creating and (2) maintaining the desired channel bathymetry. Contractor shall describe key considerations to be made for the evaluation and the rational for identifying the best viable method. Contractor shall recommend reasonable attainable and low-cost channel sedimentation monitoring and criteria/triggers for site-specific dredging actions to maintain the established bathymetry, including prioritization of work, and other key considerations to support decision making for managing the Program.

Deliverable for Task No 6:

(1) Description and evaluation of suitable dredging methods to be used for the Program.
(2) Recommendation of dredging methods to be used for creating the desired bathymetry.
(3) Recommendation of dredging methods to be used for small, spot dredging, projects to maintain the desired bathymetry.
(4) Recommendation for sediment accumulation monitoring.
(5) Recommendation for dredging action criteria/triggers and prioritization for channel maintenance.

Task No 7. Develop Planning Tasks for the Environmental Compliance and Permitting

Contractor shall develop a comprehensive list of all the tasks needed for full environmental compliance and permitting for the implementation of the actions under the Program. The Program includes two types of dredging actions. The first dredging action's purpose is to **establish** the desired channel bathymetry and the subsequent dredging actions' purpose is to **maintain** the desired channel bathymetry. The two types of actions will likely require different dredging methods and need different environmental compliance and permitting strategies.

The Contractor shall determine the appropriate strategies for both types of actions (program and site-specific) and the necessary tasks for each. The Contractor shall describe all the tasks

and the associated deliverables for both types of actions in sufficient detail to assist the Work Group in developing contracts for the planning of dredging actions. Further, the Contractor shall estimate the costs of completing each task to assist the Work Group in budgeting for the work. Contractor shall describe the sequencing of the tasks and develop the critical path to take to accomplish the tasks. The Contractor shall make recommendation for cost savings and time reductions measures and identify potential funding sources and partnership opportunities for funding the planning and subsequent implementation works.

The Environmental Planning and permitting shall include, but not limited to addressing the following tasks:

- Preparing required CEQA and/or NEPA documents.
- Mitigation measures
- Conducting CNDDB queries for rare and endangered plant and animal observations.
- Conducting cultural and historic database review in support of SHPO consultation.
- Initiating tribal consultation including letters of intent to tribes in compliance with AB52.
- Conducting pre-dredge environmental surveys and preparing associated survey reports.
- Preparing pre-dredge sampling and analysis plan for submittal to the regulatory agencies.
- Preparing permit applications for all the permitting agencies including, but not limited to, the following:
    a. U. S. Army Corps of Engineers (USACE)
    b. Regional Water Quality Control Board (RWQCB)
    c. United States Environmental Protection Agency (USEPA)
    d. California Department of Fish and Wildlife (CDFW)
    e. United States Fish and Wildlife Services (USFWS)
    f. National Marine Fisheries Service (NMFS)
    g. Delta Stewardship Council
    h. In addition to any environmental review or permits as required by the California Environmental Quality Act (CEQA), or National Environmental Protection Agency Act (NEPA).

    Deliverables for Task No. 7

    (1) Description of each task and associated deliverables that are necessary for planning of program level environmental compliance and permitting of the Program actions.
    (2) Description of all tasks and associated deliverables that are necessary for planning of project level (site-specific) environmental compliance and permitting of Program actions.
    (3) Cost estimates for completion of each task/deliverables.
    (4) Time estimates for completion of each task/deliverables.
    (5) Identification of tasks' relations, sequencing, and the critical path.
    (6) Microsoft Project schedule and Gantt chart with all significant tasks, milestones, dependencies and relationships.
    (7) Identification of potential funding sources.
    (8) Recommendations for cost saving and time reduction and potential partnerships.

B. LENGTH OF AGREEMENT

The anticipated duration of the agreement will be for 12 months, with the term tentatively to begin November 2020 and end June 2021.

SECTION III – GENERAL TERMS AND CONDITIONS

Read all Instructions. Read the entire RFP and all enclosures before preparing your proposal.

Proposal Costs. Costs for developing proposals are entirely the responsibility of the proposer and shall not be charged to the Work Group or otherwise reimbursed by the Work Group.

Proposal Becomes Work Group Property. The RFP and all materials submitted in response to this RFP will become the property of the Work Group.

Questions and Responses Process. Submit all questions relating to this RFP and your response to:
Linda Standlee, LStandlee@swc.org

If changes to the RFP are warranted, they will be posted to the http://www.swc.org. It is the responsibility of each proposer to check the website for changes and/or clarifications to the RFP prior to submitting a response. A proposer's failure to do so will not provide a ground for protest.

Alteration of Terms and Clarifications. No alteration or variation of the terms of this RFP is valid unless made or confirmed in writing by the SWC. Likewise, oral understandings or agreements not incorporated into the final contract are not binding on the SWC or Work Group. If a proposer discovers any ambiguity, conflict, discrepancy, omission, or other error in the RFP, the proposer must immediately notify the SWC of such error in writing and request modification or clarification of the document. If a proposer fails to notify the SWC of an error in the RFP prior to the date fixed for submission, the proposer shall submit a response at his/her own risk, and if the proposer enters into a contract, the proposer shall not be entitled to additional compensation or time by reason of the error or its later correction.

Any modifications or clarifications to the RFP will be posted to the http website as outlined above without divulging the source of the request for same. The SWC may, at its discretion, also give electronic notice by email to all parties who have notified the SWC of their electronic contact information in response to this RFP, but no party that fails to receive email notice has any basis for protest given that all clarifications will be available online. It is the obligation of all proposing parties to check the http: website for updates regarding the RFP if they wish to be kept advised of clarifications prior to submitting a proposal.

Selection of Provider(s). The selection of a provider will be memorialized in the form of a "SWC Agreement with Independent Contractor". The SWC reserves the right to reject any or all proposals without penalty. The SWC's waiver of any deviation in the proposal shall in no way modify the RFP documents or excuse the proposer from full compliance with any eventual contract. Once a provider is selected, the Agreement with that provider must still be negotiated.

Proposers should submit questions or concerns about the process as stated above. The proposer should not otherwise ask any SWC or Work Group employees questions about the RFP or related issues, either orally or by written communication, unless invited to do so.

Proposers should ensure their proposals are as competitive as possible while also providing the highest quality services in order to be considered a viable provider for the listed services.

SECTION IV – REQUEST FOR PROPOSALS PROCEDURE

This section describes the general RFP procedure that will be used, and the remaining sections of this RFP list detailed requirements.

A. TENTATIVE SCHEDULE OF EVENTS

- RFP Released: September 23
- Proposals Due: October 23
- Expected Award Date: November 20

B. SUBMISSION OF PROPOSALS Submit electronic proposals to SWC via email to LStandlee@swc.org by 5pm October 23.

C. CONFIDENTIALITY OF PROPOSALS California Government Code Sections 6250 *et seq*. (the "California Public Records Act" or the "Act") defines a public record as any writing containing information relating to the conduct of the public business. The Act provides that public records shall be disclosed upon written request and that any citizen has a right to inspect any public record unless the document is exempted from disclosure. To the extent the materials submitted in response to this RFP are available to the California public agencies that are participants in the Work Group, the materials are subject to the California Public Records Act. Submission of any materials in response to this RFP constitutes a waiver by the submitting party of any claim that the information is protected from disclosure, regardless of whether such information is marked as confidential or proprietary.

D. PROPOSAL EVALUATION All proposals received will be evaluated by the Work Group.

SECTION V – PROPOSAL SUBMISSION REQUIREMENTS

The proposal should be submitted in the following format:

A. GENERAL INSTRUCTIONS. All proposals should be typewritten or prepared on a computer and have consecutively numbered pages, including any exhibits, charts, and/or other attachments. All proposals should adhere to the specified content and sequence of information described by this RFP. Proposals should be no longer than 5 pages, excluding resumes.

B. COVER LETTER. Provide a one-page cover letter on your letterhead that includes the address, voice and facsimile numbers, and e-mail address of the contact person or persons. List the name and title of each person authorized to represent the proposer in negotiations. Unless the proposer is an individual, all proposals must be signed with a firm/company/partnership/entity name and by a responsible officer or employee indicating that officer or employee's authorization to commit the proposer to the terms of the proposal. Obligations assumed by such signature must be fulfilled.

C. SPECIFIED CONTENT AND DETAILED SEQUENCE OF INFORMATION IN THE RFP. Each proposal should include sections addressing the following information in the order shown in the following section. The proposer should be sure to include all information that it feels will enable the Work Group to make a decision. Failure of the proposer to provide specific, detailed information may result in its proposal being rejected in favor of a sufficiently detailed proposal. Any necessary exhibits or other information, including information not specifically requested by this RFP but that you feel would be helpful, should be attached to the end of the proposal. The party submitting the materials should keep in mind the limitations on confidential information described in Section IV.

D. INFORMATION CONTAINED ON EACH PAGE

PAGE 1 Qualifications and Experience:

1) Provide a statement of qualifications for your organization, including an organization chart, a statement of the size of firm, a description of services provided by your organization, and a statement of the extent of experience/history providing the services requested by this RFP.
2) How many full-time employees (FTEs) do you plan to assign to this project if you are selected?
3) How many people in total are employed by your company? Delineate between employees and consultants.
4) If applicable, list the professional qualifications for each individual that would be assigned to provide services requested by this RFP, including date and 18 educational institutions of any applicable degrees, additional applicable training, and any professional certifications and/or licensing. In lieu of listing this information, you may submit a resume or curriculum vitae for each such individual if the resume/CV includes all the requested information.

PAGE 2 Service Model: This section describes your service model for meeting the services required by this RFP. Relevant considerations include the quality and feasibility of your approach to meeting these needs, the manner in which you plan to provide adequate staffing (including planning for absences and back-up coverage, training, background checks, and staff monitoring, etc.), and equipment or other resources provided by you (if applicable). Keep these considerations in mind as you respond to the following:

1) Describe how you will fulfill the needs of the Work Group described in this RFP.
2) Identify how you will meet all other aspects of the scope of work and related requirements stated above. List any items that you cannot provide.
3) Describe the measurements/metrics/deliverables/assessments that you will provide on at least a (monthly or quarterly) basis to allow the Work Group to assess the services you will provide.
4) Provide information on any other pertinent services, if any, that you will offer that will reduce costs for the Work Group.

PAGE 3 Customer Service

1) How will your services meet the needs of Work Group?
2) In the event of a routine problem, who is to be contacted within your organization?
3) In the event of the identification of a problem by the Work Group, describe how you will address such problems and the timeframe for addressing them.

PAGE 4 Cost Analysis and Budget for Primary Services:

1) Provide a detailed explanation for all costs associated with your providing the requested services if you are selected. The total costs should not exceed $150,000.
2) Provide hourly rate schedule.

PAGE 5 References:

1) List at least three business references for which you have recently provided similar services. Include contact names, titles, phone numbers and e-mail addresses for all references provided.
2) Provide at least three client/patient references, if applicable and appropriate, for whom you have provided more than occasional services. Include names, titles, email addresses and phone numbers for these individuals.

SECTION VI – ENCLOSURES

Attachment A1. Sacramento San Joaquin River Delta – Vicinity Map

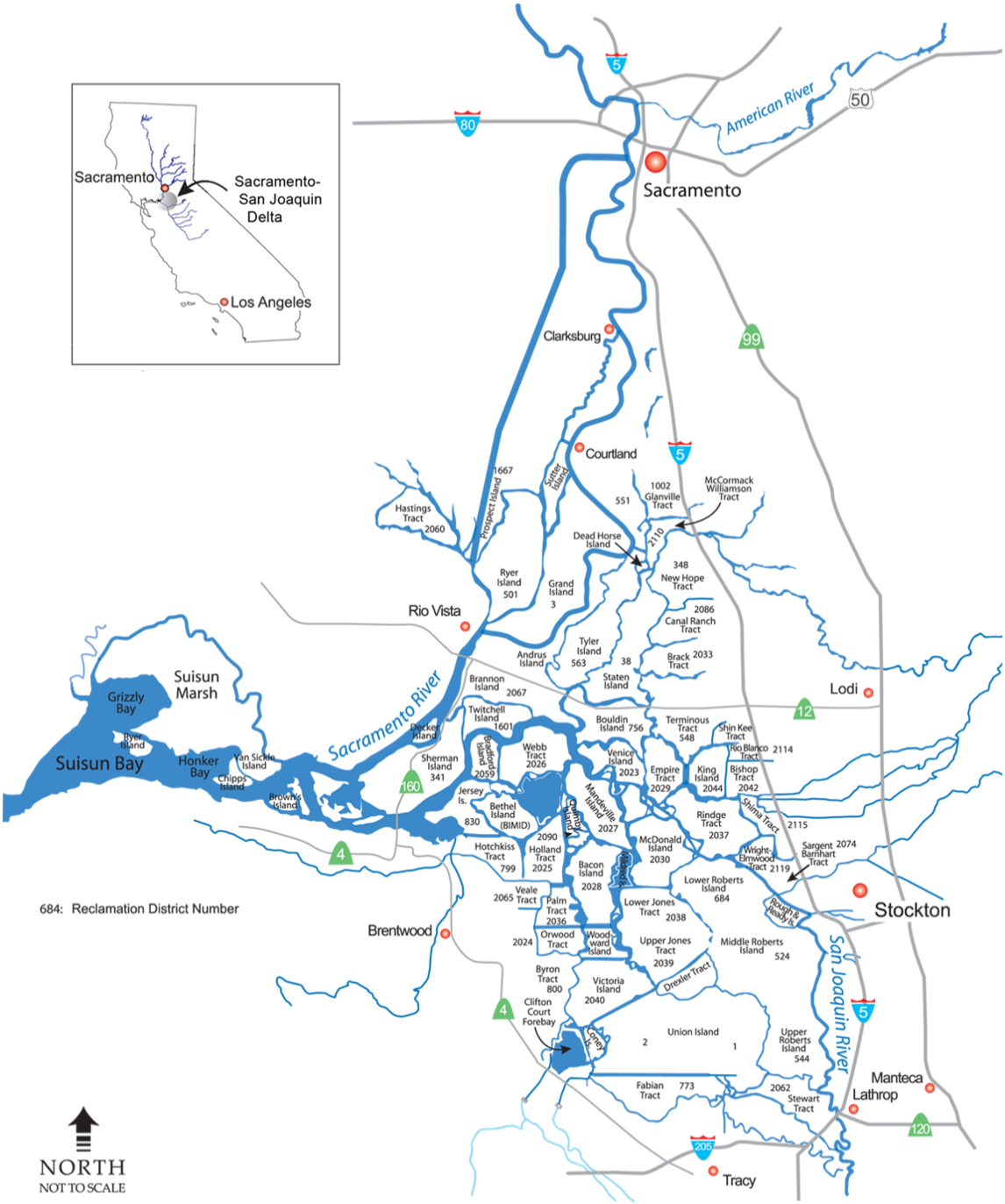
Attachment A2. South Delta – Vicinity Map

Attachment B. South Delta – Proposed Dredging Limits

Attachment C. Work Group Problem Statement

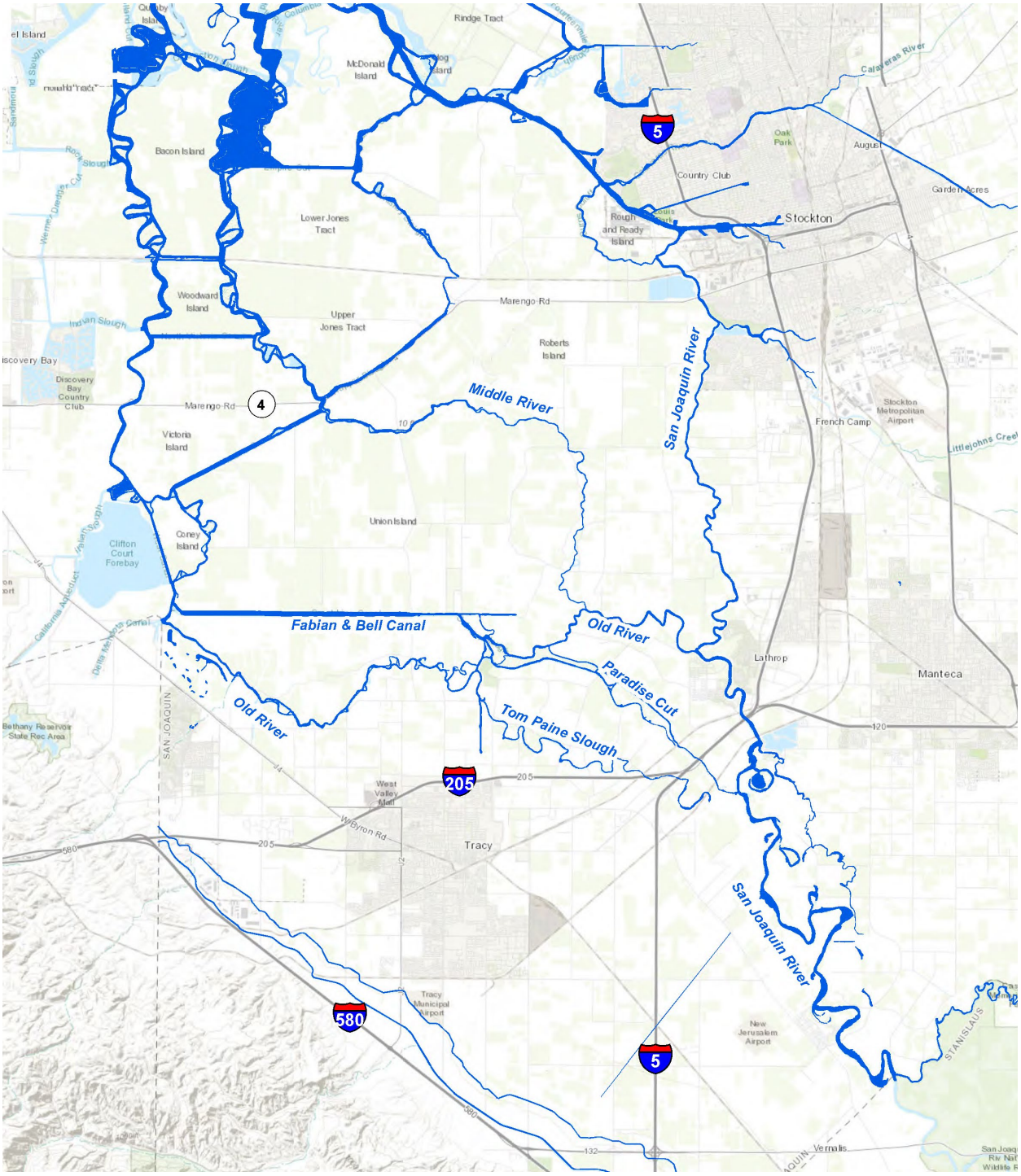
Attachment A1. Sacramento San Joaquin River Delta - Vicinity Map

To the Request for Proposals for the Development of a Planning Guide for the Planning of a Channel Depth Restoration Program for the South and Delta Channels



Attachment A2. South Delta - Vicinity Map

To the Request for Proposals for the Development of a Planning Guide for the Planning of a Channel Depth Restoration Program for the South and Delta Channels



Attachment B. South Delta – Proposed Dredging Limits

To the Request for Proposals for the Development of a Planning Guide for the Planning of a Channel Depth Restoration Program for the South and Delta Channels

SACRAMENTO SAN JOAQUIN RIVER DELTA CHANNEL RESTORATION & MAINTENANCE

Representatives of the above-identified federal agencies, state agencies, local agencies and non-governmental entities are interested in exploring a ***Delta Channel Restoration/Maintenance Program****.*

Problem Statement

Channels of the Sacramento-San Joaquin Delta, particularly those in the southern Delta, suffer from diminished capacity due to siltation. The siltation impacts:

- Net flow in the channels (reduced)
- Water temperature (increased)
- Dissolved oxygen (reduced)
- Salinity ("hot spot" buildup)
- Concentration of constituents of concern (increased)
- Toxic algae blooms (increased)
- Navigation (impeded)
- Flood response and levee maintenance (compromised)
- Invasive species (expanded)

Proposed Action

Through a transparent, inclusive, and collaborative process, develop and implement a comprehensive, long-term program to remove excess silt buildup from Delta channels, initially targeting those in the southern Delta. The program would identify the scope of the problem, criteria for silt removal operations (dredging), and mitigation measures. The objectives would be to: (1) engage permit agencies early and secure all necessary permits, (2) establish an adequate and consistent source of funding, (3) reestablish adequate channel depths, and 4) provide for

regular dredging that removes accumulating sediment to improve conditions for beneficial uses and the health of the Bay-Delta estuary.

Background Information

Impacts Generally: Siltation in the Delta channels has occurred and, left unaddressed, will choke more of the waterways with more severe consequences. The buildup of silt fundamentally alters the hydrodynamics of Delta channels to the detriment of all beneficial uses. As sediment accumulates, the amount of flow which can travel in and through the channels decreases. With decreased channel capacity, incoming flows (whether from riverine or tidal action) encounter greater resistance; thus, only diminished and restricted flows pass into and through the channels, impairing all beneficial uses and the overall health of the Bay-Delta estuary.

Aquatic Weeds: Current conditions in some occluded Delta channels are precluding many function like conveyance, recreation, and transportation because of a combination of reduced channel depths and aquatic invasive weeds. Further, sediment deposition makes many channels shallower, shifting the invasive aquatic weed composition from floating aquatic vegetation (FAV) like water hyacinth to submerged aquatic weeds (SAV) like *egeria densa*. Although both SAV and FAV flourish in the nutrient rich Delta waters, FAV is both easier to remove and mechanical removal techniques can be employed. The use of mechanical removals for FAV eliminates the associated dissolved oxygen demand from the decomposition of dead biomass that settles to the channel bottom after treatment with herbicide. As invasive aquatic weeds proliferate the channel function impacts beneficial uses. Although the State Parks Division of Boating & Waterways mounts a permit-limited aquatic weed management program, channel occlusion inhibits access and with shallow channels allowing the proliferation of stubborn rooted SAV like *egeria densa* management of these invasive aquatic weeds becomes much more challenging. With restored channel depths management of invasive aquatic weeds would be more attainable and alternative methods to remove FAV including mobile mechanical harvesting and possibly fixed mechanical harvesting facilities may be possible with a greater proportion of FAV than SAV and better channel flows to allow downstream movement of FAV.

Ecosystem Impacts: Shallower channels constrict flow for habitat, increase temperatures and decrease dissolved oxygen in the water, all of which adversely affect fish and other water-dependent species. Reduced channel capacities also decrease assimilation and dilution of pollutants, such as salts and metals, and encourage the growth of harmful algae blooms.

Navigation Impacts: Reduced depth and increased aquatic weeds significantly reduce accessibility of Delta channels for commerce, recreation, emergency response, and marine construction, including water-based levee repairs.

Water Supply Impacts: For in-Delta water users, shallow channels impede diversions due to pumps' and siphons' inability to divert water without adequate depth. The silt deposition is not uniform so the siltation process can create mounds or channel features that block water from reaching areas that otherwise would have sufficient water elevation for agricultural diversion.

Also, because of the effect on hydrodynamics, water levels, and quality, the excess silt buildup generates avoidable and unnecessary friction among regulators, recreational interests, in-Delta water users, and the operators of the CVP and SWP, both of which depend on Delta channels to convey water for use in areas south of the Delta.

High Flow Events: Very high flows entering the Delta might have formerly been expected to flush accumulated sediment out of the area and improve channel capacity. This is no longer the case; recent high flows, like those that occurred in 2017 and 2019, actually increased sediment buildup in many South Delta channels. The fast-moving flows on the rivers bring heavy sediment loads which then settle out in the meandering and slow-moving Delta channels. Thus, the adverse effects of the diminished channel capacity are increasing, and high flow events contribute to, rather than solve, the problem.

Potential Uses of Dredge Material: Although dredge material is expected to improve levees by depositing the material on the land side of levees to form stability berms, other uses, such as supporting Delta restoration projects should be explored.