RECLAMATION DISTRICT 2092

REQUEST FOR QUALIFICATIONS
GRAYSON RIVERBEND PRESERVE FLOODPLAIN RESTORATION PROJECT
June 2021

Reclamation District 2092 (District) is seeking qualifications from habitat restoration professionals to complete project management, riparian restoration implementation, and monitoring of project progress. The qualified restoration project team will be selected based on their demonstrated and verifiable experience installing landscape scale habitat restoration projects; performing project management requirements including accounting, invoicing, and reporting for multi-million dollar grants and contracts; and performing highly specialized monitoring protocols including vegetation monitoring composed of composite UAV-borne data multispectral sensors and LiDAR to provide high resolution data on plant health and canopy structure, the characterization of floodplain and channel margin complexity through UAV imagery and UAV-borne LiDAR including ground-based real-time kinematic (RTK) mapping, water quality parameters such as dissolved oxygen, electrical conductivity, turbidity, and chlorophyll concentrations will be monitored on the EXO2 sonde to characterize changes in primary productivity in the river channel, and hydrologic monitoring to quantify floodplain inundation extent using a combination of UAV photography during flooding events and strategically deployed pressure transducers..

Introduction

Reclamation District 2092 began working with the California Department of Water Resources (DWR) Riverine Stewardship Program in 2018 to implement the Salmon Population Enhancement Program on RD 2092 lands at Dos Rios Ranch and Hidden Valley Dairy. In addition, RD 2092 has received several rounds of funding to contract with local agencies and organizations to produce the Mid-San Joaquin River Regional Flood Management Plan.

Through this long and beneficial partnership with DWR, RD 2092 has been able to direct funds to critical flood benefit projects and positively impact threatened and endangered species, including Chinook salmon. These twin objectives of creating flood solutions for the Middle San Joaquin Region and developing optimal conditions for migratory salmon pervades all of RD 2092's project work, including the opportunity available for bid at the Grayson Riverbend Preserve.

Grayson Riverbend Preserve was purchased in 2016 by River Partners, a 501(c)3 nonprofit organization with their San Joaquin Office located at Dos Rios Ranch. The 285-acre Grayson Riverbend Preserve lies due west of Dos Rios Ranch across the San Joaquin River, adjacent to the town of Grayson, CA. Since purchase by River Partners, the River Partners team has received funding from the Wildlife Conservation Board and California Department of Fish and Wildlife to complete the *Grayson Riverbend Preserve*

Habitat Restoration Plan. In 2020, RD 2092 applied to the RSP for funding to implement this agency-approved restoration design. With this Request for Qualifications, we are seeking a highly qualified habitat restoration firm to work with RD 2092 to implement the restoration plan in accordance with the grant terms set out by the DWR RSP.

The following scope of work briefly lays out what needs to be done to implement the Grayson Riverbend Preserve Restoration Project. The Grayson Riverbend Preserve Restoration Project will be completed no later than **December 31, 2024**.

Services

The Subcontractor shall perform management, coordination, and technical services related to the Grayson Riverbend Preserve Restoration Project. The work will be performed onsite at the Grayson Riverbend Preserve, adjacent to the San Joaquin River, the town of Grayson, CA, and the San Joaquin River National Wildlife Refuge (Figure 1). The following services will be required under this contract:

Task 1 – Management, Administration, and Coordination

Subtask 1A – Project Administration
The Subcontractor will perform all Project administration tasks necessary to manage this grant and oversee Project development, including the preparation of quarterly progress reports per Exhibit H and invoices, overseeing consultant and construction contracts, submitting GIS Project Boundary Files per Exhibit F, preparation of a final report for DWR's review and approval, and other administrative tasks. The Subcontractor will work with RD 2092 to prepare and execute a title restriction, easement, updated Notice of Unrecorded Grant Agreement, or other legal instrument that adequately describes the fish and floodplain habitat values and is recorded against the property or otherwise demonstrates that the property and habitat restoration thereon is protected in perpetuity. The Subcontractor will submit this for review and approval by DWR prior to commencing Project implementation as set forth in Task 3.

Subtask 1B – Agency Coordination and Community Engagement
The Subcontractor will coordinate with DWR and other agencies as needed to advance the Project goals and will convene meetings or calls with DWR and other agencies at key points to discuss the Project. The Subcontractor shall take notes at these meetings and send them to the meeting's attendees. Agency coordination and community engagement tasks will include:

- Development and implementation of a simple community engagement plan to invite the Grayson community to assist with long-term stewardship of Project enhancements at the Project site.
- Coordination with Stanislaus County and other local planning forums to inform them about the Project and encourage sustainable practices in the area.

- Coordination with the U.S. Fish and Wildlife Service (USFWS) to transfer title of the property for long-term conservation and management by USFWS.
- Coordinate with permitting agencies regarding potential design refinements (Task 2) to maximize benefits of the project to native fish.
- Respond to written requests from DWR.

Subtask 1C – Construction Site Acknowledgement Sign
The Subcontractor will work with RD 2092 to develop a sign acknowledging DWR support for this project. The Subcontractor will submit a PDF file of the sign to DWR for review and approval prior to fabrication and installation. The sign will be installed at the Project site or other place that maximizes exposure to the public and is approved by DWR.

Task 1 Deliverables
- Invoices monthly and no less than quarterly
- Quarterly Progress Reports
- GIS Project Boundary Files
- Final Report
- Subcontractor contracts
- Easement, title restriction, or other legal instrument
- Meeting agendas, presentations, and notes
- Draft construction site sign acknowledging funder and funding source
- PDF of the draft and final acknowledgement sign

Task 2 – Plan, Design and Permit Enhancement Activities

The Subcontractor will retain the professional services to evaluate potential opportunities to enhance the Restoration Plan to maximize benefits for native fish. The Subcontractor will contract with an engineering firm and consult with subject matter experts in fish biology and geomorphology to complete this task.

Subtask 2A – Hydraulic Modeling and Habitat Analyses
The Subcontractor will retain an engineering firm to perform hydraulic modeling analyses. The firm will use an existing 2D hydraulic model(s) to inform design of the enhancement activities in a manner that maximizes the areas of suitable species-specific habitat type. The Subcontractor will consult with a fish biologist and use information from the Central Valley Flood Protection Conservation Strategy and other sources to inform habitat criteria for each target species to use in modeling.

Subtask 2B – Design replacement for culvert with fish friendly structure
With assistance from an engineering firm, the Subcontractor will oversee a proof-of-concept analyses to determine whether it is possible to use an operable water control structure to increase the frequency and duration of floodplain inundation for native fish. The engineering firm will use the 2D hydraulic model and the Salmon Habitat Quantification Tool to quantify increases in frequency or duration of inundation that would be possible with an operable

water control structure compared to a natural bottom box culvert(s), and will include an evaluation of their sustainability and maintenance costs. The Subcontractor will consult with a qualified fish biologist throughout the design process.

1. Preliminary Design: Based on the results of the proof-of-concept analysis and associated review by the fishery agencies and approval from DWR to proceed, the Subcontractor will conduct a site survey (topography, etc.) and developing a 30% preliminary design for either an operable water control structure or a passive, fish friendly road crossing [i.e. box culvert(s)]. The Subcontractor will not pursue design of an operable water control structure without first consulting the CDFW, USFWS, and the National Marine Fisheries Service (NMFS); and obtaining DWR's approval. The Subcontractor will consult with a fish biologist and seek review from DWR and the permitting agencies before directing the engineering firm to complete 65% design(s).

2. 65 Percent Design: The 65 percent design will include everything that is required to enter the various permitting processes, including a project description and plan sheets of existing conditions, all Project components and their dimensions and elevations, grading, construction staging areas, access routes, best management practices, and, in the case of an operable structure, an operation plan.

3. 90 Percent Design: The Subcontractor will incorporate timely comments from DWR and other agencies on the 65 percent design and add detail to the 65% design to develop 90% designs, draft specifications, and draft construction bid items.

4. 100 Percent Design: The Subcontractor will take each 90% design and incorporate comments received from DWR and other agencies to develop 100% designs consisting of the following:
   - Final stamped and signed drawings
   - Final technical specifications
   - Final list of bid items
   - Final estimate of anticipated construction costs
   - Proposed construction schedule (noting required construction sequencing to meet permitting restrictions, specifically related to in-channel work)

Subtask 2C – Enhancement Activities

The Subcontractor will retain a team to identify and evaluate potential fish habitat improvements that can be incorporated into the Project within the implementation budget as well as potential larger scale enhancement activities including removal of sediment at the confluence of Laird Slough and the relict San Joaquin River channel that could be designed and implemented after the start of Plan implementation. The Subcontractor will consult with a fisheries biologist and geomorphologist to identify opportunities and describe the analysis necessary to evaluate the: 1) relative potential benefits to native fishes, and 2) the long-term sustainability of the enhancement's opportunities. The Subcontractor will recommend a

suite of enhancement opportunities to evaluate further based on their feasibility to improve fish habitat quality and quantity for DWR's consideration.

Based on a mutual agreement to move forward with recommended larger enhancement activities, the Subcontractor will develop a work plan and budget for evaluating, designing, and permitting them including any surveys that may be necessary for the design and permitting process. The Subcontractor will consider land tenure, budget constraints, permitting effort, and other factors to determine whether to implement one or more of the enhancement activities and develop design documents, if necessary, to permit implementation.

Subtask 2D – Basis of Design Report
The Subcontractor will submit a Basis of Design Report for the enhancement activities, which provides the details of the design process and describes the primary thought processes behind design decisions. This report will also provide the Project background a detailed description of the enhancement activities; design goals, objectives, assumptions, and constraints; Project performance success metrics; a discussion of the decision making process; design considerations and criteria; hydraulic modeling results; critical engineering calculations; cost estimates; schedule; design features and materials used; how the designs meet Project goals and objectives; construction techniques and sequencing; and other items as needed.

Subtask 2E – Permitting and Environmental Compliance
The Subcontractor will submit a Streambed Alteration Notification for removing the two culverts described in the restoration Plan and obtain any other permits that may be necessary to implement the enhancement activities. If any of the selected enhancement activities is not covered by the existing CEQA analysis, the Subcontractor will complete whatever CEQA documents are necessary to implement the Project.

Task 2 Deliverables

- Design documents: preliminary, 65%, 90%, and 100% design plans for water control structure or fish friendly road crossing and any enhancement activities chosen.
- Technical specifications
- List of construction bid items
- Construction cost estimates and proposed schedules
- Basis of Design report
- Copies of permit applications (if requested)
- Copy of all permits (1600 CDFW, Encroachment Permit from CVFPB, grading permit, etc.)

Task 3 – Project Implementation

The Subcontractor will retain a qualified restoration contractor with experience implementing similar projects in the Central Valley to complete all the activities under this task.

Subtask 3A – Earthwork and Topography Development

The Subcontractor will perform or hire to complete the following earthwork activities necessary to implement the Project:

- Stubble and or finish disking of up to 170 acres of former agricultural ground.
- Regrade and develop microtopography on the former agricultural ground to reduce potential for fish stranding.
- Remove and/or degrade up to 1,000 feet of levee as described in restoration Plan.

Subtask 3B – Planting and Canopy Development

The Subcontractor will complete or hire to complete the following revegetation, maintenance, and adaptive management activities necessary to implement the Project:

- Obtain plant material from locally sourced seed collected on-site or within 50 miles of the site.
- Preparation of planting rows and seed beds for understory installation and maintenance.
- Design and installation of an irrigation infrastructure to support canopy development and modification to existing irrigation infrastructure.
- Planting of woody vegetation using planting tile system designed to support certain wildlife by planting species in a mosaic that will benefit forage and nesting patterns, limit the potential for invasive plant species, and create allochthonous food web resources for native fish. This includes the installation of approximately 25,000 native potted stock and cuttings, including fourteen riparian tree species (12 genera) and 8 shrub species (8 genera) and up to 16 herbaceous species to be installed at the Project site including during planting maintenance.
- Perform maintenance of the Project site consistent with the approved Monitoring and Maintenance Plan (Task 4), which includes weed control (e.g., herbicide application, hand-removal techniques, and mowing) and removal on 285 acres of floodplain, plant replacement, irrigation system repair, and other maintenance as needed.
- Perform adaptive management at the Project site consistent with the approved Monitoring and Maintenance Plan.

Subtask 3C – Facilities Modification, Removal, and Installation

The Subcontractor will perform or hire to complete the following facilities modification activities necessary to implement the Project:

- Removal of two existing culverts to restore floodplain connectivity and remove fish stranding hazards.
- Installation of a specialized water control structure (if deemed necessary and approved by DWR) or a fish friendly road crossing [i.e., natural bottom box culvert(s)], to prolong inundation events on field 4 while allowing volitional access and egress for native fishes.

Task 3 Deliverables

- As-built report including revegetation activities, grading activities, design plans, and facility modification activities.
- Operation and Maintenance Manuals (for operational facilities).
- Draft sign design deliverables for DWR review and approval.
- Photograph of installed grant acknowledgement sign.

Task 4 – Project Monitoring

Subtask 4A – Monitoring and Maintenance Plan

The Subcontractor will oversee development and implementation of a Draft Monitoring and Maintenance Plan consistent with Exhibit D for DWR's review and comment. The Subcontractor will incorporate DWR's comments into a Final Monitoring and Maintenance Plan for DWR's review and approval prior to the start of implementation.

Subtask 4B – Monitoring

The Subcontractor will retain a team to monitor the Project to satisfy Project and permit requirements, assess Project performance metrics, and ensure the sustainability of Project performance in accordance with the approved Monitoring and Maintenance Plan.

Subtask 4C – Annual Monitoring Reports

The Subcontractor will submit a Draft 1st Annual Monitoring Report per the approved Monitoring and Maintenance Plan and submit it to DWR within 90 days after the completion of the first year of post-planting monitoring for comments from DWR. The Subcontractor will make revisions and submit the 1st Annual Monitoring Report to DWR. The Subcontractor will submit subsequent Annual Monitoring Reports based on the 1st Annual Monitoring Report on an annual basis during the term of this agreement. The Subcontractor will submit subsequent monitoring reports for DWR's files if available.

Task 4 Deliverables

- Draft Monitoring and Maintenance Plan (submit within 30 days of contract execution)
- Final Monitoring and Maintenance Plan (submit by September 15)
- Draft and Final 1st Annual Monitoring Reports
- Final Monitoring Report (at close of grant period if not the 1st Report)
- Subsequent Annual Monitoring Reports (if available)

Submittal Instructions

Please prepare a Statement of Qualifications (not to exceed 20 pages all inclusive) including the following items:

1. Organizational background for prime consultant and any proposed sub-consultants
2. Key Personnel: one-page resume for each key consultant, organizational chart for the proposed team
3. Project Approach: in addition to describing how your team will complete the Scope of Work outlined above, please provide a brief (no more than 3 pages) description of key considerations in your team's project approach that will assist RD 2092 and key stakeholders in accomplishing the goals of the Grayson Riverbend Preserve Restoration Project.
4. Example Projects: provide project summaries for 3 example projects that illustrate your team's abilities to complete the project as described, and your team's familiarity with the regional geography and flood management, water supply and environmental quality concerns, as well as knowledge of technical monitoring protocols. Include client contact information, total project budget, key collaborators, and pertinent outcomes.

Please submit the full SOQ in one electronic file via email by **12 pm, Wednesday, June 30, 2021**. Include "Grayson Riverbend Preserve Restoration Project" in the subject header of your email.

Submit to:
Maggie Blankinship, Secretary RD 2092, reclamationdistrict2092@gmail.com