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TRUCKEE RIVER WATERSHED COUNCIL

June 3, 2020

REQUEST FOR PROPOSAL

TRUCKEE RIVER WILDLIFE AREA RESTORATION DESIGN: BOCA AND POLARIS UNITS

The Truckee River Watershed Council (TRWC) seeks to hire a consultant to complete restoration design for two river and floodplain restoration projects along the mainstem of the Truckee River. The project scope includes preparation of project concept design, design basis memo, 60%, 90%, and final design.

Consulting services to encompass all labor, materials, equipment, facilities, and incidentals required for completion of the scope of work.

The consulting firm shall have demonstrated experience in geomorphic analysis as well as experience with designing and implementing restoration projects. The consulting firm must be willing to work with the Truckee River Watershed Council and the project partners which include California Department of Fish and Wildlife, Tahoe-Truckee Sanitation Agency, the Town of Truckee, Trout Unlimited, and others.

PROPOSAL DEADLINE

Proposals must be received electronically (.pdf format) by 5PM on July 1, 2020.

PROPOSAL SUBMISSION

Submit proposals electronically (.pdf format) to: bchristman@truckeeriverwc.org

Please direct all questions to Beth Christman at TRWC, (530) 550-8760 x 1#.

RESPONDING TO MULTIPLE RFPS

In 2020, TRWC will release several Requests For Proposals (RFP) and Requests For Bids (RFB) for restoration design, construction, environmental compliance, permit assistance, and the like. We appreciate that some firms may wish to respond to multiple RFPs & RFBs. To help with proposal and bid preparation, we offer the following:

1. **Responding to Multiple RFPs/RFBs.** Firms may respond to multiple RFPs and RFBs. In the vast majority of our projects, a firm will not be prevented from bidding on future work if they participate in current work. In the rare case where this prohibition exists, we will state the prohibition in the current RFP/RFB.

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2. Lead Firm vs. Subcontracted Firm. We understand and accept a given firm may be the lead in one response and a subcontractor in another response.

3. Respond Uniquely to Each RFP/RFB. Each of our projects has a unique combination of partners, stakeholders, funders, constraints, opportunities, and timelines. Due to the characteristics of each project, we purposely release separate RFPs/RFBs. Firms must submit a response to each RFP or RFB to be considered. While we appreciate that a firm might be able to offer efficiencies if we combined projects, the unique blend of characteristics of each project prevent us from combining projects more than has already been done.

4. Repeating Information Across Multiple Responses. We understand and accept that information about the firm, its staff, past work, references, work approach, and the like may be repeated, perhaps even word for word, across multiple responses.

INTRODUCTION AND BACKGROUND

Project Overview

The Truckee River Wildlife Area (TRWA) Restoration Project addresses multiple critical needs on the Truckee River: lack of floodplain connectivity, chronic erosion, lack of riparian habitat, and absence of diverse in-stream habitat. This phase of the project includes restoration design for two sites: Boca and Polaris (Attachment 1).

These two sites were identified through a watershed assessment completed by TRWC, focusing on the Truckee River within the Town of Truckee (Attachment 2). The assessment identified 13 potential restoration projects that were reviewed by a technical advisory committee (TAC) of public landowners within the assessment area. The TAC selected three high priority project for their potential to improve water quality, habitat, and hydrologic function, which included the Boca and Polaris sites.

The Boca site is located within the Boca Unit of the TRWA (Attachment 1). At this location, a spur railroad constructed in the 1870's runs parallel to the Truckee River and blocks 11 acres of floodplain as the Truckee River makes an oxbow turn and directs high energy flows into an eroding downstream bank. Present day recreational and vehicle access across the floodplain exacerbate the impacts of these historic impacts.

The Polaris site is located in the Polaris unit of the TRWA and is the location of an historic Tahoe Ice Company dam on the Truckee River, constructed in 1886 (Attachment 1). The 75 foot wide dam diverted flows into a 30-acre ice pond on the right bank of the floodplain. The floodplain is still disconnected and the river supports limited fish habitat due to the effects of the historic impoundment on channel substrate. The river banks are unstable and contribute sediment to the Truckee River and the riparian communities are reduced.

Restoration goals at both sites include reducing sediment delivery to the Truckee River (which is 303(d) listed for sediment), re-establishing floodplain connectivity, and improving instream and riparian habitat. Attachment 1 contains the preliminary design ideas.

The current phase of the project for this RFP includes:

- Conceptual restoration design
- Design basis memo
- Intermediate (60%) restoration design
- Draft final (90%) restoration design
- Final (100%) restoration design
- Permit assistance

Future phases of the project, not included in this RFP, include:

- Environmental Compliance
- Construction
- Post-project monitoring

Existing Studies and Previous Work

Truckee River Revitalization Assessment. Available at: https://www.truckeeriverwc.org/wp-content/uploads/2019/03/217149-Truckee-River-Assessment_181217_Final.pdf

WORK TO BE COMPLETED

Task 1. Meetings

Four meetings are expected with TRWC staff and/or stakeholders. Meetings will include a project launch and scoping meeting with TRWC and project partners, conceptual design review, intermediate design review, and final design review. Consultant will prepare and present technical meeting materials in coordination with TRWC.

Task 2. Boca and Polaris Supplemental Data Collection

Some baseline data were collected in conjunction with the Truckee River Revitalization Assessment (TRRA). Additional data are likely to be needed to complete the restoration designs. Relevant existing data from the TRRA and supplemental field data collected by the Contractor will be compiled into a technical design basis memo (Task 3). Types of data needed to support design development are expected to include historic aerial photos, existing stream reach mapping, supplemental surveys and mapping, and biologic (vegetation, wildlife) and hydrologic data as appropriate.

Task 3. Boca and Polaris Conceptual Restoration Design & Design Basis Memo

Building on the results of Task 2 and the TRRA, produce restoration design concepts for each site, including alternative approaches as appropriate. The Design Basis

Memo will accompany the conceptual plans. It will incorporate the technical data generated from Task 2 and include discussion of the limiting factors for restoration, partner considerations, and restoration feasibility for identified alternatives. Working with TRWC and project partners, identify preferred conceptual restoration design alternative for each site.

Task 4. Boca and Polaris Intermediate Restoration (60%) Design

Develop design documents, including mapping, collecting any additional data required to advance the conceptual design to intermediate design, and analysis of technical considerations such as site grading, access, hauling, soil bioengineering, revegetation, costs, environmental impacts, and permitting. Create intermediate (60%) restoration design plans and detailed design drawings for each site based on the preferred conceptual restoration design alternatives. Prepare design drawings including schematic level plans, section and profile drawings, and written descriptions of the design and applicable grading and planting plans and other information needed to complete permit applications.

Task 5. Boca and Polaris Draft Final (90%) and Final (100%) Restoration Designs
Based on Intermediate Designs developed under Task 4 and incorporating partner feedback, advance design plans to draft final stage (90%). The draft final design will include additional details for construction, erosion and sediment control, and final staging and access plan. Once reviewed by project partners, prepare final restoration designs for both sites (100%).

Task 6. Permit Assistance.

Assist TRWC with permit preparation including generating suitable figures to include in application. Work with TRWC to calculate cut and fill quantities and areas of impact required for permit applications. Note: this current phase of work does not include development of a Stormwater Pollution Prevention Plan (SWPPP).

Task 7. Coordination and Reporting.

Consultant will coordinate with TRWC staff regarding the status of the project, as well as design issues. Consultant will produce quarterly invoices and progress reports and submit to TRWC by the 25th of the last month of the calendar quarter (March 25th, June 25th, Sept. 25th, and December 20th). Copies of all survey or other data collected and analyses will be provided to TRWC in electronic form (Word, Excel, or Adobe pdf).

Deliverables

- Scoping meeting with TRWC and project stakeholders;
- Participation in and presentation to three additional meetings convened by TRWC;
- Conceptual plans for Boca and Polaris restoration;
- Design basis memo for Boca and Polaris restoration, incorporating data collected under Task 2;

- Intermediate (60%) plans for Boca and Polaris restoration;
- Draft final (90%) plans for Boca and Polaris restoration;
- Final (100%) plans for Boca and Polaris restoration;
- Estimates of cut and fill quantities and area of disturbance by habitat type needed for permitting;
- Figures to include in permit applications;
- Digital copies of all photographs, data collection and analysis, and design/GIS-based survey data in electronic form;
- Quarterly progress reports and invoices.

Timeline

Task	Deadline
Proposals due	July 1, 2020
Interviews	July 9 - 10, 2020
Contract award	July 17, 2020
Project launch meeting – finalize scope	July 31, 2020
Conceptual design plans	March 1, 2021
Design basis memo	March 1, 2021
Meeting to review conceptual design alternatives	March 31, 2021
Intermediate (60%) design plan	September 1, 2021
Meeting to review 60% design plan	September 15, 2021
Draft final 90% design plan	December 31, 2021
Meeting to review 90% design plan	January 15, 2022
Final 100% design plan	February 15, 2022
Permit assistance	June 30, 2022
Quarterly Progress Reports & Invoices	Mar 25, June 25, Sept 25, Dec 20

Budget

The maximum budget is $109,000. Cost effectiveness will be considered during proposal evaluation.

PROPOSAL FORMAT

There is no page limit, but ***20 pages or less is preferred***. Concise writing and graphics are greatly appreciated.

Detailed Work Plan

Scope: Define specifically the scope of services to be provided to complete the above described analyses and design. The contractor may elect to suggest modifications to the scope or schedule above. Include estimated time schedule of the major tasks to be accomplished.

Objectives: Identify and discuss briefly the specific objectives you will achieve through the conduct of the services within the project, as defined and specified above.

Detailed work approach: Discuss in detail each of the activities you will conduct to achieve the scope and objectives defined and identified above. Please specifically address work components outlined in the "proposed project" section above, and elaborate as needed. Modifications to the components listed in the work statement can be included. Technical merit and details of work proposed will be heavily weighted in proposal evaluation.

Cost Proposal

Personnel costs: Itemize by task to show the following (include subcontractors):

- Name and title
- Estimated hours per staff person, per task
- Rate per hour
- Total cost per task

Support costs: supplies, printing, postage, etc.

Transportation: Travel expenses directly related to the contract services. Mileage must be charged at the current IRS rate.

Other costs: Show costs and expenses that do not fall within the other categories.

General overhead and administrative charges not allowed.

Background and References

Include experience in geomorphic watershed assessment and restoration project design with an emphasis on stream and floodplain restoration. List the specific projects that demonstrate this experience. Include projects that have been successfully implemented including discussion of performance.

Include experience working with diverse partner and stakeholder groups.

Include a duty statement and resume of each key person to be assigned to the project, by name and title, with experience in pertinent fields. If subcontractors will be used, include a description of those persons or firms including a description of their qualifications.

Provide a minimum of three references for similar projects, with name and phone number.

CONTRACT TERMS AND AGREEMENT

Once a consultant is selected, TRWC will negotiate a satisfactory contract and reasonable fee for the services needed. In the event a satisfactory agreement cannot be negotiated with the top ranked qualified firm, the negotiations shall be terminated with the firm and the negotiations continued with the remaining qualified firms in order of their ranking.

When the contract for Truckee River Wildlife Area Design is awarded, these terms will apply.

Payments

Progress payments for services performed shall be made in arrears upon receipt and approval of contractor's detailed invoices indicating costs and obligations incurred and services rendered to date. Payments will be made quarterly.

Changes in Personnel

Contractor's key personnel as indicated in contractor's response to this RFP may not be substituted without the written consent of the TRWC Project Manager. This will be monitored and enforced by TRWC.

Termination for Convenience

TRWC may, at its option, terminate the contract at any time upon thirty (30) day written notice to contractor. Contractor may submit written request to terminate only if TRWC should substantially fail to perform its responsibilities as provided in the contract. If terminated, contractor will be compensated for costs incurred up to the time of the termination notice for work satisfactorily completed. In no event shall payment of such costs exceed the contract price.

Unique Billing of Work

All work produced for the project will be original for TRWC, and will not have been billed to other clients previously. Work produced under the contract with TRWC will be billed only to the contract with TRWC and not to other clients or funders.

Liability Insurance

Contractor shall provide before entering the premises and shall maintain in force during the term of this contract the following liability insurance:

- General Liability
- Motor Vehicle Liability

Each policy of liability insurance described above shall be in an amount of not less than one million dollars ($1,000,000) per occurrence for bodily injury and property damages combined.

COVID-19 Plan and Plan Updates

Contractor shall submit a COVID-19 response plan within a week after contract signature. Contractor shall submit a revised COVID-19 response plan within a week after subsequent meaningful changes from the California Department of Public Health.

Quarterly Progress Reports

Contractor to provide quarterly progress reports and meet with TRWC representatives upon reasonable notice to allow TRWC to determine if the contract is on the right track, whether the project is on schedule, provide communication of interim findings, and afford occasions for airing difficulties or special problems encountered so that remedies can be developed. All reports will be in Microsoft Word or Adobe pdf format. Data shall be provided in Microsoft Excel files as appropriate.

Quarterly Invoicing will include detail of task, delineated staff by name, hours, rate, total for the period, and remaining amount. Reports will be submitted in Microsoft Word/Excel or Adobe.

Attachments:

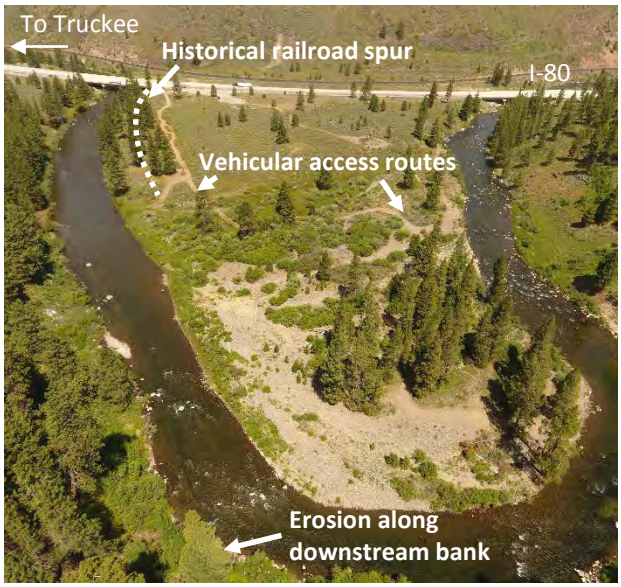
1. Boca and Polaris project concepts
2. Truckee River Revitalization Assessment, link: https://www.truckeeriverwc.org/wp-content/uploads/2019/03/217149-Truckee-River-Assessment_181217_Final.pdf

TRUCKEE RIVER WILDLIFE AREA RESTORATION PROJECT: BOCA UNIT SITE

Problem: Erosion along banks, sediment from vehicular access and loss of floodplain function
Project: Aquatic habitat, floodplain and public access improvements
Location: CDFW Boca Unit along east bound I-80 between second and third bridge (Horner's Corner) 39.373297, -120.104486

General Description of problem:
The CDFW Boca unit site contains an historical railroad spur from the Nevada Ice Company and is currently a popular fishing location along the Truckee River. The railroad spur appears to have disconnected the floodplain from the river and confined the river to a straight channel that has exacerbated erosion on the downstream bend. Additionally, vehicular access has compacted soils on river bars and limiting vegetation growth. Runoff from access routes conveys sediment directly to the Truckee River.

Goal(s)	Sources of degradation	Objectives to achieve goal(s)
Reduce excess sediment delivery to the Truckee River and re-establish floodplain function	I-80; Historical railroad spur and vehicular access	Re-establish floodplain, remove fill, and control vehicular access



CDFW River Bend Project Site

Restoration or Management Approach:
Historical impacts associated with the spur railroad grade and modern impacts associated with vehicular access could be addressed by removing fill along the left river bank and limiting vehicle access throughout the inside of the river bend. Removing the fill would reintroduce flows to the historical floodplain surface, slowing flows and possibly reducing the potential for erosion along the downstream river bank. A parking and river access area could be established to include sufficient stormwater treatment and boulder bollards could be used to limit disturbance to the floodplain and riparian zone. It should be noted that this is a popular location for fishing access and vehicle access to freedom campsites could be affected.

Cost Estimate:

Less than $10K
$10K-$100K
$100K-$500K
$500K-$2M
$2M +

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TRUCKEE RIVER WILDLIFE AREA RESTORATION PROJECT: BOCA UNIT SITE

Target Conditions/Success Criteria:

- Reduced sediment to Truckee River.
- Increased floodplain area.
- Increased floodplain inundation frequency.

Implementation Timeframe

- Conceptual design (3-5 weeks)
- 60% design (8-10 weeks)
- 90% design (8-10 weeks)
- Permitting (3-6 months)
- Implementation (4-6 weeks)
- Project monitoring (3-5 years)

Monitoring recommendations:

- Repeat cross-sectional channel surveys.
- Stage recorders.
- Vegetation monitoring.

Restoration Options

- Remove fill or create breach in railroad spur and if needed generate inset floodplain
- Limit vehicular access along floodplain and provide designated parking area.
- Revegetate and stabilize compacted areas.

Constraints

- Historical site preservation.
- Potential channel cut-off across floodplain and meander abandonment.

Parking area off I-80

Possible historical railroad spur artifacts

Railroad spur grade channelizes river and limits floodplain inundation

Vehicular access routes compacted soils and divert runoff to the Truckee River

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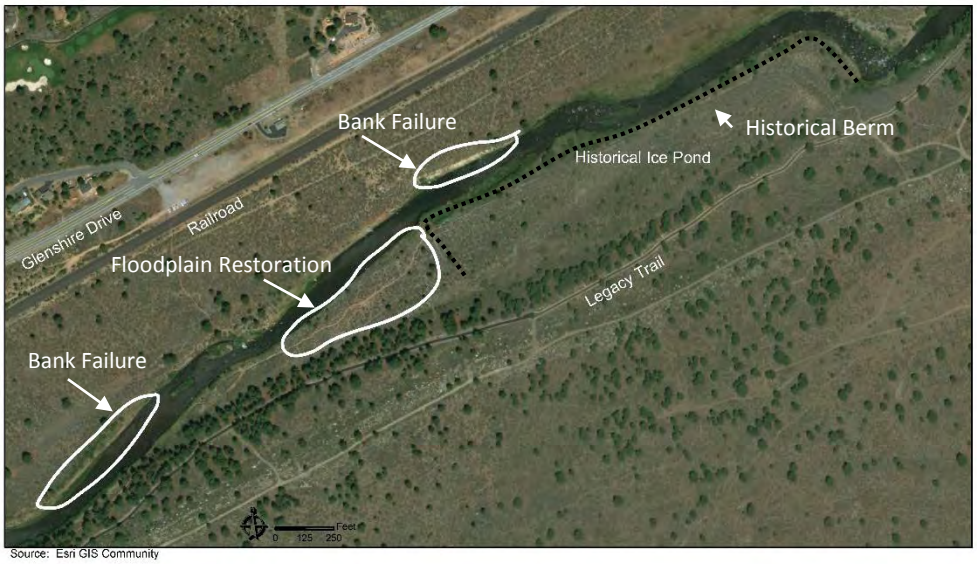
TRUCKEE RIVER WILDLIFE AREA RESTORATION PROJECT: POLARIS UNIT SITE

Problem: Bank failure and historical dam impacts
Project: Bank stabilization and floodplain habitat enhancement
Location: North and south banks of Truckee River at the location of the historical Tahoe Ice Company Dam 39.336736, -120.140289

General Description of problem:
The Tahoe Ice Company was in operation at this location from 1886 to 1919 with a dam and diversion works to direct flows into a shallow ponding area for ice harvesting. The dam disrupted riparian vegetation, altered flow paths and limited floodplain area. Several sections along the left river bank are unstable, due to historical land uses, and appears to be a chronic source of sediment to the Truckee River.

Goal(s)	Sources of degradation	Objectives to achieve goal(s)
Reduce excess sediment delivery to Truckee River and enhance habitat	Bank failure and habitat reduction due to historical impacts	Bio-engineered bank stabilization and enhance or expand floodplain habitat.

Restoration or Management Approach:
The bank failure can be stabilized through bioengineering techniques, such as a willow mattress, log crib walls, or rock and rootwad toe protection. Bioengineering techniques can reduce erosion and enhance fish habitat within the River. Additional research and investigations should be conducted to further evaluate the impacts the Tahoe Ice Company Dam had on the river and habitat. The restoration approach may need to consider potential impacts to sensitive historical resources, and could include educational and interpretive opportunities.



Source: Esri GIS Community

Potential Restoration Site Boundaries

Cost Estimate:*

Less than $10K
$10K-$100K
$100K-$500K
$500K-$2M
$2M +

**Cost estimate will depend on area of habitat restored*

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TRUCKEE RIVER WILDLIFE AREA RESTORATION PROJECT: POLARIS UNIT SITE

Target Conditions/Success Criteria:

- Reduced sediment delivery to Truckee River.
- Increase floodplain area and improve habitat.

Implementation Timeframe

- Background research on historical site and site preservation requirements (2-3 months) when accessible
- 60% design (8-10 weeks)
- 90% design (6-8 weeks)
- Permitting (3-6 months)
- Implementation (10-14 weeks)
- Project monitoring (3-5 years)

Monitoring recommendations:

- Repeat cross-sectional channel surveys.
- Observations of high-water marks and peak floodplain conditions.
- Measure sediment deposition on floodplain.

Phasing or Order of Implementation:

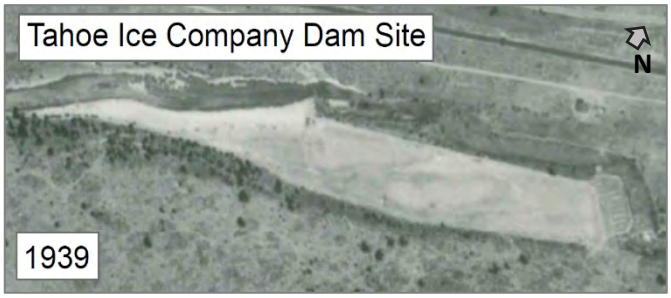
Projects could be separated into three phases with bank repairs occurring separately from the floodplain restoration site.

Habitat/Floodplain Restoration Options

- Enhance floodplain for increased frequency of inundation.
- Native plant revegetation and weed removal.
- Removal or breaching of historical dam berms and other flow impeding structures.

Constraints

- Historical site preservation.
- Existing informal trail preservation or relocation.

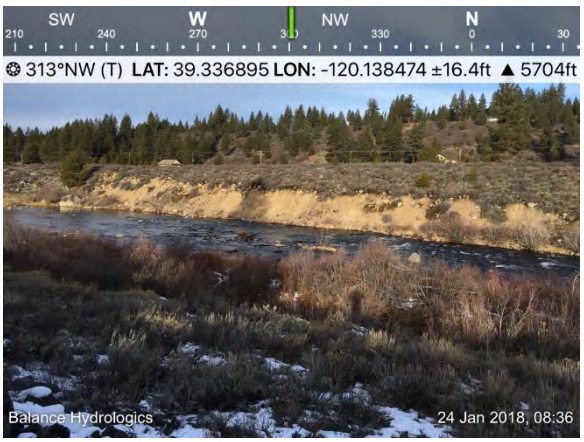


Historical aerial image of the ice pond site showing the extent of disturbance (photo credit: USFS)

Bank Stabilization Bioengineering Options

- **Willow mattress:** Installation on layers of live cutting placed flat against the bank, using stakes and string to anchor in place. The cuttings are expected to root into the entire bank face and provide surface reinforcement to the soil (NRCS, 2007).
- **Large Debris:** Large debris structures are rocks and rootwads intended to provide habitat and stabilization, until woody riparian vegetation and stable bank slopes can be established.
- **Cribwall:** A hollow, boxlike structure of interlocking logs or timbers filled with rock, soil, and live cuttings, or rooted plants. The live cuttings or rooted plants are intended to develop roots and top growth and take over some or all of the structural functions of the logs .

Tahoe Ice Company dam across the Truckee River (1886-1919); looking northwestward upstream; (photo credit: Tom Macaulay Collection)



Bank failures could be stabilized to minimize chronic sources of sediment.

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