

TRUCKEE RIVER WATERSHED COUNCIL

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June 3, 2020

REQUEST FOR PROPOSAL

FOREST HEALTH ASSESSMENT: MIDDLE TRUCKEE RIVER WATERSHED

The Truckee River Watershed Council (TRWC) is requesting proposals for consulting services to conduct a Forest Health Assessment. The goal of the Forest Health Assessment is to conduct an inventory of existing conditions across a large-scale landscape, identify areas of disrupted natural functions, and identify restoration, management, and protection opportunities.

***Note:** this project will compile information to serve as a baseline for existing conditions and planned forest health restoration efforts in the Middle Truckee River watershed. This project is not expected to involve extensive modeling or analyses that comprise the scope and scale of Lake Tahoe West Partnership ([Website Link](#)) or the Tahoe Central Sierra Initiative ([Website Link](#)).

The scope of work is to compile relevant data and to prepare several reports (or sections of a single report) that address attributes and current conditions of forest and watershed land, threats to resilience, and opportunities/constraints of large-scale management actions that will result in greater resilience and restored forest/watershed health.

The consulting firm shall have demonstrated experience in forest and ecosystem management, forest ecology/restoration and fire ecology. The firm should be versed in stand/species identification, vegetative patterns and distribution, LIDAR, risk assessment and conditional mapping as related to forest health, watershed resiliency and specific management practices that are expected to attain maximum benefits for habitat, community safety and desired watershed conditions.

The consulting firm must be willing to work with TRWC and an array of public agency and private landowners with significant acreage of forested land.

PROPOSAL DEADLINE

Proposals must be received by 5pm June 29, 2020.

PROPOSAL SUBMISSION

Submit proposals electronically (.pdf format) to Eben Swain, Program Manager (eswain@truckeeriverwc.org).

REQUESTS FOR ADDITIONAL INFORMATION

Direct all questions to Eben Swain at TRWC, eswain@truckeeriverwc.org or (530) 550-8760 x 7#. All requests must be received by 5pm on June 17, 2020.

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.
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 Middle Truckee watershed – the area draining into the Middle Truckee River – covers approximately 435 square miles, or 285,000 acres of land, most of which is in California. The area includes the 35-mile stretch of river that runs northeast from Tahoe City to the California/Nevada state line.

The Middle Truckee watershed is made up of 27 sub-basins in three different California counties, including Placer, Nevada and Sierra, with a small portion (16%) of the watershed located in Washoe County in Nevada

A number of landowners manage large tracts of land in the Middle Truckee watershed including private owners, local special districts, and state and federal agencies. Most landowners have developed land use policies and guidelines related to protection of natural resources, planned management actions and opportunities for implementation of these actions.

The primary landowner in the region is the U.S. Forest Service (Tahoe National Forest), who manages land across roughly 50% of the Middle Truckee watershed. The Tahoe National Forest (TNF) receives management direction and guidance from the 2001 Sierra Nevada Forest Plan Amendment (SNFPA) that provides direction to the 11 National Forests in the Sierra Nevada. Subsequent regional revisions may be found in an updated 2004 Record of Decision (2004 ROD). Similar types of planning and guidance

documents exist for California State Parks, Tahoe Donner Association, and special districts.

Project Need

The past 100+ years of fire suppression in the Sierra Nevada have resulted in increased stand density, less fire frequency and greater fire severity. These conditions have caused significant impacts to terrestrial and aquatic ecosystem function and have changed the composition and structure of these important ecological functions. Significant catastrophic wildfires in the past decade have destroyed forest structure altered ecological functions and associated habitat and have decimated communities.

Current conditions indicate that the forests and habitat areas in the Middle Truckee watershed are likely not resilient to a variety of disturbances. Aquatic and terrestrial systems are in need of more intensive restoration efforts across the broader landscape and a scientific foundation needs to be established to assist with planning and implementation efforts that will result in a more resilient landscape.

The following characteristics need to be further examined (both spatially and temporally) to help guide management actions that will lead to greater forest and watershed resiliency:

- Higher fuel loading and a higher density of trees creates an ecosystem that is more susceptible to catastrophic fire and more vulnerable to drought and insects & disease.
- Higher tree density and the presence of mid-seral homogeneous forests mean that forest systems lack significant diversity and increases the likelihood of the vegetation being stressed for water in a changing climate, which in turn, leads to impacts on quantity and quality of wildlife habitat
- Meadow and riparian systems that typically hold water longer into the year are degraded leading to the in-ability to be able to provide adequate refugia for meadow species under future climate scenarios.
- Lower elevation forested areas are especially vulnerable to impacts associated with fire, drought, and climate change, which may threaten the developed communities that have been established within and around the forested boundaries

This assessment provides opportunity to spatially examine a large-scale landscape and to build upon existing data that will further define and delineate landownership, current conditions, constraints and opportunities, and will also identify priority areas where treatment may occur to maximize beneficial uses of forest health restoration activities. The assessment will also establish an important framework in which to develop messaging to specific target audiences and increase understanding of the need for action, while emphasizing the benefits of implementing forest health restoration practices across a broad expanse of public and private landownership.

Existing Data

Information on the Coordinated Watershed Management Strategy for the Middle Truckee River document and other watershed scale assessments may be found on TRWC's website - [Located here.](#)

This project falls within the existing boundary of the Tahoe Central Sierra Initiative (TCSI). Additional information on the operations and projects within the TCSI boundary can be [located here at the Sierra Nevada Conservancy's website.](#)

In 2018, the California Legislature produced a report detailing forest and watershed management practices, current conditions and a set of findings and recommendations for the entire state. It is expected that this report will have relevance the Middle Truckee River Forest Health Assessment. [The full report may be found here.](#)

The SNFPA and 2004 ROD noted above can be [located here on the USFS website.](#) Lidar imagery is also available from the Tahoe National Forest.

Several other Truckee Basin or Sierra-wide studies may also be relevant, including:

- Truckee River Water Fund Study (RIOS) model (TNC, 2017) - [Located here.](#)
- Lake Tahoe West Partnership - [Located here.](#)
- The Collaborative Forest Landscape Restoration (CFLR) Project that is being implemented in the American River portion of the Tahoe National Forest – [Additional information on the project is located here.](#)

Consultant will also be expected to incorporate relevant forest/watershed projects and planning efforts from the landowners within the project area.

WORK TO BE COMPLETED

Summary of Key Tasks

Consultant will compile data that details watershed attributes and existing conditions of forest and watershed health within the Middle Truckee watershed and will examine forest stand structure to define desirable conditions that are expected to increase resiliency and reduce risk to habitat, water quality, ecosystem functionality and community safety. Consultant will also define landownership boundaries and will detail opportunities and constraints for recommended restoration actions.

See Attachment 1 for project boundary map and area of interest.

The following tasks provide a complete scope of work.

- 1. Determine Resilience Indicators.** Consultant will identify landscape values and services (upland ecosystems, meadow/riparian ecosystems, aquatic ecosystems, etc.) relevant to the project area and will determine specific indicators of landscape resilience of these values to disturbance (fire, drought, insects/disease, climate change, etc.). Resilience indicators, disturbance elements and proposed analysis processes will be submitted to TRWC for review and approval prior to additional data compilation or analysis.

- 2. Create Landowner Matrix.** Identify and delineate (via GIS) all properties owned and managed by public or private entities that are greater than 2,500 acres. Document all areas where forest stand conditions are determined to be stable and healthy and all areas where restoration activities may be implemented to restore heterogeneity, improve wildlife habitat and reduce the likelihood of catastrophic wildfire.

 - Review and delineate areas that have been treated in the past five years as well as areas that are planned for treatment in the next five years.
 - As relevant, include comparisons to reference conditions indicative of undisturbed conditions should be included.
 - Develop potential treatment options based on landowner needs and established criteria (Fuels thinning – hand/mastication, prescribed fire, etc.)
- 3. Develop Watershed Attributes Report.** Forest structure and heterogeneity will be assessed and characterized using LIDAR-based measurements to determine desirable conditions for three beneficial resource objectives: a) resilience to disturbances; b) wildlife habitat; and c) hydrology. Data collection and analysis will be completed to generate a Watershed Attributes Report that describes the main natural and social history of the headwaters region. LIDAR imagery and field verification will be used to determine forest structure, stand density, proximity to sensitive areas (ie water supply).
- 4. Develop Existing Conditions Report.** Based on the Watershed Attributes report data analysis (including LIDAR imagery, GIS data and field verification) will be conducted to determine forest structure, stand density, proximity to sensitive areas (ie water supply). Analysis will also identify priority areas for recommended treatment implementation as well as identification of areas of “no treatment” (ie extensive granite landscape).
- 5. Complete Opportunities Report.** Develop a list of restoration, management, and protection recommendations. The list should include projects that are relevant and applicable to the landowner who will be expected to implement these projects and should span a minimum of a 5 year timeframe. For each project, the following information should be included: outcomes/results, restoration actions, relevant constraints to implementation, and budget range. The list should be prioritized by beneficial impact to forest/watershed health, habitat areas and associated resilience indicators. Project descriptions for the highest priority projects should be of sufficient detail to support grant applications for permitting and implementation.
- 6. Landowner Meetings.** TRWC will assemble a stakeholder group composed of the primary landowners in the Middle Truckee watershed. The selected consultant will participate in two meetings with the stakeholder group: one to present the results of the Watershed Attributes, Disturbance Inventory, and Existing Conditions reports, and another to present the Restoration and Protection Opportunities Report.

It is anticipated that the consulting team will meet with various landowners in conjunction with

TRWC staff outside of these proposed meetings to gather existing information and gain a greater understanding of stakeholders land management needs. The consultant will also interface with other identified stakeholders to solicit input and feedback on the assessment processes and findings.

Deliverables

- Initial scoping meeting with TRWC staff to refine Scope of Work;
- Participation in and presentation at two landowner meetings convened by TRWC;
- Map data including landownership boundaries, forest/watershed attributes, stand conditions, etc. In addition to the existing conditions mapping output, a minimum of four detailed maps will need to be produced:
 - Forested stands of both public and private in-holdings over 500 acres that are bounded by the established project area
 - Forest resilience projects that are planned AND are funded in the next five years.
 - Forest resilience projects that are planned but not funded in the next five years
 - Forest resilience projects that are needed/recommended but are currently not planned
- Final assessment report including data requested above, detailing work performed, findings, and conclusions;
- GIS-based survey and map data in electronic form;
- Photographic record – 50 digital photographs documenting existing conditions and potential restoration project sites. Photos will be dated, captioned, and GPS coordinates provided;
- Quarterly progress reports and invoices.

PROPOSAL FORMAT

Please limit proposals to 20 pages or less. 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 tasks. The contractor may elect to suggest modifications to the scope or schedule above. Include estimated 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 “Work to be Completed” 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

Not Exceed Costs. Total cost of the project not to exceed \$120,000.

Details. Costs should be delineated to show anticipated expenses in the following manner:

- 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.

Qualifications, Background, and References

Include experience in forest and ecosystem management, forest ecology/restoration and fire ecology. stand/species identification, vegetative patterns and distribution, LIDAR, risk assessment and conditional mapping as related to forest health, watershed resiliency and relevant management practices. Demonstrate experience in designing and implementing forest, stream, and/or meadow restoration projects and in the development of successful communications strategies.

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.

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

CONTRACT TERMS AND AGREEMENT

Once a contractor 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 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.

Funding for this contract is provided by the California State Water Board. TRWC is a grantee and invoices quarterly (March 31, June 30, Sept. 30th, and Dec. 31st) for work completed. The obligation of TRWC to pay its subcontractors shall be subject to and conditioned upon its receipt of payment from the funder. Implied or stated in TRWC's agreement with the grantor is that payments are subject to the availability of funds.

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.

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.

ATTACHMENTS

1. [Site Map and Project Location – Area of Interest](#)