



## Beaver Creek RM 2.6 Restoration Design and Engineering Services

### Request for Proposals September 13, 2017

#### Columbia River

Honor. Protect. Restore.

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Yakama Nation Fisheries is seeking proposals from qualified engineering firms to award a design and engineering services contract in support of salmon habitat restoration activities taking place in Beaver Creek, a tributary of the Methow River in Okanogan County, Washington. Based upon the proposals received under this solicitation the Confederated Tribes and Bands of the Yakama Nation will award a design contract to the best quality bidder for the Scope of Work described within this RFP. Services rendered under this contract will be performed between the contract start date (early October, 2017) and December 31, 2018.

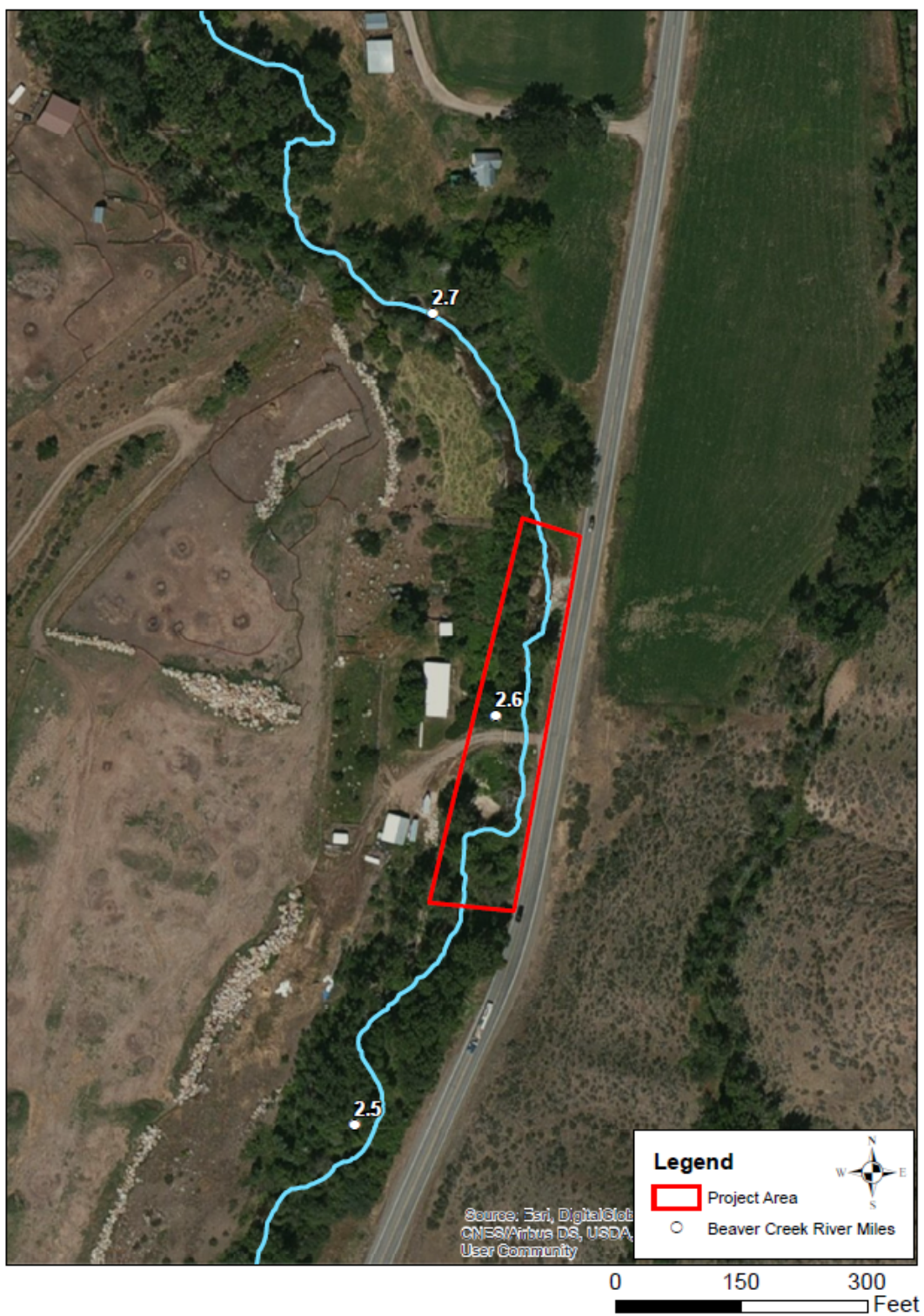
#### Project Background

The Washington State Department of Transportation (DOT) has a classified Chronic Environmental Deficiency site (CED) on Beaver Creek near rivermile 2.6. DOT and the Yakama Nation are working together with a private landowner to develop a restoration strategy that will benefit ESA-listed species and address ongoing maintenance problems along state Highway 20.

This project areas is located on private land, DOT property and within the DOT Right-of-Way. The general project idea includes removal or replacement of a private bridge and installation of large wood to increase instream habitat complexity and move Beaver Creek away from the highway. Sensitive outreach and cooperative planning will be essential in moving this project forward.

## Project Location Maps

### Beaver Creek RM 2.6, DOT CED Project Site



# Proposed Scope of Work

## *Phase 1 - Site investigation*

### Task 1 –Existing data review

The contractor will review existing data to be provided by Yakama Nation Fisheries or any other private or government entity that would aid future analysis and design. It is assumed this data consists of fish habitat survey, stream flow data, historical air photos, geomorphic field survey, hydrology, and previously collected bathymetric/topographic survey data.

### Task 2 – Geomorphic Field investigation and site survey

To gain a perspective of river process, including fluvial geomorphology and sediment continuity, the creek will be walked within the site boundaries and sufficient distances up and downstream to gain a reach level understanding of conditions. Air photos will be used during this investigation. An overview of reach conditions will be documented with general field notes and photos. Site survey will be completed through a separate on-call contract and provided to the winning bidder.

### Task 3 – Hydrology

Peak stream flow frequencies will be estimated or obtained from previous BOR, USGS, and Yakama Fisheries work efforts. If necessary peak flow frequencies can be estimated using available gage data and/or using published regression equations appropriate for the site.

Site survey will be conducted using a total station or survey grade GPS to collect survey data required for hydraulic analysis, conceptual designs and drawings. LiDAR data was collected in 2016 and may be used for modeling, where appropriate.

### Task 4 – Hydraulic analysis

Hydraulic conditions will be modeled using both 1 dimensional and 2 dimensional models. The existing site survey data will be used to build an existing conditions model. Manning's n values will be estimated from reference literature, professional experience and opinion. In support of the alternatives analysis and design tasks, the existing conditions model will be copied and modified for project conditions.

The U.S. Army Corps of Engineer's one-dimensional HEC-RAS hydraulic model will be used to consider and certify FEMA flood impacts. Two-dimensional modeling will be used to estimate surface flow behaviors at various stream discharges, including analyzing for changes in flow direction, sheer stress, and bed mobility based on the proposed conditions.

## *Phase 2 – Concept Development*

### Task 5 – Development of Conceptual Report and Drawings

Based on Site Investigation findings, the contractor will provide infrastructure modification strategies and options to prevent juvenile salmonid stranding during low summer flows and winter ice over. Restoration strategies shall be developed with consideration of the 2014 UCSRB RTT Biological Strategy.

Task deliverables will include a report of findings from Phases 1 and 2, a drawing set of conceptual restoration designs, planning estimates, and power point presentation for stakeholder meetings. The conceptual report will

be compiled in a manner consistent with BPA's HIP III General Project and Data Summary Requirements (see attachment).

## **Task 6 - Stakeholder Meetings and Communications**

Following conceptual report completion, the contractor will present such findings to landowners and agency stakeholders. The presentation will focus on existing river processes, future trends, project benefits, relative project costs, project risks, future river processes as they relate to each project opportunity and how each potential project fits within existing and likely future conditions.

### **Bid Directions**

Each engineering firm seeking to be eligible for a contract award under this Request for Proposals must submit two hardcopies of their proposal in writing to:

Yakama Nation Fisheries  
Attn: Jackie Olney (Beaver Creek RM 2.6)  
PO Box 151  
401 Fort Road (if using a shipping service)  
Toppenish, WA 98948

Proposals must be received by Close of Business, Thursday, September 28, 2017. Only hand deliveries and/or mail or parcel delivery service submittals will be accepted. Please clearly state "Beaver Creek RM 2.6" on the shipping envelope and the cover letter of the proposal. It is recommended that all shipping and/or delivery confirmation receipts are retained past the proposal due date to ensure proof of submission.

Each proposal must include a roster of qualified staff proposed to work under this contract, including resumes. Please also include a detailed cost proposal based upon the Scope of Work provided, a company fee schedule detailing all billing rates, a schedule/timeline proposal for completing the described tasks by December 31, 2018, and certify the cost proposal as being valid for at least 150 days.

### **Project related questions should be directed to:**

Jarred Johnson, UCHRP Habitat Biologist  
Phone: 509-881-1462  
E-mail: [johj@yakamafish-nsn.gov](mailto:johj@yakamafish-nsn.gov)

### **Limitations**

The Yakama Nation reserves the right to accept or reject any and all of the proposals received as a result of this request, or to cancel in part or entirely this request if it is in the best interest of the Yakama Nation to do so. This request does not commit the Yakama Nation to pay any costs incurred in the preparation of a proposal.

The contractor shall furnish all supervision, labor, equipment and tools necessary to complete the work as outlined in the Scope of Work.