



Request for Proposals

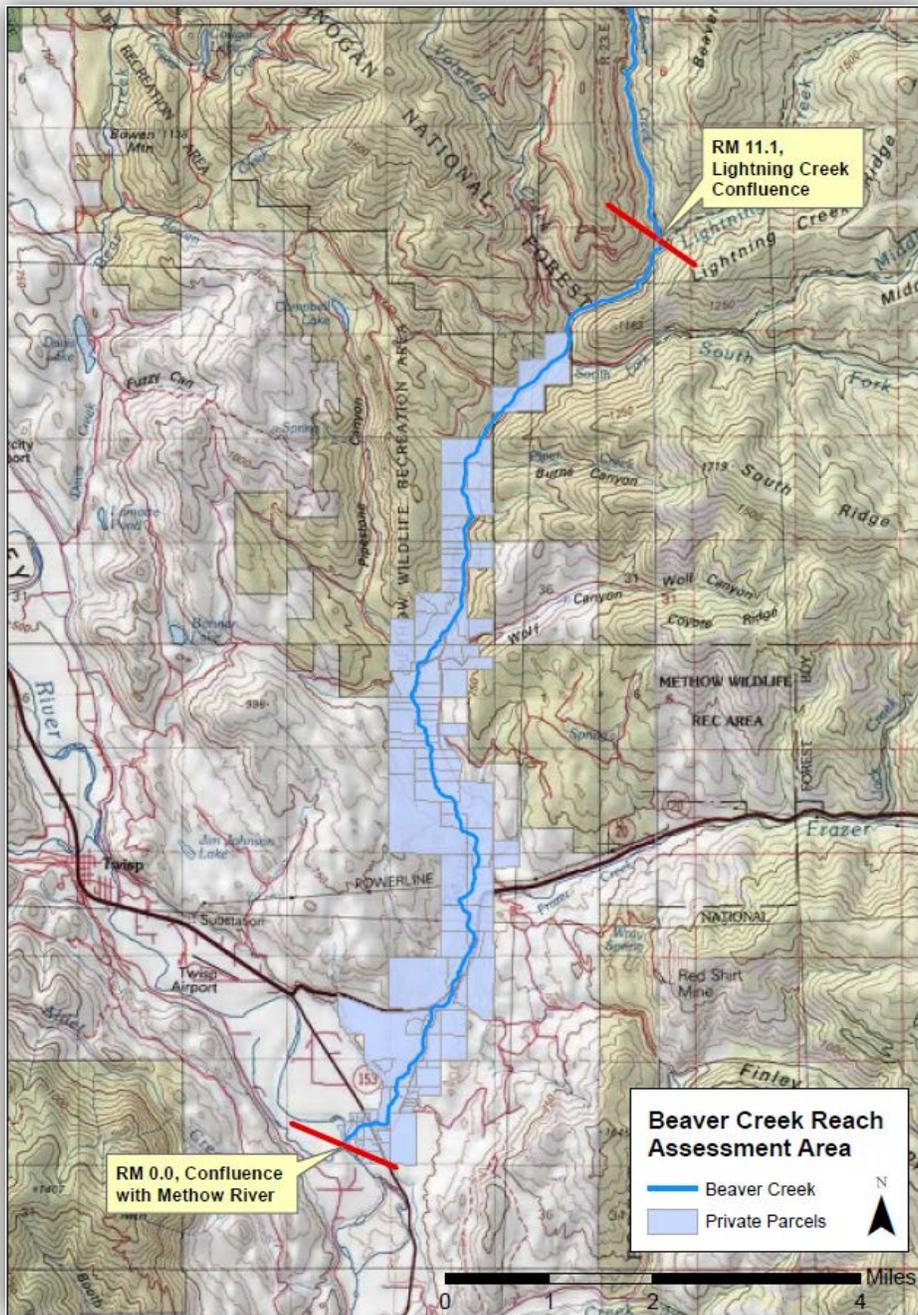
Beaver Creek Reach Assessment – River Mile 0.0 to 11.1

Field Surveys, Analysis and Report

*Yakama Nation Upper Columbia Habitat Restoration Project –
Methow Subbasin*

Objective

The Yakama Nation Department of Fisheries Resource Management is seeking to issue an engineering services contract to assist restoration planning and project identification efforts for the Upper Columbia Habitat Restoration Project (UHRP) in the Methow Subbasin. The Yakama Nation, in coordination with the Methow Watershed Action Team, has identified Beaver Creek to be a high value unit for intensive restoration of habitat and impeded river processes. The Contractor selected through this solicitation will produce a Reach Assessment that will objectively identify, prioritize, and conceptually develop restoration projects that benefit threatened and endangered salmonids. See map of the project reach below:



Reach assessments are an integral part of the process of locating and prioritizing habitat restoration actions under the guidance of the Upper Columbia spring Chinook Salmon and Steelhead Recovery Plan and the updated Upper Columbia Biological Strategy. This Reach Assessment will focus on describing the geomorphic condition, hydrology, aquatic habitat and riparian condition in the lower 11 miles of Beaver Creek.

Reach assessment activities provide under this RFP will include a stream habitat survey following USFS Level II protocol, a field and remote sensing based geomorphology assessment, and spatially explicit identification of restoration project opportunities. Reach assessment activities will build off of any existing geomorphic assessment work to describe the condition at reach and sub-reach scales and inform habitat restoration actions.

The following Scope of Work details the work tasks being solicited under this RFP. Directions on how to submit a proposal packet are provided starting on Pages 6.

Scope of Work

Task 1 – Initiation meeting

Contractor will attend a meeting with Yakama Nation Fisheries Staff and stakeholders to discuss goals and objectives, approach, schedule, and to initiate data acquisition. It is assumed that Yakama Nation Fisheries Staff will be the liaison with stakeholders and coordinate meeting schedule and venue.

Task 2 – Acquisition of Available Assessment Data

Contractor will acquire available digital data from various sources, including Yakama Nation staff, stakeholders, implementers, federal and state agencies and other online sources. This information will be reviewed and utilized where pertinent to produce a detailed, data driven, Reach Assessment. Data sources and information may include, but are not limited to:

- GIS and other data sources including aerial photography, historical mapping, geology, soils, roads, forest cover, land-use, landownership, hydromodifications, water withdrawals, and others.
- Topographic mapping and data, including LiDAR and a longitudinal channel profile
- Significant human features
- Hydraulic modeling
- Reach-level Ecosystem Indicators (REI)
- Reach-scale restoration objectives
- Existing and potential fish use and distribution
- Stream habitat survey data

Data acquisition will be initiated at the project kick-off meeting (Task 1). Data and other background information will be collected via follow-up communication and coordination.

Task 3 –Reach Assessment (Field Surveys and Preliminary Analysis)

Stream habitat and geomorphology surveys will be conducted on Beaver Creek between the Lightning Creek confluence at RM 11.1 and the Methow River confluence at RM 0.0. For this assessment landowner consent of access will be coordinated by Yakama Nation Fisheries staff.

Stream habitat survey – The habitat survey will characterize stream channel and riparian habitat conditions. The survey will help to identify areas that could benefit most from habitat enhancement and will serve as a baseline for future monitoring of project effectiveness. The habitat survey will be conducted using the USFS Level II protocol. The methodology employs a habitat unit survey along with general characterization of substrate, large woody debris, and riparian conditions.

Draft stream habitat survey summaries will be produced that document the findings of the stream habitat survey. Data will be presented in tables and figures and will include narrative interpretations of the results, especially as they apply to the identification of habitat enhancement activities.

Geomorphology assessment – A geomorphologist(s) will walk each reach in the study area and characterize bio-physical conditions and channel processes. Relevant information presented in the Methow Subbasin Geomorphic Assessment will be reviewed prior to the geomorphology surveys in order to provide context for field investigations. Reach Assessment activities will further refine and focus the geomorphology assessment at the reach and subreach scales. In particular, an emphasis will be placed on identifying site-specific geomorphic conditions to inform the selection of habitat restoration actions.

Geomorphic conditions will be recorded during field surveys. Conditions with respect to the following observed characteristics will be described: 1) sediment transport and response conditions, 2) channel incision and channel evolution trends (erosion and stability), 3) substrate types, distribution, and availability, 4) influence and role of large woody debris, 5) floodplain, channel migration zone, and habitat connectivity, 6) surface and subsurface flow interactions, 7) influence of past and current human structures and activities, and 8) interaction of the stream with riparian ecological processes. Analysis of aerial photography, topographic data, historical information, geology mapping, and other data sources will be used to complete the geomorphology analysis. The condition and impact of land uses (historic and current) on reach-scale processes and habitat will be described in draft form. Risks and constraints associated with existing or planned land-uses will be documented in draft form.

Hydraulic Modeling – A planning level hydraulic model will be developed for the study area. Hydraulic modeling will be applied to available topographic and bathymetric data in order to evaluate hydraulic and sediment transport conditions at the reach-scale. This analysis will help inform the understanding of flood risk to infrastructure and future potential projects, as well as help identify the impact of human features on floodplain connectivity.

Reach-Based Ecosystem Indicators – Results of the habitat, geomorphic, and hydraulic assessments will be used to populate the regional REI metrics for each reach. These metrics offer a consistent means to characterize the overall condition of habitat and stream physical processes and will help to identify and target restoration actions.

Identification of project opportunities – Project opportunities will be identified in tandem with the geomorphology survey. Identification of opportunities will be guided by the combination of: 1) site observations of geomorphology, habitat, riparian, and land-use impairments. Opportunities for stream habitat enhancement will be identified and draft project descriptions will be produced. Project descriptions will include: 1) location information, 2) overview of existing conditions, 3) treatment alternatives, and 4) access and feasibility considerations. Photographs and GPS coordinates will be taken to document observed conditions and location information.

Task 4 - Compile Draft and Final Report

A draft Reach Assessment and Restoration Strategy document will be compiled that describes the background, methods, and results of the assessment work. That draft document will be reviewed by the Yakama Nation and stakeholders, as determined by YN staff. The document will be revised and finalized based on review of comments and coordination with YN staff.

Included in this task, the selected contractor will produce and deliver 25 bound, color copies of the final report and associated appendices.

Task 5 - Project Management

The contractor will provide regular communication with YN staff and reporting of project status. The contractor will provide routine communications with YN, Watershed Action Teams (WATs), and others as needed to carry out project activities.

Contractors Obligations

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

Anticipated Schedule

The Yakama Nation is seeking to have this work initiated promptly upon issuance of a Notice to Proceed. Data collection will begin in the summer of 2016 and will be completed in the fall/winter of 2016.

Due to constraints related to contracting periods and fiscal year timing this contract will expire December 31, 2016. The Scope of Work within this RFP is for completion of the entire project. It is anticipated that not all work will be completed by that date. Remaining work will be conducted under a new contract or contract extension beginning January 1, 2017. The Contractor shall keep the Yakama Nation representative apprised of progress and demonstrate consistent satisfactory progress.

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.

Proposal Requirements/ Baseline Qualifications:

The contractor will have and demonstrate the following in their proposals:

- Field survey capabilities by in-house and regionally local design engineers
- Ability to effectively model hydraulics using HEC-RAS
- Ability to effectively model inundation using a program like Flow 2-D (or similar)
- Have on staff (not subcontracted) a Geologist, Hydrologist, Biologist, Botanist, and a Professional Engineer with at least 10 years experience designing in-stream restoration projects.
- Demonstrate experience producing Reach Assessments of this type in the Upper Columbia Basin and provide a link to an example document.
- Produce an estimated timeline for completing each task and deliverables.

Proposal Submittals:

By **Close of Business February 24, 2016**, submit 2 printed copies of the proposal including a detailed cost proposal certified as being valid for at least 90 days and a list of completed successful projects with references to:

Yakama Nation Fisheries

Attn: Jackie Olney (Beaver Cr. Reach Assessment)

PO Box 151

401 Fort Road (if using a shipping service)

Toppenish, WA 98948

Project related questions should be directed to:

Jarred Johnson, UCHRP Habitat Biologist

Phone: 509-881-1462

E-mail: johj@yakamafish-nsn.gov