

REQUEST FOR PROPOSALS ENGINEERING DESIGN SERVICES Swale Creek Tributary: Road Crossings and Habitat Improvement

Response Deadline: September 23rd 2020, 5:00 pm



YAKAMA NATION

Yakama Nation Fisheries - Klickitat Field Office

P.O. Box 215, Klickitat, WA 98628

Phone: 509-830-0034 | E-mail: dlindley@ykfp.org

Anticipated Timeline

Proposal Submission Deadline:	September 23, 2020 – 5:00pm
Tentative Award Selection:	September 25, 2020
Project Initiation (estimate):	October 19, 2020
Survey	November 2020
Alternatives Analysis/Conceptual Design	January 2021
15% Designs completed	March 31, 2021

Please send questions in writing so responses can be shared with other interested parties.

REQUEST for PROPOSALS for ENGINEERING DESIGN

I - PROJECT OVERVIEW

The **YAKAMA NATION (YN)**, is soliciting a Request for Proposals for Engineering Design Services for two road crossings and habitat enhancement elements on a seasonal tributary of Swale Creek in south central Washington State. The crossings are located on two unnamed tributaries that flow into Swale Creek at river mile 0.5. Crossings will be designed to provide year round passage for aquatic species and longitudinal movement of flood flows, wood, and sediment. The goal is to obtain designs at the 15% level by March 2021.

The project is located on Rattlesnake Gulch Creek (unofficial local name) a tributary that drains 3,389 acres, entering Swale Creek at RM 0.5. Rattlesnake Gulch Creek provides habitat for Steelhead and Rainbow Trout, *O. mykiss* (Yakama Nation, unpublished data, 2015). Unlike some other tributaries, Rattlesnake Gulch Creek is relatively unobstructed by the Klickitat Trail, which crosses the stream just above its confluence with Swale Creek. The project area begins approximately 300 feet upstream from the confluence with Swale Creek and continues upstream for 2,000 ft. Watershed analysis of drainage area and slope found that Rattlesnake Gulch has the largest drainage area and sediment contribution potential of 18 tributaries evaluated in Swale Canyon.

The project area encompasses 2 fish passage barriers at culverts located under Lover's Lane Road. In addition to the passage barriers, habitat along Rattlesnake Gulch Creek was historically altered by placement of fill along the streambanks, cementing of alluvial rocks together, a small pour over dam to create a soaking pool and likely the removal of large wood from the channel and historic logging. Rattlesnake Gulch is a priority tributary due to its size, baseflow, good connection to Swale Creek, and its position low in the Swale Creek watershed.

The design process will entail topographic survey, evaluation of both culvert crossings, conceptual approaches to road crossings, conceptual ideas for floodplain/alluvial fan habitat enhancement elements, and identification of locations for channel structure additions (small diameter wood and posts). Final deliverable is 15-30% designs for crossings and habitat enhancement elements. Given the remote nature of the private Lover's Lane Road innovative and cost efficient design approaches are encouraged.

Ongoing efforts to improve aquatic habitat conditions for ESA listed *O. mykiss* in Swale Creek are focused on addressing: channelization, confinement and loss of floodplain and side channels, disconnection of tributaries and interruption of hillslope processes, and revegetation of denuded surfaces to increase wood recruitment and nutrient input.

Basic hydrology information derived from Stream Stats (USGS) for the crossings follow:

Table 1: Basic Data on both crossings from Stream Stats (USGS)

Northern Lover's Lane Road Crossing					Southern Lover's Lane Road Crossing				
Peak Flood (Yr)	Flow (CFS)	Std Err	MinCFS	MaxCFS	Peak Flood (Yr)	Flow (CFS)	Std Err	MinCFS	MaxCFS
2	24.7	53	10.7	57.2	2	77	53	33.1	179
5	45.4	51	20.2	102	5	141	51	62.3	319
10	62.5	51	28	140	10	194	51	86.4	436
25	86.7	52	38	198	25	270	52	118	619
50	107	53	46	249	50	333	53	142	779
100	128	54	54	304	100	399	54	167	951
200	150	56	62.1	362	200	468	56	193	1140
500	183	58	73	458	500	572	58	227	1440

Location: (45.81210, -121.08860)
 Drainage Area: 1.2 sq miles
 Mean Annual Precipitation: 19.1 inches
 Basin Mean Slope: 12.3 %

Location: (45.81156, -121.08708)
 Drainage Area: 4.06 sq miles
 Mean Annual Precipitation: 18.4 inches
 Basin Mean Slope: 11.6 %

Klickitat Watershed Enhancement Project (KWEP) staff located in Klickitat, WA will oversee this RFP and support the design effort. KWEP works to restore, enhance and protect watershed function within the Klickitat subbasin. Work emphasizes restoration and protection of Endangered Species Act (ESA) listed anadromous fish. Restoration activities focus on improving stream processes by resolving watershed constraints and improving habitat conditions and water quality factors in support of species recovery.

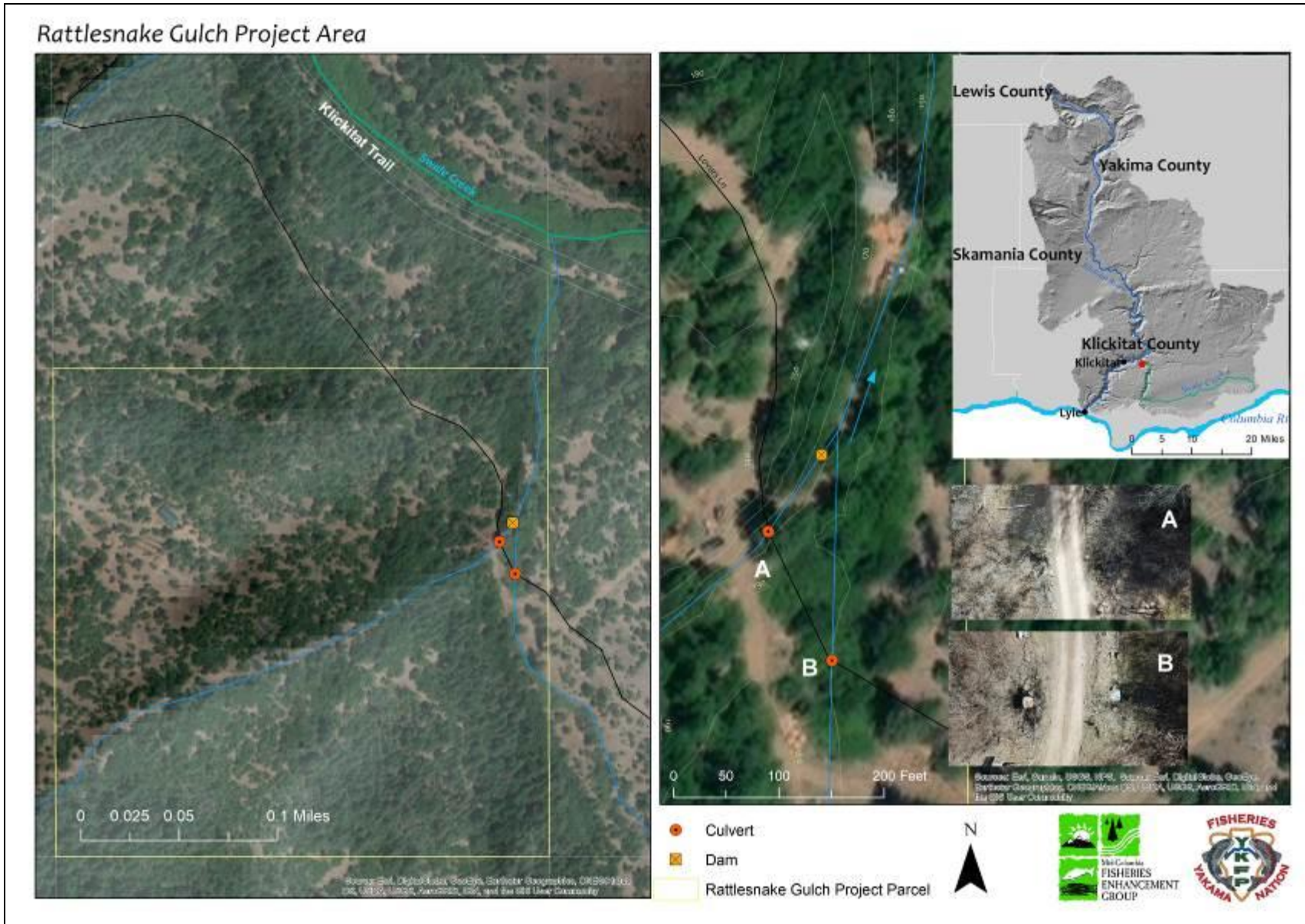


Figure 1. Rattlesnake Gulch Project Area Map.

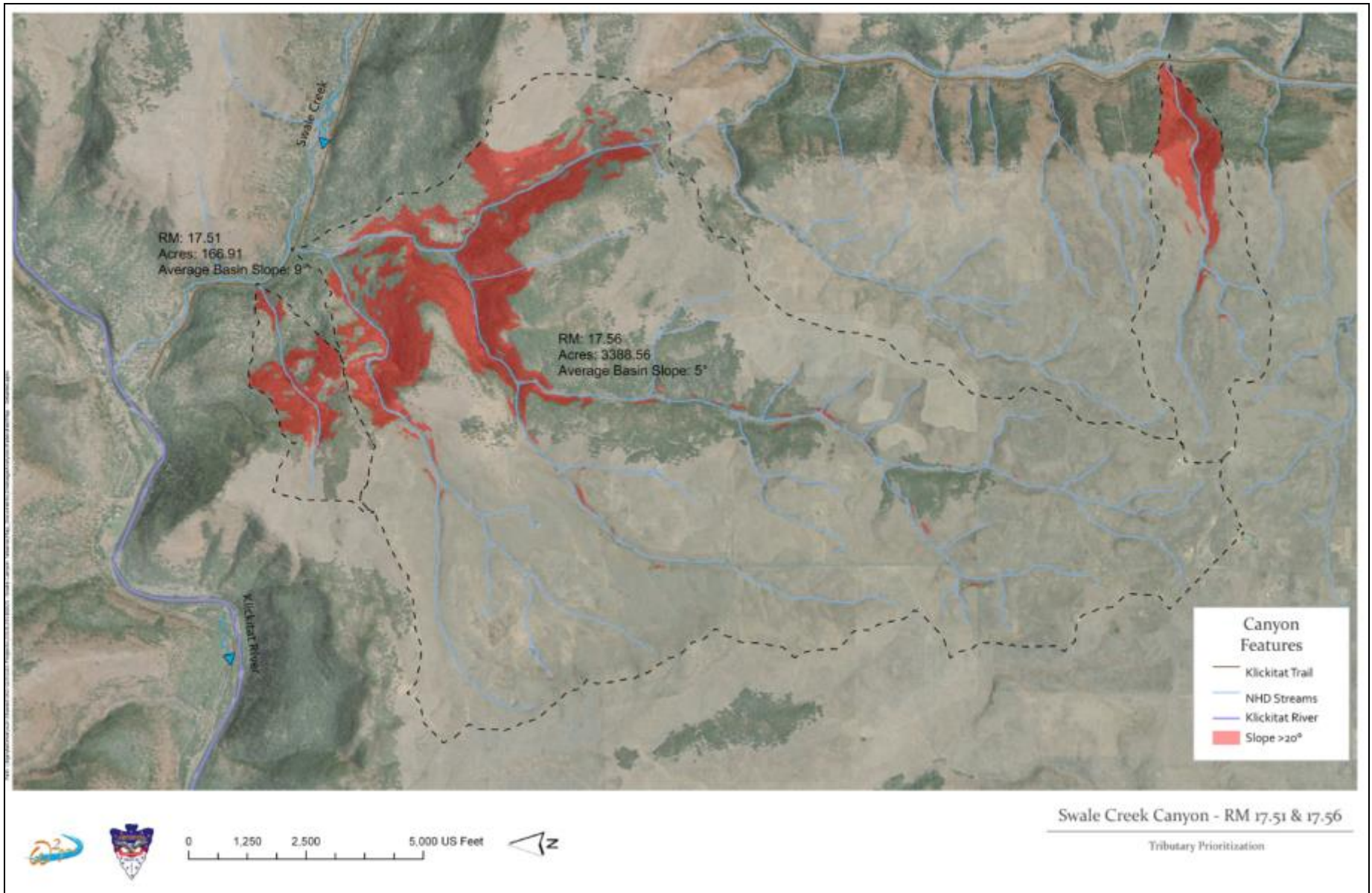


Figure 2. Watershed delineation of tributary "RM 17.56", Rattlesnake Gulch Creek.



Figure 3. Northern Lover's Lane road crossing.



Figure 4. Aerial view of Northern Lover's Lane road crossing.



Figure 5. Aerial view of Southern Lover's Lane road crossing.



Figure 6. Aerial view of both stream crossings located on Lover's Lane Road.

II - OBJECTIVE

The objective is to obtain designs to improve fish passage and longitudinal movement of sediment and wood at these two crossing locations. The selected firm will demonstrate experience designing road crossings that meet Washington Department of Fish and Wildlife Design Guidelines (<https://wdfw.wa.gov/sites/default/files/publications/01501/wdfw01501.pdf>), familiarity with Bonneville Power Administration's HIP Design submittals, and examples of practical solutions to infrastructure (forest roads) in remote locations.

Proposal should include the consulting engineering firm's:

- Consultant Team Structure
- Team/Personnel Qualifications and Experience
- Project Approach
- Past Performances/References
- Fee Schedule – Project Cost Estimate and Personnel Hourly Rates

III – SCOPE OF WORK

The cost estimate should reflect the following design components:

- A. Site Reconnaissance
 - a. Topographic Survey
 - b. Geomorphic Assessment
 - c. Base Mapping
 - d. WDFW Barrier Evaluation
- B. Hydrology & Hydraulics
 - a. Hydrology
 - b. Hec-RAS Modeling
- C. Draft Preliminary Design
 - a. Alternatives Analysis
 - b. Draft Preliminary Design Drawings
 - c. Draft Preliminary Design Report
 - d. Draft Cost Estimate
- D. 15% Design

Assistance with response to initial HIP III Feedback

Yakama Nation will provide:

- Personnel to support topographic survey
- Project Management and Coordination
- Aerial photography
- LiDAR data to supplement topographic survey

IV – TIMING AND DURATION

We expect to award this contract in September 2020 and receive final deliverables by March 31, 2021.

Qualified Contractor Proposals shall be received via email no later than 5:00 P.M. Pacific Daylight Time on September 23rd, 2020. Bids may be emailed to: David Lindley at dlindley@ykfp.org.

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V – MINIMUM QUALIFICATIONS

PROPOSAL SUBMITTAL CONTENT

To be considered responsive to this RFP, the Proposal shall include all items identified in Section II by the deadline specified in Section IV.

PROPOSAL COVER AND COVER LETTER

Clearly label the Proposal cover and the subject line in the cover letter with “PROPOSAL for Swale Creek Tributary Road Crossings and Habitat Improvements.” The cover letter shall be limited to one page and shall identify the consultant name and contact person, their title, mailing address, email address, phone number, and the name of the proposed project manager.

CONSULTANT TEAM STRUCTURE

Provide the team structure, identifying any sub-consultants, including names of lead persons with titles and general project responsibilities, and the physical location of each lead person.

TEAM/PERSONNEL QUALIFICATIONS AND EXPERIENCE

The Proposal will be evaluated for the team and individual team member’s qualifications, general background, and experience in relation to the stated Scope of Work.

PROJECT APPROACH

The Proposal will be evaluated based on the approach and proposed solutions for designing the culvert replacements and making habitat improvements.

PAST PERFORMANCES/REFERENCES

References may be used to verify the accuracy of information provided in the Proposal. Provide three recent references who can be contacted concerning your firm's/team's RFP. In listing the references, include the name of the client, telephone number, e-mail address, contact person, and the specific work your firm did for the client. Also provide three recent references who may be contacted concerning the performance of your firm's/team's proposed project manager(s). The Yakama Nation reserves the right to contact references other than those submitted by the respondent.

FEE SCHEDULE

The Proposal will be evaluated on the costs associated with the design work. Please include:

- A. Hourly rate by position classification and estimated hours per task
- B. Charges for equipment, printing, or other costs
- C. Direct expenses (if applicable)

VI - SELECTION PROCESS & EVALUATION CRITERIA

Each contractor shall provide references and/or other information related to their proposal that demonstrates their past performance. The owner (Yakama Nation) shall evaluate the qualifications of bidders. The owner shall have the sole discretion and responsibility for choosing the responsive and responsible contractor.

Bids will be evaluated based on the following ranking criteria:

- A. Fee Schedule
- B. Relevant Firm Experience
- C. Project Approach
- D. Qualification of assigned staff
- E. References