



## Contact Information

# 2026 Upper Columbia Regional Project Pre-Application

\* Pre-applications due March 11, 2026 (COB)

\*Complete SRFB applications due in PRISM April 17, 2026 (COB)

\*Revised SRFB proposals due in PRISM May 27, 2026 (COB)

\*Final revised applications due in PRISM June 22, 2026 (noon)

<b>Project Title</b>	Lower Chiwawa Area D, Implementation
<b>Sponsor</b>	Chelan County Natural Resource Department
<b>Primary Contact</b>	Scott Bailey
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## Project Summary

**Please provide a description or summary of the proposed project, including project goals. The goal of the project should be to solve identified problems by addressing the root causes. Then clearly state the desired future condition.**

This project addresses identified habitat limiting factors for high- and medium-priority spring Chinook and steelhead life stages (i.e., holding, summer and winter rearing, and fry colonization) in Reach 4 of the Lower Chiwawa River AU including Floodplain Connectivity, Off-channel Side-channels, Riparian Canopy Cover, Instream Cover (wood), Deep Pools, and Temperature (rearing). This phase of the project will execute contracts for project construction, vegetation planting, and construction oversight; complete all tasks needed to implement the restoration project as designed; and complete post-implementation tasks needed to close out the project including preparation of as-built drawings, and reporting as required to comply with permits and funding agreements. The completed project will improve conditions along ~0.6 miles of mainstem channel; create ~0.2 miles of side-channel habitat; enhance a cold water tributary confluence; and consolidate/reduce dispersed camping, decommission up to 1,000 lf of unauthorized roads, and reduce potential for future impacts and enhance vegetation within ~15 streamside acres.

**What are the project objectives? Objectives support and refine biological goals, breaking them down into small steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound).**

**Note: This exact question is included in the PRISM application. Example format: The project seeks to address [specify limiting factor(s)] for [limiting life stage(s)] by [specific actions proposed] to create an estimated [include specific target metrics, as described below] upon implementation in [estimated year].**

Objectives of the proposed project are:

Within 24 months of funding

1. Execute all contracts needed to implement the project and provide engineering oversight.
2. Construct a restoration project as identified in construction-ready design documents that will:
  - (a) add large wood structures and other habitat features along ~0.6 miles of mainstem channel (and at the mouth of a cold water tributary) that will increase wood loading to greater than 70 pieces of wood per mile, improve cover and increase pool quantity and quality, redirect flows and increase inundation of the river left floodplain, and improve habitat quality and access at the tributary confluence.
  - (b) add up to 0.2 miles of side-channel habitat to increase side channel area in project reach to greater than 5% of total channel area.
  - (c) decommission approximately 1,000 lf of forest roads, consolidate camp sites/control access, and plant native trees, shrubs, grasses and forbs to improve conditions within ~15 streamside acres.
3. Complete post-implementation tasks including as-built drawings, reporting required by funders and permitting agencies, and close out of all contracts and agreements.

## Budget Request

Values MAY be duplicative and do not have to equal TOTAL anticipated budget in pre-application.

<b>Anticipated Request - SRFB</b>	\$500,000
<b>Tributary Committee - Anticipated or Actual</b>	\$500,000
<b>Anticipated or Actual Other Funding</b>	\$1,000,000
<b>Anticipated TOTAL Budget</b>	\$2,000,000

### **Other Funding Source(s), please note if funding is anticipated or actual.**

We intend to request additional funds for this implementation effort from Priest Rapids Coordinating Committee, Colville Tribes Fish & Wildlife Department, and/or one or more other sources. No other applications have been submitted yet. Funding is anticipated, not secured.

## Project Location

<b>Briefly describe the location of the project</b>	The project site is located along the lower Chiwawa River from ~0.6 miles downstream of the Chiwawa River Road bridge upstream to the Alder Creek confluence, approximately RM 6.6-7.25
<b>Latitude (decimal degrees)</b>	47.8396
<b>Longitude (decimal degrees)</b>	-120.6638

**Project subbasin**

Wenatchee

**Wenatchee Assessment Unit(s)**

Lower Chiwawa River

**Does the proposed project span multiple assessment units?**

No

**Reach(es) Name**

Reach 04

**Identify the reach(es) priority/ reach ranking. Note: If the project involves work in multiple reaches, select "Multiple" and include details in the text box that will appear below. Please reference the Prioritization Web Map: <https://prioritization.ucsrb.org/>.**

Rank 2

## Project Information

**1. What species will the project benefit?**

Spring Chinook

Steelhead

Bull Trout

**2. Select the project's objectives and the associated tracking metrics**

Instream Habitat (Includes Floodplain & Off-Channel Reconnection)

Riparian Habitat

Upland Habitat

**Instream Habitat: Reporting Code**

Total miles of instream habitat treated

Miles of off-channel stream created or connected

Acres of channel/off-channel connected or added

Number of structures placed in channel

Pools created through channel structure placement

**Riparian Habitat: Reporting Code**

Total riparian miles streambank treated

Total riparian acres treated

**Upland Habitat: Reporting Code**

Acres of upland habitat treated

Number of erosion/ Sediment control installations

Miles of road abandoned

4. Does this project already exist in Salmon Recovery Portal or PRISM?

5. Has this project been submitted previously for funding through the SRFB and/or other process(es)?

**Please explain which process(es) and how this proposal differs from the previous submission (e.g., different phase, modified scope, etc.)**

Two design phases for this Area D project have been funded by SRFB: the Preliminary Design phase was funded through the 2022 grant round, and the Final Design phase was funded through the 2025 SRFB grant round. The Final Design agreement is still active, and work under this 2025 SRFB agreement is expected to continue through fall 2026. Previous design documents (Conceptual and Preliminary designs) and other work products have been uploaded to PRISM during these previous phases, and newly produced work products also will be uploaded to PRISM for the 2025 agreement.

The Bureau of Reclamation (BOR) also has provided financial support during both design phases. During the Preliminary Design phase, BOR contracted directly with the design firm that is designing the in-stream restoration treatments. The Final Design phase is being funded, in part, through a BOR WaterSMART Aquatic Ecosystems Restoration Projects (WaterSMART AERP) agreement that CCNRD received in 2025.

Unlike these previous agreements, this proposal is requesting funding for project implementation (not project design).

6. What category is the project?

If applicable, what is the secondary project category?

## Design and Restoration Proposals

7. What project phase(s) are proposed for completion?

8. Is your project within a completed (or soon-to-be completed) Reach Assessment or other type of assessment (e.g., Rapid Site Assessment, other)?

9. Which limiting factors does the project propose to address?

10. Which life stages will the proposed project address?

## **11. Freshwater Benefits - Describe how your project will improve survival, capacity and/or distribution for target species at the reach scale?**

Currently, floodplain connectivity, side-channels, cover wood, riparian canopy cover, and temperature are classified as Unacceptable, and deep pools are classified as At-risk, for Reach 4 of the lower Chiwawa River (UCRTT 2020). Based on the Upper Wenatchee Pilot Project: Aquatic Habitat Assessment and Restoration Strategy Report (Cramer Fish Sciences, 2019), streambed substrate is dominated by cobbles and boulder and LWD is rare along this reach. Overall pool frequency was rated Adequate, but the reach was rated At-risk for pools due to a limited number of deep pools. Riparian road densities were rated Moderately High and this resulted in a riparian condition rating of At-risk. Channel dynamics were rated Poor in this reach due to a high bankfull width to depth ratios, low entrenchment ratio, and low side channel percentages compared to predicted meandering and braided channel forms.

This project is intended to improve habitat quality for target species life stages including holding, fry, summer rearing, and winter rearing. The proposed project will improve habitat quality at the Alder Creek confluence( by adding a pool and large wood structure); increase the length of side channel habitats (by excavating an ~1,000 lf river-left side-channel that will include habitat wood), the number of deep pools and amount of LWD present along ~0.6 miles of mainstem channel (through construction of eight mainstem ELJs); and treat historical and ongoing recreational impacts to riparian and upland vegetation and water quality (and minimize potential for future impacts) along the project reach (by treating impacts, creating structures and planting native plants in three dispersed camping areas adjacent to the river).

Through the aforementioned work, this project will enhance the quantity and quality of habitats along the project reach. We expect that this will increase capacity for holding, incubation, fry and summer and winter rearing life stages, which we expect to improve survival, reproduction and fitness for target species.

## **12. Temporal Effect - Briefly describe how and to what extent the project would promote natural stream/watershed process consistent with the geomorphology of the stream?**

The lower Chiwawa River has been impacted by historical land use practices, particularly timber harvest practices that used the stream corridor to transport logs. This has resulted in a simplified, plane bed channel that is wide and shallow and disconnected from its historical floodplain. As a result, the streambed is well-armored and large cobbles and small boulders dominate the bed substrate. Pools and persistent LWD structures are rare. In addition, dispersed camping in the area has adversely affected riparian and upland vegetation, resulted in a web of social roads and trails and a proliferation of garbage and unauthorized latrines. These impact water quality and stream and forest health (and create management issues for USFS).

The project will treat ~0.6 miles of in-stream habitats and ~15 acres of adjacent riparian and upland habitats and will restore habitat values, promote natural processes, minimize future recreational impacts, and facilitate USFS management of the area. The design process has been supported by extensive data collection and modeling, anticipates the projected effects of global climate change and is consistent with reach-scale geomorphology and USFS planning and management efforts. The project also is consistent with guidance provided by the UCRTT in its recent restoration prioritization update which promulgates the following recommendations for the project reach: Improve cover wood, Improve off-channel side channels, Improve off-channel floodplain, and Improve temperatures.

Treatments associated with the proposed project will promote natural stream/watershed processes. Selective grading and the addition of wood structures in the mainstem channel and lower Alder Creek (a cold water tributary) and on adjacent floodplain surfaces will:

- (1) more regularly connect the stream channel to its floodplain,
- (2) enhance hydraulic and habitat diversity,
- (3) initiate horizontal and vertical scour that will mobilize sediments and organic materials,
- (4) create off-channel habitats, and
- (4) facilitate deposition of naturally occurring LWD and streambed materials along the project reach.

In addition to reducing potential for future recreational impacts to the area, treatments for past

anthropogenic impacts in recreation areas adjacent to the river will:

(1) improve streamside vegetation (which will facilitate recruitment of organic matter and other allochthonous inputs and increase shade);

(2) enhance infiltration in upland and riparian areas; and

(3) reduce runoff and delivery of fine sediments, garbage, fecal coliform bacteria, and other contaminants to the stream.

**13. Temporal Effect - How long will it take for the project to achieve its intended response?**

Less than or equal to 1 year

1-10 years

**14. Temporal Effect - How long will the restoration action and its benefits persist?**

10-50 years

**15. Temporal Effect - What level and/or interval of maintenance is anticipated? What is the plan for any anticipated maintenance?**

It is our intent that the project will be self-maintaining and require little or no further human intervention once construction is completed. That said, we will work with USFS to monitor the project post-construction and will complete maintenance as needed to ensure the project continues to function as designed.

This request funds project construction, but this grant program does not provide funds for post-construction monitoring and maintenance. As a result, should maintenance needs be identified it is likely that a new fundraising effort will be required to secure funds in support of that work.

**16. Methods - Briefly describe the potential (for design) or proposed restoration methods and how they will achieve project objectives.**

This project is designed to improve in-stream and floodplain habitat quality, quantity and diversity; improve flow connectivity and juvenile fish access to off-channel habitats; and promote stream processes including scour, sediment deposition and sorting, organic matter recruitment, and others. Restoration treatments associated with the project include mainstem and tributary ELJs (apex, bank-attached, and side-channel confluence structures), habitat tree placement, selective grading, and recreation area treatments including selective grading, wood/rock structures, and vegetation planting. The current 60% plan set depicting these restoration treatments will be uploaded to PRISM in support of this application (and has been uploaded under previous RCO agreements that have funded design work for this project), and the final design iteration is expected by September 2026 (it also will be uploaded to PRISM).

The project includes a total of nine ELJs, all of which will be machine-built. There are two apex ELJs, six bank-buried ELJs, and one side-channel confluence ELJ. All of these structures will include excavated pools, and the excavated streambed materials will be used to backfill the structures (supplemented with excavated materials from the side-channel, if needed). The fill material will be planted with live stakes and a native seed mix to facilitate establishment of vegetation on the structures.

The Apex ELJs will be constructed at a mid-channel location and a flow split location (side-channel inlet) in the mainstem channel. These structures are designed to enhance hydraulic complexity, initiate lateral channel processes, and provide pool habitat and cover at all flows. They will be stabilized via mechanical connections to vertical piles either driven or dug into the channel bed (17-20 piles - 16" dbh and 25' length), and will include 30-37 rootwad logs (18" dbh and 40' length), 6-8 whole trees and ~15-30 CY of salvaged slash (as racking materials).

The bank-buried ELJs will be constructed at several locations along river-left and are designed to add pools/enhance pool quality and provide cover and refuge areas at all flows. They will each include approximately 20 rootwad logs (18" dbh and 40' length), eight piles (16" dbh and 25' length), two whole trees and ~10-15 CY of slash (as racking materials). These structures will be stabilized by burying a large portion of the rootwad logs under at least two feet of backfill, with additional support provided by mechanical connections to driven or dug piles.

The side-channel confluence structure will be constructed at the downstream end of the constructed side-channel. It is intended to maintain a pool at the channel outlet and provide cover and refuge habitat at all flows. It will include 25 rootwad logs (18" dbh and 40' length), 12 piles (16" dbh and 25' length), five whole trees and ~15-25 CY of slash (as racking material). This structure will be stabilized by burying a large portion of the rootwad logs under at least three feet of backfill, with additional support provided by mechanical connections to driven or dug piles.

The project also will construct an approximately 1000 lf, river-left, side-channel. The channel will have a bottom width of ~15 ft and typical excavation depths will be 4-6 ft. It will have an average longitudinal gradient of 0.7 percent. It will be excavated with heavy equipment and will generate approximately 4,300 CY of excavated materials, which will be used as supplemental backfill for ELJs and in the recreation area treatments above ordinary high water. The side-channel is designed to convey flow perennially and will include ~100 pieces of large wood to provide cover and in-stream complexity. Large wood will be stabilized by burial or by bracing the logs with partially buried upright logs or standing trees. No ferrous connections are anticipated for this woody material. The channel alignment was identified using LiDAR and surveyed tree locations, and the path it follows was designed to minimize impacts to large standing trees. Additional field fitting and variable side slopes may be employed during construction to further limit impacts to large trees.

Finally, the project includes a suite of treatments in three separate streamside areas used primarily for dispersed camping. This work is intended to treat impacts from historical and ongoing recreational use in these areas and limit potential future impacts associated with this use. Ground-based equipment including excavators and dump trucks will be used for this work. Soils will be de-compacted; large wood and boulders will be placed as roughness features throughout these areas to improve habitat quality, create barriers impassable to vehicle travel, and delineate camping areas. We will also enhance native vegetation throughout these three areas. A crew with hand tools will plant a variety of native trees and shrubs (~2,100 plants), and we will contract with a hydroseeding company to seed/mulch (with a native grass/forb mix) a total of approximately 7 acres throughout these three areas .

## Assessment Proposals

## Protection Proposals

## Monitoring Proposals

## Project Risk and Economic Benefits

1. What is the landownership? US Forest Service

2. Have you secured landowner participation in or acceptance for this project?  Yes

### Please explain

We currently have a signed Landowner Acknowledgement Form from the USFS for the current project design phase, and will secure an acknowledgement for this proposal prior to submitting the final application. The project is on USFS's work plan and we also will obtain a signed Landowner Agreement from them prior to project implementation.

### 3. Describe any land owner requirements (e.g., design elements, right-of-ways, access agreements, liability waivers, etc.) and if/how they could affect the project

Project must avoid impacting nearby long-term lease cabins, Goose Creek Campground, and the Chiwawa River Road bridge that crosses the river just downstream of the Alder Creek confluence. The design process has considered these constraints and we do not anticipate any adverse impacts to these features.

Dispersed camping consolidation/reduction and road decommissioning follows USFS guidelines and

standards, and in-stream restoration is consistent with design criteria and conservation measures promulgated under ARBO II (Programmatic Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Aquatic Restoration Activities in the States of Oregon and Washington) and the Upper Wenatchee Pilot Project Environmental Assessment.

None of these constraints, requirements, or permit conservation measures are expected to adversely affect the project because the project was designed with these considerations in mind, and because safety considerations and following established guidelines and standards is commonplace in stream restoration design.

#### **4. Will the project raise potential concerns for interest groups (e.g., recreational users) or the community at large (including upstream/ downstream/ adjacent landowners)?**

We have not received any specific feedback from interested parties expressing concern for the project or the proposed treatments. However, campers who use the dispersed camping areas to be treated at this project site may raise concerns about the reduction in camping sites that will result from this project. In addition, in-stream projects often raise concerns for recreational boaters, adjacent property owners, and other interested parties.

Our recreation area treatments are designed to improve habitat conditions in the dispersed camping areas and reduce potential for future user-created impacts to the stream and adjacent habitats. The treatments (which have been approved by USFS) will bring the areas into better agreement with USFS standards and guidelines for dispersed camping areas. In addition, they are expected to enhance user experience by reducing the total number of campers at any given time and increasing the distance between campsites (enhancing privacy).

Our in-stream treatment designs take public safety and project risk to into account through the use of the Bureau of Reclamation's Large Woody Material - Risk Based Design Guidelines (which assesses risks to property and public safety). In addition, we have commissioned a recreational safety assessment that identified risks to non-motorized boaters in the Lower Chiwawa River and provided recommendations for minimizing risks associated with stream restoration efforts. This work also has informed the design of this project.

#### **5. Who will have the responsibility to manage and maintain the project? What is the responsibility of current or future landowners?**

This proposal supports project construction within a National Forest unit. CCNRD will work with USFS to monitor the site post-construction. As a public land manager USFS is ultimately responsible for maintenance and management of the lands and waterways it administers. However, CCNRD will work with USFS to determine if maintenance is needed and seek additional funding should we determine that adaptive management actions are necessary.

#### **6. Are other projects being proposed immediately upstream or downstream of worksite?**

No

#### **7. Please describe the risk of failure associated with this project.**

There is always risk associated with stream restoration projects, but with good data collection, careful design and modeling, and implementation that follows the designs and utilizes construction best management practices, potential for failure is low.

For this project, we have worked with licensed engineers, landscape architects and other technical staff employed by reputable companies with extensive experience in river restoration and recreation area treatments. The design effort considered applicable design criteria and conservation measures, and has included extensive technical review and revision. Finally, we will contract for implementation in a manner that assures that the project is constructed by a firm with demonstrated experience in river restoration and work in and around sensitive environments. Collectively, these steps assure a high factor of safety and minimize potential for failure.

**8. Is there any public outreach planned during and/or after implementation? Does the project build community support for salmon recovery efforts?**

We will work with USFS to continue and expand outreach that began during the design phase of this project to assure that local residents and forest users are aware of the project and its potential effects and benefits. Outreach will be structured such that it meets USFS standards and needs and informs the public about the type of restoration actions being implemented, emphasizes the need for and benefits of stream restoration, and builds support for salmon recovery efforts.

**9. Does the project represent an opportunity for economic benefit? How much benefit does the project create for the dollars invested?**

Yes, this project represents an opportunity for economic benefit. The proposal supports project construction. As a result, it will employ design consultants, agency staff, construction contractors and material providers. Kellon and Hesselgrave (2014) have reported that restoration efforts support 19-24 jobs for every \$1-million invested (depending on labor intensity), money spent on restoration projects generates substantial additional spending and economic output (roughly double the amount of the original investment), and 80% of funds spent on restoration efforts stay in the county where the project is located (with 90% staying in state). While their study focused on restoration projects in Oregon, economic benefits of restoration are almost certainly similar for Washington state.

Cathy P. Kellon and Taylor Hesselgrave, "Oregon's Restoration Economy: How investing in natural assets benefits communities and the regional economy", S.A.P.I.EN.S [Online], 7.2 | 2014, URL: <http://journals.openedition.org/sapiens/1599> (link confirmed March 3, 2025)

**10. Describe any partnerships, their experience, and types of contributions supporting the project.**

Chelan County NRD has extensive experience implementing construction efforts such as the one proposed, and is well situated to complete the proposed implementation effort on-time and on budget and achieve the expected results

We have worked with USFS on several stream restoration projects, and have partnered with them over the course of this project effort. USFS has reviewed and commented on the designs, and the project has been designed accordingly. In addition, we have worked extensively with the Bureau of Reclamation, RCO, and the Tributary Committees. These entities have provided funding throughout the design phase of this project.

**Optional Section - Preparation for PRISM (SRFB applications only)**

The following questions are identical to the questions RCO requires in the PRISM application for SRFB projects. If desired, sponsors can complete associated questions early and copy responses into PRISM during the "Complete Application" phase due on April x, 2026

**Do you want to review and/or pre-populate PRISM questions?**

**Supporting Documents**

[Upper Columbia Process Guide 2026](#)

[SRFB Manual 18 \(2026\)](#)

[RCO Application Resources](#)