

**Lower Chiwawa AU, Area D – Final Design**

Chelan County Natural Resource Department

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**Prism #: 25-1216**

Anticipated SRFB Request:	\$ 56,084
Anticipated Trib Comm Request:	N/A
Other Funding (BoR WaterSMART AERP):	\$125,000
Anticipated TOTAL Project Budget:	\$ 181,084



## Contact Information

# 2025 Upper Columbia Regional Project Pre-Application

\* Pre-applications (SRFB & Monitoring) due March 12, 2025 (COB)

\*Complete SRFB applications due in PRISM April 18, 2025 (COB)

\*Complete Monitoring applications due in PRISM May 1, 2025 (COB)

\*Revised SRFB proposals due in PRISM May 27, 2025 (COB)

\*Final revised SRFB & Monitoring applications due in PRISM June 23, 2025 (noon)

<b>Project Title</b>	Lower Chiwawa Area D, Final Design
<b>Sponsor</b>	Chelan County Natural Resource Department
<b>Primary Contact</b>	Scott Bailey
<b>E-Mail Address</b>	scott.bailey@co.chelan.wa.us

## 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 prepare construction-ready designs, finalize and complete environmental compliance tasks (i.e., continue consultation with regulatory agencies and finalize and submit permit applications), and prepare bid documents to improve conditions along ~1.25 miles of mainstem channel; create up to 0.25 miles of side channel habitat; enhance two cold water tributary confluences; and consolidate/reduce dispersed camping, decommission ~1,000 lf of forest 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 to:

1. Develop a construction-ready design package within 12 months of funding that identifies restoration actions to:

(a) add large wood structures and other habitat features along ~1.25 miles of mainstem channel (and at two cold water tributary confluences) to redirect flows and increase inundation of river left floodplain surface, increase wood loading to greater than 70 pieces of wood per mile, improve cover and increase pool quantity and quality and improve habitat quality and access at tributary confluences.

(b) add up to 0.25 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 and shrubs to improve conditions within ~15 acres of riparian habitat.

2. Finalize and submit HPA and JARPA applications within 15 months of funding.

3. Prepare and release bid documents for project implementation within 18 months of funding.

## Budget Request

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

**Anticipated Request - SRFB (standard round)** \$64,258

**Anticipated or Actual Other Funding** 125,000

**Anticipated TOTAL Budget** \$189,258

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

A 2024 BOR WaterSMART Aquatic Ecosystem Restoration Projects grant includes up to \$125,000 for work on this phase of the Area D project. We have been notified that we were selected for this funding and are currently working with BOR staff to secure the agreement.

## Project Location

**Briefly describe the location of the project**

The project site is located along the lower Chiwawa River from the Goose Creek confluence upstream to the Alder Creek confluence, approximately RM 6.0-7.25

**Latitude (decimal degrees)** 47.8396

**Longitude (decimal degrees)** -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 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?**

Yes

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

Yes

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

A related project on the lower Chiwawa River was submitted for funding in 2020. It did not receive SRFB funding because the application was pulled and the project revised. The revised effort (an assessment of the entire Lower Chiwawa AU) was funded by Tributary Committee and Bureau of Reclamation (BOR). That project identified and completed concept development for seven project sites in the AU. This Area D project was identified during that prior effort.

An earlier design phase for the Area D project was proposed for SRFB funding during the 2022 grant round. That proposal was funded, and preliminary designs and other products are being developed under that agreement (the design documents and other work products are being uploaded to PRISM). That RCO agreement is set to end September 2025. BOR also provided financial support for this earlier design phase. BOR contracted directly with the design firm, that is designing the in-stream restoration treatments.

In addition, CCNRD requested funding for this final design effort in a BOR WaterSMART Aquatic Ecosystems Restoration Projects (WaterSMART AERP) funding request. That proposal was selected for funding, and we are currently working with BOR staff to secure the award. This 2025 SRFB request serves as the required 35% non-federal match for the WaterSMART AERP funding.

**6. What category is the project?** Design

**If applicable, what is the secondary project category?** N/A

**Is the project eligible for Riparian Funding?** Yes

## Design and Restoration Proposals

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

**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)?** Lower Chiwawa River Assessment, InterFluve 2023

**9. Which limiting factors does the project propose to address?** Cover - Wood, Off-Channel - Floodplain, Off-Channel - Side-Channels, Pool Quantity & Quality, Pools - Deep Pools, Riparian - Canopy Cover, Temperature - Adult Holding, Temperature - Rearing

**10. Which life stages will the proposed project address?** Fry, Holding and Maturation, Summer Rearing, Winter Rearing

### **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 in 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. Upon implementation the proposed project will improve habitat quality at two tributary confluences; increase the length of side channel habitats, the number of deep pools and amount of LWD present along ~1.25 miles of mainstem channel; and treat historical and ongoing recreational impacts to riparian vegetation and water quality (and minimize potential for future impacts) along the project reach. Based on the above, this project will enhance the quantity and quality of habitats along the project reach, and 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 creates management issues for USFS).

The project proposes to continue an ongoing effort to assess an ~1.25 mile reach of the river and ~15 acres of adjacent riparian habitat and identify actions that can be implemented to restore habitat values, promote natural processes, minimize future recreational impacts, and facilitate USFS management of the area. The proposed design process is supported by extensive data collection and modeling. It will anticipate projected effects of global climate change and be consistent with reach-scale geomorphology and USFS planning and management efforts. The project will also be 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.

Designs are intended to promote natural processes by adding structure to enhance the mainstem channel and tributary confluences, connect floodplain and side-channel habitats, create new side channel habitats and facilitate recruitment of naturally occurring LWD and streambed materials. The design process also is developing treatments for past anthropogenic impacts to streamside habitats that are also intended to minimize potential effects of continued recreational use of the area. These treatments are collectively expected to improve conditions for adult holding, fry, summer rearing, and winter rearing life stages in the near-term and provide long-term benefits to aquatic habitats.

### **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?**

50+ years

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

This phase of the project is for preparation of construction-ready designs, so there will be no associated maintenance at this time. However, 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 anticipate involvement with the project during and after implementation and will work with USFS to monitor the project post-construction and complete maintenance as needed to ensure the project continues to function as designed.

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

A variety of methods will be used over the course of this final design effort. Our goal is to design a project that improves conditions along the mainstem channel, creates additional side channel habitat and better connects floodplain surfaces, enhances two tributary confluences, addresses dispersed camping and roads, identifies site management and planting strategies to improve riparian/upland habitats, and facilitates long-term management of the area for the landowner.

New data was gathered and analyzed during two previous design and assessment phases including high resolution aerial imagery and LiDAR topo-bathymetric data and development of an AU-wide existing conditions hydraulic model. The current preliminary design phase is utilizing these and other data sets and model outputs to build upon initial concepts.

The proposed project will gather additional data at the site, continue 2D hydraulic modeling, and employ other science and engineering methods to finalize location(s) and characteristics of restoration treatments (e.g., methods employed, size and type of materials, etc.) that will be used to meet project goals and to evaluate their influences. The engineering design process will continue to utilize best available science and follow regulatory design guidelines to finalize identified implementation techniques that meet project objectives including engineered log jams, log and boulder placement, selective grading, and vegetation management. We also will continue to develop treatments for past recreational impacts that limit future effects of recreational use. All actions will be consistent with USFS planning and management needs, and the design process will continue to be informed by internal and external review.

## Assessment Proposals

## Protection Proposals

## Monitoring Proposals

## Project Risk and Economic Benefits

**1. What is the landownership?**

USDA 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 for the Preliminary Design Phase of this project, and USFS is a partner in the ongoing design effort. We will obtain a signed Landowner Acknowledgement Form for this proposed Final Design Phase later on in this SRFB application process.

**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.

Dispersed camping consolidation/reduction and road decommissioning will follow USFS guidelines and standards, and in-stream restoration will be 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).

None of these requirements are expected to adversely affect the project 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)?**

Instream projects often raise concerns of recreational boaters, adjacent property owners, and other interested parties. Our designs will take boater 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).

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

This proposal supports preparation of construction-ready designs, so no on-the-ground management or maintenance activities are expected with work performed under it. However, management and maintenance of the project site may be needed following project implementation. CCNRD anticipates that the project site will be monitored post-construction and that USFS will ultimately be responsible for maintenance and management. However, CCNRD will work with USFS to provide for necessary management and maintenance during that time. Treatments in the dispersed camping areas are expected to facilitate USFS management of the area and reduce potential for future human impacts to streamside vegetation and water quality.

**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 design phase, we will work with a licensed engineer (and support staff) employed by a reputable company with extensive river restoration experience. The design effort to date is consistent with applicable design criteria and has included extensive review and revision. The project will be subject to further review and refinement during preparation of the proposed final designs. 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 current concept development phase of this project to assure that local resident 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 the final design phase. As a result, it will employ design consultants and agency staff. The subsequent implementation

phase 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 design projects such as the one proposed. CCNRD has:

- worked with USFS on several past and ongoing restoration efforts.
- a long-standing partnership with the Bureau of Reclamation. BOR was a primary funder for the effort that identified this project site and has directly contracted with InterFluve, Inc. for the current preliminary design phase of this project. Further, BOR funds are expected to support this project phase.
- a working relationship with InterFluve. IFI is the design firm on the current preliminary design phase,
- working relationships with other design firms and construction firms with experience designing and implementing this type of project.

Given the above, CCNRD is well situated to complete the proposed final design effort on-time and on budget, move on to the subsequent implementation phase, and achieve the expected results.

## **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 18, 2025.

\*please note, this section is not applicable for Monitoring proposals

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

No

## **Supporting Documents**

[Upper Columbia Process Guide 2025](#)

[SRFB Manual 18 \(2025\)](#)

[RCO Application Resources \(2025\)](#)

## PROJECT: 25-1216 PLAN, LOWER CHIWAWA AREA D FINAL DESIGN

Sponsor: Chelan Co Natural Resource Program: Salmon State Projects Status: Application Submitted

### Parties to the Agreement

#### PRIMARY SPONSOR

Chelan County Natural Resources Department

**Address** 411 Washington St Ste 201

**City** Wenatchee **State** WA **Zip** 98801

**Org Type** County-Open Space/Nat Resources

**Vendor #** SWV0001231-12

**UBI**

**Date Org created**

**Org Notes**

[link to Organization profile](#)

Org data updated

#### SECONDARY SPONSORS

No records to display

#### MANAGING AGENCY

Recreation and Conservation Office

#### LEAD ENTITY

Upper Columbia Salmon Rcy Bd L

#### QUESTIONS

#1: List project partners and their role and contribution to the project.

US Forest Service, Wenatchee River Ranger District (landowner, design review).  
US BoR (funder for current Conceptual and Preliminary Design work). BOR funding also is expected to help support this Final Design effort.

### External Systems

#### SPONSOR ASSIGNED INFO

**Sponsor-Assigned Project Number**

**Sponsor-Assigned Regions**

#### LINK AN EXISTING SRP PROJECT

Unlink

25-1216, Lower Chiwawa Area D Final Design, Salmon St

# Project Application Report - 25-1216

## Project Contacts

Contact Name Primary Org	Project Role	Work Phone	Work Email
<u>Amee Bahr</u> Rec. and Conserv. Office	Project Manager	(360) 867-8585	<a href="mailto:Amee.Bahr@rco.wa.gov">Amee.Bahr@rco.wa.gov</a>
<u>Scott Bailey</u> Chelan Co Natural Resource	Project Contact	(509) 679-2131	<a href="mailto:Scott.Bailey@co.chelan.wa.us">Scott.Bailey@co.chelan.wa.us</a>
<u>Michael Kaputa</u> Chelan Co Natural Resource	Alt Project Contact	(509) 670-6935	<a href="mailto:mike.kaputa@co.chelan.wa.us">mike.kaputa@co.chelan.wa.us</a>
<u>Ariel Edwards</u> Upper Columbia Salmon Rcy Bd L	Lead Entity Contact	(208) 540-2691	<a href="mailto:ariel.edwards@ucsr.org">ariel.edwards@ucsr.org</a>
<u>Lorie Wiseman</u> Chelan Co Natural Resource	Billing	(509) 679-1926	<a href="mailto:Lorie.Wiseman@co.chelan.wa.us">Lorie.Wiseman@co.chelan.wa.us</a>
<u>Sofia Bjorklund</u> Chelan Co Natural Resource	Billing	(509) 667-6324	<a href="mailto:sofia.bjorklund@co.chelan.wa.us">sofia.bjorklund@co.chelan.wa.us</a>

## Worksites & Properties

- # **Worksite Name**
- #1 Lower Chiwawa AU, Area D

Planning	Property Name
✓	Lower Chiwawa AU, Area D

# Project Application Report - 25-1216

## Worksite Map & Description

### Worksite #1: Lower Chiwawa AU, Area D

#### WORKSITE ADDRESS

Street Address N/A  
City, State, Zip

## Worksite Details

### Worksite #1: Lower Chiwawa AU, Area D

#### SITE ACCESS DIRECTIONS

From Chiwawa Loop Road turn north onto Chiwawa River Road (towards Fish Lake). Proceed along Chiwawa River Road for approximately 2.75 miles to bridge over Chiwawa River. Cross bridge and proceed for ~175 ft to first turnout on right (south side of road). Park at this dispersed camping area.

#### TARGETED ESU SPECIES

Species by ESU	Egg Present	Juvenile Present	Adult Present	Population Trend
Chinook-Upper Columbia River Spring, Wenatchee River, Endangered	✓	✓	✓	Declining
Steelhead-Upper Columbia River, Wenatchee River, Threatened	✓	✓	✓	Declining

#### Reference or source used

NOAA Fisheries -UCR Steelhead, Status of the Species Update 2024 and UCR Spring Chinook Status of the Species Update 2024.

#### TARGETED NON-ESU SPECIES

Species by Non-ESU	Notes
Bull Trout	

#### Questions

#1: Give street address or road name and mile post for this worksite if available.

No address available. Project is located at milepost 2.75 on Chiwawa River Road (2.75 miles from junction with Chiwawa Loop Road). LAT: 47.8412 N, LONG: -120.6661 W

## Project Location

#### RELATED PROJECTS

##### Projects in PRISM

PRISM Number	Project Name	Program Name	Current Status	Relationship Type	Notes
22-1499 P	Lower Chiwawa AU, Area D - Prel. Design	Salmon Federal Projects	Active	Current Phase	Ongoing effort. Agreement expires September 2025.

#### Related Project Notes

# Project Application Report - 25-1216

The purpose of the current Preliminary Design phase is to develop conceptual and preliminary designs for aquatic restoration and riparian area (dispersed camping areas) treatments to improve aquatic habitats for listed steelhead, spring Chinook, and bull trout in Reach 4 of the Lower Chiwawa Assessment unit, an area identified as a high priority for habitat improvements to benefit the targeted species. In addition, environmental compliance tasks including wetland delineation, cultural resources clearance, and draft permit applications also are being completed under PRISM No 22-1499.

## Questions

#1: Project location. Describe the geographic location, water bodies or habitat types, and the location of the project in the watershed, i.e. nearshore, tributary, main-stem, off-channel, etc.

The project will occur within the mainstem channel and on adjacent floodplain and upland habitats along the lower Chiwawa River from the Goose Creek confluence upstream to the Alder Creek confluence, approximately RM 6.0-7.25.

#2: How does this project fit within your regional recovery plan and/or local lead entity's strategy to restore or protect salmonid habitat? Cite section and page number.

This project is located within Reach 4 of the Lower Chiwawa Assessment Unit. In Step 1 of its most recent Habitat Prioritization effort, the Upper Columbia Regional Technical Team (UCRTT) classified the Lower Chiwawa River AU as a Tier 1 Priority Assessment Unit for restoration actions targeting spring Chinook, and a Tier 2 Priority Assessment Unit for steelhead and bull trout. UCRTT has further prioritized Reach 4 within the AU as Priority Rank 2. Information on the UCSRB Prioritization process is available at <https://prioritization.ucsr.org/>. The information is distributed largely in the form of maps and spreadsheets, so we are unable to cite section and page numbers for the information below.

In Step 2 of its prioritization update, UCRTT has identified that Reach 4 supports a number of high (H) and medium (M) priority life stages for spring Chinook (Holding/Maturation [M], Fry Colonization [H], Summer Rearing [H], and Winter Rearing [H]); steelhead (Winter Rearing [H]); and bull trout (Adult Migration [M], Adult Non-Spawning [M], and Subadult Rearing [M]). The proposed project is consistent with a number of actions listed to address life stage limiting factors within Reach 4. These include:

1. Improve cover wood for holding/maturation, fry, summer rearing, and winter rearing life stages (Cover - Wood - Unacceptable),
2. Improve off-channel side channels for fry, summer rearing, and winter rearing life stages (Off-channel Side Channels - Unacceptable),
3. Improve off-channel floodplain for summer rearing and fry life stages (Off-channel Floodplain - Unacceptable), and
4. Improve temperatures for holding/maturation and summer rearing life stages (Temperature - Unacceptable).

Finally, the Chiwawa River features prominently in the Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan (UCSRB 2007). Recovery criteria for bull trout and naturally produced steelhead and Chinook include evidence of spawning within major spawning areas in the Wenatchee Basin, including the Chiwawa River.

#3: Is this project part of a larger overall project?

Yes

# Project Application Report - 25-1216

#3a: How does this project fit into the sequencing of the larger project?

This project is not part of a larger project in that it is addressing a portion of the work needed at a specific site. Rather, it was identified through an earlier effort to evaluate nearly the entire Lower Chiwawa AU to identify sites within the AU where restoration may be appropriate and to develop initial concepts for work at those sites. Partners included CCNRD, US BoR, Tributary Committee, and US Forest Service, with a variety of other stakeholders also involved. Several other discrete project areas along lower 13 miles of the river were also identified during this effort, and final deliverables were completed in fall 2022.

In addition, this project area is within the USFS Upper Wenatchee Pilot Project (UWPP), a proposal to restore watershed health and resiliency by returning fire to the landscape, improving wildlife habitat, and improving watershed function on about 74,760 acres. The proposed project is consistent with aquatic restoration actions identified in UWPP documents.

#4: Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. [Aquatic Districts and Managers](#)

No

## Property Details

Property: Lower Chiwawa AU, Area D (Worksite #1: Lower Chiwawa AU, Area D)

✓ Planning

### LANDOWNER

Name US Forest Service Okanogan-Wenatchee  
Address 600 Sherbourne  
City Leavenworth  
State WA Zip 98826  
Type Federal

### CONTROL & TENURE

Instrument Type  
Timing Proposed  
Term Length  
# Yrs  
Expiration Date  
Note

## Project Proposal

### Project Description

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 prepare construction-ready designs, finalize and complete environmental compliance tasks (i.e., finalize and submit permit applications and continue consultations with regulatory agencies), and prepare bid documents to improve conditions along ~1.4 miles of mainstem channel; create up to 0.25 miles of side channel habitat; enhance two cold water tributary confluences; and consolidate/reduce dispersed camping, decommission ~1,000 lf of forest roads and reduce potential for future impacts and enhance vegetation within ~15 streamside acres.

### Project Questions

## Project Application Report - 25-1216

#1: Problem statement. What are the problems your project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.

Reach-specific information for portions of the Chiwawa River that include the project area, including descriptions of conditions and recommended actions to improve deficiencies, is provided in the following documents: Upper Wenatchee Pilot Project: Aquatic Habitat Assessment and Restoration Strategy Report (Cramer Fish Sciences [CFS] 2019), and Upper Wenatchee Thermal Refuge Assessment (CCNRD 2020). Additional information on the Upper Wenatchee Pilot Project is available in the Upper Wenatchee Pilot Project Draft Environmental Assessment (USFS 2020). The Upper Columbia Regional Technical Team (UCRTT) identified reach-specific limiting factors and recommended actions to treat these limitations in its updated prioritization strategy (UCRTT 2021). The proposed project area is within Reach 4 of the lower Chiwawa River AU as defined by UCRTT 2021, and within the Clear-Alder reach as defined by CFS 2019.

Within the project reach, the stream is generally single-thread, plane bed and entrenched within glacial deposits. It is largely disconnected from its floodplain, stream power is high, channel bed substrate is dominated by large cobbles and small boulders, persistent large wood is rare, and hydraulic diversity is low. The documented lack of floodplain connectivity and in-stream structure (large wood) are primary problems the project is seeking to address.

Additionally, water temperatures in the lower Chiwawa River can be elevated above acceptable standards during summer months, and climate change is expected to exacerbate this problem (NorWeST Stream Temperature Projections). Pre-spawn mortality for spring Chinook in the upper Wenatchee Basin is high and, although the causes of this mortality have not been determined, high water temperature is suspected to be a factor (C. Willard, pers. comm.). High water temperatures also have been shown to adversely affect juvenile salmonids by reducing or eliminating feeding, increasing harmful metabolic effects, decreasing growth rates, impairing smoltification and increasing vulnerability to predation and the feeding rates of potential predators (Sauter et. al. 2001). Goose and Alder creeks are documented cold surface water tributaries that enter the river at either end of this project reach. They create cold-water plumes in the river that are up to 8 degrees Celsius cooler than the mainstem river during the hottest part of the year (Roumasset 2020), and water temperatures in these streams are expected to continue to remain below WA state standards as the climate continues to warm (NorWeST 2040 and 2080 Stream Temperature Projections). These tributaries are important cold water resources for adult and juvenile salmonids, but there are no deep pools at the confluences and there is little in-stream structure to provide complexity and cover at these cold plumes. The habitat deficiencies at these confluences are additional problems the project seeks to address.

Finally, dispersed camping in areas adjoining the river in the project reach has resulted in a web of social roads and areas lacking ground cover that are susceptible to erosion. It has destabilized streambanks, adversely affected riparian vegetation, and the users are leaving garbage and human waste in close proximity to the river. These recreational impacts and riparian habitat impairments are also problems this project seeks to address.

## Project Application Report - 25-1216

#2: Describe the limiting factors, and/or ecological concerns, and limiting life stages (by fish species) that your project expects to address.

This project will improve conditions for all three listed fish species and other aquatic species in the lower Chiwawa River. However, it primarily addresses the following spring Chinook, steelhead, and bull trout life stage limiting factors identified for Reach 4 (UCRTT 2021):

Floodplain Connectivity is rated "Unacceptable" for spring Chinook and steelhead fry colonization, summer rearing and winter rearing life stages; as well as bull trout natal and subadult rearing and adult non-spawning life stages.

Off-channel Side Channel is rated "Unacceptable" for spring Chinook and steelhead spawning and incubation, fry colonization, summer rearing and winter rearing life stages; and bull trout natal and subadult rearing and adult non-spawning life stages.

Cover-Wood is rated "Unacceptable" for spring Chinook and steelhead holding/maturation, fry colonization, summer rearing and winter rearing life stages. It is also rated "Unacceptable" for bull trout holding/maturation, natal and subadult rearing and adult non-spawning life stages.

Temperature is rated "Unacceptable" for the following spring Chinook and steelhead life stages: holding/maturation, spawning/incubation, and summer rearing. It is also rated "Unacceptable" for bull trout holding/maturation, subadult rearing, natal rearing and adult non-spawning life stages.

Cramer Fish Sciences (CFS 2019) also rates Reach 4 as "At Risk" for Riparian Conditions, and UCRTT rates Deep Pools as "At Risk" for spring Chinook, steelhead and bull trout holding/maturation life stage.

#3: What are the 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. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized. **Example Goals and Objectives**

The goal of the proposed project is to complete work needed to develop construction-ready designs and bid documents, and finalize and submit permit applications for restoration actions that address Limiting Factors identified for Reach 4 of the Lower Chiwawa River AU including cover-wood, floodplain connectivity/off-channel side channels, water temperature, deep pools, and riparian habitat. During this phase CCNRD also will prepare grant requests to fund project implementation. Upon completion of this phase we will be prepared to implement a project to enhance conditions along an ~1.4 mile reach of the lower river.

The designs will identify actions intended to improve habitat characteristics important for a variety of spring Chinook, steelhead and bull trout life stages including summer & winter rearing, fry colonization, holding/maturation, subadult rearing, natal rearing, & adult non-spawning life stages. Benefits from actions likely to occur are realized very quickly, persist for decades and are year-round in nature.

Goal 1: Add structure (large wood and/or boulders) within the mainstem channel.

Goal 2: Create/Improve off-channel floodplain/side channel habitats.

Goal 3: Increase pool quantity and Improve pool quality throughout the project reach.

Goal 4: Treat upland and floodplain impacts associated with dispersed camping, decommission social roads and limit and consolidate camp sites for future use in areas adjacent to the treatment reach.

## Project Application Report - 25-1216

#4: What are the project objectives? Objectives support and refine biological goals, breaking them down into smaller 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). [Example Goals and Objectives](#)

Objectives of the proposed project are to:

1. Develop a Construction-ready Design Package within 12 months of a signed agreement that identifies restoration actions that will:

(a) increase pool quantity, cover and complexity along ~1.4 miles of mainstem channel to (1) redirect flows and increase inundation of river left floodplain surface, (2) increase wood loading to greater than 70 pieces of wood per mile, (3) increase pool quantity and quality along the project reach, and (4) improve cover and pool depth at Alder Creek and Goose Creek confluences.

(b) add up to 0.25 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 user-created roads, consolidate camp sites, plant native trees and shrubs and complete other treatments to (1) improve conditions within ~15 acres of riparian habitat, and (2) facilitate USFS management of the area.

2. Within three months after completing draft final design package, finalize and submit HPA and JARPA applications needed for project implementation.

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#5: Scope of work and deliverables. Provide a detailed description of each project task/element. With each task/element, identify who will be responsible for each, what the deliverables will be, and the schedule for completion.

The scope of work includes the following tasks (schedule assumes a November 2025 start date):

- 1. Final Design (November 2025–October 2026):**  
Includes advancement of 60% designs to draft final designs (for in-stream and terrestrial treatments) based on feedback from external technical reviewers and the design team. Upon completion, the draft final design package also will be reviewed by external technical reviewers and the design team and feedback from this review process will inform edits to develop the construction-ready design package. Construction-ready designs will include updated Basis of Design Report (including final hydraulic analysis), design sheets, construction technical specifications and bid schedule, and engineer's estimate of probable costs. CCNRD and Consultants lead, stakeholders involved. Products: construction-ready design package.
- 2. Implementation Fundraising (January 2026-September 2026)**  
This task includes proposal preparation and other tasks needed to raise funds for project implementation (targeted for 2027). The draft final design package will inform these implementation funding requests. CCNRD lead, consultants involved. Products: grant applications requesting funding sufficient to cover expected implementation costs.
- 3. Finalize and Submit Permit Applications (January 2026 – October 2026):**  
CCNRD will work with our consultants to complete final federal and state fill/removal permit applications, and will submit these applications to the appropriate regulatory agencies. CCNRD lead, consultant involved. Products: final JARPA and HPA applications submitted.
- 4. Bid Document Preparation (June 2026 - December 2026):**  
CCNRD will work with the design consultants to prepare bid documents needed to solicit bids for project implementation. At this stage, we anticipate two separate contracts, one for project construction and one for shrub/tree planting to follow construction tasks, but this could change depending upon final designs. CCNRD lead, consultant involved. Products: bid documents for all necessary contracted tasks.
- 5. Management and Meetings (Ongoing during life of project):**  
Project sponsor will manage grant agreements and contracts, participate on the design team and work with landowners, permit agencies and other stakeholders. CCNRD lead, consultant & stakeholders involved. Deliverables: grant compliance materials including progress reporting, invoice processing/billing, and final reports.

#6: What are the assumptions and physical constraints that could impact whether you achieve your objectives? Assumptions and constraints are external conditions that are not under the direct control of the project, but directly impact the outcome of the project. These may include ecological and geomorphic factors, land use constraints, public acceptance of the project, delays, or other factors. How will you address these issues if they arise?

The project area includes a bridge over the river, a small community of cabins on leased USFS land, and a designated USFS campground. The project must not adversely affect these features or increase risks to occupants/users, so the constraints that they impose and their effects on hydraulics, hydrology, topography, etc. must be considered when designing restoration actions for this location.

Our proposal is for continuation of the design phase of this project and we have considered all of the above during the ongoing preliminary design phase. As a result, we are able to continue to incorporate these and other concerns into the proposed final designs and adjust designs if needed.

Because these assumptions and physical constraints are accounted for during the design phase, the potential for these to adversely affect the implementation phase that follows will be low.

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#7: How have lessons learned from completed projects or monitoring studies informed this project?

This project is informed by a thermal refuge assessment completed with financial support from RCO (Roumasset 2020), and a project funded by BoR and the Tributary Committee that identified potential restoration project sites in the lower Chiwawa AU and developed concepts to restore/enhance those sites (InterFluve 2023). Other studies in the basin (e.g., Cramer Fish Sciences, 2019) also have informed the ongoing preliminary design phase.

Additionally, Chelan County NRD has completed many projects to enhance in-stream conditions throughout our service area. Modern river restoration has evolved considerably from early efforts and a substantial body of knowledge is available to inform project design and implementation. To assure that our projects are state of the art and meet objectives, CCNRD draws from internal and external knowledge sources when designing and implementing such projects, and we partner with design firms that specialize in river restoration and have substantial experience. Our experience with past restoration projects also informs how we select sites for projects, and the actions proposed. We are increasingly looking for opportunities to complete large-scale projects where we can employ a variety of restoration actions to treat identified deficiencies and for areas where we can enhance thermal conditions

#8: Describe the alternatives considered and why the preferred was chosen.

Alternative treatment approaches were evaluated during the earlier effort that identified this project site (InterFluve 2023). At that time, three alternatives were analyzed for Area D. These were not true alternatives in that each included a separate suite of treatments. Instead, each alternative included a similar suite of in-stream large wood treatments and treatments in all three dispersed camping areas. Where they differed was the extent of new channel excavation - one included no side-channel excavation; one included a single, river-left side channel; and the third included a river-left side-channel and a river-right alcove and groundwater collection gallery. The preferred alternative was an amalgamation of two alternatives - it incorporated large wood treatments from the alternative with no side channel, a single side channel on river-left, and assumed treatments in the dispersed camping areas. It was selected because it best met the previously determined in-stream and floodplain connectivity goals, while minimizing potential for adverse impacts to the adjacent USFS lease cabins.

The preferred alternative from the earlier effort has been further refined during the ongoing conceptual and preliminary design phases. This included exploration of different ELJ configurations and iterative hydraulic modeling to assure that impacts to the adjacent cabins are avoided. Conceptual designs also included identification and evaluation of different treatment options in the dispersed camping areas. Based on USFS feedback, all proposed dispersed camping treatments were moved forward in the preliminary design phase.

The treatments that will be advanced during this proposed final design phase were selected because they achieve the desired aquatic habitat improvements and enhanced floodplain connectivity, improve conditions in the dispersed camping areas and facilitate USFS management of these areas, and avoid raising water levels where the USFS lease cabins are located.

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#9: How were stakeholders consulted in the development of this project? Identify the stakeholders, their concerns or feedback, and how those concerns were addressed.

During the earlier effort to identify projects in the Lower Chiwawa AU (InterFluve 2023), we assembled a Project Development Team (PDT) which included staff from CCNRD, USFS, BoR, WDFW, members of the Tributary Committee, and technical consultants. We also consulted with many private landowners.

The proposed project was identified during that earlier effort and was refined based on feedback provided by USFS Wenatchee River Ranger District recreation, fisheries, wildlife, cultural and geology staff. The project scope was originally limited to in-stream work, but USFS feedback resulted in an expanded scope which included a substantial area outside of the channel where dispersed camping impacts have been noted. As a result of this stakeholder involvement, the project also includes treatments for areas outside of the channel.

Feedback on early concepts also expanded the scope of the project. Original ideas for this area were limited to potential floodplain reconnection opportunities, but stakeholder and PDT discussions led us to expand the project longitudinally to include the two tributary confluences.

#10: Does your project address or accommodate the anticipated effects of climate change?

Yes

#10a: How will your project be climate resilient given future conditions?

Resilient rivers have space to move and are connected to adjacent floodplains, underlying sediments, and up- and downstream reaches. They are also diverse – physical diversity equals habitat diversity, which supports biological diversity.

This project is designing actions to enhance physical diversity and connectivity in a stream reach that is simplified and laterally disconnected. It also will treat disturbed riparian habitats and limit potential for future disturbances. Anticipated actions are long-lived and expected to facilitate subsequent natural changes in aquatic and terrestrial environments, promoting continued physical diversity and connectivity. NorWeST stream temperature projections indicate that, even as stream temps throughout the NW continue to rise, flows in the project area are expected to remain favorable for salmonids through 2080.

Based on the above, this project is expected to contribute to a more resilient landscape that ameliorates the effects of climate change.

#10b: How will your project increase habitat and species adaptability?

This project is intended to enhance habitat quality over the long term along ~1.25 miles of mainstem river and adjacent riparian habitats in proximity to two known cold water tributaries. In addition to the immediate direct benefits of better floodplain connectivity, ELJ/pool construction, and riparian habitat enhancement, the project is expected to facilitate subsequent natural changes in aquatic and terrestrial environments and promote continued physical diversity and connectivity. This is expected to contribute to a more resilient landscape and improve survival and productivity for salmonids using the Chiwawa River, which should, in turn, facilitate species resiliency and adaptability.

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#11: Describe the sponsor's experience managing this type of project. Describe other projects where the sponsor has successfully used a similar approach.

CCNRD has considerable experience designing and implementing stream restoration projects and has managed numerous similar projects. It is currently involved in similar design efforts and is implementing projects that will employ actions likely to be employed by the proposed project.

Scott Bailey will manage the project for CCNRD. He has nearly 40 years of professional experience, has implemented many stream/wetland restoration projects, and is managing similar design efforts on the Chiwawa River and other nearby streams.

#12: Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.

No

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## Planning Supplemental

#1: Is the project an assessment / inventory?  
No

#2: Is your project a Barrier / Screening Diversion Inventory Project?  
No

#3: Is this a fish passage design / screening design project?  
No

#4: Will the project develop a design?  
Yes

#4a: Will a licensed professional engineer design of the project?  
Yes

#4b: Will you apply for permits as part of the project scope?

Yes. We have completed cultural resources and wetland delineation reports, and USFS completed its Section 106 process for cultural resources. In addition, we have communicated with regulatory agency staff during the current design phase and will prepare draft permit applications (and upload to PRISM) once 60% preliminary designs are complete. During the proposed final design phase, we will finalize and submit permit applications in addition to preparing construction-ready designs.

## Planning Metrics

### Worksite: Lower Chiwawa AU, Area D (#1)

Area Encompassed (acres) (B.0.b.1)	119.8
Miles of Stream and/or Shoreline Affected (B.0.b.2)	1.46

### DESIGN FOR SALMON RESTORATION

#### Final design and permitting (B.1.b.11.a RCO)

Total cost for Final design and permitting	\$56,084
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Project Identified in a Plan or Watershed Assessment. (1221) (B.1.b.11.a)	Upper Columbia Regional Technical Team. 2021. Habitat Action Prioritization Within the Upper Columbia River Basin. Upper Columbia Salmon Recovery Board. <a href="https://www.ucsr.org/mdocs-posts/habitat-action-prioritization-strategy-v-3/">https://www.ucsr.org/mdocs-posts/habitat-action-prioritization-strategy-v-3/</a> and Roumasset, A. (Chelan Co. Natural Resource Dept.). 2020. Upper Wenatchee Thermal Refuge Assessment. Unpublished report to RCO.
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Priority in Recovery Plan (1223) (B.1.b.11.b)	The Upper Columbia Regional Technical Team (UCRTT) and Upper Columbia Salmon Recovery Board (UCSRB) have identified the Lower Chiwawa River Assessment Unit as a Tier 1 Priority HUC12 watershed for restoration efforts that benefit spring Chinook, and as Tier 2 for steelhead and bull trout. They have further identified that highest priority restoration efforts in this HUC12 are those that enhance habitats for the following life stages: Spring Chinook: Fry Colonization, Summer Rearing, and Winter Rearing; and Steelhead: Winter Rearing. Spring Chinook Holding/Maturation and bull trout Adult Migration, Adult Non-Spawning, and Subadult Rearing are rated Medium Priority. All other life stages are Low
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# Project Application Report - 25-1216

Priority. Finally, UCRTT has identified Floodplain Connectivity, Off-channel Side Channel, Cover-Wood, and Temperature as "Unacceptable." Riparian Conditions and Deep Pools are rated "At Risk."

## Overall Project Metrics

### COMPLETION DATE

Projected date of completion

01/31/2027

## Planning Cost Estimates

### Worksite #1: Lower Chiwawa AU, Area D

Category	Work Type	Estimated Cost	Note
Design for Salmon restoration	Final design and permitting (B.1.b.11.a RCO)	\$56,084	
	Subtotal:	\$56,084	
	Total Estimate For Worksite:	\$56,084	

### Summary

Total Estimated Costs:	\$56,084
Total Estimated Planning Costs:	\$56,084

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## Cost Summary

	Estimated Cost	Project %	Admin/AA&E %
<u>Planning Costs</u>			
Planning	\$56,084		
SUBTOTAL	\$56,084	100.00 %	
Total Cost Estimate	\$56,084	100.00 %	

## Funding Request and Match

### FUNDING PROGRAM

Salmon State Projects	\$56,084	100.000000
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### SPONSOR MATCH

## Questions

#1: Explain how you determined the cost estimates

Costs were estimated by estimating the total amount of time needed to administer and manage the project and to participate in project activities including data collection, stakeholder coordination and participation in the design process. Estimates for contractor provided work are based on estimated costs provided by technical service providers and previous project costs. CCNRD is not requesting Indirect costs because State funding is requested to match other funding from a federal source.

## Other Funding

### OTHER FUNDING DETAILS

Other Funds: Monetary Funding	Federal Grant	
Amount		\$125,000
Funding Organization		US Bureau of Reclamation
Grant Program		WaterSmart AERP
Other Funding Detail Total:		\$125,000

## Cultural Resources

### Cultural Resource Areas

Worksite #1: Lower Chiwawa AU, Area D

Area: Lower Chiwawa AU, Area D

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#1: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

The only ground disturbing work anticipated during this phase of the project is development of shallow groundwater monitoring wells on one of the floodplain surfaces. We intend to complete cultural clearance surveys in advance of well creation and the report for this work also accompany permit applications that will be prepared upon completion of preliminary designs. Completing cultural work during this phase will facilitate implementation during the next phase. We will survey areas where wells are likely to be needed and where ground disturbing activities are expected during the implementation phase.

#2: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

The project area is National Forest land. A large portion of the area is currently used for day use recreation and dispersed camping. There are social roads and disturbed ground (bare ground, fire pits, etc.) associated with camping activities. There is also an area where summer cabins have been constructed. The project will not affect the cabins. Plant communities dominated by native shrubs and trees are also present within the project footprint.

#3: Will a federal permit be required to complete the scope of work on the project areas located within this worksite?

No

Federal permits will be required for project implementation. However, this proposal is only for the design phase and, as a result, no permits are required for the scope of work associated with this proposal.

#4: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not.

Yes

#4a: Please list the federal agency and funding sources.

We are awaiting award of US BoR WaterSMART Aquatic Ecosystem Restoration Projects funds in support of this design effort.

#4b: Does the federal funding you are utilizing as match require you to receive state funding?

Yes. WaterSMART AERP grants require a 35% non-federal match.

#5: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?

Yes

#5a: Summarize the previous cultural resource review; including lead agency and date of review, reference name and numbers, etc. If RCO, include the prior phase grant number. NOTE: Do not provide any site-specific information considered confidential. Attach previous surveys or other reference documents.

We completed cultural resources survey and worked with USFS to complete Section 106 compliance tasks during the Conceptual/Preliminary Design Phase for this project site.

#6: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.

Unknown

The bridge over the river may be over 45 years of age, but there are no other structures or buildings in the proposed project footprint. The project is not expected to affect the bridge.

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## Project Permits

Permits and Reviews	Issuing Organization	Applied Date	Received Date	Expiration Date	Permit #
Cultural Assessment [Section 106]	DAHP		05/07/2024		R202361707005
			<b>Note:</b> Cultural resources Section 106 clearance complete. USFS Heritage Program Project Resource Review Summary included on Attachments page.		
Dredge/Fill Permit [Section 10/404 or 404]	Army Corps of Eng.		11/13/2023	11/13/2028	NWS-2004-189 (RGP-8)
			<b>Note:</b> We anticipate that federal fill/removal permitting will be completed under Regional General Permit 8 [RGP-8], USFS Aquatic Restoration Program Within the State of WA.		
Hydraulics Project Approval [HPA] NEPA	Dept of Fish & Wildlife Federal Agencies		07/17/2023		Upper Wenatchee Pilot
			<b>Note:</b> Project is being implemented under USFS, Upper Wenatchee Pilot Project NEPA Pathway.		

# Project Application Report - 25-1216

## Attachments

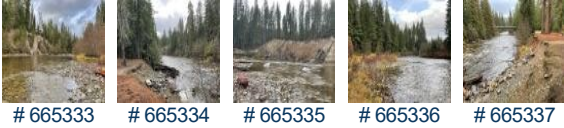
### Required Attachments

7 out of 7 done

Applicant Resolution/Authorizations	✓
CCA Tribal Notification	✓
Cost Estimate	✓
Landowner acknowledgement form	✓
Map: Planning Area	✓
Photo	✓
RCO Fiscal Data Collection Sheet	✓

### PHOTOS (JPG, GIF)

Photos (JPG, GIF)



### PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
	04/16/2025	CCA Tribal Notification	CCA-TribalNotices_CCNRD_2025_draft.pdf	ScottB	CCA-TribalNotices_CCNRD_2025_draft.pdf, 666453	✓
	04/16/2025	Cost Estimate	25-1216_Area D Final Design_CostEstimate.xlsx	ScottB	25-1216_Area D Final Design_CostEstimate.xlsx, 666417	✓
	04/14/2025	Landowner acknowledgement form	LandownerAcknowledgement_USFS.pdf	ScottB	LandownerAcknowledgement_USFS.p... 666021	
	04/11/2025	Map: Planning Area	SRFB Area D Project Location Map.pdf	ScottB	SRFB Area D Project Location Map.pdf, 665853	✓
	04/11/2025	RCO Fiscal Data Collection Sheet	SRFB 2025_FiscalDataCollectionSheet_final.pdf	ScottB	SRFB 2025_FiscalDataCollectionSheet_final... 665757	
	04/10/2025	Applicant Resolution/Authorizations	SRFB2025_CCNRD_ApplicantAuthorizatic	ScottB	SRFB2025_CCNRD_ApplicantAuthori... 665623	✓
	04/08/2025	Photo	IMG_5688_1.JPG	ScottB	IMG_5688_1.jpg, 665337	✓
	04/08/2025	Photo	IMG_2218.JPEG	ScottB	IMG_2218.jpeg, 665336	✓
	04/08/2025	Photo	IMG_2217.JPEG	ScottB	IMG_2217.jpeg, 665335	✓
	04/08/2025	Photo	IMG_2215.JPEG	ScottB	IMG_2215.jpeg, 665334	✓
	04/08/2025	Photo	IMG_5691.JPG	ScottB	IMG_5691.jpg, 665333	✓
	04/07/2025	Cultural Resources: Section 106	LChiwawaD-USFS HeritageReview.pdf	ScottB	LChiwawaD-USFS HeritageReview.pdf, 665151	

## Application Status

Application Due Date: 06/23/2025

Status Name	Status Date	Submitted By	Submission Notes
Application Submitted	04/18/2025	Scott Bailey	
Preapplication	04/02/2025		

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional

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documents before evaluation or approval of this project and I agree to provide them. (Scott Bailey, 04/18/2025)

Date of last change: 04/18/2025

## DESIGN PROJECTS

The costs on this page are for design projects, not for the design phase of a restoration grant.

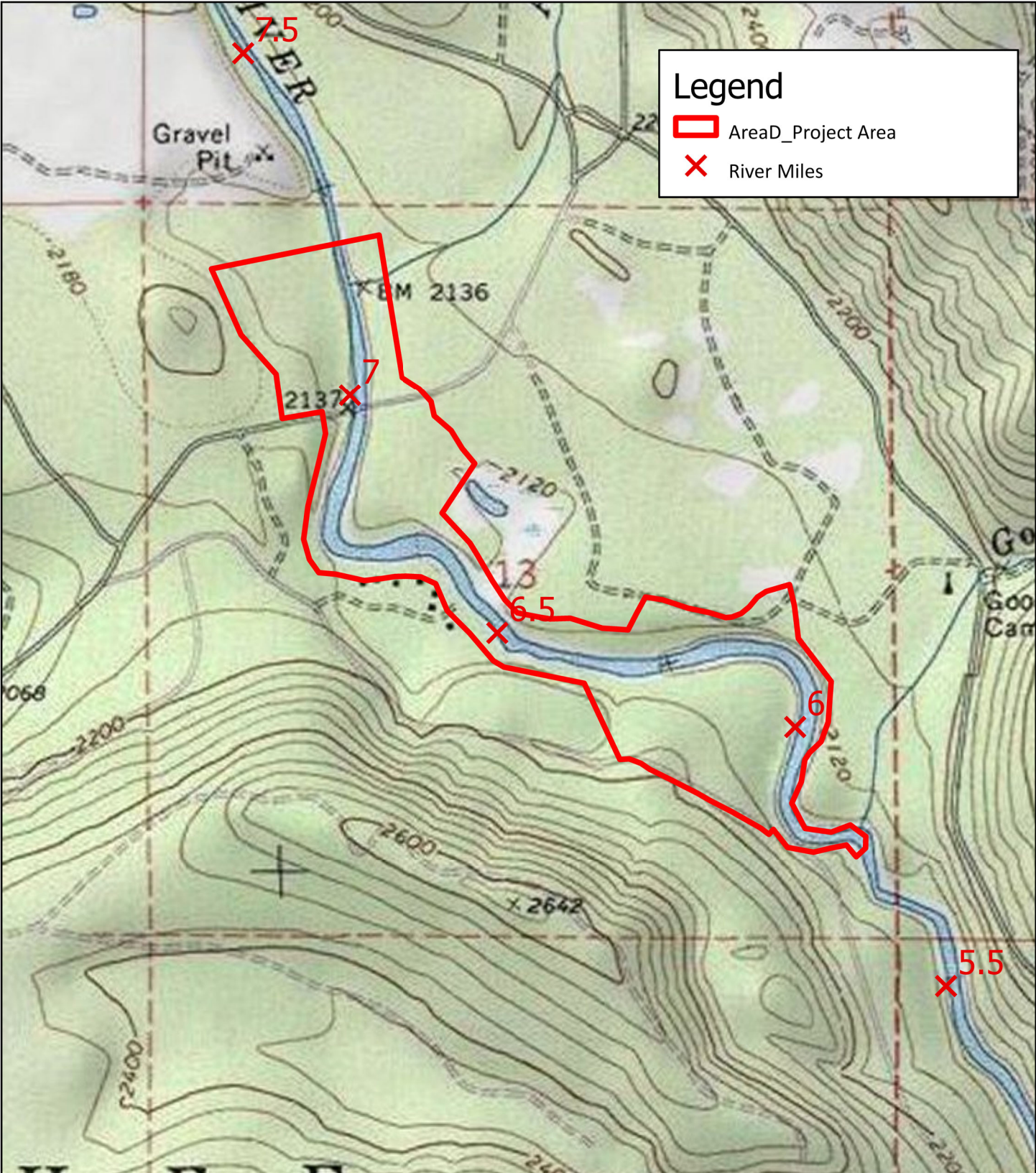
				OVERALL PROJECT	GRANT REQUEST	MATCH				
				Budget must account for all costs to complete the project	Enter only the amount of the grant request	The Grant Request and Match should equal the total project cost and Budget Check cell should be 0. Sponsors must account for all sources and types of match need to complete the project.				
				Amount	Grant Amount	Match in PRISM	Funding not reported in PRISM	Source (Grant, Cash, Materials, Labor, Volunteers, etc)	Match Type (federal, state, local)	
Design Costs										
Category	Task Description	Qty	Rate							
Final design - Camping Areas	Draft Final Design - contractor	1.00	\$ 15,000.00	\$ 15,000	\$ -	\$ 15,000	\$ -	BOR WaterSMART AERP	federal	
Final design - Camping Areas	Construction-ready Design-contractor	1.00	\$ 6,000.00	\$ 6,000	\$ -	\$ 6,000	\$ -	BOR WaterSMART AERP	federal	
Final design - Camping Areas	Bid Services Support -contractor	1.00	\$ 4,000.00	\$ 4,000	\$ -	\$ 4,000	\$ -	BOR WaterSMART AERP	federal	
Final design - In stream	Project Mngt and Coordination - contractor	1.00	\$ 22,000.00	\$ 22,000	\$ -	\$ 22,000	\$ -	BOR WaterSMART AERP	federal	
Final design - In stream	Construction-ready Design-contractor	1.00	\$ 60,000.00	\$ 60,000	\$ -	\$ 60,000	\$ -	BOR WaterSMART AERP	federal	
Permits	Environmental Compliance Support-contractor	1.00	\$ 11,000.00	\$ 11,000	\$ -	\$ 11,000	\$ -	BOR WaterSMART AERP	federal	
Final design - In stream	Bid Support Services-contractor	1.00	\$ 7,000.00	\$ 7,000	\$ -	\$ 7,000	\$ -	BOR WaterSMART AERP	federal	
Administrative - CCNRD	Project Mngt and Coordination	1.00	\$ 7,904.00	\$ 7,904	\$ 7,904		\$ -			
Permits - CCNRD	Secure Permits	1.00	\$ 15,421.00	\$ 15,421	\$ 15,421	\$ -	\$ -			
Final design - CCNRD	Design Team Lead, Bid Package Preparation	1.00	\$ 17,543.00	\$ 17,543	\$ 17,543	\$ -	\$ -			
Other - CCNRD	CCNRD Fringe	1.00	\$ 12,551.00	\$ 12,551	\$ 12,551	\$ -	\$ -			
Other - CCNRD	Anzu Robotics Raptor T	1.00	\$ 1,000.00	\$ 1,000	\$ 1,000	\$ -	\$ -			
Mileage - CCNRD	Motor pool vehicle mileage	1,500.00	\$ 1.11	\$ 1,665	\$ 1,665	\$ -	\$ -			
			\$ -	\$ -	\$ -	\$ -	\$ -			
			<b>STotal</b>	<b>\$ 181,084</b>	<b>\$ 56,084</b>	<b>\$ 125,000</b>	<b>\$ -</b>			
Indirect Costs				Amount	Grant amount	Match in PRISM	Funding not reported in PRISM	Match Source	Match Type (federal, state, local)	
	Description	Approved Rate	Total Project Base							
	Indirect	20.000%		\$ -	\$ -	\$ -	\$ -			
	Indirect	0.000%		\$ -	\$ -	\$ -	\$ -			
			<b>STotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
<b>Totals</b>				<b>\$ 181,084</b>	<b>\$ 56,084</b>	<b>\$ 125,000</b>	<b>\$ -</b>			

# CUMULATIVE TOTALS

*This sheet contains automatic calculations*

Project Name	Lower Chiwawa Area D - Final Designs
SRFB #	enter
Sponsor	Chelan County Natural Resource Department

	OVERALL PROJECT Cost	GRANT REQUEST Amount	PRISM MATCH Amount	MATCH NOT IN PRISM Amount	Budget Check
<u>Sheet #1 Acquisition</u>					
Property Costs	\$ -	\$ -	\$ -	\$ -	0
Incidental Costs	\$ -	\$ -	\$ -	\$ -	0
Administrative Costs	\$ -	\$ -	\$ -	\$ -	0
Indirect Costs	\$ -	\$ -	\$ -	\$ -	
STotal	\$ -	\$ -	\$ -	\$ -	0
<u>Sheet #2 Design</u>					
Design Costs	\$ 181,084	\$ 56,084	\$ 125,000	\$ -	
Indirect Costs	\$ -	\$ -	\$ -	\$ -	
STotal	\$ 181,084	\$ 56,084	\$ 125,000	\$ -	0
<u>Sheet #3 Restoration</u>					
Construction Costs	\$ -	\$ -	\$ -	\$ -	0
AA&E	\$ -	\$ -	\$ -	\$ -	0
Indirect Costs	\$ -	\$ -	\$ -	\$ -	
STotal	\$ -	\$ -	\$ -	\$ -	0
<b>Totals</b>	<b>\$ 181,084</b>	<b>\$ 56,084</b>	<b>\$ 125,000</b>	<b>\$ -</b>	<b>0</b>



**Legend**

- AreaD\_Project Area
- X River Miles



Lower Chiwawa AU - Area D  
 Instream Complexity and Floodplain Reconnection Design Project  
**Project Location Map**

The County makes no warranty, expressed or implied, concerning the data's content, accuracy, currency or completeness, or concerning the results to be obtained from queries or use of the data. ALL DATA IS EXPRESSLY PROVIDED "AS IS" AND "WITH ALL FAULTS." The County makes no warranty of fitness for a particular purpose, and no representation as to the quality of any data. The Requestor shall have no remedy at law or equity against the County in case the data provided is inaccurate, incomplete or otherwise defective in any way.

Prepared by: Scott J. Bailey  
 Chelan Co. Natural Resource Dept.  
 4/11/2025

**COUNTY OF  
CHELAN**

N

0      500      1,000

Feet

0      185      370

Meters

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet









