Monday, March 10, 2025

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)

Project Title	Icicle Creek (Doctor Reach) Restoration Prelim Designs
Sponsor	Chelan County Natural Resource Department
Primary Contact	Bryan Maloney
E-Mail Address	bryan.maloney@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.

The project goal is to restore habitat and processes in the Doctor Reach of Icicle Creek (RM 15 - RM 15.5), through addressing legacy impacts of relic infrastructure. This project will develop preliminary designs and permit applications to support project development.

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].

Project objectives are to design restoration treatments that will restore natural channel and floodplain processes. To do so, designs will include naturalizing a relic road through the floodplain, increasing quantities of functional large wood, increasing inundation frequency of the left-bank floodplain, and improving quality of mainstem habitat with increased cover, pool frequency, and substrate heterogeneity.

Upon implementation (anticipated in 2028), these habitat actions will benefit spawning and rearing Chinook salmon and steelhead.

Budget Request

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

Anticipated Request - SRFB (standard round)	212584
Tributary Committee - Anticipated or Actual	37515
Anticipated TOTAL Budget	250099

Project Location

Briefly describe the location of the project	Icicle Creek mainstem from RM 15 - RM 15.5, including left bank floodplain
Latitude (decimal degrees)	47.606982°
Longitude (decimal degrees)	-120.861425°
Project subbasin	Wenatchee
Wenatchee Assessment Unit(s)	Middle Icicle Creek
Does the proposed project span multiple assessment units?	No
Reach(es) Name	Icicle Creek Middle 05
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/.	Unranked (not a priority or missing data)

Project Information

1. What species will the project benefit?	Spring Chinook, Steelhead
2. Select the project's objectives and the associated tracking metrics	Design, Monitoring or Assessment
4. Does this project already exist in Salmon Recovery Portal or PRISM?	No

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

No

6. What category is the project?

Design

Is the project eligible for Riparian Funding?

No

Design and Restoration Proposals

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

Preliminary 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)?

Yes, Icicle Creek reach assessment that is currently being developed

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

Channel Stability
Coarse Substrate
Cover - Wood
Off-Channel - Floodplain
Off-Channel - Side-Channels
Pool Quantity & Quality

10. Which life stages will the proposed project address?

Fry
Holding and Maturation
Spawning and Incubation
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?

This project will address relic infrastructure, in order to restore habitat for Chinook salmon and steelhead. By addressing a mainstem reach and large river-left floodplain, this project will improve both spawning and rearing habitat. Project outcomes include increasing inundation frequency of the left-bank floodplain side channel, increasing habitat complexity (e.g., cover, substrate heterogeneity, pool abundance and quality) in mainstem Icicle Creek, encouraging channel migration, and naturalizing a former road grade that drains the floodplain.

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 project would promote natural stream processes through addressing the impacts of relic infrastructure. Due to a relic road cutting through the floodplain, most of the project reach has remained static for decades, even after the Doctor Creek landslide reset the channel upstream. The projects' restoration outcomes include increasing floodplain complexity, mainstem habitat complexity, pool frequency and depth, sediment heterogeneity, large wood frequency, cover, and channel migration rates.

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

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?

We anticipate minimal maintenance requirements for this project. The project will be designed to accommodate large streamflow events (Q100).

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

Designs will include proposed restoration methods such as:
engineered log jam installation to increase inundation frequency of the left-bank floodplain channel;
installation of wood and grading to naturalize the relic road crossing the left-bank floodplain;
rip-rap removal from the relic road;
and engineered log jam installation to increase complexity, pool frequency, substrate heterogeneity, cover, and encourage channel migration in Icicle Creek.

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

This project has been funded through the conceptual design phase by the Washington Department of Ecology Office of Columbia River, allocated by the Icicle Work Group. The Forest Service is a critical member of the Icicle Work Group. Project status has been presented to the work group at a few stages. Additionally, the Forest Service provided design feedback on early concept designs, which have been revised to reflect the feedback received.

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

Designs will need to meet standards set in ARBO II, or otherwise entail additional analyses and consultation.

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

The project will need to incorporate recreational use in the design process, in order to satisfy NEPA analyses.

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

As landowner, the US Forest Service would ultimately have long-term stewardship responsibilities. As the project will restore natural stream and floodplain processes, we anticipate minimal maintenance needs. Additionally, access to the project site will be limited after project implementation. An overgrown road

would likely be used for access during eventual project construction. As this access route would be rehabilitated following project implementation, we anticipate limited access to the project site after implementation.

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

Don't know

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

The risk of failure associated with this project is low. Designs will incorporate hydraulic modeling for large streamflows (Q100), in order to maintain enduring stability of restoration treatments. Additionally, there is no infrastructure immediately downstream of the project area.

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

Public outreach regularly occurs as a part of the Chelan County Natural Resource Department and Icicle Work Group programs. A public community outreach event was held in Leavenworth on February 2025 on Icicle Creek projects. These public outreach events will continue during the design phase and including project implementation.

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

Yes, the project represents an opportunity for specialized river restoration design work to occur from qualified firms. Additionally, eventual implementation would require contracting a qualified contractor through a competitive bidding process.

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

This project has been supported and funded through the conceptual phase by the Washington Department of Ecology Office of Columbia River, allocated by the Icicle Work Group. The Icicle Work Group incorporates many different stakeholders with varied interests in Icicle Creek, ranging from irrigation water providers, regulatory agencies, wilderness groups, land management agency, tribes, etc.

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)