



## Contact Information

# 2024 Upper Columbia Regional Project Pre-Application

\* Pre-applications due March 11, 2024 (COB)

\*Complete applications due in PRISM April 19, 2024 (COB)

\*Revised proposals due in PRISM May 24, 2024 (COB)

\*Final revised applications due in PRISM June 24, 2024 (noon)

|                        |  |
|------------------------|--|
| <b>Project Title</b>   | Nason Creek and State Route 207 Re-Alignment Fish Habitat Enhancement Project - Phases 1 & 2 |
| <b>Sponsor</b>         | Confederated Tribes and Bands of the Yakama Nation   |
| <b>Primary Contact</b> | Chris Butler   |
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## Budget Request

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

**Anticipated Request - SRFB (standard round)** \$600,000.00

**Anticipated Request - Targeted Investment** \$3,500,000.00

**Anticipated Other Funding** \$9,611,489.00

**Anticipated TOTAL Budget** \$13,711,489.00

### Other Funding Source(s)

Yakama Nation Fisheries, Washington State Département of Transportation, United States Forest Service, America the Beautiful, and BOR-WaterSmart

## Project Location

**Briefly describe the location of the project**

The project will occur in Chelan County near Coles Corner along Nason Creek between River Mile 3.9 and 4.6 and between mile post 0.20 to 0.85 along State Route 207.

**Latitude (decimal degrees)** 47.46'08" N

**Longitude (decimal degrees)** -120.43'27"W

**Project subbasin** Wenatchee

**Wenatchee Assessment Unit(s)** Lower Nason Creek

**Does the proposed project span multiple assessment units?** No

**Reach(es) Name** Nason Creek Lower 03

**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 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].**

The project proposes to realign 0.65 miles of state highway (SR 207) out of the Nason Creek floodplain to reconnect 12.9 acres of floodplain and side channel habitat, remove two WSDOT chronic environmental deficiency (CED) sites, create new side channel and wetland connections, prevent new unnatural channel avulsions that threaten to cutoff additional side channels and wetlands, and restore instream complexity and habitat forming process in a 0.7-mile-long project reach to benefit the following Upper Columbia spring Chinook salmon, steelhead, and bull trout life stages: spawning and incubation, winter rearing, summer rearing, and holding and maturation. The project specifically addresses the following limiting factors in Nason Creek: Temperature - Rearing, Temperature - Adult Spawning, Temperature - Adult Holding, Bank Stability, Channel Stability, Cover - Wood, Floodplain connectivity, off-Channel-Side-Channels, and Riparian Canopy. The highway realignment component of the project will be completed by December 31, 2026 while instream habitat restoration and floodplain reconnections including removal of old highway fill and riprap will be completed by December 31, 2027.

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

Spring Chinook

Steelhead

Bull Trout

Summer Chinook

sockeye

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

Design, Monitoring or Assessment

Instream Habitat (Includes Floodplain & Off-Channel Reconnection)

Water Quality

Wetlands

**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

Miles of streambank stabilized

**Water Quality: Reporting Code**

Total acres feet of water treated for water quality

**Wetlands: Reporting Code**

Acres of wetland improvement/enhancement

**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.)**

The previous project submittal was in the 2023 Grant Round. The differing of this proposal of that is the road relocation portion of this project has completed 30% designs. Phase 1 of this project is still the relocation of the state highway out of the floodplain to an upland area. Phase 2 of this project is the removal of the old highway alignment and the floodplain habitat restoration work from river mile 3.9 to 4.6. It should be noted that Yakama Nation Fisheries is ultimately working to treat the entire project area from river mile 3.2 to RM 4.6, which includes a third WSDOT CED site downstream of river mile 3.9 in a "Phase 3" project area. Our current funding proposal to SRFB is now scoped to cover "Phases 1 and 2" in this grant round, but we plan on submitting a future funding request to SRFB for implementation funding for "Phase 3" in the coming years. Our current timeline concept for completing restoration in the full river mile 3.9 to 4.6 project area is to conduct Phase 1 (Road Realignment) in 2026, Phase 2 (Upstream Restoration and Old Road Removal) in 2027, and Phase 3 (Downstream Restoration) in 2028.

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

Restoration

**If applicable, what is the secondary project category?**

N/A

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

No

**Design and Restoration Proposals**

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

Final Design

Construction

**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)?**

Multiple assessments have been completed for the project area, including: • Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan, 2007 • A Biological Strategy to Protect and Restore Salmonid Habitat in the Upper Columbia Region, September 2021 • Nason Creek Tributary Assessment, Bureau of Reclamation 2008 • Lower Nason Assessment of Geomorphic and Ecologic Indicators Nason Creek, Wenatchee Subbasin, Bureau of Reclamation 2011 • Nason Creek, RM 3.4-4.6 Floodplain Enhancement, Interfluve Inc. 2019 • Feasibility Analysis SR 207 Realignment, Perteet 2021 • Nason Creek RM 3.3 to 4.6 Supplemental Alternatives Analysis, Interfluve Inc. 2022 • Nason Creek Watershed Analysis, USFS 1996, • Salmon and Steelhead Biological Assessment for the Nason Creek N1 Floodplain Reconnection Project, ICF International 2012 • Nason Creek N1/KDIZ3 Alternatives Analysis Report, CCNRD 2011 • Nason Creek River Mile 3.3-4.6 Feasibility Study, CCNRD 2012

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

Cover - Wood

Off-Channel - Floodplain

Off-Channel - Side-Channels

Pool Quantity & Quality

Temperature - Adult Holding

Temperature - Adult Spawning

Temperature - Rearing

**10. Which life stages will the proposed project address?**

Adult Migration

Subadult Rearing (Bull Trout)

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?**

The project will remove a portion of State Route 207 from the floodplain and river corridor, which will eliminate hardened infrastructure from the aquatic environment and restore more natural physical habitat conditions that better support fish survival and production. In addition, extensive instream and floodplain restoration will occur meant to increase the quantity and quality of holding, spawning, and rearing habitats in the project reach, including increasing the amount of cover habitat, floodplain side channels and wetlands. Currently the existing highway and road protection infrastructure and on-going roadway management decreases vegetation cover, decreases stream bank roughness and complexity, introduces roadway contaminants from rainfall runoff and snow removal, and prohibits fish access to floodplain habitats such as side channels and wetlands where productive off-channel rearing habitats exist. The project will increase the active floodplain size and level of connectivity, increase ground water storage, create channel length and allow for the development of new meanders. Flood water attenuation and sediment storage capacity will increase; as will riparian vegetation cover over and adjacent to fish bearing waters. The amount of diverse and complex stream habitat will be significantly increased. All of these benefits should significantly increase the capacity of Nason Creek to support more rearing juvenile salmonids and more holding and spawning adults due to the increase in habitat availability and habitat quality.

In addition, the project will help prevent the likelihood of an unnatural channel avulsion occurring near the middle CED site, which is currently an elevated risk with on-going road and powerline maintenance at this

location. If Nason Creek were to avulse into the current river right side channel downstream of the BPA power lines significant productive spawning and rearing habitat would be lost, and the large oxbow side channel connected by the 2007 Chelan County NRD culverts would likely be disconnected. It is imperative from a habitat protection standpoint that this avulsion risk be addressed as soon as possible in coordination with removing the highway out of the floodplain so that maximum freshwater benefits can be obtained.

**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 geomorphology of Nason Creek in the project area has become artificially constrained and the river has been artificially straitened due to the placement of State Route 207 into the stream corridor and floodplain in 1943. This project seeks to remove the artificial geomorphic constraints imposed by SR 207 along Nason Creek so that natural stream/watershed processes that create and sustain quality salmon and steelhead habitat can be restored.

**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?**

Once the overall construction is completed in 2026, the Phase 1 work, (realignment of State Route 207) will be maintained by the Washington State Department of Transportation. The new highway alignment will occur outside of the Nason Creek flood corridor, so roadway surface and embankment maintenance requirements should be substantially reduced compared to existing conditions at the Chronic Environmental Deficiency Sites.

Phase 2 work, (stream restoration) will incorporate restoration efforts that are self-maintaining or similar to what you would expect to see naturally occurring in this type of landscape under a more natural unaltered setting. So we expect annual maintenance needs to be low. Most of this work will occur on lands managed by the U.S. Forest Service, where the Yakama Nation and U.S. Forest Service will work cooperatively to ensure restored features are functioning as designed and accomplishing habitat restoration targets. The Yakama Nation will conduct monitoring at the site for up to five years to determine if any maintenance or construction interventions are needed to achieve project objectives.

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

The proposed Phase 1 work, (realignment of State Route 207) will include mobilizing a qualified construction contractor to construct a new highway segment for SR 207 that circumvents the Nason Creek floodplain from highway mile 0.20 to roughly 0.85. The new roadway will be constructed to meet AASHTO criteria and traffic will be rerouted once the new roadway alignment and utilities of Phase 1 construction are complete. These actions should be completed by December 31, 2026. Completion of this phase in 2026 will allow the Phase 2 restoration work to take place in 2027, using the old highway alignment as access into the floodplain and instream restoration zone.

Phase 2 work, (Instream and floodplain restoration) will include mobilizing a qualified construction contractor to construct the restoration plans as designed by Professional Engineers, and adherence to BMPs and standard Conservation Measures described in the U.S. Forest Service Aquatic Restoration Biological Opinion (ARBO) and WDFW's Stream Habitat Restoration Guidelines. All of these actions should be completed by July 31, 2027. Phase 2 construction will include the removal of the existing alignment of SR 207 out of the floodplain, excavation and construction of new side channels and wetland areas, placement of engineered log structures and wood habitat cover features, excavation of new pool habitat, and planting of native riparian vegetation in all disturbed areas. This work will ensure the project's

intended habitat benefits are achieved and that the intended hydraulics created that will restore natural habitat forming processes and reduce unnatural channel avulsions risks downstream of the Phase 2 project area.

## Assessment Proposals

## Protection Proposals

## Monitoring Proposals

## Project Risk and Economic Benefits

### 1. What is the landownership?

United States Forest Service and Washington State Department of Transportation

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

Yes

#### Please explain

The Yakama Nation has two project partners, the United States Forest Service, and the Washington Department of Transportation. Both project partners are supportive of this restoration action due to the environmental benefits contained in the project and the ability of the project to assist each agency in achieving regional environmental policy goals.

### 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

The project has been proposed on federal lands managed by the United States Forest Service and within an easement managed by the Washington State Department of Transportation. Both entities are supportive of the project and are willing to engage in agreements and proceedings that may be needed to support the project action legally moving forward. Additionally, there are also powerline and utility franchises within the WSDOT ROW (CCPUD) and for Utility (Ziplay Fiber and T-Mobile) that will require access permission and realignment once the new road alignment location is resolved. One other additional ROW easement within the jurisdiction of this project area is BPA power lines. All entities are awaiting further designs, confirmed funding, and approvals from the Forest Service and WSDOT to decide on how to move ahead with this project.

### 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 Yakama Nation is engaging in a public outreach campaign to raise awareness about this project, and to solicit feedback from interested parties regarding the proposed highway realignment. We expect both positive and negative responses from interested parties because of the magnitude of the project action, and the visible effect on the popular highway that accesses the Lake Wenatchee area. The Yakama Nation is using a documented supplemental alternatives analysis requested by the Chelan County Commissioners to demonstrate to the public the need for the project action, and why this particular highway realignment is the best alternative for resolving multiple existing conflicts including poor habitat conditions and an unstable transportation corridor caused by incessant flood/roadway interactions.



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

The SR 207 realignment roadway will be built to American Association of State Highway and Transportation Officials, (AASHTO) standards and this will become the management and responsibility of Washington State Department of Transportation. The United States Forest Service will manage the reconnected floodplain areas in conjunction with similar floodplain and upland lands that are managed by the Wenatchee River Ranger District in this project area.

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

Yes

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

Risk of failure for SR 207 realignment is low due to the support provided by USFS and WSDOT. The new highway segment will be engineered, designed, and constructed out of the floodplain to meet AASHTO standards to ensure public safety and longevity of the project. Funding is the largest hurdle for Phase 1 due to the high project cost. However, funding from the 2023 SRFB Grant round along with YN, WSDOT, and USFS funding makes this project feasible.

A negative reaction from the public for this project could prevent the land management agencies from going forward, however the public will be informed that a “no action” alternative at these CED sites are a very high risk to causing further damage to the river and the highway. We believe the public will support this type of balanced restoration approach when presented with all the project history and a list of all of the options that have been considered.

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

The Yakama Nation and project partners had a public meeting on March 21, 2023 to inform the public of the project area, project history, feasibility analysis, and supplemental alternatives analysis. We have presented the project concept at Wenatchee Watershed coordination meetings and to the Chelan County Commissioners. Chelan County, at that time, requested we create the supplemental alternatives analysis for the project that could be used to further demonstrate the project need and the appropriateness of the proposed action. The Yakama Nation and project partners will be engaging with the broader public about the outcomes of this supplemental alternatives analysis as we start to develop 30% designs for the roadway alignment and instream habitat restoration.

An additional public meeting is planned in 2024 to inform the public on project development.

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

Current conditions in the project area routinely degrade fish habitat and cause damage to the Highway 207 road prism and embankment, necessitating constant maintenance spending by WSDOT. The proposed road realignment will reduce the maintenance cost burden of Highway 207 to WSDOT, which will benefit the WSDOT program budget and state taxpayers. In addition, local contractors will be hired to complete both the road construction and restoration construction work associated with this project, which will generate at least temporary economic benefits to Chelan County and the local community.

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

The Yakama Nation has 2 partnerships for this project, Washington State Department of Transportation and the United States Forest. The WSDOT has contributed both money and expertise to this project. The USFS has contributed the land, agreements, management, and is currently seeking funding towards Phase 1 of this project.

The Yakama Nation Fisheries has also received 3 million dollars toward design and construction from America the Beautiful and 500 thousand dollars from BOR-WaterSMart for design.

## Optional Section - Preparation for PRISM

The following questions are identical to the questions RCO requires in the PRISM application. If desired, sponsors can complete associated questions early and copy responses into PRISM during the "Complete Application" phase due on April 19, 2024.

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

Yes

### **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 historical factors important to understand the problems.**

Nason Creek has historically been a critically productive spring Chinook salmon and steelhead spawning and rearing tributary in the Wenatchee Subbasin. The reduction of salmonid abundance in the Wenatchee Subbasin correlates closely with increased habitat impairments induced in Nason Creek during railway, powerline, highway, logging, and residential development over the past century. Given its historic importance and high geomorphic intrinsic potential to be productive salmonid habitat, the Lower Nason Creek Assessment Unit has consistently been identified as a logical top priority stream system to focus salmon habitat restoration efforts within the Upper Columbia Basin salmon recovery framework. The current Biological Strategy to Protect and Restore Salmonid Habitat in the Upper Columbia Region (UCRTT, 2021) identifies channel complexity restoration, floodplain reconnection, and side channel and off-channel habitat restoration as top priority restoration action categories needed in Nason Creek to contribute to improved status of the viable salmonid population parameters for spring Chinook salmon and steelhead.

In the proposed project area, Nason Creek has become significantly artificially constrained and cutoff from historically productive side channel and floodplain habitats by the placement of State Route 207 in the floodway in 1943. In total, the 1943 roadway project cutoff some 70 acres of floodplain and side channel habitats, although some previous restoration work has partially restored stream connectivity to around forty acres of habitat north of the BPA powerline crossing through the use of culverts. Yet these culverts are still vulnerable to being disconnected at the upstream end of Nason Creek. The location and down valley alignment of State Route 207 in the floodway has become increasingly problematic in recent decades as the creek has attempted to naturally meander in the historic floodplain corridor. Repeated flood events starting in 1995 caused the natural channel migration trends to increasingly encounter the roadway prism which has now actively destroyed two different segments of the two lane highway, causing the Department of Transportation to create new rock fortified streambanks along hundreds of feet of the creek body which diminish instream habitat quality and impede riparian vegetation growth. Without some level of continued intervention that can decrease floodwater interactions with the roadway prism, it is expected and predicted that unnatural creek channel avulsions will occur along and adjacent to the roadway surface that will further degrade aquatic habitats and cause additional roadway damage. Phase 1 of this project seeks to remove a substantial component of the State Route 207 roadway infrastructure from the Nason Creek floodway. This action alone will connect 12.9 acres of cutoff floodplain and high flow side channel. However, combining this action with Phase 2, a habitat floodplain restoration that will include reconnecting a low flow side channel, alcove, instream large wood for complexity and roughness, and wetland benches so as to increase viable fish and riparian habitat and reduce risks of future artificially induced creek avulsion.

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

Limiting Life Stages and Limiting Factors from a Biological Strategy to Protect and Restore Salmonid Habitat in the Upper Columbia Region - Habitat Action Prioritization Within the Upper Columbia River Basin, 2021:

Nason Creek Lower 03 Reach Priority Life Stages:

spawning and incubation,  
winter rearing,  
summer rearing,  
holding and maturation

Assessment Unit Life Stage Priorities:



Spring Chinook:

holding: high priority

spawning: high priority

summer rearing: high priority

winter rearing: high priority

Steelhead:

spawning: medium priority

winter rearing: high priority

Nason Creek Lower 03 Reach Limiting Factors Addressed:

temperature (rearing), temperature (adult spawning), temperature (adult holding), bank stability, floodplain connectivity, riparian (canopy cover), channel substrate (percent fines and embeddedness) Nason Creek

Lower 03 Reach Priority Action Categories:

bank restoration, channel complexity restoration, channel modification, fine sediment management, floodplain reconnection, riparian restoration and management, side channel and off-channel habitat restoration, upland management, water quality improvement

Limiting Factors from a Biological Strategy to Protect and Restore Salmonid Habitat in the Upper Columbia Region, 2017:

1. Peripheral and Transitional Habitat (Side Channel and Wetland Connections)
2. Channel structure and form (Bed and Channel Form)
3. Riparian Condition (Riparian Condition)
4. Channel structure and form (Instream Structural Complexity)
5. Food (Altered Primary Productivity)
6. Sediment Conditions (Increased Sediment Quantity)

**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 and future condition. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized.**

1. Restore quality salmon habitat and habitat sustaining natural processes in a high priority restoration segment of Nason Creek by addressing the UCRTT listed priority ecological concerns and project actions in a cost effective manner.
2. Reduce and/or eliminate stream system impacts to the Highway 207 roadway in a manner that preserves roadway integrity and protects the traveling public.
3. Address Washington State Department of Transportation Chronic Environmental Deficiency sites along SR 207 in a cost effective manner that permanently eliminates or mitigates the environmental deficiencies.
4. Restore winter, spring, summer and low flow connectivity to available peripheral and transitional habitats necessary for rearing juvenile spring Chinook salmon, steelhead, and bull trout within Nason Creek.
5. To roughly realign a 0.65-mile length of SR 207 infrastructure from out the floodplain.
6. To realign Utility infrastructure from the floodplain.
7. Increase mainstem habitat complexity and channel roughness to increase and naturally sustain surface water connectivity with adjacent floodplain for anadromous salmonid rearing habitats at all times of the year.
8. Increase surface water contributions to the floodplain to improve riparian and wetland vegetation conditions, nutrient imputes, and to enhance floodplain hyporheic conditions that support groundwater temperature and discharges to juvenile salmonid bearing mainstem and side channels.
9. Increase the riparian and wetland areas of impact.

**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).**

1. Build final consensus and agreement with WSDOT and USFS on the proper placement and designs for Phase 1, the realignment of SR 207 in the valley right uplands on USFS lands between current mile posts 0.20 and 0.85. (2022-23 – Addresses all Goals)
2. Receive competitive funding through the 2024-2025 SRFB Grant process to ensure Phase 1 and 2

become a reality

3. Build a final consensus and agreement with USFS and CCNRD on Phase 2, instream habitat restoration between RM 3.9 and 4.2
4. Complete final construction designs for Phase 1 roadway realignment based upon the agreed upon final roadway alignment. (2024-25 - Addresses all Goals)
5. Complete permitting and final construction designs for Phase 2, instream habitat restoration between river mile 3.9 and 4.6 of Nason Creek. (2024-2025 - Addresses all Goals)
6. Complete ROW negotiations between USFS, WSDOT, and franchises. (2024-2025 - Addresses all Goals)
7. Begin and complete construction of the roadway alignment out of the floodplain between mile posts 0.20 and 0.85 while the original roadway remains in place for traffic access. This action includes realignment of utilities sited along the roadway once the new roadway construction is mostly completed. (2024-25 – Addresses Goals 2 and 3)
8. Commission the new SR 207 segment for public use. (2026 – Addresses Goals 2 and 3)
9. Begin Phase 2 and complete instream and floodplain habitat restoration efforts from July 1, 2027 to July 31, 2027. (2026 – Addresses Goals 4, 7, 8, and 9)
10. Continue all out of stream restoration efforts such as side channel development, large wood and floodplain roughness, and wetland benches. (2027 – Addresses Goals 4, 7, 8, and 9)
11. Remove 0.65 miles of obsolete SR 207 original roadway from the Nason Creek Floodplain and restore 12.9 acres of cutoff floodplain of overflow side channel habitat to unencumbered creek access, completion. (2027 - Addresses Goals 1, 2, and 3)
12. Introduce and complete floodplain and upland plantings. (2027 - Addresses all Goals)
13. Phase 1 and 2 implementations complete, December 31, 2027 (2026 - Addresses all Goals)

**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.**

- Engineer’s Design of the New Roadway, Phase 1 - 30% Plan Set - This work is already contracted by the Yakama Nation – 2023-24
- Engineer’s Design of Instream Habitat Restoration, Phase 2 – 30% Plan Set – This work is already contracted by the Yakama Nation – 2023-24
- Public Outreach Process – Public meetings and outreach products – Yakama Nation will be the lead along with Washington State Department of Transportation, and United States Forest Service – 2022 through 2028
- Site Tours – Yakama Nation will be the lead along with Washington State Department of Transportation and United States Forest Service. – 2022-2026
- Review, Comment, and Acceptance of Phase 1, 30% Designs – The Yakama Nation, Bonneville Power Administration, Washington State Department of Transportation, and United States Forest Service – 2023
- Review, Comment, and Acceptance of Phase 2, 30% Designs – The Yakama Nation, Bonneville Power Administration, and United States Forest Service – 2024
- Utility realignment planning – The Yakama Nation will lead the discussions and coordinate the work with Washington State Department of Transportation, and United States Forest Service - 2023-2026
- WSDOT Easement Realignment on USFS Lands, (this includes franchise ROW) - United States Forest Service, Washington State Department of Transportation, and Utilities 2024-2025
- Phase 1, Engineer’s Design of the New Roadway - 60% Plan Set - The Yakama Nation will contract this deliverable - completed 2024
- Phase 2, Engineer’s Design of Habitat Restoration - 60% Plan Set - The Yakama Nation will contract this deliverable - completed 2024 to 2025
- NEPA, ESA Section 7 Consultation, and NHPA Section 106 Consultation - The Yakama Nation, Bonneville Power Administration, and United States Forest Service – 2024 to 2025
- Review, Comment, and Acceptance of Phase 1, 60% Designs – The Yakama Nation, Bonneville Power Administration, Washington State Department of Transportation, and United States Forest Service – 2024
- Review, Comment, and Acceptance of Phase 2, 60% Designs – The Yakama Nation, Bonneville Power Administration, and United States Forest Service – 2025
- Environmental Permitting through WDFW, USCOE, WDOE, and Chelan County - The Yakama Nation and Washington State Department of Transportation, United States Forest Service – 2024 to 2025
- Phase 1, Final Roadway Construction Design – 100% - The Yakama Nation will finalize this deliverable no later than October 2024-2025
- Phase 2, Final Instream Habitat Restoration Construction Design – 100% - The Yakama Nation will

finalize this deliverable no later than October 2025

- Phase 1, Construction Contracting - The Yakama Nation will create a competitive bid and hire a roadway construction contractor with Washington State Department of Transportation, and United States Forest Service –by 2025.
- Begin Phase 1 construction Activities for building the new road segment – Construction contractor with Yakama Nation as the Owner with Washington State Department of Transportation, and United States Forest Service – 2025 through 2026.
- Relocate utilities along the right of way – CCPUD, Ziply Fiber and T-Mobile with Yakama Nation, Washington State Department of Transportation, and United States Forest Service – 2025 through 2026.
- Roadway construction complete and commission new roadway alignment for public use with Yakama Nation, Washington State Department of Transportation, and United States Forest Service – fall 2026.
- Phase 2, Construction Contracting - The Yakama Nation will create competitive bid and hire a Habitat restoration construction contractor by March 2027.
- Phase 2, Begin Construction Activities for Instream Habitat Restoration – Construction contractor with Yakama Nation as the Owner summer 2027.
- Phase 1, Remove obsolete SR 207 original roadway from the Nason Creek Floodplain – summer / fall 2027.
- Site stabilization and plantings - The contractor hired by the Yakama nation will plant, seed and restore all staging areas, access routes and riparian areas – October / November 2027.

**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?**

One constraint is funding. The current projected cost for planning/design and implementation of Phases 1 and 2 total to \$11,000,000.00, hence a large contribution of SRFB funding to the project is necessary to ensure project feasibility. Yakama Nation Fisheries is also securing funding from WSDOT (CED funding), USFS (CWI, CFLRP, and BIL funding), BPA Fish Accords funding, America the Beautiful, BOR-WaterSmart, and many other potential funding sources. Current match funding towards the project totals to \$5,200,00.00, but SRFB funding remains a critical piece of the funding puzzle for this project that will ensure full project feasibility.

A second potential constraint is public support. The Yakama Nation is currently engaging in direct public outreach to raise awareness and solicit feedback from interested parties and the public about the full restoration proposal. Soon the project proposal will be evaluated through NEPA and SEPA processes where the project funders and land management agencies will have to make decisions on how to proceed based on public feedback. This project proposal has been developed in close coordination with the likely NEPA and SEPA leads, and we believe the purpose, needs, and cost/benefits of the proposal are clear and will be supported by the public. We are using a documented alternatives analysis requested by the Chelan County Commissioners to demonstrate the purpose, needs, and cost/benefits of the proposal, which should be very helpful in communicating this proposal to the public through the NEPA and SEPA processes.

The last constraint is unforeseen environmental permitting requirements. The current road realignment proposal has taken into account likely impacts to sensitive areas like wetlands which could influence project construction techniques, project footprint standards, or require compensatory mitigation. Yakama Nation Fisheries has already engaged regional project permitters to discuss the likely project scope and impacts to understand whether additional permitting burdens may exist. At this time, based on the concept that the new road realignment will mostly be in a stable upland location, actual permitting constraints and requirements are likely to be relatively straightforward and should not require significant changes for the current conceptual designs.

**7. How have lessons learned from completed projects or monitoring studies informed this projects?**

Yakama Nation Fisheries has been implementing salmon projects in the Columbia Basin for more than a decade, and we utilize information gained from our project histories in all new projects. This project is being proposed based on our experience that the best biological outcomes from restoration will require

that artificial infrastructure be removed from the floodplain so that natural hydraulic dynamics, flood water attenuation, and sediment transport can operate in an unimpeded manner which creates better long term habitat resiliency. The types and placement of the instream and floodplain habitat restoration elements we are proposing are highly informed by other successful floodplain restoration projects that have demonstrably increased habitat complexity and productivity for salmonids and reestablished natural processes that promote habitat resiliency in the long term. In addition, our experience in analyzing for fluvial geomorphic trends indicates that this segment of Nason Creek is at high risk avulsion which could further capture the thread of Nason Creek directly along a longer portion of the Highway 207 embankment. Yakama Nation Fisheries is proposing this project in part to prevent this channel avulsion scenario from happening so that more habitat can be restored and additional significant habitat degradation can be avoided.

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

Prior to proposing or developing any project actions, the Yakama Nation has done extensive geomorphic and habitat research within this reach. Additionally, the Bureau of Reclamation, Washington Department of Fish and Wildlife, and Chelan County Natural Resource Department have all assessed and produced documentation of this same reach in previous years. All parties have come to similar conclusions and alternatives. The opportunities for salmon habitat restoration is extensive and many different approaches to this solution have been identified. The latest efforts by the Yakama Nation are a Feasibility Study in 2021 and a Supplemental Alternatives Analysis in 2022. The options identified a range of projects for leaving the SR 207 in place to the removal of the SR 207 from the floodplain. All documents suggest that the biggest biological benefit would be the removal of SR 207 from the floodplain and to restore river process to benefit listed species for this reach.

Additionally, this project can set the stage for future alignment options for SR 207 when funding becomes available as Phase 1 of this project only targets what is currently feasible and affordable at this time. As previously discussed the project concept removes a portion of SR 207 out of the floodplain and reconnects 12.9 acres to Nason Creek. Phase 1 does not remove the entire SR 207 roadway from the floodplain that is located to the north of our current project. However, this portion of the floodplain is connected to Nason Creek by the use of culverts installed in 2008. Theoretically, this floodplain is currently functioning, though its function is at a constant threat of being disconnected with the potential channel migration near the CED sites. This project will remove two of the three of WSDOT's CED sites, continued maintenance issues, and the potential straitening of Nason Creek. When funding becomes available to address the second portion to the north of SR 207, the overall cost will be reduced due to this projects actions.

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

WSDOT and USFS have been directly involved in all project design decisions undertaken since YN began developing restoration actions at this site in 2018. YN has also directly coordinated with WDFW. All of these entities are supportive of the proposed highway realignment alternative and are planning to engage in any NEPA/SEPA processes to inform their final decisions about the project as the project development moves forward.

Utilities in the project have been informed of the proposal and none have identified any significant constraints to implementation. At the request of the utilities, additional engagement will occur once permit level designs have been prepared for the Phase 1 project.

Over the past year YN has been coordinating with Chelan County regarding the highway realignment and habitat restoration proposals. The 2022 Nason Creek RM 3.3 to 4.6 Supplemental Alternatives Analysis report was created in direct response to feedback from the Chelan County Commissioners for this project. YN is now working directly with Chelan County Natural Resources Department to develop restoration actions proposed to take place on the Nason Ridge Community Forest lands adjacent to the project area.

The Yakama Nation is currently engaged in a public outreach campaign to inform the public about this project action. We have upcoming public meetings scheduled and we have previously presented the project concept at Wenatchee Watershed coordination meetings and to the Chelan County Commissioners.

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

This project will remove a portion of SR 207 from the floodplain and river corridor, which will eliminate

hardened infrastructure from the aquatic environment and restore a more natural physical habitat condition that better supports fish survival, production, and water storage through floodplain connection with Nason Creek. Currently, the existing highway and road protection infrastructure and management decreases floodplain connection, decreases vegetation cover, decreases stream bank roughness and complexity, introduces roadway contaminants, and prohibits fish access to floodplain habitats. This project will increase the active floodplain size and level of connectivity, create channel length, and allow for the development of new meanders. Flood water attenuation and sediment storage capacity will increase, as will off channel habitat and riparian vegetation cover over the fish bearing waters. The amount of diverse and complex stream habitat will be significantly increased. All of these benefits will increase the site's habitat resiliency to climate change and will improve carrying capacity potential for ESA listed aquatic species.

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

The Yakama Nation has implemented stream restoration projects for more than a decade. Recently, Yakama Nation Fisheries completed the Skinney Creek channel reconstruction project in the Wenatchee Subbasin under a similar partnership framework with USFS and WSDOT. That project reconstructed 0.5 miles of highly sinuous Skinney Creek channel with inset vegetated floodplains in an old Highway 2 roadway alignment, and the project included replacing failed grade control weirs in a WSDOT wetland mitigation area with new constructed riffles that improved fish passage. In addition, in 2018 we worked in the WSDOT right-of-way and road embankment on State Highway 20 along Beaver Creek to restore a WSDOT CED site and replace an undersized private bridge. Yakama Nation Fisheries has also conducted multiple levee removal projects in the Upper Columbia Basin including the Twisp Ponds Floodplain Restoration Project in 2017 and Horseshoe Side Channel Project in 2018.

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

No, unless they are employed by one of the many subcontractors that is needed for this entire project scope of work.

## Supporting Documents

[Upper Columbia Process Guide 2024](#)

[SRFB Manual 18 \(2024\)](#)

[RCO Application Resources \(2024\)](#)