

INTERLOCAL AGREEMENT BETWEEN SNOHOMISH COUNTY AND  
THE TULALIP TRIBES OF WASHINGTON TO IMPLEMENT PORTIONS OF  
THE SNOHOMISH COOPERATIVE SALMON BARRIER REMOVAL PROJECT

Execution through December 31, 2026

---

This Interlocal Agreement Between Snohomish County and the Tulalip Tribes of Washington to Implement Portions of the Snohomish Cooperative Salmon Barrier Removal Project (this “Agreement”), is made by and between Snohomish County, a political subdivision of the State of Washington (the “County”), and the Tulalip Tribes of Washington, a federally-recognized Indian Tribe (the “Tribes”).

**RECITALS**

- A. The Tulalip Tribes was awarded grant funds from the U.S. Department of Commerce National Oceanic and Atmospheric Administration (NOAA) Restoring Fish Passage through Barrier Removal Notice of Funding Opportunity under the Infrastructure Investment and Jobs Act (IIJA) under Federal Award ID Number NA23NMF4630025 (the “Tribes’ Grant”) to implement the Snohomish Cooperative Salmon Barrier Removal Project;
- B. The goal of the Tribes’ Grant is to achieve measurable and lasting benefits to native migratory or sea-run (Migratory) fish populations through fish passage barrier removal;
- C. The Tribes’ Grant identifies the County as a subrecipient which requires the County and the Tribes to enter into an Interlocal Agreement to implement fish passage projects on Sexton Creek, Williams Creek, and French Creek;
- D. The County’s goals include removal of four fish passage barriers to restore fish access to approximately 8.7 miles of upstream habitat;
- E. Chapter 39.34 RCW, the Interlocal Cooperation Act, authorizes public agencies, including the County and the Tribes, to enter into cooperative agreements to make the most efficient use of their respective resources; and
- F. This Agreement is made pursuant to and shall be governed by the Interlocal Cooperation Act.

**AGREEMENT**

NOW, THEREFORE, in consideration of the respective agreements set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the County and the Tribes agree as follows:

**1. PURPOSES OF AGREEMENT**

The Tulalip Tribes received funding from NOAA to implement the Snohomish Cooperative Salmon Barrier Removal Project, which is a cooperative effort between watershed partners working collectively to remove 16 fish passage barriers and restore fish access to approximately 32 miles of upstream habitat. The purpose of this Agreement is for the Tribes to contract with the County for services described in Appendix A (the “Scope of Work”), attached hereto and incorporated herein by this reference. The source of funds for this Agreement is the Tribes’ Grant.

**2. DURATION OF AGREEMENT**

- A. The term of this Agreement is execution through December 31, 2026, (the “Term”) unless terminated sooner as provided herein. In the event funding becomes unavailable for work to be performed pursuant to this Agreement, all work shall terminate in accordance with provisions of this Agreement upon the last day of funding.
- B. As provided by RCW 39.34.080, this Agreement shall not take effect unless and until it has (i) been duly executed by both parties, and (ii) either filed with the County Auditor or posted on the County’s Interlocal Agreements website.

**3. SCOPE OF WORK**

- A. The County shall furnish the necessary personnel, equipment, material and/or services and otherwise do all things necessary for or incidental to the performance of the work set forth in Appendix A, attached hereto and incorporated herein.
- B. The County will not be required to perform work for the Tribes in excess of work specified in Appendix A to this Agreement except by mutual agreement in a written amendment to this Agreement.
- C. If there are any conflicts between the Tribes’ Grant and Appendix A of this Agreement, the terms of the Tribes’ Grant shall control. The Tribes’ Grant is attached to this Agreement as Appendix D and incorporated herein to the extent referenced by this Agreement.

**4. PERFORMANCE**

- A. The County agrees to complete all work described in Appendix A in a timely and professional manner. The County may use subconsultants or subcontractors, with prior Tribes’ approval, to complete any portion of the work described in Appendix A. The Tribes agrees that some or all of the work required at Sexton Creek, as described under Task 1 in Appendix A, may be performed by the Washington State Department of Transportation (WSDOT), and no additional approval is required from the Tribes for the County to contract with WSDOT for any work necessary to complete Task 1. If at any time the County cannot fulfill its responsibilities under this Agreement, the County shall notify the Tribes thereof in writing, together with an explanation of why said responsibilities cannot be fulfilled.
- B. Funding contingencies:
  - i. The parties’ obligations after December 31, 2023, are contingent upon local legislative appropriation of the necessary funds for this specific purpose in accordance with applicable law.
  - ii. The parties acknowledge the funding provided by this Agreement may not completely fund the work contemplated in the Scope of Work set forth in Appendix A of this Agreement. The parties accept the risk that work commenced in the Scope of Work may not be completed if additional funding is needed and not secured. The Tribes will compensate the County for any work performed under the Scope of Work up to six million

one hundred ninety-seven thousand three hundred eight dollars (\$6,197,308), even if all work described in the Scope of Work is not completed due to lack of additional funding.

**5. ADMINISTRATION OF AGREEMENT**

Each party to this Agreement shall designate an individual who may be designated by title or position to oversee and administer such party’s participation in this Agreement. The parties’ Administrators shall be the following individuals:

County’s Administrator:  
Surface Water Management Engineer IV  
Snohomish County Conservation &  
Natural Resources  
3000 Rockefeller Ave, M/S 303  
Everett, WA 98201

Tribes’ Administrator:  
Environmental Manager  
Tulalip Tribes of Washington  
P.O. Box 277  
Tulalip, WA 98271

Any notice required by a party to this Agreement shall be provided to the other party’s Administrator.

**6. MONITORING & REPORTING**

The Tribes shall be responsible for monitoring the performance of the County’s work under this Agreement.

**7. COMPENSATION**

The budget for work to be performed under the Agreement is six million one hundred ninety-seven thousand three hundred eight dollars (\$6,197,308), as set forth in Appendix B to the Agreement, attached hereto and incorporated herein. The Tribes shall have no obligation to pay any invoice from the County that would cause the total payments made to the County by the Tribes under this Agreement to exceed six million one hundred ninety-seven thousand three hundred eight dollars (\$6,197,308) as set forth in Appendix B. The Tribes shall compensate the County only for such costs that are: 1) incurred between March 1, 2023, and December 31, 2026; and 2) are necessary to perform the work described in Appendix A of this Agreement.

The Tribes shall have the right to withhold payment of all or any portion of an invoice provided under Section 8 below if the Tribes has a reasonable good faith basis to believe that the work performed by the County is not consistent with the Scope of Work defined in Appendix A. In such an event the Tribes shall provide the County a written statement identifying and describing problems or deficiencies it perceives on or before the date such payment is due. Upon receipt of such notice the County shall have twenty (20) days to either correct the problem or object to the Tribes’ determination. In the event the Tribes objects, the matter shall be submitted to a consulting engineer for review to determine whether work performed by the County is consistent with the Scope of Work, and if not, what remedial action is required to bring the work into compliance. The consulting engineer will be mutually agreed upon by both parties. The Tribe’s right to withhold payment shall last until the work has been brought into compliance or the work is deemed consistent with the approved scope and task.

**8. INVOICING AND PAYMENT**

The County shall submit a quarterly invoice to the Tribes no later than the 15<sup>th</sup> of the month following the end of the quarter. The invoice shall accurately and completely document all labor costs, materials costs, equipment costs and other reimbursable costs for services that meet the requirements of this Agreement and the Tribes' Grant. The Tribes shall pay each quarterly invoice within thirty (30) days of receipt unless it objects under Section 7 of this Agreement.

**9. AUDIT AND INSPECTION**

The Tribes and the County shall maintain records pursuant to this Agreement in accordance with generally accepted accounting principles and practices consistently applied. The County and Tribes' records shall be available for inspection and audit by one another, the State Auditor, federal auditors, and any persons duly authorized by the parties. The County and Tribes shall preserve and make such records available to said parties until expiration of six (6) years from the date of final payment under this Agreement.

**10. ENTIRETY OF AGREEMENT**

This Agreement constitutes the entire agreement between the County and the Tribes and supersedes all proposals, oral and written, and all other communication between the parties in relation to the subject matter of this Agreement. No other agreement exists between the County and the Tribes with regards to the instant subject matter except as expressly set forth in this instrument. Except as otherwise provided herein, no modification of this Agreement shall be effective until reduced to writing and executed by both parties.

**11. AGREEMENT ALTERATIONS AND AMENDMENTS**

This Agreement may be altered or amended by mutual agreement of both parties. Such alterations or amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

**12. TERMINATION**

Either party may terminate this Agreement upon thirty (30) days' prior written notice to the other party. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

A. In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date of this Agreement and prior to normal completion, the Tribes may terminate this Agreement by providing written notice to the County fifteen (15) days prior to the effective date of such withdrawing, reduction or limitation of funding. The termination shall be effective on the date specified in the termination notice. The County shall continue to perform its obligations through the date of termination. The obligation of the Tribes to make final payment for work performed and costs incurred through the date of termination shall survive the termination of this Agreement.

B. If for any cause either party does not fulfill in a timely and proper manner its obligations under this Agreement, or if either party violates any of these terms and conditions, the aggrieved party

shall give the other party written notice of such failure or violation. The responsible party will be given the opportunity to correct the violation or failure within fifteen (15) working days. If failure or violation is not corrected, this Agreement may be terminated immediately by written notice of the aggrieved party to the other.

**13. RIGHTS AND REMEDIES**

In no event shall any payment by the Tribes to the County constitute a waiver by the Tribes of any breach of covenant or any default that may exist on the part of the County. The making of any such payment by the Tribes while any such breach or default exists shall in no way impair or prejudice any of the Tribes' rights and remedies, hereby expressly recognized, to recover payments or portions thereof, to which the County was not entitled under this Agreement, where any payments were made by mistake, or to pursue any other remedy available to the Tribes with respect to breach or default of this Agreement.

**14. INSURANCE**

Either party shall maintain its own General Liability insurance and/or self-insurance with limits of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate, for its liabilities from damage to property and/or injuries to persons arising out of its activities associated with this Agreement. The maintenance of, or lack thereof insurance and/or self-insurance shall not limit the liability of the indemnifying party to the indemnified party.

**15. HOLD HARMLESS**

The County agrees to protect, defend and hold harmless the Tribes, its elected and appointed officials, employees and agents, from and against all claims, demands and causes of action of any kind or character, including any cost of defense and attorney's fees, arising out of any actions, errors or omissions of the County, its officials, employees and agents in performing this Agreement except for those arising out of the sole negligence of the Tribes.

The Tribes agrees to protect, defend and hold harmless the County, its elected and appointed officials, employees and agents, from and against all claims, demands and causes of action of any kind or character, including any cost of defense and attorney's fees, arising out of any actions, errors or omissions of the Tribes, its officials, employees and agents in performing this Agreement except for those arising out of the sole negligence of the County.

In no event shall either party be responsible for indemnifying the other party for damages caused by or resulting from the sole negligence of that party, and its elected officials, officers, employees, agents, contractors and/or subcontractors.

**16. VENUE, WAIVER OF SOVEREIGN IMMUNITY, AND INTERPRETATION**

The venue of any claim or suit arising out of this Agreement shall be in the Superior Court of the State of Washington, in and for Snohomish County.

Limited Waiver of Sovereign Immunity. The Tribes expressly reserves all of its inherent sovereign rights as a federally recognized Indian tribe, including sovereign immunity from suit in any state, federal or tribal court without the Tribes' consent. By entering into this

Agreement, the Tribes hereby grants a limited waiver of sovereign immunity to the County only, subject to and conditioned on the following:

- a. This limited waiver of immunity shall not extend to interpretation of the Treaty of Point Elliott, 12 Stat. 927, or the rights reserved by the Tribe under that Treaty. This waiver of immunity shall not extend to or be used for or to the benefit of any other person or entity of any kind or description whatsoever, including any successor or assign of the County.
- b. To the extent that jurisdiction obtains, this limited waiver of immunity shall be deemed a consent to jurisdiction only of the Snohomish County Superior Court.
- c. This limited waiver of immunity in favor of the County shall commence and become effective as of the effective date of this Agreement and shall remain in effect and extend for three (3) years from the ending date under Section 2 or three (3) years from earlier termination of this Agreement as set forth in Section 12 herein. Notwithstanding any applicable statute of limitations or other law, upon expiration of the above three (3) year period that extends from the ending date or early termination of this Agreement under Section 12, this limited waiver of immunity shall be deemed withdrawn without further action by the Tribes or notice to the County.
- d. Nothing contained in this Agreement shall be deemed a consent to levy of any judgment, lien or attachment upon any assets, property or interest of the Tribes except as specifically described herein.
- e. Nothing in this Agreement nor any activity of the Tribes shall implicate or in any way involve the trust assets or credit of the Tribes or any of its members.
- f. The Tribes hereby expressly provides a limited waiver of sovereign immunity to suit with respect to claims made relating to, or arising under, this Agreement by the County, to interpret or enforce the terms of this Agreement, or to a claim of indemnification by the Tribes. The limit for any claim of indemnification will be the insurance limit required by this Agreement. The parties agree that in discharging this indemnification obligation, where the required insurance is procured, the Tribes shall look only to the proceeds of the insurance procured by the Tribes herein and the policy of insurance obtained by the Tribes shall prohibit the insurer from asserting a defense of sovereign immunity to a claim made under the policy to indemnify the County. The Tribes warrants its authority to and agrees to assign over to the County, at its request, any and all of its rights against the insurer to effectuate a payment of its indemnification obligation to the County.

Arbitration. Any dispute in relation to the interpretation of this Agreement shall be resolved by arbitration. The Tribes or the County may initiate arbitration by providing written notice of intent to arbitrate to the other parties, together with a statement of the matter in controversy. If the parties are unable to agree upon a single arbitrator within thirty (30) days of such notice of intent, the Tribes and the County each may appoint an arbitrator and the two arbitrators shall meet promptly and attempt to select a third arbitrator. Once appointed, the three-arbitrator panel shall determine the specified controversy. Each party shall bear the cost of any arbitrator it appoints, and one-half (1/2) of the cost of appointing a third arbitrator and the third arbitrator's fee. Any arbitrator appointed under this provision must be an active member of the Washington State bar. The arbitration rules of the American Arbitration Association shall govern the arbitration. An award or decision rendered by a majority of the arbitrators appointed under this Agreement shall be final and

binding on all parties to the proceeding, and judgment upon any award or decision rendered by the arbitrators may be entered in Superior Court of the State of Washington, in and for Snohomish County, and enforced in the same manner as any other judgment.

Interpretation. This Agreement and each of the terms and provisions of it are deemed to have been explicitly negotiated by the parties, and the language in all parts of this Agreement shall, in all cases, be construed according to its fair meaning and not strictly for or against either of the parties hereto. The captions and headings in this Agreement are used only for convenience and are not intended to affect the interpretation of the provisions of this Agreement. This Agreement shall be construed so that wherever applicable the use of the singular number shall include the plural number, and vice versa, and the use of any gender shall be applicable to all genders.

**17. RELATIONSHIP TO EXISTING LAWS**

This Agreement is entered into pursuant to and under the authority granted by the laws of the state of Washington and any applicable federal laws. The provisions of this Agreement shall be construed to conform to those laws. In the event of an inconsistency in the terms of this Agreement, or between its terms and any applicable statute or rule, the inconsistency shall be resolved by giving precedence in the following order:

1. Applicable state and federal statutes and regulations;
2. Scope of Work (Appendix A); and
3. Any other provisions of the Agreement, including materials incorporated by reference.

**18. SEVERABILITY**

If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected thereby if such remainder would then continue to serve the purposes and objectives of the Agreement as determined by the Tribes.

**19. PUBLIC RECORDS ACT**

This Agreement and all public records associated with this Agreement shall be available from the Tribes for inspection and copying by the public where required by the Public Records Act, Chapter 42.56 RCW.

**20. MISCELLANEOUS**

- A. No obligation in this Agreement shall limit the Tribes in fulfilling its responsibilities otherwise defined by law.
- B. No obligation in this Agreement shall limit the County in fulfilling its responsibilities otherwise defined by law.

IN WITNESS WHEREOF, the County and the Tribes have executed this Agreement as of the date of the last party to sign.

**SNOHOMISH COUNTY:**

Snohomish County, a political subdivision of the State of Washington

By \_\_\_\_\_  
County Executive

**TULALIP TRIBES:**

Tulalip Tribes of Washington, a federally-recognized Indian Tribe

DocuSigned by:  
*Teri Gobin*  
By \_\_\_\_\_  
7F0A44805428125  
Title: Chairwoman

**Approved as to Form:**

Kisielius,  
Laura  
Snohomish County  
Deputy Prosecuting Attorney

Digitally signed by  
Kisielius, Laura  
Date: 2023.08.10  
11:05:18 -07'00'

**Approved as to Form:**

Tyler  
Eastman  
Tulalip Tribes  
Attorney

Digitally signed  
by Tyler Eastman  
Date: 2023.09.25  
10:01:56 -07'00'

**COUNCIL USE ONLY**  
Approved 10/4/2023  
ECAAF # 2023-0957  
MOT/ORD Ordinance 23-085



## APPENDIX A SCOPE OF WORK

This scope of work is intended to more specifically describe the County Subaward for the Tribes' Grant. If there are any conflicts between this scope of work and the Tribes' Grant, the Tribes' Grant governs.

### Task 1 – Sexton Creek Fish Passage

This project near 7616 Sexton Rd will consist of construction to replace an impassable culvert and fishway with a 26-foot span steel plate arch buried bridge. Construction will involve mobilization, staging, erosion and water control, road fill removal, removal of fishway, abutment and bridge installation, channel construction, channel stabilization and planting.

### Task 1 – Expected Outcomes

- Restore access to 1 mile of upstream intact spawning and riparian habitat by replacing one impassable culvert and fishway.

### Task 1 – Deliverables – The County shall provide the following deliverables, consistent with the Tribes' Grant and the more specific requirements as described below.

- Semiannual project reports that describe progress toward the outcomes above and billings. **DUE to Tribes: Semiannually through duration of Agreement** due no later than 15 days after the semiannual reporting periods ending March 31 and September 30 for the entire duration of the award. These follow the same frequency and have the same due dates (April 15 and October 15, respectively) as the SF-425 Federal Financial Reports, which also must be submitted as a condition of this award.
- Permits **DUE to Tribes: 5/1/2024**
  - Permits/review from Snohomish County, the WA Department of Fish and Wildlife (WDFW), WA Department of Natural Resources (DNR), WA Department of Ecology (ECY), WA Department of Archeology and Historic Preservation (DAHP), US Army Corps of Engineers (Corps), US Fish and Wildlife Service (USFWS), NOAA, and/or others as required.
- Designs
  - Final Designs for Tribes and NOAA review **DUE to Tribes: 5/1/2024**
- Construction Bid Award. **DUE to Tribes: 12/1/2024**
- Safety Plan **DUE to Tribes: 6/1/2025**
  - The County must have a written safety plan for management of the project, which should specifically address safety of project personnel, associates, visitors, and volunteers.
- Project construction to be completed consistent with the Build American, Buy American (BABA) Act, Pub. L. No. 117-58, §§ 70901-52 and OMB M-22-11 **DUE to Tribes: 11/1/2026**
- Report on Fish Passage Implementation Monitoring and Evaluation **DUE to Tribes: 6/1/2026**
  - Data Management and NOAA Tier I monitoring will be conducted per Appendix E: Data Management and Implementation Monitoring Plan.
- Annotated before and after photos of project. **DUE to Tribes: 10/1/2026**
- Staff and Contract Personnel Time Tracking **DUE to Tribes: 10/1/2026**
- Acknowledgement of Project Contributors **DUE to Tribes: 10/1/2026**
  - The Recipient must display, where appropriate and practical, publicly visible signs indicating that the project has received funding from the NOAA Restoration Center. These signs should also identify other contributing partners. These contributions should also be acknowledged in all communications with the media and the public and in all outreach related to the projects,

consistent with Department of Commerce Financial Assistance Standard Term and Condition G.05.k.3.

- Final As-Built Designs. **DUE to Tribes: 11/1/2026**
- A comprehensive final report covering all activities during the award period is required and must be received by the Tribes, but a final semi-annual report is not required. **DUE to Tribes: 12/31/2026**

### **Task 1 Budget –\$1,776,000**

### **Task 2 – Lower Williams Creek Fish Passage**

This project near 2333 S. Machias Rd and 2727 S. Machias Rd will consist of planning and construction to replace two impassable culverts. The planning phase will include outreach to adjacent property owners and project stakeholders, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, removal of fish way, abutment and bridge installation, channel construction, channel stabilization, and planting.

### **Task 2 – Expected Outcomes**

- Restore access to 0.21 miles of upstream habitat by replacing two impassable culverts.

### **Task 2 – Deliverables – The Tribes shall provide the following deliverables, consistent with the Tribes’ Grant and the more specific requirements as described below.**

- Semiannual project reports that describe progress toward the outcomes above and billings. **DUE to Tribes: Semiannually through duration of Agreement** due no later than 15 days after the semiannual reporting periods ending March 31 and September 30 for the entire duration of the award. These follow the same frequency and have the same due dates (April 15 and October 15, respectively) as the SF-425 Federal Financial Reports, which also must be submitted as a condition of this award.
- Permits **DUE to Tribes: 9/1/2025**
  - Permits/review from Snohomish County, the WA Department of Fish and Wildlife (WDFW), WA Department of Natural Resources (DNR), WA Department of Ecology (ECY), WA Department of Archeology and Historic Preservation (DAHP), US Army Corps of Engineers (Corps), US Fish and Wildlife Service (USFWS), NOAA, and/or others as required.
- Designs
  - Preliminary Designs for Tribes and NOAA review **DUE to Tribes: 10/1/2024**
  - Final Designs for Tribes and NOAA review **DUE to Tribes: 9/1/2025**
- Construction Bid Award. **DUE to Tribes: 2/1/2026**
- Safety Plan **DUE to Tribes: 6/1/2026**
  - The County must have a written safety plan for management of the project, which should specifically address safety of project personnel, associates, visitors, and volunteers.
- Project construction to be completed consistent with the Build American, Buy American (BABA) Act, Pub. L. No. 117-58, §§ 70901-52 and OMB M-22-11 **DUE to Tribes: 11/1/2026**
- Report on Fish Passage Implementation Monitoring and Evaluation **DUE to Tribes: 6/1/2026**
  - Data Management and NOAA Tier I monitoring will be conducted per Appendix E: Data Management and Implementation Monitoring Plan.
- Annotated before and after photos of project. **DUE to Tribes: 10/1/2026**
- Staff and Contract Personnel Time Tracking **DUE to Tribes: 10/1/2026**

- Acknowledgement of Project Contributors **DUE to Tribes: 10/1/2026**
  - The Recipient must display, where appropriate and practical, publicly visible signs indicating that the project has received funding from the NOAA Restoration Center. These signs should also identify other contributing partners. These contributions should also be acknowledged in all communications with the media and the public and in all outreach related to the projects, consistent with Department of Commerce Financial Assistance Standard Term and Condition G.05.k.3.
- Final As-Built Designs. **DUE to Tribes: 10/1/2026**
- A comprehensive final report covering all activities during the award period is required and must be received by the Tribes, but a final semi-annual report is not required. **DUE to Tribes: 12/31/2026**

### **Task 2 Budget - \$1,548,166**

### **Task 3 – French Creek Fish Passage**

This project near 10101 167<sup>th</sup> Ave SE will consist of planning and construction to replace an impassable culvert and fishway with a 54-foot span bridge. Preliminary designs are complete for this project. The planning phase will include continued outreach to adjacent property owners, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, removal of fishway, abutment and bridge installation, channel construction, channel stabilization and planting.

### **Task 3 – Expected Outcomes**

- Restore access to 7.5 miles of upstream intact spawning and riparian habitat by replacing an impassable culvert and fishway.

### **Task 3 – Deliverables – The County shall provide the following deliverables, consistent with the Tribes’ Grant and the more specific requirements as described below.**

- Semiannual project reports that describe progress toward the outcomes above and billings. **DUE to Tribes: Semiannually through duration of Agreement** due no later than 15 days after the semiannual reporting periods ending March 31 and September 30 for the entire duration of the award. These follow the same frequency and have the same due dates (April 15 and October 15, respectively) as the SF-425 Federal Financial Reports, which also must be submitted as a condition of this award.
- Permits **DUE to Tribes: 9/1/2025**
  - Permits/review from Snohomish County, the WA Department of Fish and Wildlife (WDFW), WA Department of Natural Resources (DNR), WA Department of Ecology (ECY), WA Department of Archeology and Historic Preservation (DAHP), US Army Corps of Engineers (Corps), US Fish and Wildlife Service (USFWS), NOAA, and/or others as required.
- Designs
  - Final Designs for Tribes and NOAA review **DUE to Tribes: 9/1/2025**
- Construction Bid Award. **DUE to Tribes: 2/1/2026**
- Safety Plan **DUE to Tribes: 6/1/2026**
  - The County must have a written safety plan for management of the project, which should specifically address safety of project personnel, associates, visitors, and volunteers.
- Project construction to be completed consistent with the Build American, Buy American (BABA) Act, Pub. L. No. 117-58, §§ 70901-52 and OMB M-22-11 **DUE to Tribes: 11/1/2026**
- Report on Fish Passage Implementation Monitoring and Evaluation **DUE to Tribes: 6/1/2026**

- Data Management and NOAA Tier I monitoring will be conducted per Appendix E: Data Management and Implementation Monitoring Plan.
- Annotated before and after photos of project. **DUE to Tribes: 10/1/2026**
- Staff and Contract Personnel Time Tracking **DUE to Tribes: 10/1/2026**
- Acknowledgement of Project Contributors **DUE to Tribes: 10/1/2026**
  - The Recipient must display, where appropriate and practical, publicly visible signs indicating that the project has received funding from the NOAA Restoration Center. These signs should also identify other contributing partners. These contributions should also be acknowledged in all communications with the media and the public and in all outreach related to the projects, consistent with Department of Commerce Financial Assistance Standard Term and Condition G.05.k.3.
- Final As-Built Designs. **DUE to Tribes: 11/1/2026**
- A comprehensive final report covering all activities during the award period is required and must be received by the Tribes, but a final semi-annual report is not required. **DUE to Tribes: 12/31/2026**

**Task 3 - \$2,873,142**

## APPENDIX B BUDGET

The budget for work to be performed under the Agreement is six million one hundred ninety-seven thousand three hundred eight dollars (\$6,197,308). The Tribes shall have no obligation to pay any invoice from the County that would cause the total payments made to the Tribes by the County under this Agreement to exceed six million one hundred ninety-seven thousand three hundred eight dollars (\$6,197,308). Appendix C is an example of details required with each invoice submittal.

### Contract Task and Dollar Summary

<b>Task</b>	<b>Description</b>	<b>Budget from Tribes' Grant</b>
<b>1</b>	Sexton Creek Fish Passage	\$1,776,000
<b>2</b>	Lower Williams Creek Fish Passage	\$1,548,166
<b>3</b>	French Creek Fish Passage	\$2,873,142
	<b>Interlocal Agreement Grand Total</b>	\$6,197,308

## APPENDIX C INVOICE DOCUMENTS

The following are examples only of the kind of information needed when billing for reimbursement for this Agreement.

**County's invoices** will clearly communicate Project name, work period, percentage completion, Interlocal Agreement task numbers associated with charges, procumbent documents, sub-contractor invoices, and sufficient backup documentation for billing and audit purposes, such as:

### Task 1 – Sexton Creek Fish Passage

#### *Reimbursement*

<i>Payee</i>	<i>Job Title</i>	<i>Description</i>	<i>Date</i>	<i>Hours</i>	<i>Rate</i>	<i>Overhead</i>	<i>Total</i>
J. Doe	Project Manager						

#### **Send County Invoices to:**

Brett Shattuck  
*Restoration, Acquisition and Stewardship Senior Scientist*  
 Environmental Department  
 The Tulalip Tribes  
 6406 Marine Dr.  
 Tulalip, WA 98271  
 (360) 716-4618

## APPENDIX D NOAA Award NA23NMF4630025

Summary information with the Tribes as a pass-through entity:

- a. Subrecipient name: County of Snohomish
- b. Subrecipient's unique entity identifier: LG8NG8JNJD83
- c. Federal Award Identification Number (FAIN): NA23NMF4630025
- d. Federal Award Date: 2/16/2023
- e. Subaward Period of Performance Start and End Date: 03/01/2023-12/31/2026
- f. Subaward Budget Period Start and End Date: 03/01/2023-12/31/2026
- g. Amount of Federal Funds Obligated by this action by the pass-through entity to the subrecipient: \$6,197,308
- h. Total Amount of Federal Funds Obligated to the subrecipient by the pass-through entity including the current financial obligation: \$6,197,308
- i. Total Amount of the Federal Award committed to the subrecipient by the pass-through entity: \$6,197,308
- j. Federal award project description, as required to be responsive to the Federal Funding Accountability and Transparency Act (FFATA):  
This project is a collaboration between The Tulalip Tribes (Tulalip), Snohomish County (County), and the Snohomish Conservation District (SCD) with the priorities of achieving measurable and lasting benefits to native migratory or sea-run (Migratory) fish populations including ESA listed (Listed) and Magnuson-Stevens Fishery Conservation and Management Act (Managed) salmon species, fostering regionally important habitat restoration, enhancing community resilience to climate hazards, and benefiting underserved communities including The Tulalip Tribes and local rural communities. Target Migratory species for this proposal are those native species that spend a portion of their lives in rivers and/or ponds and a portion in the ocean or estuaries including ESA listed Chinook salmon, steelhead, and bull trout, other salmonid species of concern (e.g. coho and chum) and culturally/ecologically important fish species.
- k. Name of Federal awarding agency: U.S. Department of Commerce
- l. Pass-through entity: The Tulalip Tribes
- m. Contact information for awarding official of the Pass-through entity:  
Environmental Manager  
Tulalip Tribes of Washington  
P.O. Box 277  
Tulalip, WA 98271
- n. Assistance Listings number and Title: NOAA-NMFS-HCPO-2022-2007209; NOAA's Restoring Fish Passage through Barrier Removal Notice of Funding Opportunity under the IJA; Estimated Total Program Funding: \$65,000,000; Total award amount to pass-through entity: \$9,733,975.00
- o. Identification of whether the award is R&D: No
- p. Indirect cost rate for the Federal award: Tulalip 19.37%; County: N/A

FORM CD-450 (REV 10/18)		U. S. DEPARTMENT OF COMMERCE		<input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT	
RECIPIENT NAME THE TULALIP TRIBES OF WASHINGTON		FEDERAL AWARD ID NUMBER <b>NA23NMF4630025</b>			
		PERIOD OF PERFORMANCE 03/01/2023-12/31/2026			
STREET ADDRESS 6406 MARINE DR		FEDERAL SHARE OF COST \$9,733,975.00			
CITY, STATE, ZIP CODE TULALIP WA 98271-9714		RECIPIENT SHARE OF COST \$0.00			
AUTHORITY P.L. 117-58; 16 U.S.C. 1891a; 16 U.S.C. 661, as amended by the Reorg. Plan No. 4 of 1970		TOTAL ESTIMATED COST \$9,733,975.00			
CFDA NO. AND NAME 11.463 Habitat Conservation					
PROJECT TITLE SNOHOMISH COOPERATIVE SALMON BARRIER REMOVAL PROJECT					
<p><b>This Award Document (Form CD-450) signed by the Grants Officer constitutes an obligation of Federal funding. By signing this Form CD-450, the Recipient agrees to comply with the Award provisions checked below and attached. Upon acceptance by the Recipient, the Form CD-450 must be signed by an authorized representative of the Recipient and returned to the Grants Officer. If not signed and returned without modification by the Recipient within 30 days of receipt, the Grants Officer may unilaterally withdraw this Award offer and de-obligate the funds.</b></p> <p><input checked="" type="checkbox"/> DEPARTMENT OF COMMERCE FINANCIAL ASSISTANCE STANDARD TERMS AND CONDITIONS</p> <p><input type="checkbox"/> R &amp; D AWARD</p> <p><input type="checkbox"/> FEDERAL-WIDE RESEARCH TERMS AND CONDITIONS, AS ADOPTED BY THE DEPT. OF COMMERCE</p> <p><input checked="" type="checkbox"/> BUREAU SPECIFIC ADMINISTRATIVE STANDARD AWARD CONDITIONS</p> <p><input checked="" type="checkbox"/> SPECIFIC AWARD CONDITIONS</p> <p><input checked="" type="checkbox"/> LINE ITEM BUDGET</p> <p><input checked="" type="checkbox"/> 2 CFR PART 200, UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS, AS ADOPTED PURSUANT TO 2 CFR § 1327.101</p> <p><input type="checkbox"/> 48 CFR PART 31, CONTRACT COST PRINCIPLES AND PROCEDURES</p> <p><input checked="" type="checkbox"/> DEPARTMENT OF COMMERCE PRE-AWARD NOTIFICATION REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS (REF: 79 FR78390)</p> <p><input type="checkbox"/> MULTI-YEAR AWARD. PLEASE SEE THE MULTI-YEAR SPECIFIC AWARD CONDITION.</p> <p><input checked="" type="checkbox"/> OTHER(S): This award is being made under competitive Funding Opportunity Number NOAA-NMFS-HCPO-2022-2007209 posted at Grants.gov on 06/14/2022.</p>					
SIGNATURE OF DEPARTMENT OF COMMERCE GRANTS OFFICER Alan Conway				DATE 02/16/2023	
PRINTED NAME, PRINTED TITLE AND SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL Veronica Iukes				DATE 03/24/2023	



## Specific Award Conditions

**Award Number:** NA23NMF4630025

**Amendment Number:** 0

### 1) New Award SAC

This award number NA23NMF4630025, to The Tulalip Tribes of Washington, supports the work described in the Recipient's proposal entitled Snohomish Cooperative Salmon Barrier Removal Project dated 08/15/2022, and revisions dated 12/22/2022 and 02/07/2023, which is incorporated into the award by reference. Where the terms of the award and proposal differ, the terms of the award shall prevail.

### 2) Part 1 - Required Use of American Iron, Steel, Manufactured Products, and Construction Materials

Pursuant to the Infrastructure Investment and Jobs Act ("IIJA"), Pub.L. No. 117-58, which includes the Build American, Buy American (BABA) Act, Pub. L. No. 117-58, §§ 70901-52 and OMB M-22-11, recipients of an award of Federal financial assistance from the Department of Commerce (DOC) are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:

- 1) all iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- 2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
- 3) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

### 3) Part 2 - Required Use of American Iron, Steel, Manufactured Products, and Construction Materials

#### WAIVERS

When necessary, recipients may apply for, and DOC may grant, a waiver from these requirements. DOC will notify the

recipient for information on the process for requesting a waiver from these requirements.

1) When DOC has made a determination that one of the following exceptions applies, the awarding official may waive the application of the domestic content procurement preference in any case in which DOC determines that:

- a. applying the domestic content procurement preference would be inconsistent with the public interest;
- b. the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or
- c. the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

A request to waive the application of the domestic content procurement preference must be in writing. DOC will provide instructions on the format, contents, and supporting materials required for any waiver request. Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Made in America Office.

There may be instances where an award qualifies, in whole or in part, for an existing waiver described at [whitehouse.gov/omb/management/made-in-america](http://whitehouse.gov/omb/management/made-in-america).

## DEFINITIONS

“Construction materials” includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives<sup>2</sup>—that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall.

“Domestic content procurement preference” means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced in the United States; or the construction materials used in the project are produced in the United States.

"Infrastructure" includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

"Project" means the construction, alteration, maintenance, or repair of infrastructure in the United States

--

1 Excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

2 IIA, § 70917(c)(1).

#### **4) Implementation of Domestic Sourcing Requirements**

Prior to initiation of any construction that may arise in this award, the Recipient is required to inform the NOAA Grants Officer and the Federal Program Officer whether it is using iron, steel, manufactured products, or construction materials as described in the Specific Award Condition in this award on Required Use of American Iron, Steel, Manufactured Products, and Construction Materials. In addition, the Recipient is required to inform the NOAA Grants Officer and the Federal Program Officer whether those materials are produced or manufactured in the United States, or alternatively, it is requesting one or more waivers, as described in the award condition. The Recipient is required to coordinate with NOAA regarding its compliance with this term.

#### **5) Pre-Award Costs – 90 Days**

Pre-award costs incurred within 90 days prior to the award start day are allowable only to the extent of their reasonableness and relationship to the proposed activities of this award. The approved pre-award costs are a portion of, not in addition to, the approved total budget.

#### **6) Contingency for Construction**

A contingency amount has been identified in the budget documentation of the grant or subaward application. While a contingency budget may be included in the Federal award, please be advised that any flat contingency charges or drawdowns towards a contingency reserve are not allowable. Pursuant to 2 CFR 200.433(b), in order for the actual costs charged against contingency budgets to be allowable, they must comply with the cost principles, be necessary and reasonable for proper and efficient accomplishment of project or program objectives, and be verifiable from the recipient's records.

#### **7) Post Award NEPA Review Process**

By accepting this award, the Recipient agrees to assist and cooperate with NOAA Fisheries in the preparation of any outstanding National Environmental Policy Act (NEPA) compliance documentation. For purposes of NEPA compliance, Phase 1 of the project includes planning, permitting, cultural resources surveys, design work, bid package development, permitting, contractor selection, landowner agreements, invasive species control and pre-implementation monitoring. The activities for which work can proceed (as described above) will have no significant individual or cumulative adverse effects on the environment. The Recipient will not expend any funds for Phase 2 project implementation which includes culvert modification and/or removal until impacts have been assessed, and NEPA compliance documentation has been completed by NOAA. At this time, \$925,000 of the total award funds are available to the Recipient to complete Phase 1 tasks outlined above that have no adverse impacts on the environment. The remaining award funds will be available after

the NOAA Program Officer provides NEPA clearance by confirming in Grants Online that this award condition has been satisfied.

### **8) Cooperative Agreement**

This award is a cooperative agreement as described in 2 C.F.R. Sec. 200.1, meaning that NOAA is “substantially involved” in the project. NOAA Fisheries’ participation will be crucial to ensuring the timely implementation of the most beneficial habitat restoration project. NOAA may participate in one or more of the following ways:

- collaboration on the scope of work through participation in meetings and review of documents;
- providing assistance with technical aspects of the habitat restoration project such as assistance with permitting or development of detailed work plans and monitoring plans;
- review and comment on design plans at the beginning of the award, at various stages throughout any portion of the design process that occurs during the award (e.g. conceptual, 30%, 60%, and 90% completion), and at the final completion stage;
- review of procurement materials to the extent authorized by 2 C.F.R. Sec. 200.325;
- tracking the progression of the restoration from planning through implementation and post-construction monitoring, with particular emphasis on tracking Recipient achievement of targets for major milestones and performance metrics and sharing results;
- other involvement consistent with Office of Management and Budget Guidance on Substantial Involvement. See 43 Federal Register 36860 (Aug. 18, 1978).

### **9) Performance Progress Reports**

Reporting requirements are described in 2 C.F.R. Sec. 200.328-.330, and 200.300(b); Department of Commerce Financial Assistance Standard Terms and Conditions Sec. A.01, C.03, and G.05; and Bureau-Specific NOAA Administrative Standard Award Conditions, with the following supplement.

Progress reports must be submitted using the NOAA Community-based Restoration Program's Performance Progress Report (PPR) reporting form approved by OMB under control number 0648-0718, or a successor form. The NOAA Federal Program Officer will provide this form to the Recipient. Interim semi-annual progress reports are due no later than 30 days after the semiannual reporting periods ending March 31 and September 30 for the entire duration of the award. These follow the same frequency and have the same due dates (April 30 and October 30, respectively) as the SF-425 Federal Financial Reports, which also must be submitted as a condition of this award.

A comprehensive final report covering all activities during the award period is required and must be received by the NOAA Program Officer within 120 days after the end date of this award, but a final semi-annual report is not required.

### **10) Contact Information**

Contact information for NOAA and the Recipient is maintained in the NOAA Grants Online award management system.

In addition:

The Federal Program Officer for this award is: Melanie Gange; 301-427-8664; melanie.gange@noaa.gov

The Technical Monitor for this award is: Terill Hollweg; 206-503-0671; terill.hollweg@noaa.gov

### **11) Project Milestones**

To ensure adequate and timely progress towards project completion, NOAA and the Recipient have cooperatively identified several milestones as outlined in the proposal narrative on pages 8-14. Project progress will be evaluated throughout the award with particular emphasis on meeting these milestones. NOAA reserves the right to pursue enforcement action for the award under 2 C.F.R. 200.339-.343 at any time throughout the award period should NOAA determine that a Recipient is not meeting project milestones as outlined in the application submitted to the NOAA Grants Management Division for funding.

### **12) Changes to the Scope of Work**

By accepting this award, the Recipient agrees to assist and cooperate with NOAA Fisheries in the preparation of any outstanding National Environmental Policy Act (NEPA) compliance documentation. Recipients who plan any changes to the activities described in the award documentation approved by NOAA should contact their Federal Program Officer at least 90 days in advance of any changes, so that NOAA can confirm that all environmental compliance review is complete, and all documentation is in place. Other requirements related to changes in the Scope of Work are contained in the NOAA Standard Terms and Conditions.

### **13) Outreach and Communications**

Department of Commerce Financial Assistance Standard Term and Condition G.05.k.3. is supplemented as follows consistent with NOAA's collaboration on this project. The Recipient will coordinate with NOAA on outreach plans, events, products, and media coverage associated with the project. Please coordinate with the Federal Program Officer listed under the Contact Information award condition. Grantees will provide copies of final outreach products, website mentions, press materials, photos, etc. via the standard progress reports to NOAA, or when available throughout the award period. Grantees will provide NOAA with high-resolution before, during, and post-implementation photos of the project. Photos of the site prior to construction and during project implementation should be submitted with progress reports or as requested by NOAA.

### **14) Acknowledgement of Project Contributors**

The Recipient must display, where appropriate and practical, publicly visible signs indicating that the project has received funding from the NOAA Restoration Center. These signs should also identify other contributing partners. These contributions should also be acknowledged in all communications with the media and the public and in all outreach related to the projects, consistent with Department of Commerce Financial Assistance Standard Term and Condition G.05.k.3.

### **15) Project Safety**

The Recipient must have a written safety plan for management of the project, which should specifically address safety of

project personnel, associates, visitors, and volunteers. The Recipient must conduct a safety briefing for volunteers immediately prior to their participation in hands-on restoration activities under this award.

In addition, for any Self-Contained Underwater Breathing Apparatus (SCUBA) diving activities in a project, it is the responsibility of the Recipient to ensure that SCUBA divers are certified to a level commensurate with the type and conditions of the diving activity being undertaken. Furthermore, it is the responsibility of the Recipient to ensure that any SCUBA diving activities under this award meet, at a minimum, all applicable Federal, State, and local laws and regulations pertaining to the type of SCUBA diving being undertaken.

#### **16) Compliance with Applicable Laws, Obtaining Permits, and Consultation Requirements**

The Recipient is required to comply with national policy requirements consistent with 2 C.F.R. Sec. 200.300 and Department of Commerce Financial Assistance Standard Terms and Conditions, Section G. The Recipient will ensure that implementation of the project will meet all Federal laws and regulations by obtaining all Federal, state, and local permits and consultations applicable to the project prior to expenditure of award funds for those activities requiring permits and consultations. This includes, but is not restricted to, consultations required under the Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat), National Historic Preservation Act, and Coastal Zone Management Act. The Recipient will be cognizant of all conditions and restrictions required by their permits and consultations, and will immediately halt activities and contact their NOAA Technical Monitor if events occur that threaten to violate the conditions or restrictions required by their permits and consultations.

#### **17) Verification of Permits and Consultations**

Verification of permits and regulatory compliance related to this project must be presented to the NOAA Technical Monitor prior to project implementation. The Recipient should provide a list of Federal, tribal, state, and local permits acquired for this project by email or letter to the NOAA Technical Monitor.

#### **18) Project Files**

The Recipient must maintain project files for all restoration activities taking place under this agreement consistent with 2 C.F.R. Sec. 200.334. These files must contain, at a minimum, project work plans and copies of all federal and state permits/consultations associated with project implementation.

# SNOHOMISH COOPERATIVE SALMON BARRIER REMOVAL PROJECT

## PROJECT SUMMARY

- 1) Applicant Organization: The Tulalip Tribes
- 2) Project Title: Snohomish Cooperative Salmon Barrier Removal Project
- 3) Site Location: Snohomish County, Washington State

This proposal has several priority projects sites which are all located in Snohomish County, Washington (see map in Supplemental Materials). The projects are within the Snohomish River Basin that flows into the Puget Sound, the largest estuary by volume in the United States. The Snohomish Basin delta is located north of the City of Seattle near the City of Everett in Washington State. The Tulalip Tribes Reservation is located at the Snohomish delta, and all projects are within the ancestral lands of the Tulalip People who retain fishing, hunting and other rights and deep cultural connections to this area.

### 4) Project Description:

This project is a collaboration between The Tulalip Tribes (Tulalip), Snohomish County (County), and the Snohomish Conservation District (SCD) with the priorities of achieving measurable and lasting benefits to native migratory or sea-run (Migratory) fish populations including ESA listed (Listed) and Magnuson-Stevens Fishery Conservation and Management Act (Managed) salmon species, fostering regionally important habitat restoration, enhancing community resilience to climate hazards, and benefiting underserved communities including The Tulalip Tribes and local rural communities. Target Migratory species for this proposal are those native species that spend a portion of their lives in rivers and/or ponds and a portion in the ocean or estuaries including ESA listed Chinook salmon, steelhead, and bull trout, other salmonid species of concern (e.g. coho and chum) and culturally/ecologically important fish species.

### *Project Goals:*

- Increase all Viable Salmonid Population Parameters including abundance, productivity, diversity, and distribution of ESA listed, Managed, Migratory, and other fish species.
- Increase food availability (salmon) for Southern Resident Killer Whales (Species in the Spotlight).
- Restore migratory fish access to **32.17 miles** of habitat through barrier removal.
- Remove **16** migratory fish passage barriers.
- Enhance the quantity, quality and connectivity of priority spawning and rearing habitat for migratory fish species including Chinook salmon (Listed/Managed), Steelhead Trout (Listed), Bull Trout (Listed), Coho Salmon (Species of Concern/Managed), Chum Salmon, Pink Salmon (Managed), Sea Run Cutthroat Trout, and other fish species.
- Enhance ecological connectivity and natural process function within the Snohomish River Basin.
- Increase the abundance and access to Tribal treaty Retained Resources such as salmon.
- Replace/remove infrastructure to enhance safety, reduce flood hazards, and improve resilience.

*Regional and Watershed Context:* This proposal includes fish barrier removal projects in the Snohomish River Basin that drain to the Puget Sound. The 2022-2026 Action Agenda for Puget Sound, the Puget Sound National Estuary Program's Comprehensive Conservation and Management Plan, lists fish passage barrier removal as one of the primary strategies to recover salmon populations. The Snohomish River is the second largest Puget Sound River, and a major producer of ESA listed and Managed fish stocks including

Chinook and coho salmon. The watershed produces salmon that are critical food for endangered Southern Resident Killer Whales (Species in the Spotlight). Many fish stocks (Chinook, steelhead, coho, and chum salmon) have experience record low returns over the last 5 years. These low abundance numbers have restricted harvest. Restoring natural processes, habitat connectivity, and migratory fish abundance is critical to the survival of these iconic, economically important, and culturally vital species.

This collaborative proposal will remove 16 migratory fish passage barriers within a focused geographic region, restoring connectivity to 32.17 miles of upstream habitat. All of these barriers are located in priority streams for the recovery of anadromous fish including salmon. Many of the crossings are located in the Pilchuck River Watershed, a tributary to the Snohomish River that has been prioritized by the State of Washington and the local watershed for fish passage barrier removal. Other crossings are located in areas that will benefit critical species (Chinook salmon), and/or will provide significant upstream habitat connectivity gains.

In general, upstream habitat to be connected as part of this proposal is high quality and will provide critical spawning and rearing habitat for priority species. There are no complete fish passage barriers downstream of any of the proposed fish barrier replacements. The only projects with potential downstream partial fish passage barriers are located on Riley Slough, where we are currently implementing a wholistic habitat connectivity project where we intend to replace/remove all fish passage barriers by 2028. This will be described further in the below project narrative.

There are no known federally-owned dams in the Snohomish. The only significant hydroelectric dams are the Culmback Dam and the associated Spada Lake Reservoir located on the Sultan River, and the South Fork Tolt Dam and Tolt Reservoir located on the South Fork Tolt River in the Snohomish River Basin. The dams are not downstream or in the vicinity of any of the proposed fish barrier removal projects.

*Timeline:* This proposal includes the removal of 16 fish passage barriers implemented by 3 coordinating entities. Timelines for each associated project will differ depending on current status and project scale. Project activities will start in December 2022, and potentially continue through December 2025 (total of 3 years). See the below narrative for project specific timelines.

#### 5) Landowner and Stakeholder Outreach:

All projects in this proposal are either owned by project collaborators or have existing signed landowner acknowledgements and barrier owner support. This proposal has broad stakeholder support, including from the three primary project collaborators (Tulalip, County, and SCD), and many others (see support letters in PDF 4. Supplemental Materials). We are working closely with permitting agencies including Snohomish County, the Washington Department of Fish and Wildlife, the Washington State Department of Natural Resources, the Washington Department of Ecology, the Washington Department of Archaeology and Historic Preservation, NOAA, and the Army Corps of Engineers. We intend to utilize a streamlined Fish Habitat Enhancement Project or Forest Practices Hydraulic Project permitting process for these projects.

#### 6) Funding Request: See PDF 2. Budget Narrative for full description

<b>Funding</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
<b>Request</b>	\$950,871	\$5,997,439	\$2,781,451	\$9,729,761



## PROJECT NARRATIVE

### 1) IMPORTANCE AND APPLICABILITY (24 POINTS):

The removal of 16 migratory fish passage barriers and connectivity of 32.17 miles of habitat will provide substantial intrinsic value including measurable and lasting benefits to migratory fish populations including ESA listed salmon species. This will foster regionally important habitat restoration, enhance community resilience to climate hazards, and benefit underserved communities including The Tulalip Tribes and the local rural community.

*a) Priority for Migratory Fish (10 points):* This project will provide substantial measurable migratory fish population benefits through the collaborative removal of 16 fish passage barriers. These fish barrier removals will restore Listed and Managed migratory fish access to 32.17 miles of priority upstream spawning and rearing habitat. This proposal will remove fish passage barriers for Chinook salmon (Listed/Managed), steelhead trout (ESA Listed), bull trout (Listed), coho salmon (Species of Concern/Managed), chum salmon, pink salmon (Managed), cutthroat trout, and other fish species. All projects are located in priority areas for Snohomish Basin salmon recovery efforts (see b below).

The priority of fish barrier removal in the Snohomish Basin is highlighted in associated ESA Recovery and Management Plans. The Puget Sound Salmon Recovery Plan (2007) lists fish access including restoring access on barrier road culverts as one of the top ten actions needed for salmon recovery. One of the primary objectives in The Snohomish River Basin Salmon Conservation Plan (SBSRF, 2005) is to eliminate human-made barriers such as blocking culverts to anadromous fish passage, prevent the creation of new barriers, and provide for the transport of water, sediment, and organic matter at all stream crossings. The 2022 Plan for Puget Sound Chinook: Harvest Management Component Snohomish River Management Unit Status Profile states that “restoration and protection of rearing habitats that support both yearling and subyearling smolt life history traits is vitally important to the recovery of these stocks.” The Snohomish River Natural Coho Salmon Rebuilding Plan (2020) states that human made physical barriers to coho migration including culverts confound rebuilding efforts. This proposal will directly address these priorities.

Coho, Chinook, and Puget Sound Pink Salmon Essential Fish Habitat includes all those streams, lakes, ponds, wetlands, and other water bodies currently or historically accessible to salmon in Washington. All projects in this proposal will either remove fish passage barrier infrastructure or replace existing infrastructure on anadromous streams with fish passable culverts or bridges per current Washington State fish passage standards as required in Washington Administrative Code (WAC) 220-660-190 per stream simulation design standards. This aligns with guiding principal 1 (Support ecosystem conservation and enhancement) of the National Saltwater Recreational Angler Policy through restoration and conservation of habitats that benefit recreational and other fish stocks. No fish ladders, weirs or other retrofits/temporary fish passage structures will be installed. This proposal will also benefit Southern Resident Killer Whales (Species in the Spotlight) by increasing the abundance of their primary food, salmon.

<b>Project Name</b>	<b>Project Sponsor</b>	<b>Watershed in Snohomish Basin</b>	<b># Barriers Corrected</b>	<b>Habitat Gain (Mi)</b>	<b>Primary Target Species</b>
<i>Sexton Creek</i>	County	Pilchuck River	1	1	Chinook/coho
<i>Bunk Foss</i>	SCD	Pilchuck River	1	1.3	Chinook/coho
<i>Lower Williams</i>	County	Pilchuck River	2	0.21	Chinook/coho
<i>Upper Williams</i>	Tulalip	Pilchuck River	3	1.5	Chinook/coho
<i>Watt Crossing</i>	Tulalip	Pilchuck River	1	3.0	Chinook/coho
<i>Little Pilchuck</i>	SCD	Pilchuck River	1	1.0	Chinook/coho
<i>Coho Creek</i>	Tulalip	Quilceda Creek	1	13.5	Chinook/coho
<i>French Creek</i>	County	French Creek/Snohomish	1	7.5	Chinook/coho
<i>Peoples Creek</i>	Tulalip	Snoqualmie/Tualco	2	0.8	Chinook/coho
<i>Riley Slough</i>	SCD	Skykomish/Tualco	2	1.1	coho
<i>Sister of Friar</i>	SCD	Woods Creek/Skykomish	1	1.26	coho
		<b>Total</b>	<b>16</b>	<b>32.17</b>	Chinook/coho

*b) Regional and Watershed Context (6 points):* This project will benefit one of the most critical river basins in the Puget Sound Region for the recovery of migratory fish populations, the Snohomish River Basin. The Snohomish River is the second largest Puget Sound river, and the largest Puget Sound producer of Managed coho salmon. The Snohomish has substantial restoration potential, and significant effort has been made over the last decades to restore and connect natural processes and habitats.

Many culverts in the Snohomish Basin are being removed/replaced by the Washington State Department of Transportation (WSDOT) as part of a federal court injunction for fish passage. No barriers in this proposal are part on this injunction, however there are injunction culverts up/downstream of several projects in this proposal. Twenty-one northwest Washington tribes asked the U.S. District Court to find that the State of Washington has a treaty-based duty to preserve fish runs by repairing or replacing culverts that impede salmon migration. The court ruled in the tribes' favor, requiring the state to refrain from building or operating culverts under state-maintained roads that hinder fish passage. Issued in March 2013, the permanent injunction requires the state to significantly increase the effort for removing state-owned culverts that block habitat for salmon and steelhead by 2030. This includes implementing injunction projects on Sexton Creek, Bunk Foss Creek, and Little Pilchuck Creek up or downstream in coordination with projects in this proposal.

Many of the projects in this proposal are within the Pilchuck River, a tributary to the Snohomish River, that has been identified by the State of Washington Fish Passage Barrier Removal Board as a high priority watershed for the recovery of salmonids in the Snohomish River Basin. Members of the Pilchuck Working Group and Snohomish Basin Salmon Recovery Forum lead entity Technical Committee have developed and adopted a prioritized list of Pilchuck River culverts that need to be removed for salmon recovery including the barriers in the Pilchuck watershed in this proposal. Projects in the Pilchuck Watershed will build off of recent successes by the Tulalip Tribe to remove the [Pilchuck River Diversion Dam](#) in 2020 that restored unimpeded upstream fish passage to over 37 miles of pristine habitat.

The Pilchuck provides documented spawning and rearing habitat for ESA-listed Chinook salmon, coho salmon, steelhead, and bull trout as well as other important salmonids. Historically a major Chinook salmon and steelhead river, the Pilchuck now supports only a small fraction of its historic abundance. The Snohomish River Basin Salmon Conservation Plan (SBSCP, 2005) identified the Middle Pilchuck River sub-

basin as part of the Mainstem Primary Restoration sub-basin strategy group and highlights the sub-basin's importance in maintaining and restoring the diversity and spatial structure of the Skykomish Chinook population which overall is at 3.4% of its estimated historical abundance. (SBSCP, 2005). Tier 1 recovery priorities for the Mainstem Primary Restoration sub-basin strategy group as listed in the SBSCP includes removal of barriers.

Several projects are also located in the Skykomish Watershed that is a tributary to the Snohomish River, and the Tualco Valley located at the heart of the Snohomish Basin where the Skykomish and Snoqualmie Rivers confluence to form the Snohomish River. The SBSCP also lists much of the Skykomish (including the Tualco Valley) as part of the mainstem primary restoration sub-basin strategy group with barrier removal as a Tier I priority. Tulalip, the County and SCD are working on an extensive suite of projects in the Skykomish and Tualco Valley to increase habitat connectivity and provide integrated, multi-benefit outcomes. This includes assessing all stream crossings in the Tualco Valley on Riley Slough, and working to replace all fish passage barriers, increase water quality, and improve habitat quality. These activities have been largely funded by the WA State Department of Ecology through the [Floodplains by Design](#) public-private partnership and coordinated by the [Snohomish County Community Floodplain Solutions \(CFS\)](#) program and the Snohomish Integration Team (IT). The Snohomish IT is comprised of representatives from many entities including Tulalip, the County, SCD, Washington Farmland Trust, Forterra (Land Trust), Ducks Unlimited, WA Department of Fish and Wildlife, and the City of Monroe. The proposed projects on Riley Slough and Peoples Creek in the Tualco Valley will be part of this larger effort.

This proposal includes the Sister of Friar fish passage project which is located on a tributary in the West Fork Woods Creek sub-basin, a tributary to the Lower Skykomish River. Fish passage barrier removal is a priority recovery action identified in the Salmon Conservation Plan (SBSCP, 2005). The Sister of Friar fish passage project builds on significant coordinated efforts to replace all public and private fish passage barriers in the Woods Creek system. SCD and partners completed a barrier inventory and prioritization for private and public stream crossings in 2016 and have replaced four of the Tier 1 priority barriers (all Tier 1 barriers corrected as of 2020). This project will replace a Tier 2 priority barrier that was identified by the Woods Creek Culvert Cooperative as the next highest priority barrier in the Woods Creek system.

The proposed project on French Creek (tributary to the Snohomish) is the largest in scope and cost, with corresponding large upstream habitat gains. French Creek is adjacent to the Pilchuck River Watershed and is an important producer of coho and other salmon. The proposed project will address the lowest barrier in the system that is currently a 100% fish passage barrier.

Finally, one project is located on Coho Creek on the Tulalip Reservation near the mouth of the Snohomish River. This crossing has a substantial amount of upstream migratory fish habitat, and upstream habitat access is significantly inhibited by the current barrier culvert. This stream is utilized by coho, chum, and other migratory fish species. This and all other projects in this package will help build community and ecological resilience, including for underserved communities such as the Tulalip Tribes and the local rural community.

*c) Enhancing community resilience to climate hazards and providing other co-benefits (6 points):* Every project in this proposal has an undersized crossing that is aging and poses flooding, lack of access, or other community safety/economic/environmental risks that will be exacerbated with climate change. This proposal will either remove unnecessary/hazardous crossings or replace them with adequately sized stream crossings that meet current fish passage standards and incorporate climate change considerations

into the design. The result will be increased access, reduced flood risk, and increased safety for the community. Also, the increase in Treaty Retained Resource (such as salmon) abundance will provide cultural resilience to the Tulalip Tribes and other members of the community who utilize these resources for economic, recreational, cultural, or other purposes.

The Washington Department of Fish and Wildlife has an online tool for designing climate-change-resilient culverts that will be used for these barrier replacement designs. We will consider the 2080 results for both predicted bankfull width and flow rate changes. Spans are increased when the lifespan of the structure exceeds the predicted change interval. In addition, freeboard may be adjusted to continue to pass debris and scour is analyzed to prevent damage to the structure foundation. Footing depths may be increased as a countermeasure. The results also help plan for future maintenance and operations.

*d) Providing benefit to underserved communities, including through partnerships with federally recognized tribes (2 points):* The applicant and primary sponsor for this proposal is the federally recognized Tulalip Tribes. Tulalip will be involved in all projects in this proposal and will be the primary sponsor for the several of the projects. Other underserved communities within the project area include persons who live in rural areas, persons living in areas within the project area that have persistent poverty, and local Latino populations.

**Community Demographics Within Project Area** Per EP Environmental Justice Screening and Mapping Tool (V 2.0; National Percentiles):

- Cities of Monroe, Snohomish and Lake Stevens are up to the 70<sup>th</sup>-80<sup>th</sup> percentile in people of color
- There are areas within the City of Monroe with low income in the 90-95<sup>th</sup> percentile
- Unemployment rate is up to the 80-90<sup>th</sup> percentile in Cities of Monroe, Snohomish and Lake Stevens
- Portions of Monroe have linguistically isolated rates between the 80-90<sup>th</sup> percentile
- Portions of Monroe have less than high school education rates between the 90-95<sup>th</sup> percentile
- Cities of Monroe, Snohomish and Lake Stevens have under age 5 rates in the 90-100<sup>th</sup> percentile
- Portions of Monroe and Lake Stevens have over age 64 rates between the 80-90<sup>th</sup> percentile

## 2) TECHNICAL AND SCIENTIFIC MERIT (27 POINTS):

All of the fish barrier removal projects in this proposal will be implemented via technically sound, established methods including stream crossing removal or replacement per current Washington State requirements. This includes crossing sizing and installation as described in the Washington Department of Fish and Wildlife Water Crossing Guidelines (WDFW, 2013). Project site characteristics and methods support barrier removal and fish passable replacement in all project sites using typical, well established construction methods. Many of these projects have planning/designs underway, and all projects have barrier owner support. All projects will result in fish barrier removal implementation within the performance period. Permitting and environmental compliance will be needed for all projects, and all project collaborators are adept at the permitting process, options for permitting streamlining, and have relationships with permitting agency staff. All projects will include implementation monitoring to ensure project success per NOAA Tier I guidance. All projects will provide socioeconomic benefits including increased access, reduced flood risk, increased safety, and environmental/cultural resilience. All projects will be sustainable by incorporating current design standards and climate change considerations into implemented barrier removal/replacement projects, enhancing ecosystem resilience to extreme weather events. Any data collected will have an associated data management plan.

*a) Proposal Site Characteristics and Methods (6 points):* Tulalip, the County and SCD will design and replace or remove 16 barrier culverts to restore migratory fish access to 32.17 miles of priority habitat. Habitat above these crossings is generally complex, with mature vegetation and spawning gravels. Slopes are generally low, and the likelihood of fish use is high post barrier removal. The culverts are on Tulalip, County and private roads, and are typically the most downstream barrier in the stream system. There are no complete fish passage barriers downstream of any of the projects in this proposal. Mapped and observed species include Chinook, Coho, Chum, Pink Salmon, Steelhead, Bull Trout, and other species. The preferred alternatives were determined upon stream survey and consultation with fish passage engineers. The removal of the barrier and installation of fish passable infrastructure will increase safety, maintain access, and increase resiliency.

*b) Project Description and Milestones (5 points):* This proposal will consist of planning and construction to remove or replace barrier culverts with fish passable structures. Archeological and hydraulic permits will be required. This includes permits/review from Snohomish County, the WA Department of Fish and Wildlife (WDFW), WA Department of Natural Resources (DNR), WA Department of Ecology (ECY), WA Department of Archeology and Historic Preservation (DAHP), US Army Corps of Engineers (Corps), US Fish and Wildlife Service (USFWS), and/or NOAA depending on the project. Projects will utilize streamlined Fish Habitat Enhancement Project (FHEP), Forest Practices Hydraulic Permit (FPHP), Multiagency Permit Program (MAP), and/or Nationwide permitting processes whenever possible and appropriate. Planning phases will include outreach, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, traffic control, road fill removal, utilities management, culvert/bridge installation, channel construction, channel stabilization, and planting. See milestones for each component project below.

*c) Fish Passage Implementation Monitoring and Evaluation (4 points):* See PDF 4 Supplemental Materials.

*d) Socioeconomic Performance Measures (3 points):* Proposal implementation will improve current infrastructure for the community, decrease erosion and increase resilience to climate change for the rural community. Fish passage improvement in this watershed will help increase the availability of treaty-reserved resources for Tulalip Tribal Members.

*e) Sustainability (8 points):* The replacement or removal of crossing is expected to take little to no active management in the future as the stream simulation design allows for natural channel migration and passage of debris. Adaptive management responsibilities will be written in a 10-yr landowner agreement when occurring on private land and will include a requirement for annual inspections and photo-documentation by the landowner/project sponsor for 10 years following construction as well as visual qualitative inspection/monitoring of the crossing and installed riparian vegetation and photo-documentation completed by the project sponsor for a minimum of the first three years post-construction. Installed infrastructure is expected to last upward of 50-75+ yrs.

*f) Data Management Plan (1 point):* See PDF 4. Supplemental Materials.

## PROJECT SPECIFIC TECHNICAL AND SCIENTIFIC MERIT

Please see the below descriptions of Technical and Scientific Merit associated with a) Project Site Characteristics and Methods, and b) Project Description and Milestones for each project.

### SEXTON CREEK (COUNTY; PILCHUCK RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Snohomish County will replace a 67% passable culvert and fishway on Sexton Creek, a tributary to the Pilchuck River, with a 26 ft span steel plate arch buried bridge. This culvert is being replaced in conjunction with the WA Dept. of Transportation (WSDOT) who will be replacing their structure under US-2 immediately upstream of the County owned crossing, and together the proposed structures will restore access to **1 mile** of upstream intact spawning and riparian habitat. The upstream habitat is a mixture of wide, natural riparian buffer and open field. The next stream crossing upstream of US-2 is a privately owned total barrier, and WA Dept. of Fish and Wildlife (WDFW) is working with the property owners on barrier replacement.

The existing structure and fishway is a barrier due to water surface drop through the existing fishway. Species present at the site include Pink, Chum, Chinook, Coho, Steelhead, Sea run Cutthroat, Resident Trout and Bull Trout. The proposed structure has been designed utilizing a grant from the WA Fish Barrier Removal Board, working in conjunction with WDFW, WSDOT and the Tulalip Tribes.

*b) Project Description and Milestones:* This project will consist of construction to replace an impassable culvert and fish way with a 26 ft span steel plate arch buried bridge. Construction will involve mobilization, staging, erosion and water control, road fill removal, removal of fish way, abutment and bridge installation, channel construction, channel stabilization and planting

Year	Milestones
2023	Agreement  Permitting  outreach  Landowner Agreement  Construction Bid Award
2024	Construction  Implementation monitoring  Riparian restoration  As-built designs

### BUNK FOSS CREEK FISH PASSAGE PROJECT (SCD; PILCHUCK RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Snohomish Conservation District will design and replace a culvert on a tributary to the Pilchuck River with a culvert or bridge, restoring access to **1.3 mi** of upstream intact spawning and riparian habitat. The habitat above the project site is complex and consists of mature riparian forest vegetation. The downstream habitat is agricultural pasture along the stream within the floodplain of the Pilchuck River that confluences with the river approximately 1,000 ft downstream of the barrier; there is documented adult and juvenile salmon presence in the lower portion of the creek. The culvert is on a private agricultural access road and is the most downstream barrier on the tributary stream. There are partial fish passage barriers upstream that are being scoped for replacement.

The existing 3ft diameter culvert outlet is undersized for the 14-foot wide channel, which creates a velocity and depth barrier for juvenile salmonids. Mapped and observed species at the project site include coho, steelhead, resident coastal cutthroat trout, and searun cutthroat trout. A preferred alternative to maintain access and restore fish passage will be determined upon a stream survey and consultation with a fish passage engineer. The removal of the barrier and replacement structure installation will improve safety, maintain access, and increase resiliency.

*b) Project Description and Milestones:* This project will consist of planning, permitting, and construction to replace an existing culvert with a fish passable structure. Archeological and hydraulic permits will be required to correct this barrier. The planning phase will include outreach, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and bridge installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement   Outreach   Engineering Award   Prelim designs   Cultural Award   Permit Apps.
2024	Final designs   Permit complete   Construction Award   Landowner Agreement executed
2025	Construction   Implementation monitoring   Riparian restoration   As-built designs complete

#### LOWER WILLIAMS CREEK (COUNTY; PILCHUCK RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Snohomish County will design and replace two partial barrier culverts on Williams Creek, a tributary to the Pilchuck River. The two County culverts will restore access to **0.21 miles** of upstream habitat. These culverts will be replaced in conjunction with three additional culverts being replaced by the Tulalip Tribes (See Upper Williams Creek below), and another [adjacent upstream replacement conducted by the County in 2020](#). Replacement of all six culverts will remove all barriers on Williams Creek. Upstream of the culverts being replaced by the Tulalip Tribes, the habitat has complex habitat features, beaver activity and has the potential to be productive rearing habitat. The existing culverts are barriers due to lack of water depth. Preliminary design data indicates an approximate bankfull width of 7.44 ft, which results in a minimum structure span of 11 ft based on the 2013 Water Crossing Design Guidelines.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace two impassable culverts. The planning phase will include outreach to adjacent property owners and project stakeholders, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, removal of fish way, abutment and bridge installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement   Outreach   Engineering Award   Prelim designs   Cultural Award   Permit Apps
2024	Final designs   Permitting complete   Construction Award   Landowner Agreement signed
2025	Construction   Implementation monitoring   Riparian restoration   As-built designs completed

#### UPPER WILLIAMS CREEK (TULALIP; PILCHUCK RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Tulalip Tribes will restore fish passage on Williams Creek, a Pilchuck River Tributary in Snohomish County. The project will remove 3 existing fish passage barrier culverts and install 2 pre-fabricated 30' length bridge structures. The current culverts structures are 33%, 33%, and 67% passable partial blockages and represent significant impediments to upstream migration of anadromous fishes. In total **1.5 miles** of upstream habitat will be made readily available to migratory fish for adult salmon spawning as well juvenile salmon rearing. The habitat above is complex, with mature vegetation and significant available gravel substrates >75%. Drainage slope is 1-5% and the likelihood of fish utilization is high. The downstream habitat has documented adult and juvenile salmon presence and

use. All 3 culverts are on private residential properties. Downstream barriers will be replaced by Snohomish County as part of this proposal eliminating all passage barriers in this reach of Williams Creek.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace 3 barrier culvert with two 30 ft span bridges. Archeological and hydraulic permits will be required to correct this barrier. The planning phase will include outreach, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and bridge installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement   Outreach   Engineering Award   Prelim designs   Cultural Award   Permit Apps
2024	Final designs   Permitting complete   Construction Award   Landowner Agreement signed
2025	Construction   Implementation monitoring   Riparian restoration   As-built designs completed

#### WATT CROSSING (TULALIP; PILCHUCK RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Tulalip Tribes will design and replace a 0% passable (total barrier) culvert on a tributary to the Pilchuck River with a 50 ft. span bridge restoring access to **3.0 miles** of upstream intact spawning and riparian habitat. The habitat above is complex, with mature vegetation and 75% gravels. Slope is 3% and the likelihood of fish use is high post barrier removal. The downstream habitat is a wetland complex with documented adult and juvenile salmon presence. The culvert is on a private residential road and is the most downstream barrier. There are partial fish passage barriers upstream that are currently being assessed for replacement (other funding).

The existing 4ft diameter culvert outlet is perched with a 4 ft. water surface drop and is undersized for the 16-foot wide channel. Mapped and observed species include Chinook, Coho, Chum, Pink Salmon, Steelhead, and Bull Trout. The preferred alternative to maintain access and restore fish passage was determined upon stream survey and consultation with a fish passage engineer. The removal of the barrier and bridge installation will increase safety, maintain access, and increase resiliency.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace an impassible culvert with a 50 ft span bridge. Archeological and hydraulic permits will be required to correct this barrier. The planning phase will include outreach, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and bridge installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement   Outreach   Engineering Award   Prelim designs   Cultural Award   Permit Apps
2024	Final designs   Permitting complete   Construction Award   Landowner Agreement signed
2025	Construction   Implementation monitoring   Riparian restoration   As-built designs completed

#### LITTLE PILCHUCK CREEK (SCD; PILCHUCK RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Snohomish Conservation District will design and replace a 67% passable culvert on a tributary to the Pilchuck River with a 24 ft. span box culvert or a 30 ft. span bridge, restoring access to **1.0 mi** of upstream intact spawning and riparian habitat. The habitat above is complex and includes extensive wetlands, beaver ponds, and mature riparian forest vegetation and private forestland adjacent to the crossing. Slope is 0.7% and the likelihood of fish use is high post barrier removal.



The downstream habitat is a forested wetland complex with documented adult and juvenile salmon presence. The culvert is located on a private forest road and is the most downstream barrier on the tributary stream. There are partial fish passage barriers upstream that are currently being assessed for replacement with future FBRB funding.

The 2 existing 2ft diameter culvert outlet is undersized for the 14.5-foot wide channel, which creates a velocity and depth barrier for juvenile salmonids. Mapped and observed species include Coho, Chum, Pink Salmon, Steelhead, Resident Coastal Cutthroat Trout, and Bull Trout. The preferred alternative to maintain access and restore fish passage was determined upon stream survey and consultation with a fish passage engineer. The removal of the barrier and culvert/bridge installation will increase safety, maintain access, and improve infrastructure resiliency to the impacts of climate change.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace an existing culvert with a 24 ft. span box culvert or a 30 ft. span bridge. Archeological consultations have been completed. Hydraulic permits will be required to correct this barrier and initial consultations with regulatory entities have begun. The planning phase will include final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and culvert/bridge installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement  Final designs  Permitting  Construction Award  Landowner Agreement  Construction  Implementation monitoring  Riparian restoration  As-built designs completed

COHO CREEK (TULALIP; QUILCEDA CREEK WATERSHED)

*a) Project Site Characteristics and Methods:* Tulalip Tribes will restore fish passage on Coho Creek, a tributary to Quilceda Creek and the lower mainstem Snohomish River. This project is located on Tribally owned property within the boundaries of the Tulalip Reservation and represents a high priority in ecological restoration for the Tribes. The project will remove 1 known fish passage barrier culvert and replace this failing structure with a 60’ span pre-fabricated weathering steel bridge. The current structure is a 0-33% partial fish blockage and represent significant impediments to upstream migration of anadromous Coho and Chum salmon. This project is immediately downstream from a multi-million dollar roadway expansion project/fish passage enhancement project currently in the late design phases by Tulalip Tribes. The removal of this downstream barrier is vital to realizing the intended benefits of this upstream restorative action by Tulalip Tribes. In total **13.5 miles** of habitat exist upstream that will be made available to migratory fish for adult salmon spawning as well juvenile salmon rearing. The habitat above is complex, with mature vegetation, intact riparian corridors, and significant available gravels substrates (75% or greater). Drainage slope is 1% and the likelihood of fish utilization is high. The habitat at the project location and downstream habitat is characterized as tidally inundated marsh habitat and is critically important for adult migration as well as juvenile rearing.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace a barrier culvert with a full span bridge. Permitting will be greatly simplified as all required archeological and associated project permits will be available and readily obtainable through Tulalip Tribes land use division offering a streamlined permitting process. Project milestones will include cultural resources evaluation, preliminary design, final design, construction, and post project monitoring and stewardship.

Year	Milestones
2023	Agreement  Outreach  Engineering Award  Prelim designs  Cultural Award  Permit Apps
2024	Final designs  Permitting complete  Construction Award  Landowner Agreement signed
2025	Construction  Implementation monitoring  Riparian restoration  As-built designs completed

### FRENCH CREEK (COUNTY; SNOHOMISH RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Snohomish County will design and replace a 0% passable culvert and fishway on French Creek, a tributary to the Snohomish River, with a 54 ft span bridge restoring access to **7.5 miles** of upstream intact spawning and riparian habitat. The habitat upstream of the culvert is intact riparian buffer with mature forested canopy, slope is 4.6% and the likelihood of fish use is high post barrier removal. The downstream habitat is intact riparian buffer with mature forested canopy with documented juvenile salmon presence. The culvert and fishway are located in a combination of road right of way for 167<sup>th</sup> Ave SE and private property. This is the most downstream barrier on French Creek.

The existing 6 ft span by 8 ft rise concrete culvert is undersized for hydraulic capacity creating a velocity barrier, and the existing fishway has two failed weirs creating a water surface drop of approximately 3 ft. Documented and mapped species include Coho, Chinook, Steelhead, Sea run Cutthroat, Resident Trout, and Bull Trout. The preferred alternative to maintain access and restore fish passage was determined upon stream survey and following the unconfined bridge design methodology presented in the Washington Department of Fish and Wildlife 2013 Water Crossing Design Guidelines.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace an impassable culvert and fish way with a 54 ft span bridge. Preliminary designs are complete for this project. The planning phase will include continued outreach to adjacent property owners, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, removal of fish way, abutment and bridge installation, channel construction, channel stabilization and planting

Year	Milestones
2023	Agreement  Outreach  Engineering Award  Final designs  Permit Apps  Landowner Agreement signed   Bid award for Construction
2024	Permitting complete  Construction  Imp monitoring  Riparian restoration  As-built designs

### PEOPLE'S CREEK (TULALIP; SNOQUALMIE RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Tulalip Tribes will remove one partial fish barrier and replace a 33% passable culvert (2 barriers removed total) on a tributary proximal to the Snoqualmie River with a full span structure to restore access to **0.8 miles** of upstream high-quality salmon spawning and riparian habitat. The habitat above is complex, with mature vegetation and 75% gravels. Slope is 1-3% and the likelihood of fish use is high post barrier removal. The downstream habitat is a healthy stream with a mature riparian buffer and documented adult and juvenile salmon presence and is critical refuge rearing habitat. The culverts are on a private agricultural property that is being worked as such and are the two most downstream barriers on this stream.

The existing 2 culverts are both 4ft diameter, and undersized for the 20-foot wide channel. The upstream culvert is used as an agricultural crossing and cannot be abandoned at this time. Mapped and observed

species include Chinook, Coho, Chum, Pink Salmon, Steelhead, and Bull Trout. The preferred alternative to maintain access on the upstream culver and abandon the lower to restore fish passage was determined upon stream survey and consultation with a fish passage engineer. The removal/abandonment of the barriers and bridge installation will increase safety, maintain access, and increase resiliency.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace a barrier culvert with a full span bridge, and to remove and abandon a crossing. Existing preliminary designs for barrier replacement will be modified for the revised project scope. In addition to restoration of fish passage, we propose remaindering of a 1000 ft. channel and riparian buffer restoration to realize full benefits. Archeological and hydraulic permits will be required to correct this barrier. The planning phase will include outreach, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and crossing installation, flood berm modification, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement   Outreach   Engineering Award   Prelim designs   Cultural Award   Permit Apps
2024	Final designs   Permitting complete   Construction Award   Landowner Agreement signed
2025	Construction   Implementation monitoring   Riparian restoration   As-built designs completed

RILEY SLOUGH FISH PASSAGE PROJECT (SCD; SKYKOMISH RIVER WATERSHED/TUALCO)

*a) Project Site Characteristics and Methods:* Snohomish Conservation District will design and replace two culverts on a tributary to the Snohomish River with a ford or other structure, restoring access to **1.1 mi** of upstream riparian habitat. One crossing has been identified and landowner willingness is secured; several other barrier crossings have been identified but the final selection of the second crossing constructed during this project will be finalized following completion of the barrier crossing inventory and prioritization that is currently underway by Tulalip Tribes and Snohomish Conservation District. The secured project site is located on agricultural land located along Riley Slough and within the larger floodplain of the Skykomish River. The surrounding land use includes a dairy and several horse boarding facilities, and the riparian area consists of pasture with sparse woody shrub vegetation. Habitat is degraded, with significant restoration potential. The culvert is on a private agricultural access road. This project is part of a larger effort in the Tualco Valley to assess and correct all fish passage barriers in Riley Slough.

The existing crushed culvert at the secured site forces water to overtop the access road. Mapped and observed species include Chinook, Coho, Chum, Pink Salmon, Steelhead, and Bull Trout. A preferred alternative to maintain access and restore fish passage will be determined upon a stream survey and consultation with a fish passage engineer. The removal of the barrier and replacement structure installation will improve public safety and reduce hazard risk, maintain access, and increase watershed and community resiliency.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace a crushed culvert with a fish passable structure. Archeological and hydraulic permits will be required to correct this barrier. The planning phase will include outreach, final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and bridge installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement  Outreach  Engineering Award  Prelim designs  Cultural Award  Permit Apps
2024	Final designs  Permitting complete  Construction Award  Landowner Agreement signed
2025	Construction  Implementation monitoring  Riparian restoration  As-built designs completed

### SISTER OF FRIAR CREEK FISH PASSAGE PROJECT (SCD; SKYKOMISH RIVER WATERSHED)

*a) Project Site Characteristics and Methods:* Snohomish Conservation District will design and replace a 33% passable culvert on Sister of Friar Creek, a tributary to Woods Creek in the Skykomish River watershed. The barrier culvert will be replaced with a 16.41 ft. span box culvert, restoring access to **1.26 mi** of upstream spawning and riparian habitat. Habitat conditions upstream of the barrier includes partially vegetated riparian areas with mixed mature vegetation. The likelihood of fish use is high post barrier removal. The downstream habitat is a forested riparian area with documented adult and juvenile salmon presence. The culvert is on a private forested driveway and is the downstream-most barrier on the tributary stream. There are partial fish passage barriers upstream that are currently being assessed for replacement (other funding). This project location represents the next phase of a coordinated fish passage barrier and habitat restoration effort in Woods Creek; six public and private barriers have been replaced including a partial barrier replaced by Snohomish County on Sister of Friar Creek in 2014.

The existing 3ft diameter culvert outlet is undersized for the 12-foot wide channel, which creates a velocity and depth barrier for juvenile salmonids. Mapped and observed species include Coho, Resident Coastal Cutthroat Trout, and Bull Trout. The preferred alternative to maintain access and restore fish passage was determined upon stream survey and consultation with a fish passage engineer. The removal of the barrier and culvert installation will increase public safety/reduce hazard risk to the public, maintain access to six properties, and increase watershed and community resiliency.

*b) Project Description and Milestones:* This project will consist of planning and construction to replace an existing culvert with a 16.41 ft span box culvert. Archeological and hydraulic permits will be required to correct this barrier. The planning phase will include final designs and permitting. Construction will involve mobilization, staging, erosion and water control, road fill removal, abutment and culvert installation, channel construction, channel stabilization, and planting.

Year	Milestones
2023	Agreement  Final designs  Permitting  Construction Award  Landowner Agreement  Construction  Implementation monitoring  Riparian restoration  As-built designs completed

### 3) OVERALL QUALIFICATIONS OF APPLICANTS (13 POINTS)

The Tulalip Tribes, County and SCD have more than adequate education, experience, training, facilities, and administrative resources to support this proposal. All project collaborators have implemented many fish passage barrier removal projects and other salmon enhancement projects throughout the region. This includes relatively small fish barrier culvert removal projects to dam removal restoration projects and other multimillion-dollar habitat connectivity projects.

*a) Fish Passage and Conservation Background (7 points):* Tulalip, the County and SCD have all managed several large restoration/barrier removal projects including stakeholder collaboration, planning, design, engineering, construction, and monitoring. The Tulalip Tribes most recently removed two dams in the

Snohomish Basin in 2020 ([Pilchuck River Dam](#)) and 2021 ([Haberzette dam](#)) along with a bridge installation project. Tulalip has conducted many other fish passage barrier removal/replacement projects and large-scale restoration projects such as the ~\$20 million-dollar 350-acre [Qwuloolt Estuary Restoration Project](#) with the same key staff who will be working on projects in this proposal. We are accustomed to completing difficult projects in the face of adverse conditions including challenging site conditions, inclement weather, and contracting challenges, and have successfully completed several projects on time during the COVID pandemic.

Over the past 23 years, Snohomish County has designed and constructed more than 200 fish passage culverts. The cost estimates, design and implementation of culverts to be completed by the County relies on the extensive experience the County has designing fish passage culverts.

Since 2013, Snohomish Conservation District has designed and constructed over 16 fish passage barrier correction or removal projects on both public and private land. Our fish passage project team includes three engineers and two project managers with a combined 55 years-experience designing and constructing stream crossing and fish passage projects. SCD's project team has demonstrated success in developing cost estimates, designing projects, obtaining permits, managing construction, and working cooperatively with private landowners to construct fish passage barrier projects in this landscape.

*b) Management Capacity (6 points):* The Tulalip Tribes is a large, well-managed and successful organization that has managed large federal, state and other grants in the past. Tulalip has approximately 1,200 employees including large Natural Resources, Grants and Self Governance, and Finance Departments. In collaboration with our project partners, we have the necessary experience, qualifications, facilities, equipment, and administrative resources available to successfully fulfill the responsibilities associated with managing this federal grant award. We have demonstrated the ability to manage the requested amount of funds, maintain financial and administrative records, and fulfill reporting requirements.

The Capital group within Snohomish County Surface Water Management has a team of 11 engineers, including 3 dedicated to fish passage, available to complete fish passage barrier removal projects throughout the County. Additional engineers can be pulled in from our Floodplain Services group.

#### 4) PROJECT COSTS (19 POINTS):

See PDF 2. Budget Narrative for the full project budget and a budget for each project phase to place the funding request in spatial and temporal context.

*a) Budget Detail (7 points):* Please see PDF 2. Budget Narrative for a clear outline of the NOAA funding request and other funding sources for each project in this proposal over the 3-year performance period.

*b) Cost-sharing and Leveraging Federal Funds (4 points):* Please see PDF 2. Budget Narrative for cost-sharing information. We are proposing a 1:1 ratio of NOAA request to other leveraged funds.

*c) Funding Allocation and Cost-effectiveness (8 points):* Please see PDF 2. Budget Narrative. All requested direct federal funds will support the proposed fish passage projects with the great majority of funding allocated on-the-ground implementation.

## 5) OUTREACH AND EDUCATION (17 POINTS):

This collaborative proposal has broad community support, and we will be implementing a focused and effective outreach strategy to protect the nation's natural resources through restoration.

*a) Stakeholder Support (5 points):* This proposal has broad stakeholder support, including from the three primary project collaborators (Tulalip, County, and SCD), and many others. Please see the support letters included in PDF 4. Supplemental Materials including letters from: Snohomish County, Snohomish Conservation District, WA State Department of Natural Resources, Snohomish Basin Salmon Recovery Forum, Representative Rick Larsen (WA-02), Representative Suzan DelBene (WA-01), and Senator Maria Cantwell.

*b) Inclusive Planning and Engagement (8 points):* The Tulalip Tribes will be the primary sponsor for this proposal working collaboratively with the County and SCD. Therefore, underserved communities will be leading this effort, in collaboration with other entities and the local community. Barrier owners have all signed project acknowledgements and are supportive of projects in this proposal. We will continue to engage with the largely rural community associated with these projects, and project outcomes will include increased access, safety, and reduced flood risk to the rural community.

Many culverts in the Snohomish Basin are being removed/replaced by the Washington State Department of Transportation (WSDOT) as part of a federal court injunction for fish passage. This proposal is occurring in conjunction with WSDOT efforts in a coordinated fashion including collaborative review and data sharing. Snohomish County maintains HSPF hydrologic modeling for most basins within the County. Data is shared with the WA Dept. of Transportation (WSDOT) for use in their analyses of injunction culvert replacements. Project data has been shared with WSDOT and they have been involved in the review of proposed projects. Snohomish County is coordinating construction with WSDOT in order to reduce impacts to the stream and community as well as exploring construction efficiencies.

We are working closely with permitting agencies including Snohomish County, the Washington Department of Fish and Wildlife, the Washington State Department of Natural Resources, the Washington Department of Ecology, the Washington Department of Archaeology and Historic Preservation, NOAA, and the Army Corps of Engineers. We intend to utilize a streamlined Fish Habitat Enhancement Project or Forest Practices Hydraulic Project permitting process for these projects.

*c) Community Outreach and Education (4 points):* The Tulalip Tribes has a very engaged and active Media and Marketing Department with the ability to produce and distribute outreach content including high quality videos, physical outreach materials, and web content. These will be shared on Tulalip TV, other media outlets, Tulalip websites, social media, and other avenues to show the benefits of collaboration on fish passage barrier removal projects. Tulalip, SCD, and project partners also have Washington Conservation Corps (AmeriCorps program) crews that will be part of implementing these projects, which will provide education and outreach opportunities.

Snohomish County has [a Fish Passage Culvert Program](#) website, which includes a one-pager describing the program, highlights individual fish passage projects, and has a new interactive map of county-owned fish passage culverts. The Surface Water Management Division at the County also sends out a monthly newsletter, which often features fish passage projects completed by the County.

SCD and Tulalip Tribes, along with several partners (including NOAA Restoration Center) have completed extensive community outreach and engagement in the Tualco Valley including Riley Slough. Beginning in 2014, SCD and NOAA Restoration Center completed a series of community meetings to discuss landowner barriers to conservation incentive programs and gather input into community needs. SCD completed additional outreach about climate resilience needs for landowners in Tualco Valley/Riley Slough to develop the Snohomish County Agriculture Resilience Plan (2019). Drainage improvements, including drainage improvements through fish passage barrier corrections, was identified by community members as the highest priority climate resilience need. In summer 2022, SCD and Tulalip Tribes began a coordinated landowner outreach initiative to outreach to all landowners with stream crossings with the goal secure landowner permission to inventory, assess, and prioritize all stream crossings in the Tualco project area. Landowner outreach and inventory work is ongoing through fall 2022.

Snohomish Conservation District has completed extensive community outreach in the Tualco Valley, Pilchuck River, and Woods Creek. Snohomish Conservation District and partners completed a community outreach effort in 2013-2016 in the Woods Creek watershed to reforest 45 acres of riparian area and to complete a passage barrier inventory and prioritization study for all of Woods Creek. Community outreach in Woods Creek will continue using funding from Washington State Dept. Of Ecology grants to provide landowner outreach and workshops. SCD is using Department of Ecology grants to conduct outreach to priority properties in the Lower and Middle Pilchuck sub-basins to secure landowner permission to complete riparian buffer plantings and fish passage barrier removal projects. Lastly, SCD maintains a robust project website where fish passage and other project information is shared with the community and stakeholders. Examples of SCD's community engagement project website includes the [Kristoferson Creek Fish Passage Project](#) and the [Haystack Creek Fish Passage Project](#). SCD also sends out a [newsletter](#) every other month to share highlight projects, partners, funders, and landowner stories.

# SNOHOMISH COOPERATIVE SALMON BARRIER REMOVAL PROJECT

## BUDGET NARRATIVE

### Table of Contents

Personnel (Federal Request), \$495,225.....	2
Fringe Benefits (Federal Request), \$148,569.....	3
Travel (Federal Request), \$2,292.....	3
Equipment (Federal Request), \$0.....	3
Supplies (Federal Request), \$20,000.....	3
Contractual (Federal Request), \$1,760,000.....	4
Other (Federal Request), \$7,178,868.....	5
County Subaward, \$6,197,308.....	5
SCD Subaward, \$981,560.....	6
Total Direct Costs (Federal Request), \$9,604,954.....	7
Total Indirect Costs (Federal Request), \$129,021.....	7
Total Costs (Federal request), \$9,733,975.....	8
Match/Leverage/Other Funding.....	8
Project Site Revisions/Additions.....	11



## SNOHOMISH COOPERATIVE SALMON BARRIER REMOVAL PROJECT

### BUDGET NARRATIVE

The Snohomish Cooperative Salmon Barrier Removal Project will efficiently and effectively remove 16 fish passage barriers and restore Migratory Fish/salmon access to 32.17 miles of priority upstream habitat. A total of 11 component projects will be implemented through a collaborative effort between The Tulalip Tribes (applicant; 4 projects), Snohomish County (County, 3 projects), and the Snohomish Conservation District (SCD; 4 projects). The NOAA request includes funding for personnel, fringe, travel (mileage), supplies, contractual costs, and indirect associated with the 4 Tulalip implemented projects. The NOAA request for the remaining 7 projects to be implemented by the County and SCD includes funding in the "Other" object class for subawards. The great majority of requested funding will be directed to implementing on-the-ground barrier removal. Projects in this proposal will build off of substantial previous efforts to fund and implement these and related projects. Tulalip, the County and SCD have either partially funded or applied to various funding sources for all of these projects for various project phases. There are also many related projects that this proposal will build upon.

#### Personnel (Federal Request), \$495,225

- Brett Shattuck, Restoration, Acquisition and Stewardship Senior Scientist, will provide 332 hours/year of work at \$46.43/hr for project management, supervision, contracting, fish removal and exclusion, permitting, outreach, and reporting. Mr. Shattuck's work will occur over 3 years. Total: \$46,245
- Natasha Coumou, Restoration Ecologist, will provide 790 hours/year of work at \$35.99/hr for project management including, scoping, outreach, contracting, permitting, fish removal and exclusion, monitoring, and reporting. Ms. Coumou's work will occur over 3 years. Total: \$85,296
- Matt Pouley, Restoration Biologist, will provide 1,123 hours/year of work at \$37.95/hr for project management including, scoping, outreach, contracting, permitting, fish removal and exclusion, monitoring, and reporting. Mr. Pouley's work will occur over 3 years. Total: \$127,854
- We plan to hire an environmental engineer to produce designs and engineering oversight. The Engineer will provide 1,123 hours /year of work at \$70/hr. The Engineer's work will occur over 3 years. Total: \$235,830

Table 1. Personnel annual federal request table.

Name	Title	Hours/Year	wage/ hour	Year 1	Year 2	Year 3	Total Cost
Brett Shattuck	Senior Scientist	332	\$ 46.43	\$ 15,415	\$ 15,415	\$ 15,415	\$ 46,245
Natasha Coumou	Restoration Ecologist	790	\$ 35.99	\$ 28,432	\$ 28,432	\$ 28,432	\$ 85,296
Matt Pouley	Restoration Biologist	1123	\$ 37.95	\$ 42,618	\$ 42,618	\$ 42,618	\$ 127,854
Engineer	Environmental Engineer	1123	\$ 70.00	\$ 78,610	\$ 78,610	\$ 78,610	\$ 235,830
<b>Total</b>				<b>\$ 165,075</b>	<b>\$ 165,075</b>	<b>\$ 165,075</b>	<b>\$ 495,225</b>

### Fringe Benefits (Federal Request), \$148,569

The fringe benefit rate is 30% of salary. \$13,875 covers benefits for Bett Shattuck, \$25,590 for Natasha Coumou, \$38,355 for Matt Pouley, and \$70,749 for an engineer. Fringe benefits go toward FICA, medical and dental insurance, retirement and disability. Total: \$148,569

Table 2. Fringe annual federal request table.

Name	Title	Personnel / Year	Year 1	Year 2	Year 3	Total Cost
Brett Shattuck	Senior Scientist	\$ 15,415	\$ 4,625	\$ 4,625	\$ 4,625	\$ 13,875
Natasha Coumou	Restoration Ecologist	\$ 28,432	\$ 8,530	\$ 8,530	\$ 8,530	\$ 25,590
Matt Pouley	Restoration Biologist	\$ 42,618	\$ 12,785	\$ 12,785	\$ 12,785	\$ 38,355
Engineer	Environmental Engineer	\$ 78,610	\$ 23,583	\$ 23,583	\$ 23,583	\$ 70,749
<b>Total</b>		<b>\$ 165,075</b>	<b>\$ 49,523</b>	<b>\$ 49,523</b>	<b>\$ 49,523</b>	<b>\$ 148,569</b>

### Travel (Federal Request), \$2,292

Travel funding will be required for personnel to travel to and from the project sites to conduct fieldwork and supervise construction activities. Mileage expenses will be charged at \$0.625/mile and total mileage (52 trips/year) for the project is estimated to be 1,222 miles per year over 3 years. Total: \$2,292

Table 3. Travel annual federal request table.

# Round Trips/Year	Miles/Year	Mileage Rate	Year 1	Year 2	Year 3	Total Cost
52	1222	\$0.625/Mile	\$764	\$764	\$764	\$ 2,292

### Equipment (Federal Request), \$0

No equipment is part of this federal request.

### Supplies (Federal Request), \$20,000

- Purchase and use of expendable field supplies including: waders, fish removal and exclusion supplies, sampling materials, and health and safety gear. Total: \$4,000
- Native plants/trees and erosion control supplies (straw wattles, coir matts, etc.) will be purchased to revegetate the riparian area around project sites. Total: \$16,000

Table 4. Supplies annual federal request table.

Supplies	Year 1	Year 2	Year 3	Cost
Expendable Field Supplies	\$1,000	\$1,000	\$2,000	\$4,000
Plants/Trees/Erosion Control	\$0	\$6,000	\$10,000	\$16,000
<b>Total</b>	<b>\$1,000</b>	<b>\$7,000</b>	<b>\$12,000</b>	<b>\$20,000</b>

### Contractual (Federal Request), \$1,760,000

Contractors will be hired to carry out several activities associated with the Snohomish Cooperative Salmon Barrier Removal Project.

Cultural resources consultants are required for permitting (1 contract), and will include site assessments, development of cultural resource reports, Tribal consultation, and Section 106 compliance. Total cultural resources consultant costs are estimated at \$60,000. Costs are estimated from past experience with similar projects.

Construction contractor will be required to implement these projects (1 contract). Construction contractual costs will include heavy equipment rental, heavy equipment operators, and project materials. Costs are estimated from current design plans, communication from fish passage engineers, and past experience with similar projects. Total construction contractor costs are estimated at \$1,700,000.

All contractors will be selected competitively per the Tulalip Procurement Policy. Total \$1,760,000

*Table 5. Contractual annual federal request table.*

<b>Contract Task</b>	<b>Task Description</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
Cultural Resources	Site investigation and report generation per permitting requirements (1 contract)	\$0	\$30,000	\$30,000	\$60,000
Project Construction	Fish passage barrier removal/ replacement implementation (1 contract)	\$0	\$30,000	\$1,670,000	\$1,700,000
<b>Total</b>		<b>\$0</b>	<b>\$60,000</b>	<b>\$1,700,000</b>	<b>\$1,760,000</b>

Other (Federal Request), \$7,178,868

County Subaward, \$6,197,308

Funds in the amount of \$6,197,308 will be allocated to Snohomish County as a subawardee to implement the Sexton Creek, French Creek and Lower Williams Creek projects in this proposal. The County was chosen due to their status as barrier owner and their proven project management experience demonstrated during the successful management of similar restoration projects including many fish passage barrier removals. Total \$6,197,308.

Table 6. County subaward annual federal request table.

Object Class	County Federal Request Subaward			
	Year 1	Year 2	Year 3	Total
Personnel	\$0	\$0	\$0	\$0
Fringe Benefits	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0
Supplies	\$0	\$0	\$0	\$0
Contractual	\$544,000	\$5,653,308	\$0	\$6,197,308
Construction	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0
<b>Total Direct Charges</b>	<b>\$544,000</b>	<b>\$5,653,308</b>	<b>\$0</b>	<b>\$6,197,308</b>
Indirect Charges	\$0	\$0	\$0	\$0
<b>Totals</b>	<b>\$544,000</b>	<b>\$5,653,308</b>	<b>\$0</b>	<b>\$6,197,308</b>

Construction contractors will be required to implement these projects (3 contracts). Construction contractual costs will include heavy equipment rental, heavy equipment operators, and project materials. Costs are estimated from current design plans, communication from fish passage engineers, and past experience with similar projects. Total construction contractor costs are estimated at \$6,197,308.

Table 7. County subaward annual contractual federal request table.

Contract Task	Task Description	Year 1	Year 2	Year 3	Total
Lower Williams Construction	Fish passage barrier removal/ replacement implementation (1 contract)	\$544,000	\$1,004,166	\$0	\$1,548,166
Sexton Construction	Fish passage barrier removal/ replacement implementation (1 contract)	\$0	\$1,776,000	\$0	\$1,776,000
French Construction	Fish passage barrier removal/ replacement implementation (1 contract)	\$0	\$2,873,142	\$0	\$2,873,142
<b>Total</b>		<b>\$544,000</b>	<b>\$5,653,308</b>	<b>\$0</b>	<b>\$6,197,308</b>

## SCD Subaward, \$981,560

Funds in the amount of \$981,560 will be allocated to the Snohomish Conservation District (SCD) as a subawardee to implement the Bunk Foss Creek, Little Pilchuck Creek, Riley Slough, and Sister of Friar Creek projects in this proposal. SCD was chosen due to their partnership with Tulalip and the County in implementing restoration projects in the Snohomish Basin and their proven project management experience demonstrated during the successful management of similar restoration projects including many fish passage barrier removals. Total \$981,560.

Table 8. SCD subaward annual federal request table.

Object Class	SCD Federal Request Subaward			
	Year 1	Year 2	Year 3	Total
<b>Personnel</b>	\$20,000	\$24,000	\$45,600	\$89,600
<b>Fringe Benefits</b>	\$5,000	\$6,000	\$11,400	\$22,400
<b>Travel</b>	\$50	\$50	\$100	\$200
<b>Equipment</b>	\$0	\$0	\$0	\$0
<b>Supplies</b>	\$0	\$1,000	\$2,000	\$3,000
<b>Contractual</b>	\$91,190	\$21,050	\$722,760	\$835,000
<b>Construction</b>	\$0	\$0	\$0	\$0
<b>Other</b>	\$0	\$0	\$0	\$0
<b>Total Direct Charges</b>	\$116,240	\$52,100	\$781,860	\$950,200
<b>Indirect Charges</b>	\$7,000	\$8,400	\$15,960	\$31,360
<b>Totals</b>	<b>\$123,240</b>	<b>\$60,500</b>	<b>\$797,820</b>	<b>\$981,560</b>

Engineering & Design services to be conducted by SCD for three of the projects (Little Pilchuck Creek, Sister of Friar Creek, and Riley Slough). Engineering & Design services for the fourth project (Bunk Foss Creek) may be procured competitively and overseen by SCD. Cultural resources and project construction contracting to be selected competitively. Construction contractual costs will include heavy equipment rental, heavy equipment operators, and project materials. Costs are estimated from current design plans, communication from fish passage engineers, and past experience with similar projects. Total \$835,000.

Table 9. SCD subaward annual contractual federal request table.

Contact Task	Task Description	Year 1	Year 2	Year 3	Total
Cultural Resources	Site investigation, report generation, consultation	\$1,190	\$6,050	\$12,760	\$20,000
Bunk Foss Engineering	Engineering designs and construction oversight	\$0	\$15,000	\$35,000	\$50,000
Bunk Foss Construction	Fish passage barrier removal/replacement	\$0	\$0	\$315,000	\$315,000
Little Pilchuck Construction	Fish passage barrier removal/replacement)	\$45,000	\$0	\$0	\$45,000
Sister of Friar Construction	Fish passage barrier removal/replacement	\$45,000	\$0	\$0	\$45,000
Riley Slough Construction	Fish passage barrier removal/replacement	\$0	\$0	\$360,000	\$360,000
<b>Total</b>		<b>\$91,190</b>	<b>\$21,050</b>	<b>\$722,760</b>	<b>\$835,000</b>

Table 10. Total "Other" federal request table by subawardee.

Object Class	County Federal Request Subaward	SCD Federal Request Subaward	Total "Other" Federal Request
Personnel	\$0	\$112,000	\$112,000
Fringe Benefits	\$0	\$0	\$0
Travel	\$0	\$200	\$200
Equipment	\$0	\$0	\$0
Supplies	\$0	\$3,000	\$3,000
Contractual	\$6,197,308	\$835,000	\$7,032,308
Construction	\$0	\$0	\$0
Other	\$0	\$0	\$0
<b>Total Direct Charges</b>	<b>\$6,197,308</b>	<b>\$950,200</b>	<b>\$7,147,508</b>
Indirect Charges	\$0	\$31,360	\$31,360
<b>Totals</b>	<b>\$6,197,308</b>	<b>\$981,560</b>	<b>\$7,178,868</b>

Table 11. Total annual "Other" federal request table by subawardee.

Subawardee	Year 1	Year 2	Year 3	Total
County	\$544,000	\$5,653,308	\$0	\$6,197,308
SCD	\$123,240	\$60,500	\$797,820	\$981,560
<b>Total</b>	<b>\$667,240</b>	<b>\$5,713,808</b>	<b>\$797,820</b>	<b>\$7,178,868</b>

### Total Direct Costs (Federal Request), \$9,604,954

Table 12. Annual total direct cost table.

Year 1	Year 2	Year 3	Total
<b>\$883,602</b>	<b>\$5,996,170</b>	<b>\$2,725,182</b>	<b>\$9,604,954</b>

### Total Indirect Costs (Federal Request), \$129,021

Table 13. Annual indirect costs assuming 2023 indirect rate of 19.37%.

Year	Base Description	Base Calculation	Rate	Indirect Request
1	Sum Personnel, Fringe, Travel, Equipment, & Supplies	\$ 216,362	19.37%	\$ 41,909
2	Sum Personnel, Fringe, Travel, Equipment, & Supplies	\$ 222,362	19.37%	\$ 43,072
3	Sum Personnel, Fringe, Travel, Equipment, & Supplies	\$ 227,362	19.37%	\$ 44,040
<b>Total</b>	<b>Sum Personnel, Fringe, Travel, Equipment, &amp; Supplies</b>	<b>\$ 666,086</b>	<b>19.37%</b>	<b>\$ 129,021</b>

## Total Costs (Federal request), \$9,733,975

Table 14. Annual total cost table by object class.

Object Class	Year 1	Year 2	Year 3	Total Cost	% Total	Description
a. Personnel	\$ 165,075	\$ 165,075	\$ 165,075	\$ 495,225	5.09%	Tulalip staff time
B. Fringe	\$ 49,523	\$ 49,523	\$ 49,523	\$ 148,569	1.53%	Fringe for Tulalip staff
c. Travel	\$ 764	\$ 764	\$ 764	\$ 2,292	0.02%	Mileage to Tulalip project
d. Equipment	\$ -	\$ -	\$ -	\$ -	0.00%	No proposed equipment
e. Supplies	\$ 1,000	\$ 7,000	\$ 12,000	\$ 20,000	0.21%	Field supplies, plants, & EC
f. Contractual	\$ -	\$ 60,000	\$ 1,700,000	\$ 1,760,000	18.08%	Tulalip Cultural/Construction
g. Construction	\$ -	\$ -	\$ -	\$ -	0.00%	No proposed construction
h. Other	\$ 667,240	\$ 5,713,808	\$ 797,820	\$ 7,178,868	73.75%	County and SCD subawards
i. Total Direct	\$ 883,602	\$ 5,996,170	\$ 2,725,182	\$ 9,604,954	98.67%	Sum of a-h
j. Indirect	\$ 41,909	\$ 43,072	\$ 44,040	\$ 129,021	1.33%	19.37% sum of a-e
k. TOTALS	\$ 925,511	\$ 6,039,242	\$ 2,769,222	\$ 9,733,975	100.00%	Sum of i and j

### Match/Leverage/Other Funding

Projects in this proposal will build off of highly coordinated substantial previous/current efforts to fund and implement these and related projects. Tulalip, the County and SCD have either partially funded or applied to various funding sources for all of these projects for various project phases. There are also many related habitat restoration and salmon recovery projects that this proposal will build upon. Match/Leverage for this proposal will come from the Brian Abbott Fish Barrier Removal Board, Snohomish County, WA State Department of Ecology, Floodplains by Design, WA Salmon Recovery Funding Board, Puget Sound Acquisition and Restoration Fund, NFWF/America the Beautiful, and Natural Resources Conservation Service. Secured leverage is either under agreement/contract or ranked to receive funding. Pending leverage includes grant applications that have been submitted and accepted and have not been ranked. We anticipate much of the FBRB and SRFB/PSAR to be secured in the next month, and ATB by November (see below table).

Tulalip, the County and SCD are working on an extensive suite of projects in the Skykomish and Tualco Valley to increase habitat connectivity and provide integrated, multi-benefit outcomes. This effort includes assessing all stream crossings in the Tualco Valley on Riley Slough, and working to replace all fish passage barriers, improve water quality, and restore habitat. These activities have been largely funded by the WA State Department of Ecology through the Floodplains by Design public-private partnership, and coordinated by the Snohomish County Community Floodplain Solutions (CFS) program and the Snohomish Integration Team (IT). The Snohomish IT is comprised of representatives from many entities including Tulalip, the County, SCD, Washington Farmland Trust, Forterra (Land Trust), Ducks Unlimited, WA Department of Fish and Wildlife, and the City of Monroe. The proposed projects on Riley Slough and Peoples Creek in the Tualco Valley will be part of this larger effort. Secured funding associated with the Tualco Valley Connectivity Project is included as leverage in the below table.

Related projects include many culverts in the Snohomish Basin that are being removed/replaced by the Washington State Department of Transportation (WSDOT) as part of a federal court injunction for fish passage (no barriers in this proposal are part on this injunction). Twenty-one northwest Washington tribes asked the U.S. District Court to find that the State of Washington has a treaty-based duty to preserve fish runs by repairing or replacing culverts that impede salmon migration. The court ruled in the tribes' favor,

requiring the state to refrain from building or operating culverts under state-maintained roads that hinder fish passage. Issued in March 2013, the permanent injunction requires the state to significantly increase the effort for removing state-owned culverts that block habitat for salmon and steelhead by 2030. This includes implementing injunction projects on Sexton Creek, Bunk Foss Creek, and Little Pilchuck Creek up or downstream in coordination with projects in this proposal. WSDOT projects have not been counted as leverage in the below table though we will be coordinating closely with WSDOT to maximize efficiency and effectiveness.

Table 15. Match/Leverage/Other Related Funding Source Table.

Funder*	Amount	Type	Org Type	Project Phase	Status	Related Project (s)
ATB	\$665,000	Leverage	Federal	Design-Construction	Pending	Peoples Creek
County	\$4,074,724	Leverage	Local	Design-Construction	Secured	Sexton, Williams, French
DOE	\$30,000	Leverage	State	Design-Construction	Secured	Friar
FbD	\$1,561,912	Leverage	State	Design-Outreach	Secured	Riley, Peoples
FBRB	\$3,236,512	Leverage	State	Design-Construction	Pending	Sexton, Williams, Watt, Pilchuck, Peoples
NRCS	\$50,000	Leverage	Federal	Construction	Not Yet Applied	Riley
PGAFF	\$80,000	Leverage	Private	Design	Secured	Riley
SRFB/PSAR	\$850,681	Leverage	State	Design	Secured	Riley
SRFB/PSAR	\$137,876	Leverage	State	Design	Pending	Peoples
<b>Total</b>	<b>\$10,686,705</b>	Leverage				

\*ATB = America the Beautiful, County = Snohomish County, DOE = WA Department of Ecology, FbD = Floodplains by Design, FBRB = WA Fish Barrier Removal Board, NRCS = National Resource Conservation Service, PGAFF = Paul G Allen Family Foundation, SRFB = WA Salmon Recovery Funding Board, PSAR = Puget Sound Acquisition and Restoration Fund

Table 16. Proposed leverage ratio of greater than 1:1.

Funding	Amount
<b>NOAA Request</b>	<b>\$9,733,975</b>
<b>Leverage</b>	<b>\$10,686,705</b>
<b>Leverage:NOAA</b>	<b>1.1:1</b>



Table 17. Multi-site/multi-year budget table.

<b>Bunk Foss</b>	<b>Subaward Total</b>	\$ 447,320	\$ 12,500	\$ 31,000	\$ 403,820
<b>L Williams</b>	<b>Subaward Total</b>	\$ 1,548,166	\$ 544,000	\$ 1,004,166	\$ -
<b>Upper Williams Creek</b>	<b>Personnel</b>	\$ 133,404	\$ 44,468	\$ 44,468	\$ 44,468
	<b>Fringe</b>	\$ 40,020	\$ 13,340	\$ 13,340	\$ 13,340
	<b>Travel</b>	\$ 828	\$ 276	\$ 276	\$ 276
	<b>Supplies</b>	\$ 6,000	\$ 250	\$ 1,000	\$ 4,750
	<b>Contractual</b>	\$ 615,000	\$ -	\$ 15,000	\$ 600,000
	<b>Indirect</b>	\$ 34,915	\$ 11,299	\$ 11,445	\$ 12,171
	<b>Project Total</b>	\$ 830,167	\$ 69,633	\$ 85,529	\$ 675,005
<b>Watt Crossing</b>	<b>Personnel</b>	\$ 105,198	\$ 35,066	\$ 35,066	\$ 35,066
	<b>Fringe</b>	\$ 31,560	\$ 10,520	\$ 10,520	\$ 10,520
	<b>Travel</b>	\$ 585	\$ 195	\$ 195	\$ 195
	<b>Supplies</b>	\$ 2,000	\$ 250	\$ 750	\$ 1,000
	<b>Contractual</b>	\$ 215,000	\$ -	\$ 15,000	\$ 200,000
	<b>Indirect</b>	\$ 26,990	\$ 8,916	\$ 9,013	\$ 9,061
	<b>Project Total</b>	\$ 381,333	\$ 54,947	\$ 70,544	\$ 255,842
<b>L Pilchuck</b>	<b>Subaward Total</b>	\$ 50,120	\$ 50,120	\$ -	\$ -
<b>Coho Creek</b>	<b>Personnel</b>	\$ 123,222	\$ 41,074	\$ 41,074	\$ 41,074
	<b>Fringe</b>	\$ 36,966	\$ 12,322	\$ 12,322	\$ 12,322
	<b>Travel</b>	\$ 147	\$ 49	\$ 49	\$ 49
	<b>Supplies</b>	\$ 2,000	\$ 250	\$ 750	\$ 1,000
	<b>Contractual</b>	\$ 415,000	\$ -	\$ 15,000	\$ 400,000
	<b>Indirect</b>	\$ 31,445	\$ 10,401	\$ 10,498	\$ 10,546
	<b>Project Total</b>	\$ 608,780	\$ 64,096	\$ 79,693	\$ 464,991
<b>French Cr.</b>	<b>Subaward Total</b>	\$ 2,873,142	\$ -	\$ 2,873,142	\$ -
<b>Peoples Creek</b>	<b>Personnel</b>	\$ 133,404	\$ 44,468	\$ 44,468	\$ 44,468
	<b>Fringe</b>	\$ 40,020	\$ 13,340	\$ 13,340	\$ 13,340
	<b>Travel</b>	\$ 732	\$ 244	\$ 244	\$ 244
	<b>Supplies</b>	\$ 10,000	\$ 250	\$ 4,500	\$ 5,250
	<b>Contractual</b>	\$ 515,000	\$ -	\$ 15,000	\$ 500,000
	<b>Indirect</b>	\$ 35,671	\$ 11,293	\$ 12,116	\$ 12,262
	<b>Project Total</b>	\$ 734,827	\$ 69,595	\$ 89,668	\$ 575,564
<b>Riley Sl.</b>	<b>Subaward Total</b>	\$ 434,000	\$ 10,500	\$ 29,500	\$ 394,000
<b>SOF Cr.</b>	<b>Subaward Total</b>	\$ 50,120	\$ 50,120	\$ -	\$ -
<b>Proposal Total</b>		<b>\$ 9,733,975</b>	<b>\$ 925,511</b>	<b>\$ 6,039,242</b>	<b>\$ 2,769,222</b>

## Project Site Revisions/Additions

It is expected that this project package will maintain the same project sites, project collaborators, and budget for the duration of the grant period. However, in the event of an unanticipated budget shortfall, budget surplus or project infeasibility, the following process will be followed:

- **Budget Shortfall**
  - Start process as soon as budget shortfall is anticipated (likely 60% designs-construction contracting phase/years 1-2)
  - Assess if project savings from one project can cover budget shortfall for another project
  - Determine if supplemental grant/sponsor funding can be obtained for the project
  - Discuss budget shortfall with NOAA to determine if supplemental funding is available
  - If supplemental funding cannot be obtained within the grant period, meet with project collaborators (Tulalip, County, SCD, and NOAA) to determine how to divert funding to maximize project metrics/efficiency and position project(s) for subsequent funding/implementation.
  - Implement priority projects, and advance other project(s) to the highest design level possible for construction outside the grant period.
- **Project Infeasibility**
  - Start process as soon as project is determined infeasible (likely at conceptual designs – construction contracting phase/years 1-2)
  - Goal will be to identify a project with similar benefits to the infeasible project, including benefits to salmon species including ESA listed Chinook salmon, steelhead, and bull trout, other salmonid species of concern (e.g. coho and chum) and culturally/ecologically important fish species.
  - Tulalip will collaborate with other project partners (County, SCD, WADNR, Snohomish Forum, NGOs, and others) to generate a list of possible fish passage barrier removal project site alternatives.
  - Project site alternatives will be located below all complete fish passage barriers, benefit migratory fish species, result in significant habitat gains/benefits, and have a high likelihood of successful implementation.
  - A prioritized project site alternative list will be presented to NOAA for review, comment, and selection of the alternative project site(s).
  - Tulalip will revise/execute an agreement with the alternative project sponsor as necessary, and project implementation will begin.

## APPENDIX E

### Data Management and Implementation Monitoring Plan

#### DATA MANAGEMENT PLAN

The Snohomish Cooperative Salmon Barrier Removal Project, implemented by The Tulalip Tribes and subawardees (Snohomish County, Snohomish Conservation District) will generate environmental data and information including pre and post-implementation data on fish passage/site passability, presence/absence of anadromous salmonids (adult, juvenile), channel width metrics, and channel gradient metrics, as well as riparian species assemblage, and invasive species presence/absence. Data will be collected and compiled by staff from representative sponsor organizations. The data will be stored on data servers hosted by the project proponent and project sub-recipients. The data will be readily available at the request of NOAA agency personnel, or other agencies on an as needed basis no later than two years after the date collected/created. Contact Brett Shattuck, Restoration Program Manager for Tulalip Tribes at 360.716.4618 or e-mail to [bshattuck@tulaliptribes-nsn.gov](mailto:bshattuck@tulaliptribes-nsn.gov) to make a data request. All sub-awardees will have a condition of their contract acceptance of this data sharing plan. Any additional data sharing stipulations for future subawardees may be outlined at that time and described in their contract.

#### IMPLEMENTATION MONITORING PLAN

##### *FISH IMPLEMENTATION MONITORING AND EVALUATION: TIER I*

The Tulalip Tribes and project sub-awardees (Snohomish County, Snohomish Conversation District) will follow NOAA's Tier I monitoring guidelines to conduct pre and post barrier removal site monitoring including site passability, presence of targeted fish, operational cost assessment, safety, and community enhancement evaluations. Data will be collected, compiled, and stored following the Data Management Plan, and data will be made available on each of the listed Tier I metrics in a timely manner to NOAA representatives or others on an as needed basis.

##### *NOAA TIER I MONITORING METRICS SUMMARY TABLE:*

Metric	Method	Schedule		Target	References
		Pre	Post		
Channel Width	Average Measurement	Prior to Implementation	Soon Following Implementation	Emulate Natural Channel Width	Adjacent Channel Widths
Channel Slopes	Longitudinal Profile	Prior to Implementation	Soon Following Implementation	Emulate Natural Channel Slopes	Upstream Channel Slopes
Max Jump Height	Measured	Prior to Implementation	Soon Following Implementation	Emulate Natural Jump Height	Upstream Jump Height
Target Species Presence	Spawner Surveys; Electroshocking	Prior to Implementation	Until Detected Min 1yr max 3yr	Coho Presence Above Culvert	N/A
Costs	Calculate	Estimate 5-Year Cost With Dam	Estimate 5-Year Post-Dam	Reduced Cost With Removal	N/A
Safety	Describe	Prior to Implementation	Soon Following Implementation	Lower Hazard With Removal	N/A
Community Enhancement	Describe	Prior to Implementation	Soon Following Implementation	Enhancement Achieved	N/A

##### *MONITORING METRICS:*

- 1) **Site Passability:** A pre-implementation survey will be conducted at each site to document conditions before culvert barrier removal. Pre-implementation culvert passability impairment will be calculated using Level A and B culvert assessment criteria and all culverts will be ranked as either 0, 33, 66, or 100% impassible. Post implementation surveys will be conducted at each location soon after project

implementation to document as-built conditions and observe presence/absence of diadromous fishes within and upstream from each project area.

- a. **Channel width** will be determined by taking the average of three measurements of the active channel width immediately within each barrier removal site. Pre-implementation measurements will be taken immediately upstream and downstream of the culvert to be removed and above/below the areas of influence created by pooling water or other artifactual habitat features created by the culvert itself.
- b. **Channel gradient** will be determined by taking a longitudinal profile through the project reach, defined by the extent of barrier influence on channel and/or water surface slope. Average channel slope from just upstream of the influence of the barrier to just downstream of its influence (below the scour pool) will be determined. Areas of maximum channel slope pre- and post-implementation will be identified visually from plotted longitudinal profiles and then computed. Maximum channel slopes will be identified and computed for channel distances greater than 5-10 feet. Significant changes in channel elevation over shorter distances will be considered as jump heights (see below).
- c. **Maximum jump height** is the largest abrupt discontinuity in the channel slope that would require a fish to jump to transit the site. These will also be identified visually from the pre-and post-implementation longitudinal profile plots and then measured, where applicable. Residual pool depths will be determined associated with these discontinuities to assess fish passage potential.

## 2) Presence of Target Fish Species

Coho and Chinook salmon are the primary target species for these projects and will be monitored for presence following culvert removal. Electrofishing surveys and spawning surveys may be conducted pre and post culvert removal along accessible habitats immediately upstream of the removed culvert(s). Photography of the site will be documented pre and post project to document geomorphological, habitat, or other changes over time.

## 3) Annual Operating and Maintenance Costs

- a. Pre-implementation: We will calculate the expected average annual operating, maintenance, and/or liability costs over the next 5 year period if the barrier were to remain in place. Periodic or less frequent costs that may occur during this period (e.g. structural upgrades to meet safety or regulatory requirements) may be incorporated into the estimate.
- b. Post-implementation: We will calculate the expected average annual operating, maintenance, and/or liability costs over the next 5 year period with the barrier removed.

## 4) Safety Hazard

- a. Pre-implementation: We will describe the safety hazards caused by the culvert structures and how they will be eliminated or diminished through culvert removal and replacement for each location and structure to be modified.
- b. Post-implementation: After implementation, we will confirm that the identified public safety hazard has been eliminated or diminished. The goal of each project implementation is to promote unimpeded natural processes of the stream course through the project area with no calculable manmade influence on the hydrologic functions of the waterway.

## 5) Community Enhancement

- a. Pre-implementation: We will determine local community, civic enhancement associated with the barrier removal project.
- b. Post-implementation: We will confirm that the enhancement associated with the barrier removal was realized.