

# Grant Application



Derek Wiley

**Email :** derek.j.wiley@odfw.oregon.gov

**Application ID :** A70WD146

**Custom Ref. -**

**Application Start Date:** 2023-12-15 16:08:42

**Application Completed Date:** 2024-01-05 22:06:41

1 Have you previously applied for a grant from the Oregon Wildlife Foundation?

yes

1.Y.1 What was the name of the project?

Warner Cr LWD, BDA, and Riparian Planting (SEP #1), Tweedle Cr Channel & Wetland Restoration (SEP #2), Fishhawk Riparian Planting (SEP #3)

2 Has a previously submitted grant application been denied funding support?

no

3 Title of your proposed project

Clear/SF Clear Cr and Lower NF LWD & Fish Passage

4 Name of your organization

Oregon Department of Fish and Wildlife (ODFW)/Upper Nehalem Watershed Council (UNWC)

5 If your organization is not a 501c3 nonprofit, please identify your fiscal sponsor

If this does not apply to you, write N/A

N/A

6 Your name or the name of the Project Manager

Derek Wiley/Maggie Peyton

7 organization mailing address

Please enter full address with city, state & zip

Derek Wiley (Oregon Department of Fish and Wildlife, North Coast Watershed District Office, 4907 Third Street, Tillamook, OR 97141), Maggie Peyton (Upper Nehalem Watershed Council, 1201 Texas Ave. A, Vernonia, OR 97064)

8 your phone number or that of the Project Manager

Derek Wiley (503-731-8618), Maggie Peyton (503-396-2046)

9 your email address or that of the Project Manager

Derek Wiley (derek.j.wiley@odfw.oregon.gov), Maggie Peyton (maggie@nehalem.org)

10 a brief biographical statement about yourself or that of the Project Manager

Derek Wiley (ODFW Habitat Restoration Biologist, Tillamook), Maggie Peyton (Upper Nehalem Watershed Council Executive Director, Vernonia)

11 social media handles that your organization uses

Enter social handles or URLs such as instagram, facebook, twitter, youtube, etc. so that we can use to cross promote on our channels - if you do not have any, please place N/A

ODFW (<https://www.dfw.state.or.us/>), Upper Nehalem Watershed Council (<https://www.facebook.com/UpperNehalemWC/>)

12 are you are currently following Oregon Wildlife Foundation on its social media channels?

- Facebook
- YouTube

13 what is the total estimated cost of your project?

522329

14 Funding that you are requesting from OWF

If your request is for more than \$5,000, please contact Tim Greseth [tim@myowf.org](mailto:tim@myowf.org) before submitting your application.

115000

15 what type of project are you proposing?

fish habitat restoration or improvement

16 will your project address an Oregon Conservation Strategy habitat or species?

yes

16.Y.1 What habitat or species is addressed?

This restoration project will primarily benefit Coho Salmon, Steelhead, and Coastal Cutthroat Trout with additional benefits possible for Pacific and Western Brook Lamprey. This project proposes to replace three undersized culverts functioning as fish passage barriers located in SF Clear Creek, SF Clear Creek, unnamed tributary, and Lower North Fork with culverts that will exceed state fish passage criteria and decommission a road crossing and remove infrastructure remaining in the stream channel near the mouth of the Lower North Fork. After completion, this work will provide 2.65 miles of improved upstream access for Coho Salmon and additional habitat access for Coastal Cutthroat Trout and other species. Additionally, this project will install 25 large wood structures in Clear (0.75 miles, 15 LWD structures) and SF Clear Creeks (0.60 miles, 10 LWD structures) and add LWD into the Lower North Fork (0.50 miles, approximately 21 trees felled into the creek). Large wood placements will cover approximately 1 mile of anchor habitat identified and highly prioritized in the Strategic Action Plan for the Protection and Restoration of Nehalem River Coho Salmon Habitat (NSAP 2023).

17 what is the location of your proposed project?

Clear Creek Watershed (Project center point: 45.8197, -123.3491) within 4N, 5W, Section 20, Taxlot 2500, 4N, 5W, Section 19, Taxlot 2500, 4N, 5W, Section 19, Taxlot 2400, 4N, 5W, Section 21, Taxlot 2300 and in the Headwaters Nehalem HUC (1710020201)

18 what ecoregion and Conservation Opportunity Area (COA) is your proposed project located in?

See <https://www.compass.dfw.state.or.us/> for the information you need to answer this question

This project is located in the Coast Range ecoregion within the Headwaters Nehalem HUC and ODFW's Beaver Emphasis Area (BEA). The project is not within an established Conservation Opportunity Area (COA) but the project has been prioritized within the Strategic Action Plan for the Protection and Restoration of Nehalem River Coho Salmon Habitat (NSAP 2023).

19 what is the anticipated start date of your project?

Day/Month/Year

01-07-2024

20 what is the anticipated end date of your project?

31-12-2025

21 has a local, state or federal biologist reviewed this project?

yes

21.Y.1 What is their name and contact info?

Derek Wiley - (ODFW Habitat Restoration Biologist, North Coast Watershed District Office, 4907 Third Street, Tillamook, OR 97141, (503-731-8618))

22 have you already or will you obtain necessary permits from all requisite agencies as applicable to proposed project?

yes

23 what will the funds you are requesting be used for?

this would be a good time to review, if you haven't already done so, our grantmaking guidelines at [www.myowf.org/grants](http://www.myowf.org/grants)

The \$115,000 OWF funding request is to make this project whole and includes all costs associated with upgrading fish passage at one of the undersized and failing culverts (culvert 298 on upper Lower North Fork) prioritized for replacement by this project. These costs include purchase of the new culvert, removal of the old culvert, installation of the new culvert, and any necessary protective measures including sediment control while work is being conducted.

24 provide us a brief summary of your proposed project

Clear Creek is a tributary of the Nehalem River, entering the mainstem at river mile 100 approximately 5 miles southwest of the city of Vernonia in the Headwaters Nehalem River HUC. The Clear Creek watershed supports ESA listed Coho Salmon, Fall Chinook Salmon, Winter Steelhead, Coastal Cutthroat Trout, and Pacific and Western Brook Lamprey and includes important salmonid habitat in major tributaries including South and North Fork Green Timber, and South Prong, Lower North Fork, and South Fork Clear Creeks. Although the watershed includes important salmonid habitat, undersized culverts functioning as fish passage barriers exist throughout the watershed that impede migration for adult and juvenile salmonids under certain flow conditions. Additionally, many reaches do not meet Oregon Department of Fish and Wildlife's (ODFW) habitat benchmarks for large wood and lack sufficient instream habitat complexity and off-channel habitats. This project proposes to replace three undersized culverts functioning as fish passage barriers located in SF Clear Creek, SF Clear Creek, unnamed tributary, and Lower North Fork with culverts that will exceed state fish passage criteria and decommission a road crossing and remove infrastructure remaining in the stream channel near the mouth of the Lower North Fork. After completion, this work will provide 2.65 miles of improved upstream access for Coho Salmon and additional habitat access for Coastal Cutthroat Trout and other species. Additionally, this project will install 25 large wood structures in Clear (0.75 miles, 15 LWD structures) and SF Clear Creeks (0.60 miles, 10 LWD structures) and add LWD into the Lower North Fork (0.50 miles, approximately 21 trees felled into the creek). Large wood placements will cover approximately 1 mile of anchor habitat identified and highly prioritized in the Strategic Action Plan for the Protection and Restoration of Nehalem River Coho Salmon Habitat (NSAP 2023). Project partners include Upper Nehalem Watershed Council (UNWC), Weyerhaeuser Company, Oregon Department of Fish and Wildlife (ODFW), and Oregon Wildlife Foundation (OWF).

25 upload pre-project pictures or a video

By submitting these photos or video I warrant that I am the legal owner of this media and grant the Foundation permission to reproduce, exhibit, or publish them for all general purposes in relation to Oregon Wildlife Foundation's work. If you have questions about photo or video submissions please refer to [myowf.org/grants](http://myowf.org/grants) for guidance.

1 Document Uploaded

26 fill out our budget form

Project Revenue	Cash	In-Kind	Committed / Pending
<b>Oregon Wildlife Foundation Request</b>	115000		Committed
Weyerhaeuser Company		99200	Committed
Oregon Department of Fish and Wildlife		7500	Committed
Private Forest Accord Mitigation Fund	300629		Pending

<b>REVENUE</b>	<b>415629.00</b>	<b>106700.00</b>	
		<b>TOTAL PROJECT SUPPORT</b>	<b>522329.00</b>
<b>Project Expenses</b>	<b>Cash</b>	<b>In-Kind</b>	<b>Total</b>
PFA - Upper Nehalem Watershed Council Director (Project Management)	6000		<b>6000.00</b>
PFA - UNWC Reforestation Crew	4800		<b>4800.00</b>
PFA - Falling Contractor/Ground Crew/Excavator (LWD placements)	39360		<b>39360.00</b>
PFA - Culvert Removal/New Structure/Installation (Culvert 490)	165000		<b>165000.00</b>
PFA - Culvert Removal/New Structure/Installation (Culvert 174)	40000		<b>40000.00</b>
PFA - Culvert Removal/Road Decommission/Stream Bank Pullback (Culvert 100)	12000		<b>12000.00</b>
PFA - Nehalem Native Nursery (Hemlock, Cedar, Grand Fir trees) Planting Access Routes	5000		<b>5000.00</b>
PFA - UNWC Executive Director/Reforestation Crew Mileage	157.00		<b>157.00</b>
ODFW - Habitat Restoration Biologist (Staff Time, Direct Placements)		7500	<b>7500.00</b>
Weyerhaeuser Company - (Engineering Designs, Staff Time, Tree Donation, Miscellaneous Supplies)		99200	<b>99200.00</b>
PFA - UNWC Fiscal Administration	27232		<b>27232.00</b>
PFA - Indirect Costs	1080		<b>1080.00</b>
Oregon Wildlife Foundation - (Removal/New Structure/Installation (Culvert 298)	115000		<b>115000.00</b>
			<b>0.00</b>
		<b>TOTAL PROJECT EXPENSES</b>	<b>522329.00</b>
<b>Balanced budget? This cell should read "0" ----&gt;</b>		<b>NET</b>	<b>0.00</b>

27 upload a narrative of your proposed project

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Please make sure your narrative is no more than 7 pages long, single spaced, 12 pt. font (Calibri preferred).

1 Document Uploaded

28 upload letters of support

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letters of support are strongly encouraged. in particular a letter from a supervising biologist

1 Document Uploaded

29 I understand that I am required to submit a Project Completion Report, copies of any publications or social media posts crediting the Foundation's support, and post-project pictures at the completion of my project

yes

**Powered by [Submit.com](https://submit.com)**

— Grant Application

Derek Wiley

Application ID: **A70WD146**



# CLEAR CREEK WATERSHED FISH PASSAGE RESTORATION

## Culvert #490 (SF Clear Creek)

### Current Situation

- 55' long, 6' wide, 12' of fill
- Undersized round culvert
- Perched at outlet, small opening at inlet
- Water passes under culvert due to severe erosion
- Outlet is rusted w/jagged metal protruding and bottom of pipe missing

### Fix

- New open bottom arch culvert
- Approximately 55' long, 22.5' wide, 12' of fill
- New culvert width is 1.5 x ACW (15')
- Will exceed state fish passage criteria (i.e.,  $> 1.2 \times \text{ACW} + 2'$ ) and meet federal standards



# CLEAR CREEK WATERSHED FISH PASSAGE RESTORATION

## Culvert #174 (SF Clear Creek, Trib)

### Current Situation

- 40' long, 4' wide, 8' of fill
- Undersized round culvert
- Perched and eroded at the outlet
- Inlet has a drop and plugs frequently

### Fix

- New open bottom arch culvert
- Approximately 40' long, 7' wide, 8' of fill
- New culvert width is  $> 1.5 \times \text{ACW}$  (4')
- Will exceed state fish passage criteria (i.e.,  $> 1.2 \times \text{ACW} + 2'$ ) and meet federal standards



# CLEAR CREEK WATERSHED FISH PASSAGE RESTORATION

## Culvert #100 (Lower North Fork)

### Current Situation

- Road crossing/culvert breached during a previous high-water event
- Old culvert/infrastructure remains in stream channel
- Stream bank at old crossing impacts riparian area and constrains stream channel

### Fix

- Old culvert and any remaining infrastructure will be removed from the stream channel
- Stream banks will be pulled back to allow riparian area and stream channel to revert to a more natural and health condition
- The road will be fully decommissioned



# CLEAR CREEK WATERSHED FISH PASSAGE RESTORATION

## Culvert #298 (Lower North Fork)

### Current Situation

- 55' long, 4' wide, 18' of fill
- Severely undersized round culvert
- Perched at the outlet
- Extremely small opening at inlet

### Fix

- New open bottom arch culvert
- Approximately 55' long, 15' wide, 18' of fill
- New culvert width is 1.5 x ACW (10')
- Will exceed state fish passage criteria (i.e.,  $> 1.2 \times ACW + 2'$ ) and meet federal standards



## Clear/SF Clear Creeks and Lower North Fork Large Wood and Fish Passage Restoration

### Project Narrative

The Nehalem River and its tributaries support the largest Coho Salmon run on the northern Oregon Coast, but a century of land use impacts has contributed to a significant population decline of the ESA threatened species Oregon Coast (OC) Coho ESU. Returning large wood to stream channels and improving fish passage in the watershed will help address limiting factors for several species of concern including Coho Salmon, Winter Steelhead, Coastal Cutthroat Trout, and Pacific and Western Brook Lamprey.

Clear Creek is a tributary of the Nehalem River, entering the mainstem at river mile 100 approximately 5 miles southwest of the city of Vernonia in the Headwaters Nehalem River HUC. The Clear Creek watershed supports ESA listed Coho Salmon, Fall Chinook Salmon, Winter Steelhead, Coastal Cutthroat Trout, and Pacific and Western Brook Lamprey and includes important salmonid habitat in major tributaries including **South and North Fork Green Timber, and South Prong, Lower North Fork, and South Fork Clear Creeks**. This project proposes to replace three undersized culverts functioning as fish passage barriers located in SF Clear Creek, SF Clear Creek, unnamed tributary, and Lower North Fork with culverts that will exceed state fish passage criteria and decommission a road crossing and remove infrastructure remaining in the stream channel near the mouth of the Lower North Fork. The culverts to be upgraded are juvenile and adult fish passage barriers at certain flow conditions and are an impairment to natural channel processes including downstream delivery of sediment and large wood, bed scour, and channel movement.

The barrier on SF Clear Creek (culvert 490, see attached map/pictures) is a 55' long round culvert that is undersized, perched at the outlet, and water passes underneath the culvert prior to exiting due to severe erosion. The outlet of the culvert is rusted with jagged metal protruding and the bottom of the pipe is missing. Approximately 0.5 miles of coho habitat exists upstream of the crossing, most of which is highly prioritized anchor habitat identified in the NSAP (2023). This project proposes to upgrade the old culvert to a bottomless arch pipe that provides unimpeded upstream access for Coho Salmon and other salmonids under all flow conditions. The active channel width (ACW) of SF Clear Creek was measured as 15' upstream and downstream of the crossing location outside of the stream reach impacted by the old crossing. The new culvert proposed for this location is approximately 22.5' wide, 55' long, and includes a fill height of 12' and will exceed state fish passage criteria (i.e.,  $> 1.2 \times \text{ACW} + 2'$ ). Ten LWD structures are proposed in this reach to improve instream habitat complexity.

The barrier on SF Clear Creek, unnamed tributary (culvert 174, see attached map/pictures) is a 40' long round culvert that is undersized and perched at the outlet. Approximately 0.35 miles of Coastal Cutthroat Trout habitat exists upstream of the crossing and an upgrade would improve upstream access and help restore important natural stream processes for sediment delivery and LWD transport. This project proposes to replace the old culvert with a bottomless arch pipe.

The active channel width (ACW) of SF Clear Creek, unnamed tributary was measured as 4' upstream and downstream of the crossing location outside of the stream reach impacted by the old crossing. The new culvert proposed for this location is approximately 7' wide, 40' long, and includes a fill height of 8' and will exceed state fish passage criteria.

The lower barrier on Lower North Fork was compromised during a past high-water event, but remnants of the old culvert remain in the stream channel (culvert 100, see attached map/pictures). Approximately 1.35 miles of Coho Salmon habitat exists upstream of the crossing including highly prioritized anchor habitat (0.45 miles) identified in the NSAP (2023). This project proposes to fully decommission the crossing, pull the banks back, and remove the remaining infrastructure from the stream channel. This work would eliminate all infrastructure and prior road access associated with this crossing and allow the stream channel and riparian area to revert back to a more natural and healthy condition and meet state fish passage criteria.

The upper barrier on Lower North Fork (culvert 298, see attached map/pictures) is a 55' long round culvert that is significantly undersized and perched at the outlet. Approximately 0.85 miles of coho habitat exists upstream of the crossing including highly prioritized anchor habitat (0.15 miles) identified in the NSAP (2023). This project proposes to upgrade the old culvert to a bottomless arch pipe that provides unimpeded upstream access for Coho Salmon and other salmonids under all flow conditions. The active channel width (ACW) of Lower North Fork was measured as 10' upstream and downstream of the crossing location outside of the stream reach impacted by the old crossing. The new culvert proposed for this location is approximately 15' wide, 55' long, and includes a fill height of 18' and will exceed state fish passage criteria. A total of 21 trees will be directionally felled in the reach upstream of the lower crossing and continuing upstream of the upper crossing.

Fish passage upgrades will require heavy machinery to be utilized to remove old culverts from the stream channel and bank prior to installing the new culverts. During work, a bypass channel will need to be created to allow water to flow around the project areas and fish salvages will be necessary to remove all fish from each work area. Efforts will be made to ensure minimal sediment enters the stream channel as hay bales and silt fences will be used to capture as much sediment as possible. Additionally, fish salvages will be conducted during early mornings when water temperatures are cool, not to exceed 65 degrees Fahrenheit. Fish will be handled as minimally as possible using nets and electrofishing equipment with appropriate settings for the conductivity of each stream. Salvaged fish will be held in buckets with sufficient aeration and released quickly back to the stream reaches outside of work areas after sufficient recovery time. The contractor hired to perform the culvert removals and upgrades will have extensive experience conducting similar fish passage projects with Weyerhaeuser Company.

None of the proposed LWD treatment reaches associated with this restoration project currently meet ODFW habitat benchmarks for large wood. Consequently, the goals of this project are to add LWD to each reach to meet ODFW habitat benchmarks for desirable condition and address known limiting factors for Coho Salmon production in the watershed including instream habitat complexity and off-channel habitat availability. Machine access for LWD placements is feasible for both Clear and SF Clear Creeks, allowing LWD structures consisting of at least 8 logs (>20" DBH and 30' length) and at least 2 rootwads per structure to be installed in each reach. LWD structures will be constructed in a typical jam configuration following ODFW's recommended guide for placing large wood in streams (ODFW 2010) and locked into streamside riparian trees and amongst other placed logs to provide stability and longevity. In total, this project will install 25 large wood structures in Clear (0.75 miles, 15 LWD structures) and SF Clear Creeks (0.60 miles, 10 LWD structures) at locations already identified from prior site visits to be appropriate for LWD placement. Due to steep terrain, machine access is not feasible for LWD addition in Lower North Fork. As a result, large wood will be added to the Lower North Fork by directionally felling 21 suitable conifer trees into the stream channel at appropriate locations as determined prior to project implementation and over a distance of approximately 0.50 miles. Large wood placements for all three reaches will cover approximately 1.85 miles of stream and include the treatment of 1 mile of anchor habitat identified and highly prioritized in the ***Strategic Action Plan for the Protection and Restoration of Nehalem River Coho Salmon Habitat*** (NSAP 2023).

LWD structure sites were chosen to address deficiencies in each reach associated with instream habitat complexity. All LWD structures are expected to immediately increase instream habitat complexity as installation of large wood in the form of stable jams where wood is currently lacking will provide more complex habitat and an immediate benefit for Coho Salmon and other fish species. LWD structures will provide increased high-water refugia, channel diversity, and overhead cover, improved velocity/depth diversity (i.e., more complex flow velocities and stream depth), protect stream banks from erosion, and trap sediments including spawning gravels. Additionally, some LWD structure sites were chosen to help the stream either create or activate off-channel habitats such as backwaters, alcoves, or side channels, all of which are vital for increased overwinter survival of juvenile Coho Salmon. These habitats are expected to be created or activated after the project is completed and high flows during late fall through early spring interact with LWD structures. Similarly, trees felled into the stream channel as single pieces or small jams will also improve instream habitat complexity.

LWD structures to be installed by machine will require access routes to be created through the riparian area to place wood at desired treatment locations. All efforts will be taken to minimize damage to the riparian area for stream access and all trees that require removal for access will be incorporated into the LWD structures to provide more effective and stable jams. After each structure is installed, the contractor will "brush out" each access route with vegetation removed during site access (e.g., vine maple, alders, etc....) to cover tracks and exposed sediments.

These efforts will help reduce sediment from flowing into the streams after work is completed and the site is recovering from treatment. Additionally, the Upper Nehalem reforestation crew will plant access routes with native plant species after the project is completed. The possibility exists that some desired treatment locations may require stream crossings to effectively install LWD structures. Stream crossings will be minimized, and only conducted if the written plan showing these crossings is approved by the required agencies. At approved stream crossings, vegetation or small trees will be laid down on stream banks and in the bed of the stream to minimize or eliminate potential machine disturbance.

Project priorities are aligned with numerous conservation and recovery plans including the NSAP (2023) which is informed by the National Marine Fisheries Service (NMFS) **Recovery Plan for Oregon Coast Coho Salmon Evolutionarily Significant Unit** (NMFS 2016) and the ODFW **Oregon Coast Coho Conservation Plan for the State of Oregon** (ODFW 2007) and it seeks to provide a strategic framework for Coho habitat protection and restoration based on local guidance for targeted conservation actions. The NSAP (2023) states that “the lack of instream complexity throughout the watershed is the primary factor limiting the production of Nehalem Coho” and it recommends “a process-based approach that relies heavily on an *Anchor Habitat Strategy* which seeks to identify, protect, and restore the stream reaches most capable of supporting Coho across the full spectrum of their freshwater residency, including egg incubation, rearing, smolting, and spawning.” The NSAP (2023) has determined focal areas to implement a stronghold approach within sub watersheds that support unique life history variations.

Additional conservation and recovery plans include the NMFS **2022 5-Year Review: Summary & Evaluation of Oregon Coast Coho Salmon** (NMFS 2022) and ODFW’s **Oregon Coast Coho Conservation Plan 2019 12-Year Plan Assessment** (ODFW 2021). The NMFS (2022) review states that habitat concerns include the lack of large woody debris, complex pools, and sufficient connections to floodplains and off-channel areas that negatively impact juvenile stream rearing and overwinter survival. The plan recommends future actions including implementing the NSAP (2023) and improving instream habitat complexity by increasing large wood and pool habitat. The ODFW (2021) assessment states that freshwater productivity continues to be a primary factor in limiting the OC Coho ESU from attaining the broad sense goals defined by the plan. Furthermore, the plan identifies a requirement for significant and sustained investment in habitat restoration focused on critical habitats (e.g., complex pools) and processes (e.g., large wood recruitment).

Finally, the ODFW **Oregon Conservation Strategy** (ODFW 2016) plan states that “Restoration of watershed processes and functions, and restoration of habitat complexity (e.g., woody debris) to stream and riparian areas, are major concerns throughout the entire Coast Range ecoregion. Restoring flows to headwater streams maintains ecological connections important for many species.” Additionally, the plan states that stream complexity, fish passage, and alterations of



watershed function are limiting factors for Coho Salmon as an Oregon Conservation Strategy species.

The ***Clear/SF Clear Creeks and Lower North Fork Large Wood and Fish Passage Restoration*** project was selected from the NSAP (2023) with a restoration action to support the long-term outcomes of delivering large wood to anchor habitats and to restore instream complexity and stream interaction with off-channel habitats. The proposed restoration reaches in Clear and SF Clear Creeks and Lower North Fork are below ODFW habitat benchmarks for LWD and this lack of instream habitat complexity negatively impacts salmonid species by limiting pool habitat, gravel sorting, invertebrate production, and instream refugia. LWD is also critical for connecting streams to their associated floodplain, which provides off-channel refugia and reduces channel incision. The watershed processes that produce and maintain these habitats have undergone significant alterations in the past century. Ultimately, restoration in Clear and SF Clear Creeks and Lower North Fork will improve upon the low number of miles identified as high-quality habitat in the Nehalem River watershed (ODFW 2021) and is one of many significant habitat restoration efforts needed to achieve the broad sense desired status goals for the OC Coho ESU.

Additionally, this project was selected from the NSAP (2023) with a restoration action to support the long-term outcomes of removing fish passage barriers, enhancing longitudinal connectivity, and restoring Coho access to anchor habitats, cold-water refugia, and off-channel habitats in priority anchor habitats both inside and outside of focal areas. The Clear Creek watershed was not selected as a focal area in the NSAP (2023) but was identified as a high priority for improving anchor habitats and fish passage outside of identified focal areas. The addition of large wood and fish passage improvements proposed in this project will help address these two important goals outlined in the NSAP (2023).

This project is one of many projects identified and highly prioritized in the NSAP (2023) that was developed by the Nehalem Basin Partnership (Partnership). The Partnership consists of a team of resource managers and conservation professionals representing numerous agencies, organizations, and businesses that "... envisions healthy ecological, economic, and social conditions in the Nehalem basin that ensure a sustainable future for native Coho through highly connected, functional, and productive landscapes." To attain these desired conditions for Coho that ultimately provide species recovery and conservation, strategic partnerships with a variety of public and private entities are required to achieve this common objective that "... must coalesce economic, ecological, and social goals and align the limited social and financial capital available in the region towards solutions that promote sustainable watershed and community health."

The recently completed NSAP (2023) and active collaboration of the Partnership are currently meeting those requirements by engaging local partners in developing, planning, and implementing restoration actions and habitat protection in the Nehalem River watershed. The




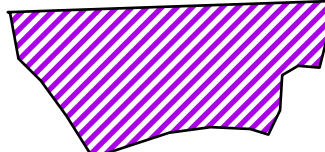

primary goal of these efforts is to "... recover the Nehalem Coho population, while sustaining and nurturing the long-term viability of working farms, forests, and communities." A portion of funding for the NSAP (2023) planning effort which includes this project was received from the Oregon Community Foundation, a statewide community foundation with a mission to improve the lives of all Oregonians through philanthropy and a vision for a healthy, thriving, and sustainable Oregon. Additionally, our partnership with Weyerhaeuser Company on this project to improve stream connectivity and instream habitat complexity for Coho is an excellent example of engaging a local industrial timber company to help recover an Oregon Conservation Strategy and ESA Threatened species while sustaining the long-term viability of a working forest that supports the local economy.

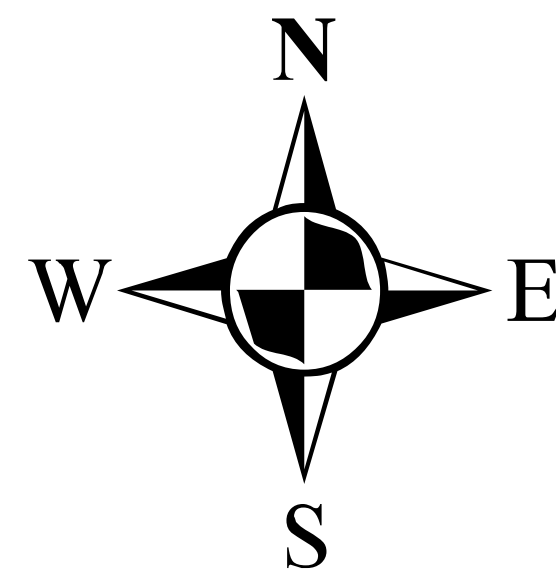
After this project is completed, fish passage upgrades will provide 2.65 miles of unimpeded upstream access for Coho Salmon and additional habitat access for Coastal Cutthroat Trout and other species. Additionally, this project will install 25 large wood structures in Clear (0.75 miles, 15 LWD structures) and SF Clear Creeks (0.60 miles, 10 LWD structures) and add LWD to the Lower North Fork (0.50 miles, 21 trees). Large wood placements will cover approximately 1 mile of anchor habitat highly prioritized in the NSAP (2023). Project partners include Upper Nehalem Watershed Council (UNWC), Weyerhaeuser Company, Oregon Department of Fish and Wildlife (ODFW), and Oregon Wildlife Foundation (OWF). Requested funds from OWF for this project are specified in the grant application budget and include all costs associated with the removal and replacement of culvert 298.

## References

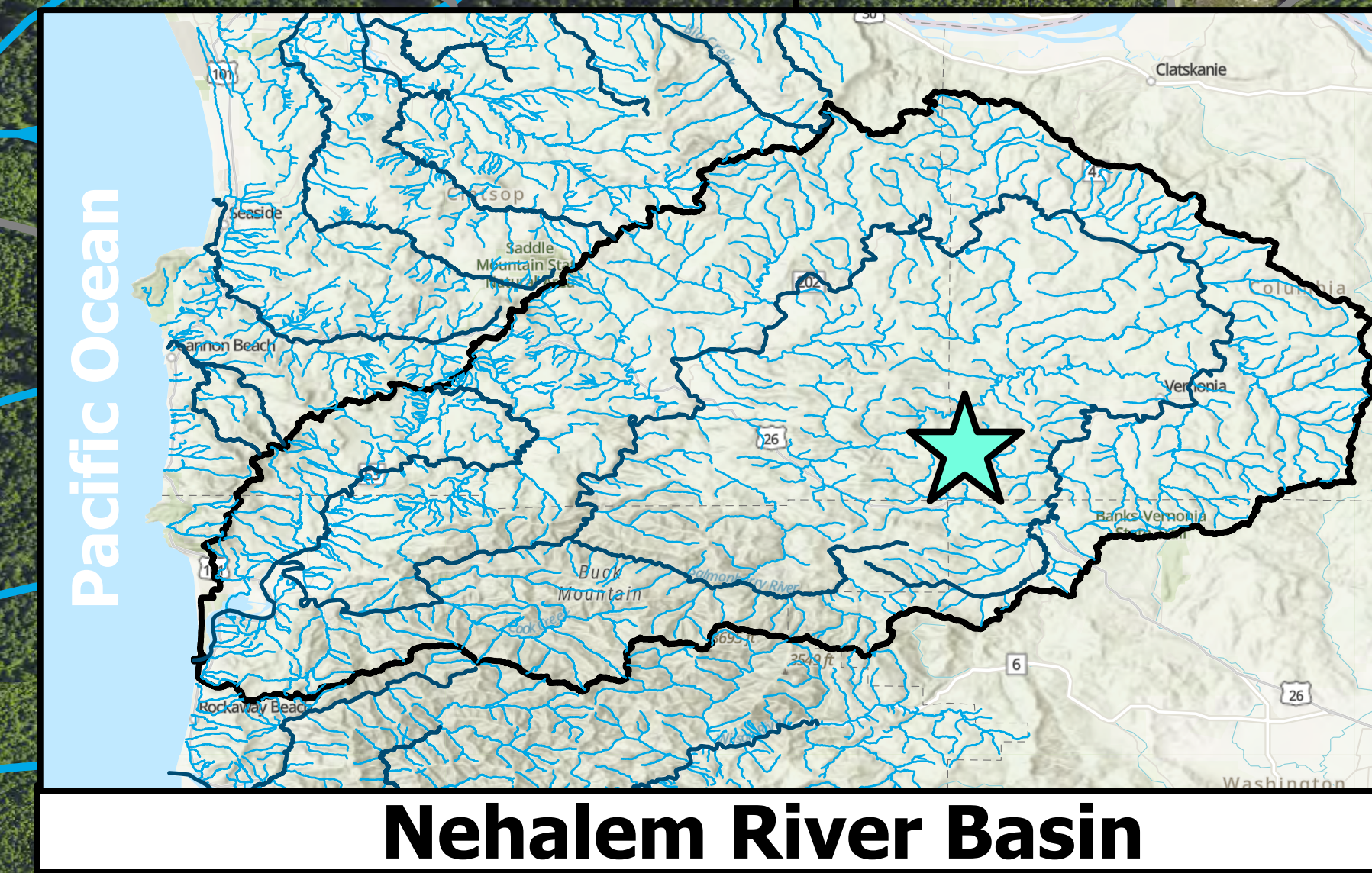
- Nehalem Basin Partnership. 2023. Strategic Action Plan for the Protection and Restoration of Nehalem River Coho Salmon Habitat (NSAP). <https://coastcoho.org/strategic-action-plan-for-coho-salmon-recovery-on-the-nehalem-river/>
- NMFS. 2022. 2022 5-Year Review: Summary & Evaluation of Oregon Coast Coho Salmon. National Marine Fisheries Service. Portland, Oregon.
- NMFS. 2016. Recovery Plan for Oregon Coast Coho Salmon Evolutionarily Significant Unit. National Marine Fisheries Service. Portland, Oregon.
- ODFW. 2021. Oregon Coast Coho Conservation Plan 2019 12-Year Plan Assessment. Oregon Department of Fish and Wildlife. Salem, Oregon.
- ODFW. 2016. Oregon Conservation Strategy. Oregon Department of Fish and Wildlife. Salem, Oregon.
- ODFW. 2010. Guide to placement of wood, boulders and gravel for habitat restoration. Final draft. Oregon Department of Fish and Wildlife. Salem, OR 97302. <https://www.oregon.gov/ODF/Documents/WorkingForests/Wood-placement.pdf>
- ODFW. 2007. Oregon Coast Coho Conservation Plan for the State of Oregon. Oregon Department of Fish and Wildlife. Salem, Oregon.

# Clear Cr (2024) - Weyerhaeuser

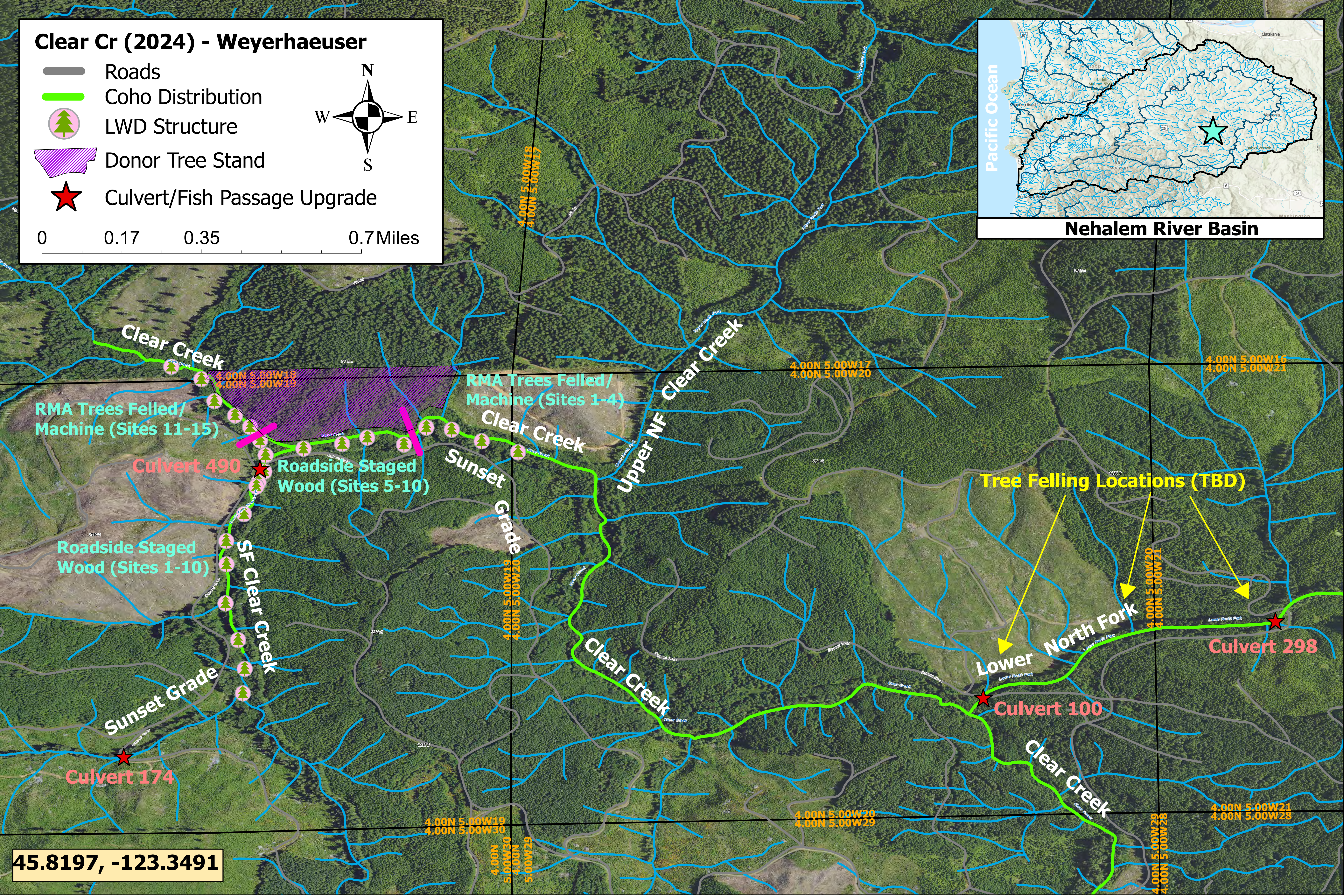
-  Roads
-  Coho Distribution
-  LWD Structure
-  Donor Tree Stand
-  Culvert/Fish Passage Upgrade



0 0.17 0.35 0.7 Miles



**Nehalem River Basin**



45.8197, -123.3491