Landscape Scale Restoration Project Report

Project Name: Middle Snohomish Riparian Restoration for Watershed Resilience, Salmon, and Forest Health

Funding Year: 2022

Stakeholders

Forest Service Region: USDA Forest Service - R6

Sponsoring Organization: Washington Forestry

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Participating Organizations:

Grantee: Washington Forestry

Project Funding

Agreement(s): 22-DG-11062765-725

Project Design

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Project Purpose

This project will provide critical riparian forest restoration along priority stream reaches in the Middle Snohomish Priority Landscape, which is identified in Washington's 2020 Forest Action Plan (FAP). The Middle Snohomish provides habitat to federally listed fish species and clean water to downstream communities, while facing high development pressure and vulnerabilities to climate change including extreme heat, drought, wildfire and flooding. Through restoration activities on State, Tribal, and county lands, supported by nonprofit and community partners, this highly collaborative project connects critical restoration activities to improve watershed function, forest health, and habitat for species including federally listed salmonids in rare and valuable riparian forests. In particular, the activities focus on management of knotweed, a noxious weed of high concern in this landscape. The projects draw from and advances several science-based multi-stakeholder strategies including the FAP, Snohomish River Basin Salmon Conservation Plan, WRIA 7 Riparian Restoration Strategy, and Department of Natural Resources Watershed Resilience Action Plan for the Snohomish Watershed. The project will leverage state and local funds and advance work in critical riparian areas including complementary floodplain restoration activities on lands being acquired by the Tulalip Tribes.

Resource Objective

Primary Objective

- Mitigate invasive species, insect infestation, and disease

Secondary Objective(s)

- Improve fish and wildlife habitats, including for threatened and endangered species
- Maintain or improve water quality and watershed function

Strategic Issues

This project is focused on riparian restoration along priority stream reaches in the Middle Snohomish Priority Landscape, identified in the state FAP. Maintaining and improving upland riparian forest health is a priority in the Middle Snohomish portion of the Snohomish Watershed (WRIA 7). This proposal serves as a package of coordinated protection and restoration priorities to improve salmon and wildlife habitat in riparian landscapes, including acreage currently being acquired by the Tulalip Tribes. It focuses on critical uplands riparian zones in accordance with watershed-scale riparian planning efforts, to deliver top-down benefits in terms of invasive species management and restoration activities.

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Collaboration & Partners

This project is a partnership of partnerships - each contributing partner brings their own expertise and stakeholders to support the broader initiative. Within the Snoqualmie River project area, there are numerous important collaborations related to the three activities. At the Snoqualmie River RV Park, GT is working closely with the King County Water and Land Resources Division, and supported by the Snoqualmie Watershed Forum and the King County Flood Control District. At the Three Forks Natural Area, GT is partnering with CS, the Greenway Snoqualmie Partnership (a collaboration of nonprofits, the City, and community members, led by Forterra), and supported with funding from the Snoqualmie Watershed Forum and the KC Flood Control District. On the Middle Fork Snoqualmie River, GT and DNR will work together, supported by the Washington State Department of Agriculture, and the USDA Forest Service. This project is part of the Greenway Trusts Middle Fork Snoqualmie Initiative. Within the Skykomish project area, the activities are priority actions that are supported by multi -partner strategies including multiple landowners. The lands are being acquired by the Tulalip Tribes, and restoration activities in riparian and floodplain zone are based on strategic plans including the Snohomish River Basin Salmon Conservation Plan, WRIA 7 Riparian Restoration Strategy. Partners in these efforts include Tulalip Tribes, Snoqualmie Tribe, King County, Snohomish County, King Conservation District, Snohomish Conservation District, DNR, Washington State Department of Fish and Wildlife, and others.

Integrated Delivery

The 2020 Forest Action Plan identified the Middle Snohomish as a priority landscape where active management, coordinated planning and implementation, and focused investments will lead to improved conditions. This landscape ranked high in a data-driven analysis due to its value for regionally important threatened fish species, contribution of clean water to downstream communities, high percentage of small forest landowners, imperiled ecosystems of concern (specifically lowland riparian forests), and vulnerability to climate change, drought, and development pressure. This proposal will improve the health and ecological function of this priority landscape by implementing actions under several Forest Action Plan goals: Protect and restore ecologically important lands in Puget Sound: This project directly improves the condition of a state-prioritized terrestrial ecological system (North Pacific riparian forests and alluvial floodplains) on protected forestlands along three river systems in the Middle Snohomish landscape that feed into Puget Sound: Snoqualmie, Raging, and Skykomish Rivers.

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Influence on Positive Change

The Middle Snohomish is a priority landscape for many partners and landowners, including these project partners and others. It supports critical habitat for endangered salmonids, and provides source drinking water including to the City of Seattle (the Seattle metropolitan area has a population of approximately 4 million). This proposal includes key landscapes identified in local science-based strategic plans, and seeks to use this grant to advance specific projects in the rural uplands and headwaters as a priority. The scale and location of these specific projects contributes to a wider, watershed-wide Riparian Forest Strategy, while seeking to prioritize work in these upland areas to provide top-down benefits that will support forest resilience and fish and wildlife habitat improvements throughout the basin. These activities in the rural and headwater forested areas will have down-stream impacts across the entire watershed, with benefits for salmonids and other protected species, water quality and quantity, and broad ecosystem resilience.

Accomplishments

Deliverables

This proposal accomplishes the following Landscape Objectives:
LO1: Mitigate invasive species, insect infestation, and disease.
LO2: Maintain or improve water quality and watershed functions
LO3: Improve fish and wildlife habitats, including habitats for threatened and endangered species.

It also delivers on FAP goals and strategies with two FAP priority themes: Landscape Resilience and Wildlife and Salmon Recovery. Individual goals and strategies within those themes are numbered in the FAP for reference.

Activity 1
FAP goal/strategy: Landscape Resilience, Western Washington (1, 4); Wildlife and Salmon Recovery (1.4, 1.7), Water Qualityand Quantity (1.5).
Deliverables: 30 acres treated, 30 acres replanted, 7,000 trees and shrubs planted.
Outcomes: LO1, LO2, LO3.

Activity 2
FAP goal/strategy: Landscape Resilience, Western Washington (1, 4); Wildlife and Salmon Recovery (1.4, 1.7), Water Quality and Quantity (1.5).
Deliverables: 15 acres treated, 15 acres replanted, 4,000 trees and shrubs planted.
Outcomes: LO1, LO2, LO3.

Activity 3
FAP goal/strategy: Landscape Resilience, Western Washington (1, 4); Wildlife and Salmon Recovery (1.4, 1.7), Water Quality and Quantity (1.5).Deliverables: 30 acres treated, 30 acres replanted.

Outcomes: LO1, LO2, LO3.

Activity 4
FAP goal/strategy: Landscape Resilience, Western Washington (1, 4); Wildlife and Salmon Recovery (1.4, 1.7), Water Quality and Quantity (1.5).
Deliverables: 16 acres treated, 10 acres thinned, 16 acres replanted, 17,000 trees and shrubs planted.
Outcomes: LO1, LO2, LO3.

Activity 5
FAP goal/strategy: Landscape Resilience, Western Washington (1, 4); Wildlife and Salmon Recovery (1.4, 1.7), Water Quality and Quantity (1.5).
Deliverables: 6 acres treated, 6 acres replanted, 7,000 trees and shrubs planted.
Outcomes: LO1, LO2, LO3.

Activity 6
FAP goal/strategy: Landscape Resilience, Western Washington (1, 4); Wildlife and Salmon Recovery (1.4, 1.7), Water Quality and Quantity (1.5).
Deliverables: Quarterly accomplishment reports are completed by project partners. Success measured by the number of acres treated/restored, and hours of knowledge sharing associated with site work/project.
Outcomes: Coordination, project management, and knowledge sharing that contributes to overall project goals.

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Accomplishments to Date

Overall accomplishments:
•83.9 acres of 107 acres treated
•18 acres re-planted
•5054 of 23,000 trees and shrubs planted

Activity 1 Three Forks Natural Area riparian restoration (30.6 acres treated)
•Removed blackberry by hand as well as with herbicide across 25.9 acres
•Chemically treating thistle across 20 acres
•Planted 280 plants
•Built 127 cages, installed cages across 1.3 acres
•Maintaining previously treated invasives across 30.6 acres

Activity 2: Snoqualmie Valley RV Park riparian restoration (15 acres treated)
•Removed invasive blackberry, scotchbroom, and tansy ragwort across 15 acres
•Simultaneously surveying all 15 acres for additional invasives to treat in subsequent project visits
•Spread 46 yards of cubic mulch across site
•Planted 4,000 native trees and shrubs
Activity 3: Middle Fork River forested wetland restoration (38.3 acres)
•Planning has been completed for the Middle Fork Snoqualmie River section
•38.3 acres of invasive species work, including 22 acres of critical riparian buffer
•Chemical control of spotted jewelweed, blackberry, common hawkweed, thistle, yellow archangel.
•Developed experimental treatment plots to determine most effective methods to control jewelweed
•Planted 435 potted trees and shrubs
•Installed 339 live stakes
Activity 4: Klock Floodplain Forest Enhancement Area (171 Acre Contiguous Area, 26 identified for treatment)
•no deliverables yet to date

Activity 5: Reiner Floodplain Forest Enhancement Area (117 Acre Contiguous Area, 6 acres identified for treatment)
•no deliverables yet to date.

Activity 6: Project management and strategic planning
• Emerald Alliance (EA) held individual and all-grant project partner meetings to identify ongoing and new/current project implementation challenges. EA staff organized a regional partner meeting to discuss largest challenges (funding and workforce) with region-based partners (federal, state, county, municipal, tribal, and non-profit) working in the Snohomish Watershed to cross-pollinate ideas, collective capacity, and lesson sharing in Fall 2025. Attendees liked the regional meeting and are planning on meeting quarterly moving forward.
• DNR continues to manage grant agreements and fulfill federal reporting requirements

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Quantities to Date

- Invasive Plant / Weed Management - 83.90 Infested acres treated for invasive plants
- Water Quality Enhancement - 18 Acres of trees and seedlings planted to enhance water quality
- Water Quality Enhancement - 20 Miles of riparian forest treated to enhance water quality
- Water Quality Enhancement - 5,054 Number of trees and seedlings planted to enhance water quality

Deliverables in Progress

Activity 1: Three Forks Natural Area riparian restoration
•Maintaining invasive weed control
•Continue planting native trees, shrubs
Activity 2: Snoqualmie Valley RV Park riparian restoration
•work complete
Activity 3: Middle Fork River forested wetland restoration
•Invasive species control, especially along critical riparian areas
•Continue replanting native shrubs and trees
Activity 4: Klock Floodplain Forest Enhancement Area (171 Acre Contiguous Area)
•all deliverables remain to be completed
Activity 5: Reiner Floodplain Forest Enhancement Area (117 Acre Contiguous Area)
•all deliverables remain to be completed
Activity 6:
•A second follow-up regional partner meeting is slated for Winter 2026; a potential spring meeting may occur if funding permits.

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Challenges

•Flooding was widespread in the Snohomish in late fall/early winter 2025. However, site work did help to mitigate flood damage across many project sites. Planning for more frequent recurrence of floods in these riparian and forest wetland areas is a new consideration for cross project site planning.

•Volunteer coordination: Volunteers have been much more numerous than originally planned for with the grant. While this is a bonus, in terms of additional support for the implementation of the work, this has resulted in project staff spending a much larger amount of time in admin/coordination than originally anticipated. This has caused partners to need to shift around funds. No changes to deliverables anticipated, however.

•Contracting. There were a few different contracting issues that delayed the contract with one partner, and so work was not able to be started on two of the deliverables. We still anticipate completing this work within the grant cycle.

•Additional grant funding. Funds from other grants with earlier spend-down dates made it so that dollars allocated to the Reiner and Klock sites did not get invoiced yet. Work on these sites that will be invoiced (and complement other work at these sites) will commence in 2026.

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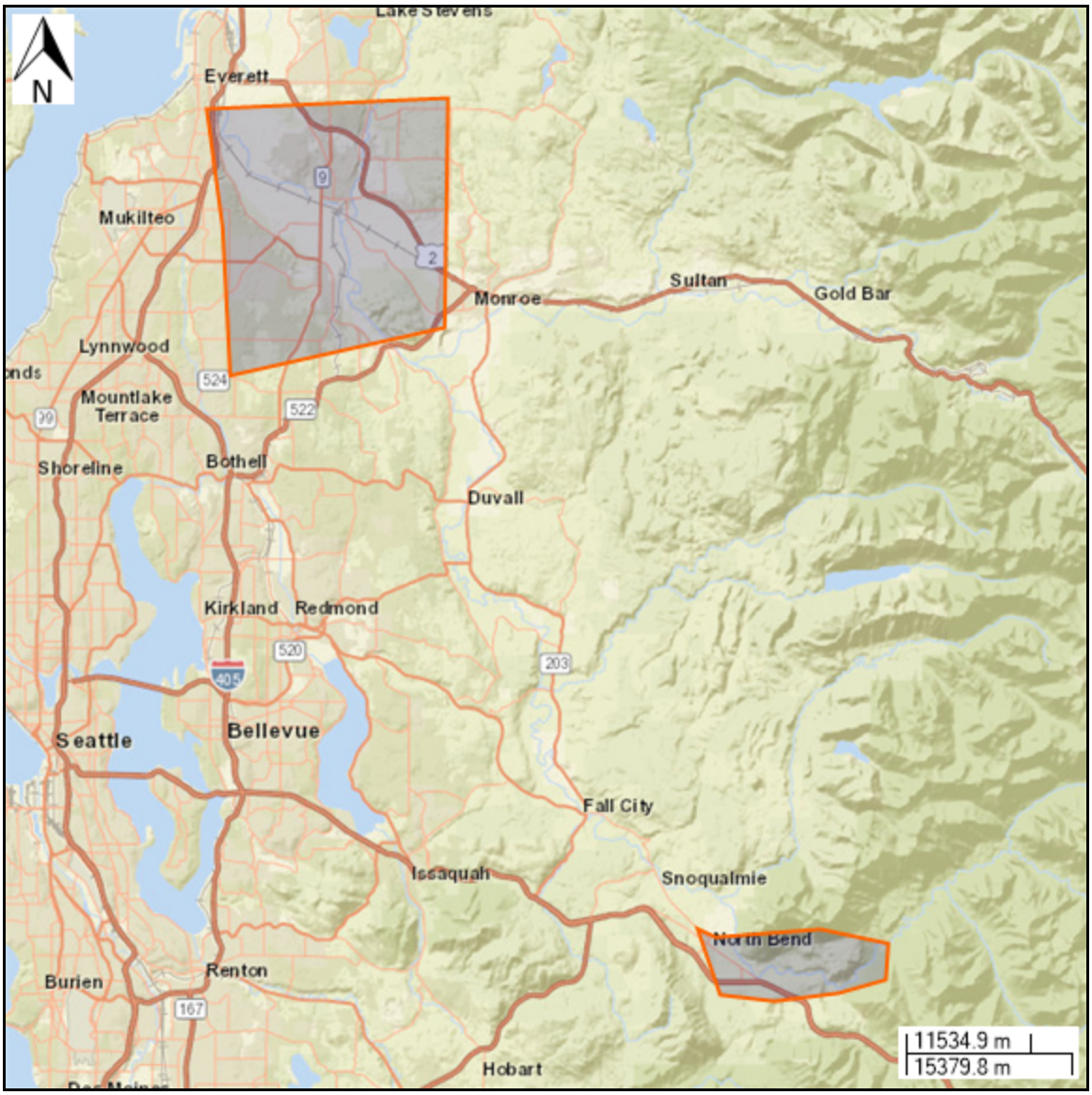
Impact Area



Information Last Updated

12/29/2025