

Landscape Scale Restoration Project Report



Project Name: Klickitat Forest Health and Wildfire Risk Reduction Project

Funding Year: 2023

Stakeholders

Forest Service Region: USDA Forest Service - R6

Sponsoring Organization: Washington Forestry

State Project Contact: Sydney Debien | | sydney.debien@dnr.wa.gov

Participating Organizations:

Grantee: Washington Forestry

Project Funding

Project Design

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Project Purpose

Implementation of forest restoration work on 275 acres of the Klickitat Priority Landscape identified in the WA NR 20-Year Forest Health Strategic Plan as a high priority for landscape resilience, community wildfire preparedness, and rural economic development. Over the last century, commercial forest practices and fire suppression have significantly altered stand structure and species composition across much of this landscape a landscape renowned for its connectivity, biodiversity, economic and cultural importance. Current tree densities and fuel loads contribute to a suite of forest health issues, including a greater risk of high severity wildfire and increased vulnerability to insect and disease outbreaks. The project area is unique: Columbia Land Trusts privately owned 6,500-acre Klickitat Canyon Conservation Area is sandwiched between the Yakama Nation Indian Reservation, the WDFW Klickitat Wildlife Area, WA DNR's Klickitat Canyon Natural Resource Conservation Area, and WA DNR's Klickitat Community Forest. These partners are implementing a shared vision for forest health through funding and management collaborations, standardized monitoring approaches, and the development of the South Mt.

Adams Prescribed Burn Association. This proposal will catalyze 275 acres of thinning and contribute to a strategic fuel break in a priority landscape.

Resource Objective

Primary Objective

- Reduce the risk of uncharacteristic wildfires

Secondary Objective(s)

- Improve fish and wildlife habitats, including for threatened and endangered species
- Improve important forest ecosystems
- Measure ecological and economic benefits including air quality and soil quality and productivity

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Strategic Issues

DNR's 20-Year Forest Health Strategic Plan identified the Klickitat as a high-priority planning area. According to the Klickitat Landscape Evaluation Summary, currently dense, multistory forest structure is over-represented on dry sites, elevating crown fire risk. Treating 38,000-48,000 acres of this type is recommended to create large patches (~100-1000 ac) of open forest with a component of large trees, flipping the majority of dry sites from closed to open forest. Ponderosa pine, oak and other drought tolerant species will continue to be suitable as climate gets warmer and drier.

Landowner Project Objectives (LPO):

- 1) Reduce stand density to improve tree health, resistance to disease/insects
- 2) Shift veg composition toward fire tolerant species
- 3) Reduce fuels in preparation for prescribed fire and first foods management
- 4) Enhance wildlife habitat
- 5) Improve understanding of oak-pine system response to disturbance events, including management and fire

The LPOs of this project address several Landscape Objectives and goals in the Forest Action Plan (FAP) and 20-Year Forest Health Strategic Plan. FAP goals addressed:

- 1) Conduct 1.25 million acres of scientifically sound, landscape-scale, cross boundary management and restoration treatments in priority watersheds to increase forest and watershed resilience by 2037.
- 2) Reduce risk of uncharacteristic wildfire and other disturbances to help protect lives, communities, property, ecosystems, assets and working forests.
- 3) Enhance economic development through implementation of forest restoration and management strategies that maintain and attract private sector investments and employment in rural communities.
- 4) Plan and implement coordinated, landscape-scale forest restoration and management treatments in a manner that integrates landowner objectives and responsibilities.
- 5) Develop and implement a forest health resilience monitoring program that establishes criteria, tools, and processes to monitor forest and watershed conditions, assess progress, and reassess strategies over time.

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Collaboration & Partners

There are eight major partnering landowners in the project area: Washington Department of Natural Resources (WA DNR), Washington Department of Fish and Wildlife (WDFW), Yakama Nation, Columbia Land Trust (CLT), DGS Timber, Lupine Forest LLC, Bureau of Land Management (BLM), US Fish and Wildlife Service (USFWS), and Mount Adams Resource Stewards (MARS). These partners have all attended field visits hosted by Columbia Land Trust to discuss landscape scale collaborations, inform prioritization of treatment areas, and discuss prescriptions.

This project builds on and buffers management outcomes on adjacent portions of the Yakama Nation Indian Reservation to the west and east. The Yakama Nation has been managing its lands for forest health and fire resilience since time immemorial, thinning and applying prescribed fire to thousands of acres annually. One stand immediately west of the project area contains

remnant old growth that serves as an analog for historical condition. Yakama Nation has offered to share its expertise and resources on cross-boundary prescribed burns in the future, and we are evaluating beaver reintroduction potential using the Yakama Nations Beaver Restoration Assessment Tool (BRAT).

To the northwest is the WA DNR Community Forest conserved in 2017. MARS, CLT, and WA DNR collaborated on the management strategy for the community forest, which includes objectives for forest health, habitat, and fire preparedness. The community forest is adjacent to the Yakama Nations Klickitat Fish Hatchery which is jointly managed by WDFW and Yakama Nation Fisheries. Immediately to the northwest is the WA DNR Klickitat Canyon NRCA, where restoration is underway on 350-

acres of ponderosa pine forest and forested wetlands with funding from the Washington Wildlife and Recreation Program. WA

DNR recently implemented a level 2 Ecological Integrity Assessment (EIA) on Columbia Land Trusts ownership, providing a framework for measuring ecological integrity and project effectiveness. To the south and downstream on the Klickitat River is the WDFW Klickitat Wildlife Area, managed for objectives that overlap with those in this proposal. All of these partners are sharing knowledge and coalescing around a vision for landscape health that is advanced through site tours, informal advisory meetings, monitoring efforts, and through participation in the East Cascades Oak Partnership (ECOP), a group of more than 25 agencies, tribes, and organizations collaborating to share knowledge and leverage resources to improve outcomes for oak and pine forests in the East Cascades. With leadership by MARS and CLT and support from ECOP, WA DNR,

and Sustainable Northwest, partners are in the early stages of forming the South Mount Adams Prescribed Burn Association (PBA)

to leverage resources, remove barriers, and improve capacity for prescribed burns across multiple ownerships.

This is a high functioning partnership, working efficiently and effectively to implement a landscape-scale vision for improved forest health and community wellness.

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Integrated Delivery

The Klickitat Priority Landscape is a high priority in many conservation and forest health plans: WA DNRs 20-Year Forest Health Strategic Plan and State Forest Action Plan (2020); Columbia Land Trusts Conservation Agenda (2016); WDFWs Washington State Wildlife Action Plan (2015); the Klickitat Lead Entity Salmon Recovery Plan (2016); the East Cascades Oak Partnership Strategic Action Plan (2020); TNCs Conserving Natures Stage: Resilient Terrestrial Landscapes in the PNW (2016). The Forest Action Plan emphasizes the need to reduce fuel loads, restore health and resilient forest conditions, and reduce risk associated with wildfires through active management. The Klickitat proposal addresses numerous goals of the Forest Action Plan focused on Landscape Resilience, specifically: prioritizing forest health treatments in landscapes with the highest need and relative risk and in priority landscapes, working with landowners to coordinate activities across borders, and selecting the most effective treatment approaches to meet the needs of the landscape and landowner objectives.

The proposal also supports goals identified in the Glenwood Community Wildfire Protection Plan (2007), and the Community

Wildfire Preparedness and Wildfire Suppression goal in the Forest Action Plan (2020), specifically, increasing the use of

prescribed fire and mechanical fuels treatments to improve firefighter and public safety and protect communities and private

timberland in line with Washington State House Bill 1784.

The proposal supports Rural Economic Development goals in the Forest Action Plan, including to:

enhance economic development through the implementation of forest restoration and management strategies that maintain and attract private sector investments and employment in rural communities, and; support efforts to secure a reliable timber supply to increase the forest products industry infrastructure to levels required to meet forest health goals.

Influence on Positive Change

This project is in the Klickitat Planning Area (149,649 acres), a high priority landscape in the 20-Year Forest Health Strategic Plan.

Ownership is 40% industrial, 35% private, 20% state, and 5% Yakama Nation necessitating an all lands, all hands approach to

increase the pace and scale of forest health treatments. In addition to addressing all 5 goals in the FAP and 5 LSR landscape

objectives, this project also aligns with goals stated in the Klickitat Planning Area Landscape Evaluation Summary in the 20-Year

Forest Health Strategic Plan.

Accomplishments

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Deliverables

Landowner Project Objective: Reduce stand density improve tree health, resistance to disease/insects

Addresses: LOS 1,2, and 4; FAP goals 1,2,3 and 4

Quantitative Accomplishments and Deliverables:

Acres of hazardous fuels management: 275

Acres treated to enhance wildlife habitat: 275

Acres treated for insect and disease: 275

Board feet of logs: ~633 mbf

Landowner Project Objective: Shift veg composition toward fire tolerant species

Addresses: LOS 1,2, and 4; FAP goals 1,2,3 and 4

Quantitative Accomplishments and Deliverables:

Acres of hazardous fuels management: 275

Acres treated to enhance wildlife habitat: 275

Acres treated for insect and disease: 275

Board feet of logs: Projecting ~633 mbf

Landowner Project Objective: Reduce fuels in preparation for prescribed fire and first foods management

Addresses: LOS 1,2, and 4; FAP goals 1,2,3 and 4

Quantitative Accomplishment and Deliverables:

Acres of hazardous fuels management: 275

Acres treated to enhance wildlife habitat: 275

Acres treated for insect and disease: 275

Board feet of logs: Projecting ~633 mbf

Landowner Project Objective: Enhance wildlife habitat for sensitive and priority species including western gray squirrel (state threatened)

Quantitative Accomplishment and Deliverables:

Consultations with partner biologists: 1

Number of nest trees detected and buffered from treatment: TBD

Acres of ladder fuels reduced: 275

Landowner Project Objective: Improve understanding of oak-pine system response to disturbance events including restoration

treatments and fire using the East Cascades Oak Partnerships standardized disturbance monitoring tool. Incorporate data into

ECOP's data library for future analysis by academic partners.

Addresses: LOS 5; FAP goal 5

Quantitative Accomplishments and Deliverables:

of plots installed and measured pre- and post- treatment: 20

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Accomplishments to Date

1A: 15 pre treatment plots completed

1B: WGS Nest Surveys completed within the 295 acre harvest boundary

1C: Forest Health Thin (non commercial); 210 acres of hazardous fuels reduction completed

1D: Forest Health Thinning (295-acre commercial harvest (ICO)); Completed layout (still finishing ICO tree marking), Permitting (DNR and Tribal), Hired a logging contractor, Coordinating with Tribe on access and road maintenance

Quantities to Date

- Hazardous Fuels Management - 210 Acres treated to reduce hazardous fuels

Deliverables in Progress

IC Forest Health Thin (non-commercial) is completed, but we are still working on deliverables (post treatment photos).

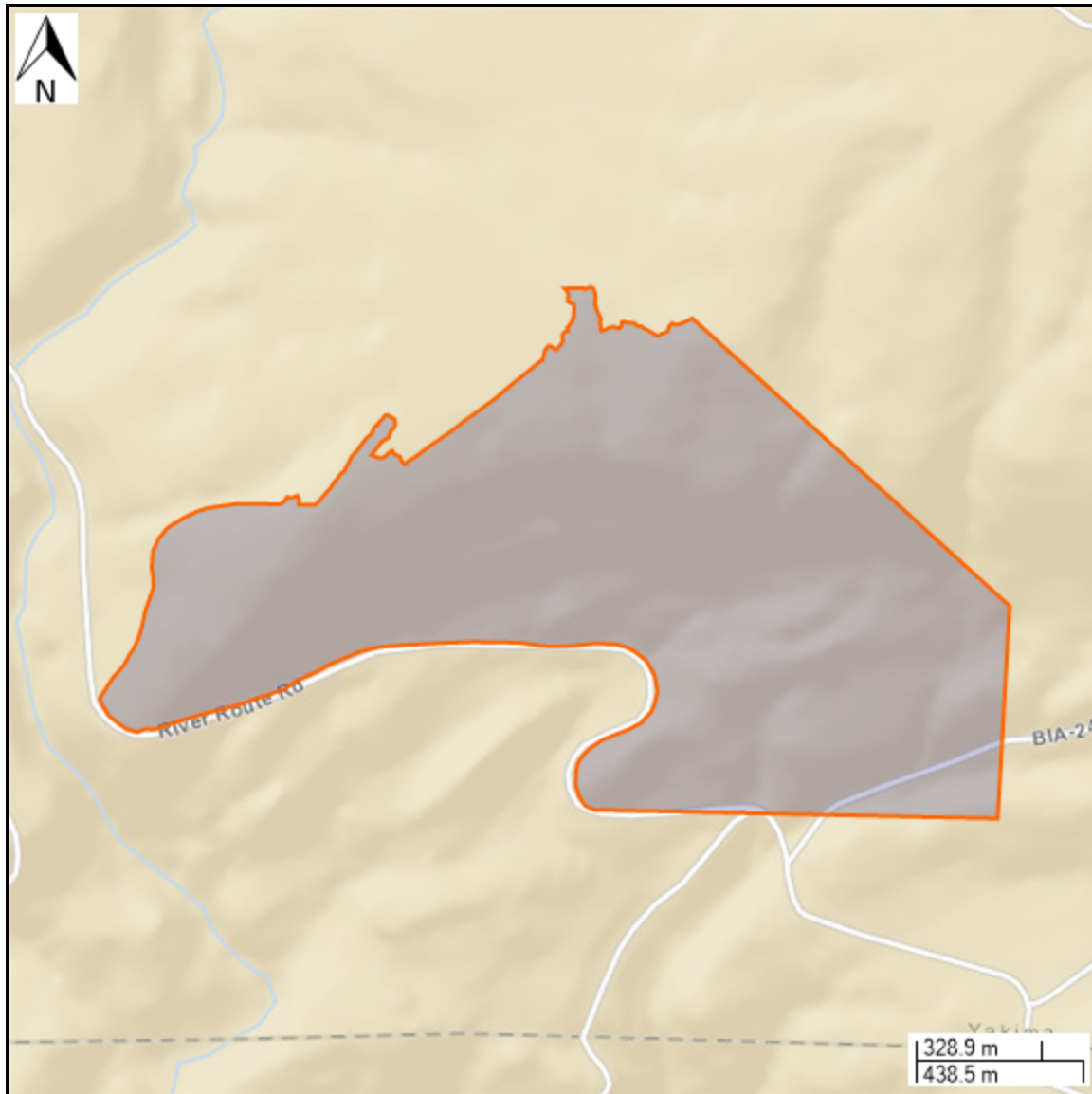
Challenges

Coordinating with our Tribal partners at Yakama Nation with regards to Cultural Resource surveys and National Historic Preservation Act compliance for this project took longer than anticipated. We ended up moving the 1C acres to another high priority fuels treatment area that had a cultural resource survey completed.

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Impact Area



Information Last Updated

2/3/2026