



**DEPARTMENT OF
NATURAL RESOURCES**

Forest Resilience Division

1111 WASHINGTON ST SE
MS 47013
OLYMPIA, WA 98504-7001

360-902-1000
WWW.DNR.WA.GOV

November 1, 2023

Joe Rausch
District Ranger
Okanogan-Wenatchee National Forest
Cle Elum Ranger District
803 W 2nd St
Cle Elum, WA 98922

RE: Upper Swauk Restoration Project Notice of Proposed Action Comments

Dear Ranger Rausch,

The Washington State Department of Natural Resources (DNR) would like to thank the Okanogan-Wenatchee National Forest (OWNF) and the Cle Elum Ranger District for developing proposed actions designed to increase the resilience of the Upper Swauk Restoration project area. The watershed comprising the project area is a priority planning area for the State of Washington's 20-Year Forest Health Strategic Plan: Eastern Washington (20-Year Plan). DNR is Washington's lead for all forest health issues (RCW 76.06.150), with the goal to promote communication and coordination between the state and federal government regarding management decisions that potentially affect the health of Washington's forests. DNR stands ready to continue our work with the US Forest Service to support forest restoration activities that will improve the resilience of the project area to natural disturbances and climate change. Under our Shared Stewardship MOU with the US Forest Service, we are interested in working to further our common goals in this planning area in an all-lands context from planning through implementation. Our staff are also engaged in this project through our participation in the Tapash Sustainable Forest Health Collaborative, partnerships with the Kittitas Fire Adapted Communities Coalition, and providing resources to project area assessment and treatment proposals.

DNR strongly supports the four identified needs for action in the Upper Swauk Restoration project: 1) reduce the risk of forest loss to severe wildfire by making forests more resilient to disturbance and restore historic disturbance regimes altered by past management and a changing climate, 2) restore habitats to contribute to the recovery of threatened and endangered wildfire species and the viability of late successional old-growth forest associated species, 3) integrate aquatic and terrestrial restoration to restore watershed functions, restore native plant diversity, and build more resilient and sustainable ecosystems, and 4) improve riparian, stream, and upland processes influencing stream and watershed functioning and resiliency to contribute to the recovery of listed fish species and their critical habitats.

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[DNR's Landscape Evaluation](#) for the Upper Swauk Restoration project area identifies 14,000 - 22,000 acres in need of treatment across all lands in the project area to increase resilience and reduce wildfire risk. The Upper Swauk restoration project proposed action includes 16,902 acres of noncommercial and commercial thinning, which falls within the treatment range in dry and moist forests. Proposed treatments are located in areas with relatively high landscape treatment priority and relatively low sustainability for forests with large trees and dense canopies, according to the DNR Landscape Evaluation.

The Upper Swauk Restoration project area contains some of the highest fire risk in all of Washington and Oregon as determined by the US Forest Service Quantitative Wildfire Risk Assessment. Some of the highest burn probabilities in Washington can be found in the project area as well as a variety of values at risk, such as the community of Liberty, the Highway 97 corridor, wildlife habitat, aquatic resources, and forest resources. The project area contains a small amount of Wildland Urban Interface (WUI) in the project area, which heightens the need for forest health and fuel reduction treatments to reduce wildfire risk to homes and communities.

DNR strongly recommends that shaded fuel breaks be implemented by intersecting large, landscape-level treatment areas with potential control lines as much as possible. Landscape treatments that intersect potential control lines should be the primary shaded fuel break implemented. Limited stand-alone fuel breaks along potential control lines are appropriate when large, landscape-level treatments cannot intersect the control line and highly valued resources are present, or where there is a need to harden a control line for tactical fire reasons. Fuel breaks along property boundaries that do not intersect a control feature or a landscape treatment are of limited utility for wildfire response, forest health, or home protection.

Research from across the interior west¹ has shown that mechanical treatments that remove trees are the most effective at reducing density, fuel loads, and crown fire risk, especially when followed by prescribed fire. Non-commercial and fire-only treatments can accomplish these

¹ Fulé, P. Z., J. E. Crouse, J. P. Roccaforte, and E. L. Kalies. 2012. Do thinning and/or burning treatments in western USA ponderosa or Jeffrey pine-dominated forests help restore natural fire behavior? *Forest Ecology and Management* 269:68–81.

Martinson, E. J., and P. N. Omi. 2013. Fuel Treatments and Fire Severity: A Meta-Analysis. USDA Forest Service Rocky Mountain Research Station: Research Paper. RMRS-RP-10.

Prichard, Susan J., et al. "Adapting western North American forests to climate change and wildfires: 10 common questions." *Ecological Applications* 31.8 (2021): e02433.

Stephens, S. L., B. M. Collins, and G. Roller. 2012. Fuel treatment longevity in a Sierra Nevada mixed conifer forest. *Forest Ecology and Management* 285:204–212.

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goals, but require allocation of limited treatment dollars and often necessitate multiple entries to sufficiently reduce fuels. In addition, Goal 3 of the 20-Year Forest Health Strategic Plan recognizes the importance of rural economic development in achieving our broader forest health goals by encouraging forest restoration and management strategies that maintain and attract private sector investments and employment in rural communities. DNR encourages the OWNF to address as many of the forest health treatment needs in the project area as possible through viable commercial treatments in order to achieve ecological, economic, and social goals.

Climate change, specifically the projected increase in drought stress that is likely to occur over the next few decades, will continue to add stress to forests in the project area and make them less resilient to natural disturbances such as fire, insects and disease. DNR's landscape evaluation for the project area finds that moisture deficit levels for most of the current moist forest in the project area will shift to levels currently associated with dry forest by mid-century (2040-2070).

Moisture deficit levels for current dry forests, which cover a majority of the project area, will shift to very high levels associated with non-forest and woodland types by mid-century. The increase in drought stress over time in the project area is another reason to treat forests in the project area at a large enough scale to be resilient to both the current and future climate. We have identified drought as an important current and future threat to forest health and resiliency, and the proposed actions will make the project area more resilient to a hotter and drier future.

Aquatic restoration activities to improve watershed health and aquatic habitat functions is a clear need in the project area. DNR fully supports addressing both the upland and aquatic restoration needs in this project area as quickly as possible and at the relevant scale and locations needed and identified.

Finally, monitoring at the stand and landscape scale is a critical component of DNR's 20-Year Forest Health Strategic Plan. We would like to see specific direction included in the decision for a monitoring plan for this project, which we hope will integrate well with our efforts.

DNR thanks your team and the OWNF for its leadership on planning forest restoration activities in this high-priority landscape. We look forward to our continued partnership to improve forest health and promote resilient landscapes for this project area and throughout the eastern Cascades.

Sincerely,



George Geissler
State Forester
Deputy Supervisor for Wildfire

CC: Chuck Hersey, Amy Ramsey