WILDEARTH GUARDIANS
A FORCE FOR NATURE

Hood Canal District Ranger - Yewah Lau
c/o Kim Crider
Olympic National Forest
1835 Black Lake Blvd SW
Olympia, WA 98512

April 13, 2020

Re: Environmental Assessment - Wynoochee Restoration and Roads Management Project

Dear District Ranger Lau and Ms. Crider,

Thank you for the opportunity to review and provide comments on your Environmental Assessment (EA) for the proposed "Wynoochee Restoration and Roads Management Project" in the Hood Canal Ranger District. We commend the staff who worked on this environmental assessment and accompanying documents because we found them easier to digest then others. We also appreciated the FAQ's, maps, road table and photos, which helped provide additional context and information. These things take a lot of time and we appreciate that effort.

In general, we are encouraged to see the U.S. Forest Service (USFS) move forward with a plan to make improvements in a part of the Olympic National Forest that has not received focused attention due to limited resources and priorities elsewhere. In 1996, the Upper Wynoochee Watershed Analysis recognized that this watershed was a Tier 1 Key Watershed because of being critical refugia for at-risk fish species.[1] Yet despite the importance of this watershed for at-risk fish, all of the sub-watersheds are rated as Class 2 – functioning at risk (Watershed Condition Framework). The primary reason for this "risk" rating is due to impacts from forest roads.[2]

This action is long overdue. The 1994 Northwest Forest Plan provides objectives for the maintenance and restoration of aquatic ecosystems at the watershed scale through the Aquatic Conservation Strategy. The 1996 Wynoochee Watershed Analysis also recommended actions to restore watershed health, many were road-related, yet little action was taken. And then in 1999, when Washington's Forest and Fish Law was passed, state and private forest landowners proceeded to address their forest roads through the development and implementation of Road Maintenance and Abandonment Plans. By 2015, most had met the requirements of the law. By contrast, the USFS – now nearly 20 years later – has barely made any progress to meet the same requirements.[3] This lack of action on federal lands,

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1 USFS Upper Wynoochee Watershed Analysis, September 1996.

2 USFS. Olympic National Forest. Wynoochee Restoration and Roads Management Project. Draft Environmental Assessment. March 2020. P. 30-31.

3 Memorandum of Agreement between the USDA Forest Service, Region 6 and the Washington State Department of Ecology Meeting Responsibilities Under Federal and State Water Quality Laws (2000).

places the investments in road work, salmon restoration and water quality on adjoining lands at risk.

The Wynoochee watershed supports coho, Chinook and chum salmon, bull trout, steelhead/rainbow trout and resident and sea run cutthroat trout.[4] Bull trout are listed as "threatened" under the Endangered Species Act (ESA) and have foraging, migration and overwintering critical habitat on USFS lands on 5.6 miles along the Wynoochee River and 3.8 miles on USFS lands along the Satsop River.[5] Numerous communities, tribes and NGO's are working hard throughout the drainages on the western side of the Olympic Peninsula to protect and restore aquatic habitats to ensure salmon/steelhead thrive and are not listed under the ESA. The actions proposed in this project contribute to that effort.

The Wynoochee watershed also provides a place for people to go and restore their well-being with recreational opportunities such as picnicking, swimming, camping, hiking, mountain biking, horseback riding, fishing, hunting and scenic viewing/driving.[6] With access to rivers, streams, a lake along with trails and camping – this is an area loved by locals and visitors.

Our Values and the Wynoochee Project

Our organization and members support outdoor experiences on public lands while also ensuring these wild lands and waters are restored and protected. The types of activities we hope to see across this landscape should meet the goals of enhanced recreation for locals and visitors alike while also protecting habitat for salmon, steelhead, bull trout and other wildlife, preserving clean and cold water and restoring landscapes where needed. We do not believe these are mutually exclusive goals. This is a large landscape with many needs and opportunities and we strongly encourage you to take the time to incorporate feedback to ensure this project meets your defined purposes. This may be the one chance in several decades, when a pathway forward is clearly outlined and benefits both people and wild lands/waters. We urge and support you in making the Wynoochee project the best that it can be.

I. Support for the Stated Needs of the Project

The Wynoochee project covers a large area – 70,220 acres, with 40,576 managed by the USFS Olympic National Forest and includes the subwatersheds: Headwaters of the Wynoochee River, Upper Wynoochee River and Upper West Fork Satsop River.[7] The Draft EA states that the need for the project is "…to improve the Wynoochee River watershed through old growth forest development, road management, recreational site adjustments,

[4] USFS Wynoochee Restoration and Roads Management Project, Fish Report, 2020. P. 14
[5] USFS Wynoochee Restoration and Roads Management Project, Fish Report, 2020. P. 15.
[6] USFS Draft EA, 2020. P. 34.
[7] USFS Wynoochee Restoration and Roads Management Project, Fish Report, 2020. P. 14 (Table 3).

and restoration of riparian and aquatic resources".[8] To meet that need, the following project purposes were identified:

- "Increase structural and habitat diversity and accelerate the development of late-successional forest characteristics by reducing the density of trees in second-growth stands in Late- Successional Reserve (LSR) and Adaptive Management Area (AMA) land allocations.
- Contribute to the economic viability of local communities
- Improve Riparian Reserve (RR) conditions to meet Aquatic Conservation Strategy (ACS) objectives. Riparian Reserves are a central component of the ACS, and include areas along streams, wetlands, ponds, lakes, and unstable or potentially unstable areas.
- Identify a road system that meets transportation needs while reducing aquatic risk associated with specific roads.
- Improve developed recreation site safety, scenery and user enjoyment through actions at recreation sites that are directly associated with (or connected to) road actions or forest stand improvement/health actions in this project."[9]

We recognize that there are often challenges achieving the "multiple-use" mission of the agency and appreciate the work completed by staff to outline steps to restore ecosystem processes while also ensuring people have reliable access to the forest for recreation. We support your efforts in making improvements.

II. **Support for Alternative B**

The Forest Service is overdue in its need to address the oversized and deteriorating road system. In Washington State, there are over 21,000 miles of Forest Service roads – which is enough to drive from Seattle to Washington D.C. eight times. Many of these roads were not built to last and were built incorrectly and on unstable terrain. The agency's road maintenance budget has been depleted over the decades by Congress and now only allows for about 15-20% of the roads to receive just the bare-bones maintenance each year. We need and want a reliable road system to access national forests but without planning for a rightsized road system, routine annual maintenance and deferred maintenance, and expanded budgets – access will be lost as roads continue to fail. By identifying the roads most people use and also identifying the roads that are mostly not used and are falling apart, the Olympic National Forest is finding a pathway forward that allows them to properly manage this important infrastructure.

The Wynoochee Draft EA was very clear in outlining (1) impacts of roads in this area (2) access needs and (3) costs of the road system. We support Alternative B because we feel it moves the watershed closer to meeting the project purposes and would have the greater cost savings over the long run.

[8] USFS Draft EA, 2020. P. 1.
[9] USFS Draft EA, 2020. Pgs. 2-5.

It should be noted that there was no mention of reservoir sedimentation in this Draft EA. Perhaps it is not identified as a problem by Tacoma Public Utilities but this could become a problem. As excess sediment from roads is transported downstream to the lake, the reservoir is at increased risk of filling with sediment – impacting dam operations (burying dam outlets, water intakes) and recreational activities (impacting boat ramps, etc.). The Association of California Water Agencies specifically identified road decommissioning and maintenance as an important tool in reducing sediment from forest roads and protecting water reservoirs and dam operations.[10] If the Forest Service has not contacted the utility, it may be worthwhile to learn if they face these issues here.

III. **Ensure road system is more resilient to impacts from climate change**

Roads degrade and fail due to a variety of reasons such as how/where/when they are built; and how they are maintained; and other factors such as weather and rainfall. The Wynoochee watershed currently receives over 150 inches of rain per year making it a very wet watershed. This amount of water, along with the steep slopes and soil composition, has already severely damaged the road system and eliminated access on several roads. Climate change impacts will only make this worse.

Almost a decade ago, the Olympic National Forest recognized the need to adapt to impacts from climate change and published a technical report titled "Adapting to Climate Change at Olympic National Forest and Olympic National Park" (USDA USFS General Technical Report 844, August 2011). A large section of that report is focused on the road system, highlighting vulnerabilities and also outlining adaptation strategies. The Wynoochee Draft EA very minimally addressed climate change impacts (mostly related to logging) even though the older report advised "…potential climate change effects underscore the need to increase activity and be proactive in priority areas to avoid impacts associated with infrastructure failure".[11] The report suggests the following adaptation strategies and actions:

- Implement habitat restoration projects that focus on re-creating watershed processes and functions and that create diverse, resilient habitat.
- Decommission unneeded roads.
- Remove sidecast, improve drainage, and increase culvert sizing on remaining roads.
- Relocate stream-adjacent roads.
- Design more resilient stream crossing structures.
- Make road and culvert designs more conservative in transitional watersheds to accommodate expected changes.
- Continue to correct culvert fish passage barriers.
- Consider re-prioritizing culvert fish barrier correction projects.
- Restore habitat in degraded headwater streams that are expected to retain adequate summer streamflow.[12]

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[10] Improving the Resiliency of California's Headwaters – A Framework. Association of California Water Agencies. February 2015.
[11] USDA USFS General Technical Report 844, August 2011, p. 35.
[12] USDA USFS General Technical Report 844, August 2011.

The Wynoochee Project does include many of these activities however our concern is that if the climate change lens is ignored, then the proposed treatments may be insufficient to adapt to impacts from climate change and will not support a resiliency in the road system. In this watershed, as in most watersheds in the Olympic National Forest, the hydrologic changes will have the greatest impact on infrastructure unless adequate planning and changes are done now. It is also more cost-efficient to fix potential issues now, using the climate change lens, rather then fixing catastrophic failures later, if drainages, culverts, ditches are not upgraded to accommodate larger precipitation events. We encourage staff to take a second look at proposed road-related actions along with the climate change analysis to ensure drainage is adequate, culverts are large enough, sidecasts are thoroughly removed and decommissioning is sufficient.

IV. **Ensure that aquatic risk factors are more fully addressed**

We strongly support actions in the Wynoochee project area that will improve aquatic ecosystems and are pleased to see the thought and analysis that went into developing the prescriptions. Clean and reliable water is a core need for all life. Because of how critically important water is, we remain concerned that the actions may not be enough to measurably improve aquatic health.

It is well documented that, beyond specific road density thresholds, certain species will be negatively affected, and some risk being extirpated.[13] A number of studies show that higher road densities also impact aquatic habitats and fish. Carnefix and Frissell (2009) provide a concise review of studies that correlate cold water fish abundance and road density, and from the cited evidence concluded that: "1) no truly "safe" threshold road density exists, but rather negative impacts begin to accrue and be expressed with incursion of the very first road segment; and 2) highly significant impacts (e.g., threat of extirpation of sensitive species) are already apparent at road densities on the order of 0.6 km/km^2 (1.0 mi/mi^2) or less". [14]

Cold water salmonids such as threatened bull trout, are particularly sensitive to the impacts of forest roads. The U.S. Fish and Wildlife Service's Final Rule listing bull trout as threatened (USDI Fish and Wildlife Service 1999) addressed road density, stating:

> "… assessment of the interior Columbia Basin ecosystem revealed that increasing road densities were associated with declines in four non-anadromous salmonid species (bull trout, Yellowstone cutthroat trout, westslope cutthroat trout, and redband trout) within the Columbia River Basin, likely through a variety of factors associated with roads (Quigley & Arbelbide 1997). Bull trout were less likely to

[13] Robinson, C., P.N. Duinker, and K.F. Beazley. 2010. A conceptual framework for understanding, assessing, and mitigation effects for forest roads. Environmental Review 18: 61-86.
[14] Carnefix, G., and C. A. Frissell. 2009. Aquatic and Other Environmental Impacts of Roads: The Case for Road Density as Indicator of Human Disturbance and Road-Density Reduction as Restoration Target; A Concise Review. Pacific Rivers Council Science Publication 09-001. Pacific Rivers Council, Portland, OR and Polson, MT.

use highly roaded basins for spawning and rearing, and if present, were likely to be at lower population levels (Quigley and Arbelbide 1997). Quigley et al. (1996) demonstrated that when average road densities were between 0.4 to 1.1 km/km^2 (0.7 and 1.7 mi/mi^2) on USFS lands, the proportion of subwatersheds supporting "strong" populations of key salmonids dropped substantially. Higher road densities were associated with further declines" (USDI Fish and Wildlife Service (1999), p. 58922).

Anderson et al. (2012) showed that watershed conditions tend to be best in areas protected from road construction and development.[15] Using the U.S. Forest Service's Watershed Condition Framework assessment data, they showed that National Forest lands protected under the Wilderness Act tend to have the healthiest watersheds. In support of this conclusion, McCaffery et al. (2005) found that streams in roadless watersheds had less fine sediment and higher quality habitat than roaded watersheds. Miller et al. (2017) showed that in 20 years of monitoring forests managed by the Northwest Forest Plan there were measurable improvements in watershed conditions as a result of road decommissioning, finding "...the decommissioning of roads in riparian areas has multiple benefits, including improving the riparian scores directly and typically the sedimentation scores." [16]

Studies have also demonstrated that decommissioning forest roads (assuming it's done correctly) should result in a net positive as documented below:

- **hydrologic recovery is speedier.** Lloyd et. al. (2013)[17] discovered that when a road is recountoured and the surface is adequately treated, rainwater infiltrates quicker than when a road is simply abandoned. (Above ground recovery is about the same but below ground is very different.) Kolka & Smidt (2004)[18] also discovered that there is less erosion/runoff on treated roads.
- **reduced sediment delivery to streams.** Nelson et. al. (2012)[19] compared sediment delivery rates on decommissioned roads and stormproofed roads. After storms, the decommissioned roads had 80% less sediment delivery while stormproofed roads had 67% less sediment delivery.
- **results in higher watershed condition scores.** An Aquatic Conservation Strategy analysis completed in 2006 showed that the watersheds that had condition scores that increased the most were the ones that had the most extensive road decommissioning.

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[15] Anderson, H.M., C. Gaolach, J. Thomson, and G. Aplet. 2012. Watershed Health in Wilderness, Roadless, and Roaded Areas of the National Forest System. Wilderness Society Report. 11 p.

[16] Miller, Stephanie A.; Gordon, Sean N.; Eldred, Peter; Beloin, Ronald M.; Wilcox, Steve; Raggon, Mark; Andersen, Heidi; Muldoon, Ariel. 2017. Northwest Forest Plan—the first 20 years (1994–2013): watershed condition status and trends. Gen. Tech. Rep. PNW-GTR-932. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 74 p.

[17] Influence of road reclamation techniques on forest ecosystem recovery. Lloyd, Rebecca A., Kathleen A. Lohse and TPA Ferre. Frontiers in Ecology and the Environment. March 2013.

[18] Kolka, R., and M. Smidt. 2004. Effects of forest road amelioration techniques on soil bulk density, surface runoff, sediment transport, soil moisture and seedling growth. Forest Ecology and Management 202: 313–323.

[19] Nelson, N., T. Black, C. Luce, and R. Cissel. 2012. Legacy Roads and Trails Monitoring Project Update. US Forest Service, Rocky Mountain Research Station, Boise, ID. 5 p.

- **increased wildlife benefit**. Extensive studies show that wildlife (particularly elk, bear, lynx) avoid roads. Switalski et. al. (2011)[20] published a study showing that black bears are going to areas where roads were decommissioned in significantly higher numbers than areas where roads were simply closed (with gates or barriers).

The road densities in the subwatersheds after all project activities are implemented still leave the watersheds categorized as "functioning at risk".[21] A properly functioning watershed has road densities of 1 mile/square mile. Reducing aquatic risks does move towards better conditions but to truly improve these watersheds, waterways, and habitat for bull trout and salmon, more needs to be done. We ask Olympic National Forest staff to reassess whether additional roads should be considered for decommissioning in order to come closer to the goal of a properly functioning watershed.

As we've stated before, as forest road users and conservationists, we do understand that a strategic reduction in road miles does not necessarily equate to a loss of access. Most roads proposed for decommissioning here are closed, overgrown and/or undriveable due to washouts, lack of use, or natural vegetation growth. There are other roads that receive limited use and are costly to maintain or were built in the wrong location. It is our belief that resources can be better spent on roads we use frequently then to spread resources so thin to all roads, that these key roads degrade even further. This is why we support the careful analysis and decision to decommission specific roads

An additional important aspect of any project is the monitoring component. With this project, only two paragraphs are devoted to implementation and effectiveness monitoring with no specific details.[22]

We would ask the Forest Service to ensure Best Management Practices (BMPs) are followed by the agency and contractors to help protect against additional spread of invasive weeds. Native vegetation should be planted as soon as possible. And the agency should develop and follow a schedule to monitor the sites for any establishment of noxious weeds. Particularly important are the first few months and years after ground disturbing activities.

In addition, the Forest Service needs to monitor for unauthorized motorized use on the closed or decommissioned roads in order to ensure aquatic benefits can be fully realized by the treatments. If any intrusions are identified, then additional measures should be immediately implemented to eliminate further incursions and prevent further damage.

If there is a stated goal of "reducing aquatic risk" then there must be a way to measure that. The Wynoochee Draft EA suggests that monitoring "could" include some basic activities. This needs to change to say monitoring "will" include and outline a monitoring plan and schedule to ensure the stated goals of this project are met. How a road is decommissioned,

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[20] Switalski, T.A. and C.R. Nelson. 2011. Efficacy of road removal for restoring wildlife habitat: black bear in the Northern Rocky Mountains, USA. Biological Conservation 144: 2666-2673.
[21] USFS Draft EA, 2020. P. 57.
[22] USFS Draft EA, 2020. P. 24.

for example, or what size drainage features are installed, for example, really impact aquatics and should be evaluated and measured.

V. Unauthorized/unclassified routes need further evaluation and treatments should be included in this Environmental Assessment

We appreciate the Olympic National Forest's effort to use unclassified routes as temporary roads to reduce further impacts in this watershed due to road construction and soil compaction. We also support the work to reduce damage to riparian areas by restoring areas impacted by unauthorized roads. These routes should be decommissioned and restored to a natural state because that road footprint can have a significant impact on the hydrology of the watershed. The Olympic National Forest should take another step to identify and treat other unauthorized routes that are discovered in this process and that are not in the official roads database. If lack of resources or staff make it overly difficult to inventory unauthorized roads during this planning process, then the decision notice should include language that authorizes the closure and treatment of unauthorized roads discovered during project implementation.

VI. Stronger action is needed to meet the requirements of Subpart A

As you know, in 2001 the Forest Service promulgated the Roads Rule (referred to as "subpart A") 66 Fed. Reg. 3206 (Jan. 12, 2001); 36 C.F.R. part 212, subpart A. The Roads Rule created two important obligations for the agency. One obligation is to identify unneeded roads to prioritize for decommissioning or to be considered for other uses. 36 C.F.R. § 212.5(b)(2). This is what the Olympic National Forest accomplished with their 2015 Travel Analysis Report. Another obligation is to identify the Minimum Road System (MRS) needed for safe and efficient travel and for the protection, management, and use of National Forest system lands. *Id.* § 212.5(b)(1).[23] The MRS is the road system, determined by the Forest Service, as needed to:

- Meet resource and other management objectives adopted in the relevant land and resource management plan,
- Meet applicable statutory and regulatory requirements,
- Reflect long-term funding expectations, and
- Ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.

The goal of subpart A is "to maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns."[24] The Forest

[23] In promulgating its rules, the Forest Service indicated that "[t]he requirement to identify roads for decommissioning is '[e]qually important' as the overall identification of the minimum road system." *Center for Sierra Nevada v. U.S. Forest Service*, 832 F. Supp. 2d 1138 (E.D. Cal. 2011) (quoting 66 Fed. Reg. at 3207).
[24] *See* 2012 Weldon Memo at 1 ("The national forest road system of the future must continue to provide needed access for recreation and resource management, as well as support watershed restoration and resource

Service's Washington Office has issued a series of directive memoranda that outline how the agency expects forests to comply with Subpart A.[25] The roads table provided as a supporting document is extremely helpful in understanding how Travel Analysis, MVUM status, risks, needs, costs and proposed project actions all fit together. This table certainly took a great deal of work from Forest Service staff and we found it to be quite informative. We also appreciate your effort in working towards a balance and identifying the minimum road system through this project.[26]

However, the question we still have is whether, after full project implementation, the intent of Subpart A will be achieved? Is the minimum road system one that reflects "long-term funding expectations" or will roads continue to fall apart due to lack of budgets? Will the deferred maintenance costs continue to add up? Will the proposed actions, when implemented, truly minimize impacts to aquatic systems from the road system?

The options considered – and costs - for the road system from page 62 of the Draft EA (excerpted into table below) suggest that Alternative B leans more towards a road system that reflects long-term funding expectations. It's important to keep in mind that these costs are estimates with some baseline assumptions that are not entirely rooted in reality such as: (1) baseline maintenance is up to date (which it clearly is not) and (2) deferred maintenance is ignored – the repairs needed on the roads to bring them up to a baseline condition.

	Alt A	**Alt B**	**Alt C**
Maintenance Level 1	94.2	78.2	74.6
Maintenance Level 2	95.8	56.4	47.2
Maintenance Level 3	29.2	10.8	20.3
Maintenance Level 4	3.4	3.1	3.1
Total Mileage	222.6	150.4	151.1
Total Costs	$84,900	$47,545	$54,520
% diff from current costs (Alt A)		-44%	-36%

The table above shows that Alternative B reduces the road maintenance cost burden more then Alternative C but still may not be enough to "reflect long-term funding expectations".

The Olympic National Forest's 2015 Travel Analysis Report estimates total deferred maintenance across the forest to be $43M for 2,026 miles of road. This area contains 11%

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protection to sustain healthy ecosystems."). *See also* Memorandum from Joel Holtrop, U.S. Forest Service Washington Office, to Regional Foresters *et al.* (Nov. 10, 2010) (hereafter, 2010 Holtrop Memo) ("Though this process points to a smaller road system than our current one, the national forest road system of the future must provide needed access for recreation and resource management and support watershed restoration and resource protection to sustain healthy ecosystems and ecological connectivity.").

[25] 2010 Holtrop Memo; 2012 Weldon Memo; Memorandum from Leslie Weldon, U.S. Forest Service Washington Office, to Regional Foresters *et al.* (Dec. 17, 2013) (hereafter, 2013 Weldon Memo) (supplementing and reaffirming the 2012 Weldon Memo).

[26] USFS Draft EA, 2020. P. 21.

of the forest's road system so one could estimate that it would take at least $5M (11% of $43M) to address all of the deferred maintenance backlog on the roads in this watershed (keeping in mind this estimate was from 5 years ago). The estimate is likely much larger due to the damage that has incurred and the time since the initial analysis was completed. These are not exact numbers – it is just important to show that deferred costs are enormous and cannot be simply ignored.

Unless budgets are significantly increased, we will lose more roads due to neglect and storms then to any other action. It's imperative that the Forest Service continue to identify key roads (specifically recreation roads) for key investments as well as unneeded roads that can be removed from the system to truly become more economically sustainable. This project, when fully implemented, does move the Olympic National Forest forward in achieving Subpart A requirements but we question whether that is enough.

Conclusion

We are pleased to see this proposal for action in the Wynoochee watershed – something that has been needed for a long time. We applaud the effort made to protect aquatic resources and protect road access in this area and the effort that Forest Service staff made to share information with the public in more understandable ways. We are pleased to see that the Olympic National Forest has used their Travel Analysis Report to focus their decision-making in this area. Identifying a minimum road network is one of the most important endeavors the Forest Service can undertake to restore aquatic systems and wildlife habitat, facilitate adaptation to climate change, enhance recreation, and lower operating expenses.

If you have questions or wish to discuss our comments further, feel free to contact us.

Regards,

Marlies Wierenga
Pacific Northwest Conservation Manager
WildEarth Guardians