TO: Sweet Home District of the Willamette National Forest
FROM: Willamette Valley & Cascade Volcanoes broadbands of Great Old Broads for Wilderness
SUBJECT: Quartzville-Middle Santiam Project — public comment

Please accept the following comments from the Willamette Valley and the Cascade Volcanoes Broadbands of the Great Old Broads for Wilderness concerning the Quartzville-Middle Santiam project Draft EA.

The Great Old Broads for Wilderness is a national grassroots conservation organization, led by women, that engages and inspires activism to preserve and protect wilderness and wild lands. There are over 40 chapters, called Broadbands, across the US with 4 chapters in Oregon. Members of the Willamette Valley Broadband, the Cascade Volcanoes (Portland area), and the Bitterbrush Broads of Central Oregon started surveying units in the QMS in July 2020 and have continued through October 2021. Several of our members have submitted comments on the EA and included photos and field notes that support the recommendations and comments found in this letter.

We commend the Sweet Home Ranger District for providing us the opportunity to learn, tour, and pose questions to their entire staff about the QMS project, and for their desire to develop a project that is *scientifically sound and socially responsible*.

The EA states (pg 32) that during the public scoping process, four key issues were identified from comments and two of these issues are addressed in Alternative 4:

- *Harvest treatments should not occur in stands over 80 years of age because that age class is underrepresented in the project area and should be preserved on the landscape.*
- *No regeneration harvest and no early seral creation is necessary because there is an over- representation of early seral in the project area.*

Alternative 4 was developed in response these issues. **Alternative 4 eliminates harvest treatments in stands over 80 years of age and eliminates all shelterwood treatments.** We support Proposed Action Alternative 4 pending satisfactory responses to our concerns below.

## Questions, concerns, and further information requested

We have serious concerns about the QMS project. This project is much too large for the public to adequately review as intended by the NEPA process. Nonetheless, we have reviewed the Draft EA and accompanying documents, examined project maps, and scoped 40 of the 249 units, and 7 of the road projects proposed for Quartzville Portion and Middle Santiam Portion of the QMS. We found inconsistencies in the documents compared to what we witnessed on the ground, a poorly developed economic analysis, an overreliance on harvesting mature natural stands, and a lack of regard for emerging climate research.

Although we support the stated goals *in principle*, this project is not well designed to serve these goals.

***Goal #1. Contribute to timber supply for local economies***
The EA provides almost no evidence that timber harvest would meet goal # 1, "to maintain the stability of local and regional economies."

The EA states (pg 187): "The current level of timber harvesting on the Willamette National Forest has dropped substantially from the levels of the mid-1980s. This decrease has contributed to a decline in the number of local jobs associated with the wood products industry and jobs which are dependent on other industries to spend money. The economic impacts of forest sector jobs contribute approximately 4.4%, or 7,421 jobs to Lane County."

Local mills are currently glutted with salvage harvests from recent fires. At best, this QMS harvest would provide a few years of work in a boom-and-bust industry that has been shrinking for 40 years. We are sympathetic to our neighbors who have worked in the mills or as loggers, but we have had more than a generation to transition jobs from extraction to conservation and recreation. This timber sale will not save the timber industry in Sweet Home.

However, the EA provides compelling evidence of substantial recreational value of the Sweet Home Ranger District to Linn County: "Linn County receives approximately 856,000 recreational visitors per year which generates approximately $138,000,000. A portion of this directly benefits rural towns adjacent to the Willamette National Forest. These economic impacts include lodging costs such as campground fees, dining, purchasing items for outdoor recreation, food, gas, and entertainment such as live music. There is a growing interest in recreation and outdoor activities on the Sweet Home Ranger District since there are abundant low elevation areas accessible year-round."

There is no further analysis in the EA of the significant contribution of unlogged federal forests to the stability of local and regional economies. If a mere 8 percent of the $138 million in revenue that Linn County receives from recreational visitors were accounted to the National Forest, the recreational value of the Forest *per year* would *exceed* the predicted timber value of the QMS Alternative 2, the Forest Service's preferred alternative (see Table 48.)

***Goal 2. Improve stand growth, diversity and structure in young, dense plantations within Late Successional Reserves in order to promote late-successional conditions***
Goal #2, under the guise to improve stand structure, is a fig leaf for providing wood to the timber industry. We witnessed proposed units in the QMS that are not overstocked; they have diverse understories, ample snags, and downed wood. There is no ecological reason to manipulate these units with harvest. These mature stands are well on their way to developing late-successional conditions and they *should not be cut*. (Further discussion of Units 43, 26, 29, with photos, are in Appendix C).

The EA (pg 62) outlines that in Alternative 2, 140 acres with trees between 113 to 149 years old will be 85% clearcut, a so-called "shelterwood with reserves" treatment. These stands are *naturally generated mature stands* that are not "overstocked" because they were never "stocked" to begin with. They are mature, natural stands, established long before the Forest Service began the plantation system of forest regeneration. Similarly, the fire regenerated stands proposed for this treatment range in age from 103 and 149 years old. This is a rare age class in this forest.

Goal 2 suggests that harvest will be limited to "young, dense plantations." There are NO plantations older than 80 years, and therefore NO stands older than 80 years should be cut.

"*Shelterwood with reserves" treatment should be excluded from the project, and all units with stands over 80 years old should be excluded*.

***Goal 3. Create diversity in structure and age class across the project area***
The EA (pg 64) claims that "shelterwood with reserves treatments" in mature natural forests would contribute to "the under-represented age classes (0-30 years) across this landscape helping ensure sustainable forests for future generations and help provide *a sustainable supply of timber products*." Wildfire is creating plenty of early seral forests; no one can create a 100-year old mature stand. The hidden purpose here is to provide a brief pulse of wood to the timber industry, not to create diversity in forest structure and age class as implied.

The goal to create more early seral habitat has been more than met by recent fires. The 2021 Bruler Fire, that burned more than 298 acres, created conditions for naturally regenerating stands with early seral habitat within the Sweet Home Ranger District (EA, pg 178.). The EA also reports that 360 acres in the Sweet Home District burned with high mortality during the Beachie Creek and Lionshead fires of 2020 (EA, pg 67.)

There are many more recently burned areas across the Willamette National Forest. We see no ecological need to artificially create early seral habitat because wildfires are offering the natural disturbance necessary to create a diverse mosaic of forest types without the negative impact of harvest on soil, habitat, and biological legacies.

The EA, under "Fire and Fuels," agrees that fire-regenerated stands contribute substantially to stand diversity. However, in the Project Design Features, units 172, 240, 241, 242, and 243 are all noted as fire-regenerated stands, yet the proposed action is to clearcut them in order to achieve Goal #3, to "create diversity in structure and age class." This is grossly contradictory. The importance of early seral-stage structures should not be a veiled excuse for harvesting naturally regenerating stands.

***Goal 4. Sustainably manage the road network.***
The QMS project proposes 32 miles of new, temporary, or re-opened roads, but maps showing where these roads are located came very late in the review process, delaying by several months our ability to survey them. We field-checked 7 of the 3-digit roads categorized as "open" and found that 5 out of the 7 were actually unpassable. Amid a confusion of adding and subtracting various categories of roads, the numbers in the proposal show a net *increase* of road miles (EA, pg 82; also compare Chapter 1 discussion of Alternatives with Chapter 3, Table 48, under 'Economics'.) There are ample opportunities to reduce road-building, such as eliminating the temporary road proposed for Unit 166 and therefore eliminating unnecessary damage to this mature stand.

## Two key areas of concern are inadequately addressed in the EA

***The Forest Service needs to address the proposed reintroduction of salmon and steelhead into the QMS.***
Historically, the Middle Santiam drainage, including Quartzville Creek, was the largest producer of salmon and steelhead within the Santiam watershed. In response to a lawsuit related to the Army Corps of Engineers' Willamette River system dams, a federal judge recently ruled against

the Corps and directed certain remedial actions take place. Among these is a directive to begin reintroducing salmon upstream of Green Peter Dam and to modify dam operations to provide for downstream passage of juveniles (see references in Appendix.)

The Middle Santiam River and Quartzville Creek have been identified by Oregon Department of Fish and Wildlife as important habitat for salmon and steelhead recovery, with recommendations to manage the habitat for the eventual reintroduction upstream of Green Peter Dam (see references in Appendix.)

So, in addition to the importance of these watersheds for resident fish and wildlife, they will also be important for the recovery of federally listed salmon and steelhead. The life history of these species is that juvenile fish generally rear for 1 to 2 years in upper watersheds before migrating to the ocean. Therefore, maintaining upstream water quantity (flow), quality (temperature), and instream habitat such as wood and shade will be critical to provide high quality habitat (see references in Appendix.)

Intact forests are particularly important for watershed protection by regulating soil permeability, overland flow, and erosion. However, for Alternatives 2, 3, and 4, the EA proposes the bare minimum required riparian protection without consideration of improving salmon habitat for the future:

"Timber harvest within the 1⁄4 mile corridor of the Middle Santiam River in unit 176. Within the 1⁄4 mile corridor of Quartzville Creek, there are units on both sides of the waterway: units 105, 106, 107, 108, 115, 125, 126, and 127. These units are proposed for thinning, with some 1⁄4 acre dominant tree release; these activities are all within the MA-6b and MA-6c standards and guides, which limit the amount of even-aged harvesting." (pg 198)

***The Forest Service needs to address emerging climate science specific to Region 6.***

The Willamette National Forest is in the middle of one of the most carbon-intensive forests in the world. This remarkable attribute is not mentioned in the EA. We were asked, "Is there any information about the project area, which you believe is important in the context of the proposed activities that you would like the Forest Service to consider?" Yes. A large information gap is the lack of regard for emerging climate science.

Climate policy is expanding its focus on fossil fuel emissions to include the great importance of protecting the massive carbon stores in nature, especially the primary forests of the temperate rain forests of the western United States. The federal forests in western Oregon and Washington have among *the highest capacity in the world* to store carbon for hundreds of years. The highest long-term value of these westside forests is as *carbon reserves*, because they are storing immense amounts of carbon *now*, not 10-50 years from now, and they have the greatest chance of holding those stores for centuries, far longer than the lifespan of any wood product. (see references and further discussion in Appendix.)

## Recommendations

We support Alternative 4, but also urge you to consider making additional changes to address the following concerns we have.

Using the EA analysis of timber-related revenue, Alternative 4 would provide significant socio-economic benefits to both Lane and Linn counties, contribute to the National Forest Fund, and

support roads and schools in Linn County. If the EA's economic analysis were to include the value of carbon storage and even a small portion of what Linn County receives annually from recreational visitors, the proposed socio-economic benefit of the National Forest would exceed all projected timber values.

**A more complete economic analysis should be conducted, focused on 21st century realities.** How has the local timber supply increased following recent fires and subsequent salvage logging? What are the projected needs of the local economies, both timber and non-timber? What is the contribution of forest recreation to the local economy? What new, sustainable, and non-extractive forest-based industries are being considered for the future?

**All units with stands over 80 years old should be excluded from the project,** even if they are in the Matrix. These older stands have long-term ecological value that far exceeds their short-term monetary value.

**'Shelterwood with Reserves' treatment should be excluded from the project.**

**Early seral habitat should not be carved from mature stands.**

**Emerging climate science specific to Region 6 should be a critical part of this environmental assessment.**

**Planning for future reintroduction of salmon and steelhead should be included in this assessment.**

**Exclude** Units 166, 172, 240, 241, 243 from planned harvest. These are units that have older forest characteristics, considerable stand diversity, and high potential for habitat for sensitive species. Exclude other units with similar older forest characteristics.

**Exclude** Units 26 and 29 from planned harvest. These units have diverse understories (> 25 species when quickly surveyed in October) with large amounts of downed wood and snags. Unit 29 has 3 riparian areas with well-developed hardwoods (3.5' diameter cottonwood, alders) and downed wood in the stream. These two units also provide a travel corridor for wildlife from the old growth west of Unit 26 (bordered on the west by private clearcuts) to the main forest to the east. Exclude other units with similar forest habitat characteristics.

**Exclude** Unit 43 from planned harvest. It was recently extensively thinned and remains extremely open. Understory is developing. The proposed treatment calls for 10 acres with 6 acres in Riparian Reserves. This contradicts the EA Chapter 2, which states: "Stands that have previously been thinned or are proposed for shelterwood with reserve treatments would have no treatment in the Riparian Reserves."

**Exclude** Unit 189 from planned harvest. The road has completely washed out leading to Unit 189 and covered by a landslide at the Unit. This unit has some of the steepest slopes in the entire project area with large old-growth trees just uphill of rock slides. It would be extremely difficult

to develop a landing for the proposed skyline logging. Exclude other units with similar slope characteristics.

**Address inconsistencies, errors, and omitted information within the EA**

• Unit 177 is in the Wilderness Area. Why is this treatment necessary in a Wilderness Area?
• Unit 137 - the new boundaries are not in the EA.
• Unit 43 has proposed riparian reserve thinning, even though the EA states that previously thinned units will not have riparian reserve thinning. Our concern is that other units are also mis-prescribed.
• The characterization of 'Commercial Thinning' is misleading. The text defines it as removing mostly small trees, Figure 19 illustrates all big trees are removed or turned into snags.
• Unit 243 is shown on the QMS Riparian buffer map to have a very large section that will be buffered because of the Tommy Creek tributaries. Visiting there multiple times, we witnessed multiple water sources. However, there are no maps in the EA that show any water in Unit 243.

**These errors, omissions, and contradictions are troubling and they raise concerns over the credibility of the EA. This project is too big and too rushed to be *scientifically sound and socially responsible*. While we urge you to choose Alternative 4 for the reasons we have stated, we also insist that you address these other concerns in any final decision.**

Sincerely,
Cyndi Anderson (thebrownsvillehouse@gmail.com) & Chandra LeGue (chandralegue@gmail.com), representing the Willamette Valley Broadband

Laurie Kerr, representing the Cascade Volcanoes Broadband, lauriekerr@pacifier.com
Great Old Broads for Wilderness

## Appendix: Research references and citations

***Re forest carbon stores***

Buotte et al. **Forest carbon and biodiversity co-benefits of preserving forests in the western US**. *Ecol Applic* Mar 2020. doi.org/10.1002/eap.2039

"Preservation of high carbon density Pacific Northwest forests that are also economically valuable for timber production will have costs and benefits to consider, including socioenvironmental benefits, the feasibility of preservation, and opportunity costs harvest. There is tremendous potential for proforestation, growing existing forests intact to their ecological potential, which is an effective, immediate, and low-cost approach to removing carbon dioxide from the atmosphere. Proforestation serves the greatest public good by maximizing co-benefits such as biological carbon sequestration and unparalleled ecosystem services including biodiversity enhancement, water and air quality, flood and erosion control, and low impact recreation. The development of governance programs to promote forest preservation will be critical."

"*The high-carbon-priority forests are primarily along the Pacific coast and the Cascade Mountains.*

These high-productivity, low-vulnerability forests have the potential to sequester up to 5,450 Tg $CO_2$ equivalent (1,485 Tg C) by 2099, which is up to 20% of the global mitigation potential previously identified for all temperate and boreal forests, or up to ~6 yr of current regional fossil fuel emissions. Additionally, these forests currently have high above- and belowground carbon density, high tree species richness, and a high proportion of critical habitat for endangered vertebrate species, indicating a strong potential to support biodiversity into the future and promote ecosystem resilience to climate change."

"We found that these high-carbon-priority forests exhibit features of older, intact forests with high structural diversity, including carbon density and tree species richness. Forest resilience and adaptive capacity increase with increasing plant species richness, suggesting that preserving the high-carbon-priority forests would provide an added buffer against potential ecosystem transformation to future climate change."

William R Moomaw *et al*. **Forests & soils meeting climate mitigation goals**. *Environ. Res. Lett* April 2020. **15** 045009 doi.org/10.1088/1748-9326/ab6b38

"Forests could store substantially more carbon if allowed to grow and reach their ecological potential. Preserving our current primary forests and allowing secondary forests to grow for carbon storage would increase carbon sinks in the near and intermediate future."

Dominick A. Delasalla, et al. **Primary Forests Are Undervalued in the Climate Emergency**. May 2020, BioScience 70(6). DOI:10.1093/biosci/biaa030

"The climate change mitigation benefit of forests in general is to store large amounts of carbon in a stable, self-regenerating and long-term reservoir. Therefore, even if we eliminate fossil fuels, continued forest degradation will generate severe climate disruptions."

William J. Ripple, et al. **The Climate Emergency, Forests, and Transformative Change**. June 2020 BioScience 70(6):446-447. DOI:10.1093/biosci/biaa032

"Scientists, teachers, and citizens must boldly address climate change by taking the actions necessary to avoid the otherwise inevitable consequences. We need genuine transformative change in how we mitigate and adapt to the climate crisis. This will entail massive personal, societal, and global political adjustments in how we function on our finite and now damaged planet in terms of energy, pollution, nature, food, economy, and human population issues."

***Re salmon and steelhead reintroductions***

Dept of Commerce, **Final Biological Opinion on the Willamette Basin Review Feasibility Study**, Willamette River Basin, Oregon. June 2019.
https://legacy-assets.eenews.net/open_files/assets/2020/10/27/document_gw_03.pdf

Oregon Department of Fish and Wildlife **Willamette River Biological Opinion**
http://withinourreach.net/downloads/Friesen.pdf

National Oceanic and Atmospheric Administration **Willamette River Biological Opinion**
https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/willamette-river-biological-opinion

Northwest Environmental Defense Center, WildEarth Guardians, and Native Fish Opinion & Society, Plaintiffs, V. United States Army Corps of Engineers and National Marine Fisheries Service. 18-cv-00437-HZ
09-01-2021
https://casetext.com/case/nw-envtl-def-ctr-v-united-states-army-corps-of-engrs

***Ruling forces Corps to make immediate changes to dams in Willamette Valley to save salmon***.
By Bill Poehler. Salem Statesman Journal, July 20, 2021.
https://www.statesmanjournal.com/story/news/2021/07/20/willamette-valley-dams-ruling-forces-corps-make-changes-salmon/8030512002/