Dec 9, 2021
Dear Willamette National Forest
QMS

I concur with Doug Hieken's 'Log it or save it The Search for an ecological rational for fuel reduction logging in spotted owl habitat'
QMS Project is extremely large and covers a length of time in which fire, disease, climate to will reshape the project area due to drought, climate initiated fire, insect infestation, flooding, and earthquakes.

Forest managers need the flexibility to deal with environmental change over time, that the selected alternative may not allow for this.

Consider breaking this project area into watershed planning areas, supported in Two EA. This would allow the public a better chance of participating in this process, if the current process has been rushed, or abbreviated due to the Covid 19 pandemic and people where unable to have access to participate in meetings for QMS, over zoom, or in person at a scoping site visit, and may have not been able to attend, District open house events for QMS.

Outdated guidance documents and plans:
The Willamette National Forest Land and Resource Management Plan Final Environmental Impact Statement, as amended (USDA Forest Service, **1990;** referred to as the "Forest Plan");
• The Forest Plan, as amended by the Northwest Forest Plan (NWFP) and Record of Decision and Standards and Guidelines for Management of Habitat for Late-Succession and Old-Growth Related Species within the Range of the Northern Spotted Owl (USDA Forest Service and USDI
Bureau of Land Management, **1994**a; referred to as the "Northwest Forest Plan" or NWFP);
• The Forest Plan as amended by the **2001** Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (USDA Forest Service and USDI Bureau of Land Management, **2001**);
• The Final Environmental Impact Statement and Record of Decision for Preventing and Managing
Invasive Plants (USDA Forest Service, **2005).**

-Interagency Fire Regime Condition Class (FRCC) version 3.0, 2010 Guidebook
(Barrett et al. **2010)**. page 185 EA

All these guidance documents are out of date. Should support updates and addendums be cited in the single EA to support use of these outdated planning documents and Forest Plan?
Do any of these guidance documents support the fact that Global Warming is underway?

Do any of these guidance documents support citation and reference to:
carbon sequestration science that prove that older forests store more carbon then plantation forests?

Carbon Storage credit program is not being used for this project, why?

Should this massive project be reduced to multiple smaller projects within two EA, reflective of the two river watersheds? As noted in Scoping comments from Milo Mecham? Breaking this massive project up into smaller service areas, watersheds, guided with two EA,using possibly 2021 outdated management plans may help the public except and participate in this massive project.

This area is heavily used for recreation, and hopefully all recreational businesses where contacted and did have a chance to input to scoping, when this project begins to close down area roads, remove view shed trees and impact area watersheds locals and tourists return yearly, to specifically explore and recreate on these lands, and at these 89,000 timber acre public sale areas- minus exclusion from 14,000 acres of private forest land the public is not able to access,but is part of QMS project. Hopefully the public will not pay for roads and timber harvest clean up, within inholdings that are 14,000 checkerboard acres of private forest land LLC.

How environmentally stable is this EA at the selected Alternative 2 if the majority of guidance documents are outdated by 10-20 years? Is this EA reflective of global warming, fire ecology changes, extreme drought, snowpack decline, Douglas Fir zone shifting to dryer species, diseases and pest damage to area forests after dought stress?

We have ten years to deal with climate change and the Selected Alternative 2 does not have guidance for this ten year global climate change target.

By removing trees in snow zones of lower and middle cascade range area, snow may be burnt off faster with ground heating up due to gaps and clearcut, thinning and tree release over 1000s of acres. These timber sales form Headwater streams and catchment watersheds which form the start of both Santiam and Quartz Creek river systems. These watersheds currently store water supplies for downstream cities and towns and water right holders, and provide State of Oregon OWRD ODFW instream water rights for fish passage.

What impacts are projected from selected Alternative 2 to area snow pack's longevity? To , area water storage volume and release into Quartz and North Santiam River systems after project is complete?

How is this project protecting water storage and conserving snow pack retention figures?

What type of restoration and other projects for how long, will timber receipts from QMS pay for?

Will restoration from impacts from QMS be paid for using QMS timber receipts? How destructive will this project be if it is unable to show how it identifies and plans for, Climate Change impacts to area forest ecology, hydrology, soils, botany, carbon storage, wildlife, fisheries, recreation, fire suppression, fire fighting funding, and Fire Season extensions, and never before seen fire ecology?

I disagree with managing forests which have trees over 80 years planned for thinning and removal of trees over 80-150 years. Trees over 80 under NWFPlan are suppose to be conserved.

Unit 166 1915 6039 MBF

224 1869 6712 MBF
243 1932 231 MBF
240 1891 490 MBF
241 1884 491 MBF
172 1905 657 MBF

The most board feet are coming out of these older forests. If units listed have a few older trees, old growth, can these tree receive buffering from thinning and clearcutting and or tree release plans, to keep them standing longer in a managed landscape that will surround these older trees if there are only a few within specific units?

Refer to design planning to protect old growth in Alternative 4 no old growth logging stands over 80 years and eliminates shelterwood treatments.

Did the original intent of prior Willamette NF Forest Plans, over time, specifically plan to not manage the forest where this massive sale is located, in such a way as we have the luxury today, of currently having large areas of older trees, which back then, was the future silvicultural landscape wide goal?

To have these forest today, currently, in 2021, possibly all historic WNF management plans over decades where working to achieved these results. Maintain and sustain older forested areas in these two watersheds over time.

This project will direct private contractors to destroy decades of silvicultural, biological, planning, research, millions of dollars in federal funded management was spent to manage and achieve the forest characteristics present today.

The WNF has functioning ecosystems housing rare, threatened and endangered species that this project has forgotten? Great Gray Owl, Pine Martin, area wolf expansion, Black Bear, River Otter, Bald Eagle,
Peregrine Falcon and other Falcon spp, fish stocks, spring botany, bog botany, hotspring hydrology, rare botany in dry rocky talus slopes 1000-6000 feet, rare trees such as Larch, and Popular stands, pines, Alaska White Cedar areas, *Aster ledophyllus* areas, juniper and other native chaparral, and biodiverse creek headwater montain meadow habitats.

This forest as a unit, may have significant UNESCO global status as a world heritage forest due to the condition it is in currently, before QMS and other massive sales projects focusing on Timber supply first and ecology and the environment as a second of the three broad reason for this sale.

World Heritage site could be considered for all or parts of WNF for it's rich and diverse ecological, and very high number of areas with intact stands of trees over 80 years, within watersheds that are functioning to store water, retain declining native birds, plants, fish species, store and retain viable snow pack and provide homes for rare and endangered species such as NSO, Red Tree Vole, Northern flying squirrel, Pine Martin, Purple martin, Black Bear, fish species, amphibians, reptiles, snakes, and new species such as wolves.

Carbon storage is huge here, and to remove carbon from so many acres in cutting down 80-150plus year old trees that are storing carbon on up into mid 200s year age class or more. By cutting down a tree at 150 years, that much carbon storage is lost, and subsequent future decades of carbon storage in this one tree are lost.

The cut down old growth tree gets driven 120 miles to a mill, milled and then shipped x miles to be sold, or is exported overseas, adding tons of carbon pollution per old growth tree removal, as finished wood product from this one tree being transported great distances.

Tree removal contributes to carbon loss, carbon release over the life of the project and the all efforts to attempt to reforest complex groups of tree species, and understory shrubs, Forbes, moss, lichen,… a balanced and functioning forest ecology will be destroyed or lost in logging projects, crown opening will bring in more direct solar heating and contribute directly to global climate deterioration. Snow will not be stored for longer periods, soils will dry faster and be more susceptible to weather caused lightning strike fires, and onset and increasingly longer and longer periods of drought at have negative impacts to area wildlife and forest growth and is disrupting the physical existence balance of all area ecology.

How exactly does the selected Alternative 2 over this massive area and over x years of harvest time frame, contribute to no impact on global climate? Thinning overstocked plantations to create diameter and height increases, tree release, but at a cost of low end volume 40% retention.

"The Council on Environmental Quality issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions."

For most timber sale, there is a goal or multiple goals to come back in the future and analyze if the sale did what it was supposed to do, and if the timber sale failed to generate the results it was planned out to obtain, then changes should have been made in the methods and details of how to develop better projects which produce the results timber sales was designed for. The goal of timber sale is to achieve results and to go back and look to see if these results where achived in x time period.

The Council on Environmental Quality issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." This is reverse to the goal of long term forest management. Silvicultural projects are done to achieve result under review in EA's should be funded to be evaluated in x years to see if projects actually achieved the results they where designed to achieve. Does QMS use CEQ Memo June 24, 2005 to bipass the need to move slower and do projects that can be managed for review under NEPA, into the future and not rapidly done just for the money and jobs? Projects in areas that had prior management regimes
are part of review areas and planned silvicultural site history that QMS may not honor under CEQ guidelines.

Such as looking at: did the thinning enhance Red Tree Vole habitat, did clearing around older trees increase tree growth with less over story competition?

What is driving this huge project , sustainable five year supply of timber and to provide jobs for a few logging companies and a few local and regional mills? How many jobs will need to be created and what mills will need to reopen for this timber supply planning?

Matrix zone

These areas where not Matrix in 1880, or whenever WNF and NF systems, where developed. Matrix was arbitrarily mapped in a multi year , remote mapping project in some office in DC, and today, Matrix in some areas is the last forest standing in checkerboard ownership which currently house rather old trees which directly and only support threatened and endangered and Survey and manage species.

Matrix units hopefully where evaluated for how they connect to other forest service ownership and wilderness and other conserved areas, to conserve these units(remove them from QRS plan) as they are important for connectivity via ground and canopy to pristine areas such as Wilderness, and being in checkerboard with clearcut commercial forestry edges, Matrix units should be retained in full and not managed to thin, create gaps, skips, shelterwood, regeneration harvested(clearcut) because they share a section line with commercial timber production holdings, where there are no biodiverse forest ecology, and rotation age may be 40 years or lower.

Red Tree Vole, NSO, NFSquirrel, Great Gray Owl, Pine Martin, are using these intact areas which are mapped Matrix. Cutting Matrix for a steady supply of timber degrades habitat, and moves many species more toward extinction, and currently, even faster toward extinction, due to Climate Change and changing fire regime, and fire ecology.

In Southern part of this project private holdings will be clearcut, how are federal forest sections that border these private lands being treated? All Federal forest holdings which are near or on Private Forest section should be considered for the most conservation, and the least thinned to 40% or regenerative harvested. Edge affects: forest dehydration, soil dehydration, wind throw, timber theft, erosion, landslide damage, fire damage, spray drift, weed invasion into native forested stands from managed private lands, ATV trail building recreational use impacts , to Federal Land that join commercial ownership areas.

“Private timber sales harvest roughly 300-500 acres a year and generate approximately 5-9 MMBF from private lands included in the southern portion of the QMS project area (checkerboard ownership) and directly adjacent to it. Haul routes shared with the USFS include Forest Roads 2041 and 2047 as well as 3 and 4 digit collector roads. These roads are maintained under cost-share agreements.”

Climate Change

“This project is not considered a major source of GHG emissions.” For area log processing, how far will a five year supply of timber have to be trucked, if multiple mills are to be used to process and trees? Which mill will take what sized tree bole and how far will this bole size have to be trucked and what total carbon emission is estimated in the Economic Impact Statement from transport of tree boles to area and regional mills?

Total mileage for movement of trees to mills is what and how is this amount of fuel to move this volume of trees not contributing to Green House Gas Emissions?

How far away are markets for milled products coming from this sale, and will these products be sold overseas?

Restoration dollars from timber sales in QMS:

Will QMS timber sale funds, an unidentified percentage, go toward trying to restore what QMS creates to have to restore?

Does the public get to see the Economic Impact Statement for this project? Will QMS timber receipts help build new roads and reopen existing closed roads, in the project area to service the project? Are timber receipts from QMS planned to be used to pay for private roads to be maintained and or built on private lands which are also involved in this project? Sweet Home RD 14,000 acres of private land, with five miles of new non system roads.

LSR

"The thinning treatments proposed in LSR will help move the forest toward late successional characteristics which would contribute to a healthy forest and a positive recreation experience." page 198. How is thinning LSR backed up by silivicultural science? What percentage of snags are in LSR to be thinned? Should Forest managers collect snag percent data and determine if there needs to be more long term snag creation in LSR instead of commercial thinning projects?

Snag retention is historically low in the Pacific North West and snag size continues to decline rapidly, due to few older forests left standing to create old growth snags, and provide sources of old growth logs on the forest floor both in private and Federal ownership.

Does thinning commercially, in unmanaged older aged, very tall, Douglas and Hemlock species LSR lead to extensive uncontrolled green retention tree loss because of wind throw, global warming linked soil dehydration, stem freezing and blow down domino affect we saw two years ago?

I concur with Milo Mecham Scoping comment and the analysis of 35 unit limitations. If there was only time to inspect 35 units, what is going on with all the other hundreds of units if this commenter found issue with 35 units? Project may be too large, and need to be divided into two EA. I concur with Reed Wilson Scoping comments and with Beth Dayton of 'Salem Trail Alliance' that unit's- 137, 147, 176, 177 and 189 are in unique geographic locations next to heavily recreated trail heads, South Pyramid Horse Camp, old growth groves, wilderness areas, and are key areas for future recreational funding to keep them from being over uses. Can these units be considered for removal from QMS inventory of Timber Sales?

Thanks, R.Foster