RE SOURCES

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Submitted by email to: sepacenter@dnr.wa.gov

November 22, 2021

RE: Determination of Nonsignificance for Bessie Sorts Timber Sale, #101720(B)

Thank you for taking comments on the Bessie Sorts Timber Sale (File no. 101720(B)) SEPA Determination of Nonsignificance (DNS). The proposed project involves logging 166 acres of public forestland in the Lake Whatcom watershed (Lake Whatcom and Samish WAUs), owned and managed by the Washington Department of Natural Resources (DNR), as well as the building and maintenance of roads to access the site.

RE Sources is a non-profit organization located in northwest Washington and founded in 1982. We work to protect the health of northwest Washington's people and ecosystems through the application of science, education, advocacy, and action. Our priority programs include Protecting the Salish Sea, Freshwater Restoration, Climate Action, and Fighting Pollution–all critical issues affecting our region. Our North Sound Baykeeper is also a member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has thousands of supporters in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

General recommendations

We respectfully disagree with the DNS and request that you reconsider this determination and pursue an alternative proposal.

There are several aspects of this proposed timber sale that we find to be in conflict with the Lake Whatcom Landscape Plan (FEIS for the Lake Whatcom Landscape Plan and Addendum to the DEIS. January 2004. SEPA File No. 02-091300) and with

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protection of the drinking water source for over 100,000 residents of Whatcom County.

Our staff, in consultation with our partners and supporters well-versed in forest practices, recommend an Alternate Action to the DNR's proposed action which takes climate change into account and provides additional protection for the drinking water source for 100,000 residents of Whatcom County.

This Alternative Action recommends that:

1. mature trees with origin dates between 1876-1926 (estimated at 50 acres) be removed from this sale;
2. all of Unit 2 be removed from the sale;
3. employ Variable Density Thinning (VDT) (as an alternative to VRH) for any remaining portions of the sale;
4. should you choose to leave Unit 2 in the sale, see recommendation #1 above and employ VDT on any remaining areas of that Unit.

Background

Lake Whatcom, the source of the majority of Whatcom County resident's drinking water and everyone living in Bellingham, faces an onslaught of threats as a result of development, logging, and other human activity in the watershed. These threats include:

- Oil leaks from vehicles and boats,
- Pesticides on home gardens and forestry activities,
- Leaking septic systems that can release pharmaceuticals and other chemicals,
- Bacteria and pet waste,
- Excessive inputs of phosphorus

Lake Whatcom violates a variety of clean water standards, and is currently listed as an impaired waterbody under Section 303(d) of the Clean Water Act. However, perhaps the greatest water quality concern is the lake's elevated levels of phosphorus. Phosphorus is a naturally occuring nutrient found in the watershed; however, phosphorus has built up over the years due to development and logging activities in the watershed. Excessive levels of phosphorus contribute to a decrease in dissolved oxygen and an increase in algal populations in the lake. These impacts not only pose problems for aquatic plant and animal life in the lake, but also require additional treatment of municipal drinking water supplies.

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Excess phosphorus in Lake Whatcom is not improving fast enough. This is despite a state mandate to reduce phosphorus loading by 3,150 pounds by the year 2066, or 63 pounds per year. According to the recent draft Lake Whatcom Management Work Plan for 2020-2024, 491 pounds have been reduced cumulatively between 2004 and 2019 or an average of 33 pounds per year (Lake Whatcom Management Program 2020-2024 Work Plan).

To ameliorate these concerns, the City and the County have proactively worked to acquire and protect forestland throughout the watershed. To date, the county and city have protected 11,178 acres from development, logging, or other impacts (Lake Whatcom Management Program 2020 Report). More than half of these protected acres were acquired by the county through a process known as reconveyance, which involved the DNR granting the County ownership to roughly 8,800 acres that had previously belonged to the County almost a century ago. The County has undergone significant planning efforts to "prevent water quality and quantity impacts from… forest practices," but has limited say in determining management prescriptions on state-owned land managed by DNR (Lake Whatcom Management Program 2020 Report).

Details of Alternative Action

We have reviewed the SEPA Checklist and supporting documents, and recognize that most of the legal requirements have been met to go forward with the proposed activities. However, ecosystems and sensitive species in the Pacific Northwest continue to decline and such decline is outpacing protection efforts (Puget Sound Partnership 2021 State of the Sound Report). This indicates that the management strategies DNR employs to ensure protection of forest lands in their timber sales are failing and that more aggressive measures need to be done to ensure critical habitat is maintained. In addition, climate change projections have changed immensely in the last 20 years, and the need for carbon sequestration and sinks and climate adaptation strategies in our forests are more important now which is another argument to keep as many older trees alive and viable as possible.

The benefits of older forests are well documented and numerous. They include maintenance of biodiversity, carbon sequestration, reductions in runoff, stabilization of steep slopes, and reduction in wildfire danger. Best available science is also emerging on the impacts of younger forests on the hydrological cycle and higher evapotranspiration rates compared to older or old growth stands (Moore

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GW, Bond BJ, Jones JA, Phillips N, Meinzer FC. *Structural and compositional controls on transpiration in 40- and 450-year-old riparian forests in western Oregon, USA.* Tree Physiol. 2004;24(5):481-491. doi:10.1093/treephys/24.5.481). Recent work in Whatcom County initiated by the Nooksack Indian Tribe has shown that older

forests can have positive impacts on low streamflows (Watershed Function and Forest Management for South Fork Nooksack River, WA).

There are at least 2 Objectives, and their associated strategies, from the Lake Whatcom Management Plan that we find relevant to this project.

Objective 18 (p14-15) asks the DNR to, "Consider other revenue generating mechanisms." And outlines the following strategy:

- Consider Lake Whatcom a preferred location for the following:
    - Green certification
    - Carbon sequestration
    - Lease(s)
    - Conservation easement
    - Maintain long term public ownership of forest lands
    - Reconveyance
    - Exchange, transfer or sell trust lands.
    - Recreational fees.

Given the ecological importance of older forests for carbon sequestration and protection of drinking water quality, we urge the DNR to find another revenue generating mechanism for Unit 2 of this sale and any trees within either unit with origin dates between 1876 and 1926.

Under Objective 20 (p15): *Reduce the visual impact of forest management activities in high visibility areas as shown on Map S-1*, there exists the following strategy:

- *On all the state trust lands, including "moderate visibility" areas on Map S-1, the following guidelines will be used for even-aged harvest units:*
    - *Harvest units will not exceed 100 acres except in the case of emergency salvage operations due to extensive "blowdown", insect or disease infestation, or public safety concern.*
    - *No harvesting within 300 feet of another harvest area if combined acreage of harvest areas exceeds 100 acres*

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This project falls under the, “moderate visibility” shaded areas of Map S-1. This project seeks to log 166 acres (120 acres in Unit 1, 46 acres in Unit 2). We find that this project does not meet the exceptions outlined in this strategy. Therefore, this project should be reduced in size to 100 acres or below.

For the above reasons we urge DNR to remove all of Unit 2 (approximately 46 acres) from the Bessie sale. In addition, Unit 1 should be decreased to 100 acres or less. Furthermore, any remaining mature trees with origin dates between 1876-1926 should be removed from the Bessie sale.

In addition, our proposed Alternative Action involves selectively thinning using a Variable Density Thinning (VDT) technique. This will reduce the hydrologic and ecological impacts of commercial logging through the application of lower-impact silvicultural techniques and road building strategies. This Alternative Action will still produce significant economic benefits, which are the primary objective of the project, while decreasing the level of environmental degradation associated with the Proposed Action.

This Alternative Action involves thinning at different spatial scales and intensities to achieve economic objectives while promoting the remaining forest’s biodiversity and structural diversity. This alternative will protect forest with origin dates before 1926, as well as riparian forests adjacent to seasonal and perennial streams. The Preferred Alternative Action also would involve increased tree retention on steep slopes to reduce erosion and replanting a wide variety of native tree species such as Douglas-fir (*Pseudotsuga menziesii*), western redcedar, (*Thuja plicata*), western hemlock (*Tsuga heterophylla*) following the harvest.

VDT can involve a wide range of prescriptions. For this Alternative Action recommendation VDT should entail thinning from below (harvesting smaller diameter trees) in all areas within 250 feet of streams and on steep slopes over 50 percent. Thinning from above (harvesting dominant, large trees) should take place in all other areas, with different intensities of thinning and densities of leave-trees. A forest’s structural diversity is one of the most important drivers of habitat quality. Therefore, VDT in the project area should be guided by spatial distribution regimes that optimize habitat potential while still extracting significant economic value from the forest.

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This Alternative Action also prescribes special care to be taken in steep areas to mitigate landslide risks and erosion potential. Minimal harvest (if any) should take place in unstable areas. The selective harvest techniques described above will help ensure that peak flows are mitigated so downhill landslide points do not become inundated and fail.

The Lake Whatcom Landscape Plan grants additional protections that go beyond FPA regulations by requiring a no-harvest buffer of 33 feet on each side of all Type N streams. To mitigate potential adverse hydrologic impacts, this Alternative Action goes even further by prescribing no-harvest buffers in accordance with the standards developed by the US Forest Service in their Northwest Forest Plan (NWFP) (USFS 1994).

Please employ Variable Density Thinning (VDT) (as an alternative to VRH) and the other aspects of this Alternative Action as described above to the Bessie sale. Should you choose to leave Unit 2 in this sale, despite our earlier recommendation to remove, employ VDT and the other aspects of this Alternate Action as described above on that Unit.

Thank you for taking the time to read and consider these comments.

Ander Russell
Senior Environmental Advocate

CC:
City of Bellingham Mayor, Seth Fleetwood, mayorsoffice@cob.org
Whatcom County Executive, Satpal Sidhu, ssidhu@co.whatcom.wa.us

Additional relevant references:

Ecological characteristics of old-growth Douglas-fir forests. USFS.

Effects on Carbon Storage of Conversion of Old-Growth Forests to Young Forests. Science.

A New Future for Old Forests.