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5	SUPERIOR COURT OF WASHINGTON FOR MASON COUNTY								
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7	MASON COUNTY CLIMATE JUSTICE, and LEGACY FOREST DEFENSE COALITION,	NO							
8	Appellants,	NO.							
9	V.	NOTICE OF APPEAL OF THE SURE WOOD TIMBER SALE, THE PLUMB BOB							
10	WASHINGTON STATE DEPARTMENT OF	TIMBER SALE, AND THE ASSOCIATED ENVIRONMENTAL REVIEWS							
11	NATURAL RESOURCES, BOARD OF NATURAL RESOURCES, and the	ENVIRONMENTAL REVIEWS							
12	COMMISSIONER OF PUBLIC LANDS HILARY FRANZ (in her official capacity),								
13	Respondents.								
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18	I. INTRODUCTION								
19	1. The Appellants, two community organizations, challenge the Washington State Department								
20	of Natural Resources' decision to approve and auction the Plumb Bob Timber Sale ("Plumb Bob")								
21	and the Sure Wood Timber Sale ("Sure Wood") for violations of the Public Lands Act, RCW								
22	79.02.010, et seq., and the State Environmental Policy Act, RCW 43.21C.010, et seq.								
23	2. The Sure Wood and Plumb Bob projects authorize the Washington State Department of								
24	Natural Resources ("DNR") to auction nearly 300	acres of forest to be clearcut. These projects are							
25									
26	DNR designed these projects for "variable retention harves the operation leaves a few trees per acre (eight for DNR-mar protected resources such as wetlands, fish-bearing streams, a	and on steep and unstable slopes. Because DNR relies on a JD Calkins Law and Consulting PLLC							
	NOTICE OF APPEAL - 1	1037 NE 65th St., No. 109 Seattle, WA, 98115 Tel: (206) 579-5072							

located within DNR's South Puget Sound HCP Planning Unit, near south Puget Sound inlets and the Hood Canal, and are within 10 miles of each other. These forests include older trees that range from 80 to well over 100 years old and play host to important plant communities, valuable terrestrial habitat for plant and animal species, and streams and wetlands important for salmonids and other freshwater aquatic species. The Sure Wood site is near a railroad operated by the Navy. These sites are in the Sherwood and Mission Creek watersheds where more than 2,260 acres of forest was harvested between 2018 and May 2023. This year alone, DNR regulatory has approved more than 200 acres for harvest in these watersheds.

- 3. Community members in Mason County rely on the forest in and around these sites for important mental and physical health support, access to food and safety, and recreational opportunities. Hundreds of people live near the Sure Wood site and the area of the Plumb Bob site includes a women's prison and a restoration project for butterfly species.
- 4. These forests play an important role in mitigating the climate crisis by sequestering carbon. They also protect the people, plants, and other animal species in the region by buffering them against the impacts of climate change, including more frequent and extreme heat waves and cold snaps, as well as increasing rates and intensity of atmospheric river events and drought. They also protect freshwater streams, rivers, wetlands, and lakes from temperature increases, thereby providing an important climate refuge for cold water species.
- 5. Because many people who rely upon this forest, including members of Appellant organizations, are part of "vulnerable populations" as defined by the Healthy Environmental for All Act, ch. 70A.02 RCW, and because DNR failed to ensure meaningful engagement, despite community efforts to work with the agency, the Sure Wood and Plumb Bob proposals impose additional impacts on people already experiencing environmental harm. RCW 70A.02.010(14)(b).

variable retention harvest approach to managing trust lands, 85 percent of the forests it manages are in "competitive exclusion phase," where densely packed stands of relatively young, homogenous commercial trees compete with each other and limit access to resources for other plant species.

- 6. DNR's approval of these sales violated its duty as manager of the state forests under the Public Lands Act, ch. 79.02 RCW, because the agency failed to establish, consistent with policies and guidance, that these stands are not needed to meet the stand structure targets under the 1997 Habitat Conservation Plan and the 2006 Policy for Sustainable Forests.
- 7. DNR also failed to comply with the State Environmental Policy Act ("SEPA"), ch. 43.21C RCW. First, DNR violated SEPA by issuing determinations of nonsignificance ("DNS") for these sites without reviewing and considering reasonably sufficient information to conclude that these logging projects, in context, would not have direct, indirect, or cumulative significant impacts on the quality of the environment.
- 8. Second, DNR failed to comply with SEPA because it did not evaluate the significance of the impacts as directed by the statute and implementing regulations. This failure includes but is not limited to, balancing the benefits of its activities against their possible impacts, failing to consider the impacts in context, failing to undertake cumulative analysis of the impacts, and improperly limiting the scope of the analysis to impacts just before, during, and just after proposed harvest activities.
- 9. Third, DNR violated SEPA by failing to withdraw these determinations for reconsideration despite receiving new information indicating likely significant adverse impacts to a variety of environmental elements following their issuance.
- 10. Fourth, DNR violated SEPA by failing to complete an EIS for either site despite evidence that both the Sure Wood and Plumb Bob projects are likely to result in significant adverse impacts on the environment, and by failing to withdraw the DNS in the face of new information about these likely impacts.
- 11. Fifth, DNR violated SEPA because it failed to interpret the laws and regulations governing timber leases on state trust lands consistent with the goals and policies of SEPA when it developed, analyzed, reviewed, and approved these sales. These goals and policies include the right of the people to a healthy environment and the responsibility of the people to contribute to the preservation

approved forest practices application authorizing that activity. DNR Regulatory administers the Forest Practices Act.

The State Environmental Policy Act

- 35. SEPA is Washington State's fundamental environmental charter. Through SEPA the legislature declared that Washington State's continuing policy is "to use all practicable means and measures . . . to: (a) Foster and promote the general welfare; (b) create and maintain conditions under which human beings and nature can exist in productive harmony; and (c) fulfill the social, economic, and other requirements of present and future generations of Washington citizens." RCW 43.21C.020.
- 36. SEPA authorizes and directs Washington State agencies, including DNR, to interpret and administer the state's policies, regulations, and laws in accordance with the policies set forth in SEPA, to the fullest extent possible. RCW 43.21C.030. SEPA's policies, therefore, overlay all governmental decision-making across Washington State. *City of Bellevue v. King Cnty. Boundary Rev. Bd.*, 90 Wn. 2d 856, 865, 586 P.2d 470 (1978) (citing to *Sisley v. San Juan County*, 89 Wn.2d 78, 569 P.2d 712 (1977). Consistent with this, under SEPA, agencies must consider climate change when making decisions. *Washington State Dairy Fed'n v. State*, 18 Wn. App. 2d 250, 490 P.3d 290 (2021).
- 37. SEPA also directs agencies to "[s]tudy, develop, and describe appropriate alternatives to recommended courses of action" for any proposal involving "unresolved conflicts concerning alternative uses of available resources." RCW 43.21C.030(2)(e). This analysis of alternatives is independent of the identification and analysis of alternatives mandated as part of the environmental impact survey ("EIS") requirement. Wild Fish Conservancy v. Washington Dep't of Fish & Wildlife, 198 Wn. 2d 846, 862, 502 P.3d 359 (2022).
- 38. Finally, SEPA directs any agency proposing a major action "significantly affecting the quality of the environment" to complete an EIS. RCW 43.21C.030(2)(c), (d). Under SEPA, "significant" means "a reasonable likelihood of more than a moderate adverse impact on

direct, indirect, and/or cumulative and may involve short-term and/or long-term effects. WAC 197-39. The first step of the SEPA process is the "threshold determination" undertaken by the lead agency. WAC 197-11-050. Only if the lead agency tasked with conducting the threshold determination concludes that there "will be no probable significant adverse environmental impacts from a proposal" may it issue a DNS and end the requirement for a full environmental study and an EIS. WAC 197-11-340(1). Because SEPA's policy "is thwarted whenever an incorrect 'threshold determination' is made" this threshold step is "very important." Norway Hill Pres. & Prot. Ass'n v. King Cnty. Council, 87 Wn. 2d 267, 273, 552 P.2d 674 (1976). SEPA, therefore, requires the threshold determination based upon "information reasonably sufficient to evaluate the environmental impact of a proposal." WAC 197-11-335. The threshold determination "must indicate that the agency has taken a searching, realistic look at the potential hazards and with reasoned thought and analysis, candidly and methodically addressed these concerns. Conservation Nw. v. Okanogan Cnty., No. 33194-6-III, 2016 WL 3453666 at * 31 (unpublished decision incorporating language from Found. on Econ. Trends v. Weinberger, 610 F. Supp. 829, 841 (D.D.C. 1985)). The list of elements of the environment that a proposed project might impact is extensive and includes, but is not limited to, the earth, air, water, plants and animals, natural and scenic resources; environmental health, land and shoreline use, aesthetics, recreation, historic and cultural resources, agricultural crops, public services, and utilities. WAC 197-11-330(3)(e)(i), -444, -960. An action may also significantly impact the environment by conflicting with local, state, or federal laws or requirements for the protection of the environment, or it may "establish a precedent for future

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1	However, if these materials do not provide the lead agency with reasonably sufficient information to
2	support a threshold determination, the agency "shall obtain and include the information" in the
3	environmental documents, provided it knows how to obtain this information and the cost to secure it
4	is not exorbitant. WAC 197-11-080(1). Alternatively, if the costs of obtaining this information is
5	exorbitant, or the means of obtaining it are not known, then the agency should prepare a worst-case
6	analysis. WAC 197-11-080(3).
7	42. The threshold review may not balance the "benefits" of the permit against the potential
8	impacts to support its determination. See WAC 197-11-330(5). If the lead agency receives new
9	information subsequent to issuing a DNS indicating that the proposed project is likely to adversely
10	impact the environment, the agency must withdraw the DNS for reconsideration. WAC 197-11-
11	340(3)(a)(ii).
12	43. A court may grant review of an agency's compliance with SEPA that request for review is
13	paired with an appeal of the underlying action. RCW 43.21C.075(1).
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15	VI. STATEMENT OF THE CASE
16	Background
17	Sure Wood Project
18	44. On February 17, 2023, DNR filed the Sure Wood proposal and initial DNS in DNR's
19	SEPA Center along with the associated approved Forest Practices Application ("FPA") #2423299.
20	The Sure Wood project is in Allyn, Mason County in DNR's South Puget Sound HCP Planning
21	Unit. The Sure Wood project is managed by DNR's South Puget Sound Region office.
22	45. For the Sure Wood project, DNR plans to auction off approximately 5,343 million board
23	feet ("MBF") of extracted timber from approximately 154 net acres of four variable retention harvest
24	units. ² The site includes trees established after a cut in the 1890s. Trees not marked as leave trees
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include pre-1920s Douglas fir, and western redcedar as well as Douglas fir, western red cedar, and western hemlock established post-harvest in the 1920s.

- 46. The proposal includes two associated right of ways, and requires approximately 778 feet of road construction, 999 feet of road reconstruction, and 34,058 feet of pre-haul road maintenance. The project proposal also includes 8,660 feet of optional road construction, and 7,755 feet of abandonment, if constructed. Finally, the project requires the installation of two temporary stream culverts and one permanent stream culvert replacement.
- 47. DNR accepted comments on the DNS until March 3, 2023. Appellant organizations, members of Appellant organizations, and other members of the local community submitted comments on the DNS.
- 48. DNR's SEPA checklist indicates that the Sure Wood proposal may impact multiple environmental elements, including but not limited to water, earth, and air. Submitted comments also identified multiple potential impacts of the project on the elements of the environment including but not limited to animal and plant species, the health and welfare of members of the community, and the climate. Commenters also raised concerns about DNR's failure to consider the impact of the climate crisis on local conditions and the impacts of the harvest.
- 49. On March 17, 2023, DNR sent responses to commenters including Appellant organizations. Despite new information about the Sure Wood project's potential significant adverse impacts to the environment, DNR retained and finalized the DNS. Subsequently, on March 26, 2023, MCCJ submitted a reply to DNR restating concerns about the lack of reasonably sufficient information supporting the DNS. MCCJ again reiterated the range of possible significant impacts on the environment posed by the project and provided additional scientific documentation and evidence of this project's likely impacts.
- 50. In anticipation of the Board's April 4, 2023, meeting, members of Appellant organizations and the local community also submitted comments raising concerns with the proposed sale and DNR's SEPA analysis.

- 51. More than 30 people signed up to give oral comments at the April 4, 2023, Board meeting, including several members of Appellant organizations and community members. The Board limited the total time for the public to comment to one hour and several community members who signed up to comment were not allowed to submit their comments.
- 52. After the Board stopped accepting comments, one member made a motion to approve the sale. Rather than second this motion, the Board members started discussing options. Board members spoke to the community concern but suggested they could not weigh the importance of the forest to members of the public when it decided whether to approve an action. Subsequently, without another motion, another member of the Board seconded the initial motion.
- 53. On April 21, 2023, Joshua Wright, a member of both Appellant organizations, surveyed the Sure Wood sale site and identified a critically imperiled S1 plant community in Unit 4. On April 23, 2023, Mr. Wright provided DNR with this information and the supporting analysis and requested the agency withdraw the DNS for reconsideration in light of this new information.
- 54. At the May 2, 2023, meeting, Board member Dr. Dan Brown requested more information about DNR's approach to identifying imperiled plant communities on proposed harvest sites. The DNR recognized that S1 plant communities have "conservation value" and admitted that that it needed to do a better job of identifying these sites before the SEPA process. There was no discussion of the potential imperiled S-1 plant community on the Sure Wood site despite DNR inclusion of Sure Wood in the list of projects available to bid on at its May 23, 2023 timber auction.

Plumb Bob Project

- 55. On November 29, 2022, DNR filed the Plumb Bob proposal and initial DNS in DNR's SEPA Center along with the associated approved Forest Practices Application ("FPA") #2423202. DNR based the initial DNS on a checklist prepared on December 1, 2021. The Plumb Bob project is near Belfair, Mason County in DNR's South Puget Sound management region.
- 56. For the Plumb Bob project, DNR plans to lease approximately 140 net acres of four variable retention harvest units that it estimates will yield approximately 3,489 MBF of extracted

claimed to incorporate consideration of climate impacts. Apart from that, it relied on a checklist completed more than a year earlier.

61. On May 2, 2023, although the DNR admitted it did not have an adequate system in place to, among other things, ensure identification of potential imperiled plant communities within proposed timber sale projects before it completed the SEPA process, the Board voted to approve the Plumb Bob project.

By Approving These Timber Sales DNR Violated its Duty as Manager of State Forests to Comply with the Objectives of the HCP and Policy for Sustainable Forests

- 62. DNR has a duty to use its authority to manage state lands under the Public Lands Act consistent with the objectives of the "State Trust Lands Habitat Conservation Plan" ("HCP") and the Policy for Sustainable Forests, among other policy and guidance. *See, e.g.*, WAC 332-41-665(1)(f); HCP Implementation Agreement at A-1.
- 63. DNR agreed to the objectives identified in the HCP in exchange for the incidental take permits that the U.S. Fish and Wildlife Service ("FWS") and the National Marine Fisheries Service ("NMFS") (collectively "Services") issued to DNR under the Endangered Species Act § 10.
- 64. These incidental take permits authorize the agency to "take" a member of an endangered or threatened species incidental to logging and associated management activities. The Services' issued these permits in reliance on the HCP because the FWS' Biological Opinion ("Bi-Op") indicated that compliance with the HCP would ensure that the take permitted under the permits will not jeopardize the continued existence of species or adversely modify critical habitat.
- 65. DNR made a commitment to provide 10-15% percent older-forest by 2097. These two timber sales will remove forest that is needed for DNR to meet that target in the SPS HCP Planning Unit. DNR therefore must managed them for that purpose. In 2006, DNR and the Board adopted the Policy for Sustainable Forests which incorporates and reinforces the HCP.
- 66. DNR has an HCP plan in place for some of its forest planning units, including the South Puget Sound planning unit ("SPS"), the South Puget HCP Planning Unit Forest Land Plan, ("SPS Plan").

- 67. According to DNR planning documents, IPCC reports, Washington State governmental reports, peer reviewed publications and other sources, climate change may adversely impact species distribution, water temperature, and the resilience of seedlings, saplings, mature and older trees. The SPS Plan does not incorporate an analysis of these climate impacts when it projected it would reach HCP targets between year 40 and 50.
- 68. Further, in relying on checklists that do not provide an analysis in context, including with respect to the impacts of the climate crisis on local conditions, and of how it will meet HCP objectives, DNR violated SEPA's mandate that threshold determinations must be supported by reasonably sufficient information.

DNR Violated SEPA by Failing to Interpret and Implement Laws and Regulations Consistent with SEPA's Policy and Procedure

- 69. Through SEPA, the legislature directed agencies, including DNR, to interpret and administer Washington State's policies, regulations, and laws in accordance with the policies set forth in SEPA, to the fullest extent possible. RCW 43.21C.030. SEPA's policies, therefore, overlay all governmental decision-making across the state. *City of Bellevue v. King Cnty. Boundary Rev. Bd.*, 90 Wn. 2d 856, 865, 586 P.2d 470 (1978) (citing to *Sisley v. San Juan County*, 89 Wn.2d 78, 569 P.2d 712 (1977). SEPA's goals include promoting efforts that will prevent or eliminate damage to the environment and biosphere, as well as facilitating the responsibilities of each generation as trustee of the environment for succeeding generations. RCW 43.21C.010, .020(1). SEPA's policies include the recognition of the right to a healthy environment. *Id.*(3). Consistent with this, under SEPA, agencies must consider climate change when making decisions. *Washington State Dairy Fed'n v. State*, 18 Wn. App. 2d 250, 490 P.3d 290 (2021).
- 70. The DNR failed to interpret its own laws, regulations, and policies consistent with SEPA's broad mandates. Instead, it interpreted and implemented these laws as narrowly as possible without consideration of the right of the people to a healthy environment, the imperative to promote efforts that will prevent or eliminate damage to the environment and biosphere, and the goal of facilitating

each generation's realization of its responsibilities as trustee of the environment for succeeding generations.

- 71. This duty under SEPA does not conflict with the DNR's duty under the Washington State Constitution because the DNR is not constrained to extract timber on these lands. As the Washington Supreme Court concluded that "there is nothing in the Enabling Act that requires DNR to generate revenue specifically from timber harvests on state lands." *Conservation Nw. v. Comm'r of Pub. Lands*, 199 Wash. 2d 813, 834, 514 P.3d 174, 185 (2022).
- 72. Yet in developing, evaluating, and approving these two timber sales, DNR interpreted its own laws and regulations with a focus on revenue generation through timber extraction as opposed to undertaking a full consideration of the implication of SEPA's policies and goals on management of these forests.
- 73. This failure includes, but is not limited to, DNR's failure to undertake an analysis of these sites alone, and together, and to undertake a cumulative analysis of the impact of these sales, and the collection of timber harvests in the local watersheds and Water Resource Inventory Areas with respect, to among other things, the impact on the climate crisis. It also includes, but is not limited to, DNR's failure to consider the impacts of climate change on local conditions and the impact of removing forest cover on local community resilience.
- 74. By failing to interpret and implement its laws and regulations when it developed, evaluated, and approved these timber sales, including but not limited to considering climate change, the DNR violated SEPA. RCW 43.21C.030(1), (2).

DNR Violated SEPA by Issued Determinations without Reasonably Sufficient Information

75. A lead agency must base a DNS on "information reasonably sufficient to evaluate the environmental impact of a proposal." WAC 197-11-335. To determine whether an impact is "significant", the lead agency must consider the impact in context, and identify its intensity, severity, and likelihood. WAC 197-11-794(2). The lead agency must also consider the potential for an impact to be direct, indirect, and/or cumulative and may involve short-term and/or long-term effects.

WAC 197-11-060(4)(e). Finally, the agency may not balance a project's benefits against its impacts. WAC 197-11-330(5).

- 76. The responsible official relied on SEPA checklists for both the Sure Wood and the Plumb Bob sales that failed to provide accurate, current and reasonably sufficient site-specific information and analysis of the likely impact of the proposal on most of the enumerated elements of the environment including, but not limited to erosion, soils, odors, surface waters, floodplains, groundwater, discharged waste material, plants, threatened or endangered species, animals, plants, migration routes, environmental health, hazardous conditions, special emergency services, environmentally sensitive areas, aesthetics, and historic and cultural preservation.
- 77. DNR also failed to consider the context of potential impacts, including but not limited to the location of these projects near dwellings, other timber harvests, Puget Sound inlets and the Hood Canal, freshwater habitat, a women's prison; and the influence of climate change on local weather, hydrological cycles, wildfire risk, reforestation capacity, and precipitation patterns. Furthermore, DNR failed to consider the cumulative impact of these two projects on the elements of the environment.
- 78. DNR also failed to consider the impact of these projects outside of the relatively limited period before, during, and just after the timber harvest. Finally, DNR relied on benefits of other projects and of possible future sequestration potential in its analysis of the impacts of the project, contrary to SEPA regulations.
- 79. DNR's threshold determinations for these two sites are clearly erroneous because they are not supported by reasonably sufficient information establishing that each harvest alone and cumulatively will not have a significant adverse impact on the environment DNR violated RCW 43.21C.030(2)(c), (d), WAC 197-11-335 and WAC 197-11-330(5).

DNR Violated SEPA Because it Did Not Reconsider the DNS for Each Project Based on New Information About Likely Significant Impacts

80. If the lead agency receives new information subsequent to issuing a DNS indicating that the
proposed project is likely to adversely impact the environment, the agency must withdraw the DNS
for reconsideration WAC 197-11-340(3)(a)(ii)

- 81. DNR received new information from experts and community members regarding the potential impacts to the environment that it had not considered in issuing the Plumb Bob and Sure Wood SEPA DNS. These comments, reports and scientific papers indicated that the projects were likely to have significant adverse impacts on the environment, including, but not limited to, harm to imperiled plant communities; habitat for northern spotted owl and salmonids, among other species; mitigation of climate change; local community resilience to the impact of climate change; and important access to non-timber products, as well as safety and sources of support for local community member's mental and physical health.
- 82. DNR did not withdraw the DNS for the Sure Wood sale in response to receiving new information about potential significant impacts to elements of the environment in violation of WAC 197-11-340(3)(a)(ii).
- 83. DNR reconsidered the initial DNS for the Plumb Bob project in light of the new information about the potential existence of an imperiled plant community, but it failed to reconsider the DNS in light of numerous other likely significant impacts identified by commenters in violation of WAC 197-11-340(3)(a)(ii).
- 84. By failing to withdraw and reconsider the DNS for each project in light of the new information about potential significant impacts it received, DNR violated WAC 197-11-340(3)(a)(ii).

DNR Violated SEPA by Excusing both Plumb Bob and Sure Wood from the EIS Process

85. A lead agency may only issue a DNS excusing a project from the EIS requirement if it concludes there will be no adverse environmental impact RCW 43.21C.030(2)(c), (d); WAC 197-11-340(1).

86. In the project SEPA checklists, DNR identified possible significant direct and indirect impacts on multiple elements of the environment, including, but not limited to land stability, aesthetic and recreational resources, and water quality.

- 87. Commenters submitted additional information regarding, among other things, the potential significant direct, indirect, and cumulative impacts, including but not limited to the loss of resources important for human physical and mental health, the loss of access to recreation, cultural, and non-timber resources, greenhouse gas emissions, the loss of a buffer from climate impacts, and the loss of carbon sequestration capacity, water temperature and quality, watershed integrity, the probability and impact of floods, the habitat, numbers and diversity of plants and animals, including unique and rare communities, and aesthetic values, among other things.
- 88. Commenters also provided additional information regarding the increase in intensity and likelihood of these impacts given the climate context of the projects—including, specifically, that many impacts are likely to be exacerbated or amplified given the local climate-change-driven context of increasingly extreme weather events, increasing rates of atmospheric rivers and drought, and changes to water temperatures, among other things.
- 89. Given these likely significant adverse environmental impacts, DNR violated SEPA by excusing both projects from the requirement to complete and EIS under RCW 43.21C.030(2)(c), (d); WAC 197-11-340(1).

DNR Violated SEPA Because it Took Action on Plumb Bob that Limited Alternatives Before Completing the Final DNS

90. Under SEPA, an agency may not take action concerning a proposal that would limit the choice of reasonable alternatives before the responsible official issues a final determination of nonsignificance. WAC 197-11-070(1)(b). SEPA requires early consideration of environmental impacts because it aims to ensure that agencies make decisions based on the full disclosure of the consequences to the environment. *King Cnty. v. Washington State Boundary Rev. Bd. for King Cnty.*, 122 Wn. 2d 648, 663–64, 860 P.2d 1024 (1993).

- 91. Under WAC 197-11-786, a "reasonable alternative" "means an action that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation."
- 92. DNR issued the initial DNS for Plumb Bob in November 2022 and provided a two-week comment period. Nearly six months later, DNR added Plumb Bob to the public list of proposed auctions for the Board to decide whether to approve for auction at the May 2, 2023 meeting less than a week before the meeting.
- 93. When it added Plumb Bob to the list of proposed timber sales, DNR had still not finalized the DNS. DNR released the final DNS for Plumb Bob after 7:00 pm Pacific Time the night of May 1, 2023. On May 2, 2023, the Board considered "the entire packet" of proposed timber sales and voted to approve them.
- 94. By including Plumb Bob among a set timber harvests for which final environmental review had been completed, before it issued the final DNS for Plumb Bob, and by failing to release the DNS until after business hours the night before the May 2, 2023 Board meeting, DNR impermissibly limited the number of reasonable alternatives.
- 95. By failing to complete and issue the final DNS before it added the Plumb Bob project to the auction packet, and by issuing the final DNS too late for the Board to consider it prior to voting, DNR violated WAC 197-11-070(1)(b).

DNR Violated SEPA by Failing to Study, Develop, and Describe Appropriate Alternatives

- 96. SEPA requires agencies to "[s]tudy, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." RCW 43.21C.030(2)(e). This "alternatives analysis is independent of the alternatives requirement under an EIS." *Wild Fish Conservancy v. Washington Dep't of Fish & Wildlife*, 198 Wan. 2d 846, 862, 502 P.3d 359 (2022).
- 97. DNR's approach to managing state forests is controversial, as indicated by the large number of comments DNR and the Board received regarding the impacts of these sales, because

1	SECOND CLAIM FOR RELIEF						
2	Violation of the State Environmental Policy Act— Failure to Interpret and Implement Laws Consistent with SEPA						
3	104. Appellants incorporate by reference all preceding paragraphs.						
4	105. A court may grant review of an agency's compliance with SEPA, provided that request for						
5	review is paired with an appeal of the underlying action. RCW 43.21C.075(1).						
6	106. SEPA directs agencies to implement regulations and laws in accordance with the policies						
7	set forth in SEPA, to the fullest extent possible. RCW 43.21C.030.						
8	107. DNR, the Board, and the Commissioner violated SEPA in developing, proposing and						
9	approving the auction of the Sure Wood and Plumb Bob projects because they failed to interpret and						
10	implement the laws governing forest management, leasing and sales on public lands, and other laws						
11	consistent with the policies and goals of SEPA to the fullest extent possible.						
12	THIRD CLAIM FOR RELIEF						
13	Violation of the State Environmental Policy Act – Violation of Requirements for Issuing a Determination of Nonsignificance						
14	108. Appellants incorporate by reference all preceding paragraphs.						
15	109. SEPA directs any agency proposing a major action "significantly affecting the quality of						
16	the environment" to complete an EIS. RCW 43.21C.030(2)(c), (d). Under SEPA, "significant"						
17	means "a reasonable likelihood of more than a moderate adverse impact on environmental quality."						
18	WAC 197-11-794(1). Discerning whether an impact will be "significant" requires consideration of						
19	its context, intensity, severity, and likelihood. <i>Id</i> .(2). Impacts may be direct, indirect, and/or						
20	cumulative and may involve short-term and/or long-term effects. WAC 197-11-060(4).						
21	110. Only if the lead agency tasked with conducting the SEPA threshold determination						
22	concludes that there "will be no probable significant adverse environmental impacts from a						
23	proposal" may it issue a DNS and end the requirement for a full environmental study and an EIS.						
24	WAC 197-11-340(1). This threshold review may not balance the "benefits" of the permit against the						
25	potential impacts to support its determination. See WAC 197-11-330(5). If the lead agency receives						
26	new information subsequent to issuing a DNS indicating that the proposed project is likely to						

1	adversely impact the environment, the agency must withdraw the DNS for reconsideration. WAC
2	197-11-340(3)(a)(ii).
3	111. SEPA, therefore, requires the threshold determination based upon "information reasonably
4	sufficient to evaluate the environmental impact of a proposal." WAC 197-11-335.
5	112. DNR's threshold determinations of nonsignificance for the Plumb Bob and Sure Wood
6	sales are clearly erroneous and violated SEPA because they are not supported by reasonably
7	sufficient information, impermissibly balanced benefits of offsite activities against the
8	environmental impacts of projects, are not based upon analysis of the significance of the impacts
9	and because DNR failed to withdraw the threshold determinations despite new information
10	indicating likely significant environmental impacts.
11	FOURTH CLAIM FOR RELIEF
12	Violation of SEPA— Failure to Undertake EIS Despite Likely Significant Impacts
13	113. Appellants incorporate by reference all preceding paragraphs.
14	114. DNR acted clearly erroneously and violated SEPA by failing to undertake EISs for both
15	the Plumb Bob and Sure Wood projects despite evidence of significant adverse impacts.
16	FIFTH CLAIM FOR RELIEF
17	Violation of SEPA— Failure to Consider Alternatives
18	115. Appellants incorporate by reference all preceding paragraphs.
19	116. SEPA directs agencies to "[s]tudy, develop, and describe appropriate alternatives to
20	recommended courses of action" for any proposal involving "unresolved conflicts concerning
21	alternative uses of available resources". RCW 43.21C.030(e).
22	117. DNR acted clearly erroneously and violated SEPA by failing consider alternatives to
23	timber harvests on these sites despite clear unresolved conflicts concerning alternative uses of
24	available resources.
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1	VIII. RELIEF REQUESTED				
2	Appellants respectfully request the following relief:				
3	1. An order invalidating the decisions to approve the Sure Wood and Plumb Bob timber				
4	sales for auction.				
5	2. An order invalidating the Sure Wood "determination of nonsignificance" and the Plumb				
6	Bob "determination of nonsignificance."				
7	3. A declaration that the Sure Wood and Plumb Bob projects have probable, significant,				
8	adverse impacts on the environment requiring the preparation of environmental impact				
9	statements.				
10	4. A declaration that the development, planning and approval of the Sure Wood and Plumb				
11	Bob actions were not developed consistent with SEPA's direction to interpret and implement				
12	laws and regulations consistent with SEPA goals and policies.				
13	5. A declaration that the approval of the Sure Wood and Plumb Bob projects for auction				
14	without consideration of alternatives violated SEPA.				
15	6. An order awarding Appellants their reasonable costs and attorney's fees under the				
16	Washington Equal Access to Justice Act, RCW 4.84, or other applicable law.				
17	Any other relief that this Court deems to be just and proper.				
18	DATED this 4th day of May 2023.				
19	Respectfully submitted,				
20	Life Gilli WGDAN 54400				
21	Jenifer Calkins, WSBA No. 54498 J.D. Calkins Law and Consulting PLLC				
22	1037 NE 65th St., No. 109 Seattle, WA, 98115				
23	E-mail: jen@jdcalkinslaw.com				
24	Attorney for Appellants				
25					
26					

EXHIBIT A



TIMBER NOTICE OF SALE

SALE NAME: SURE WOOD AGREEMENT NO: 30-102110

AUCTION: May 23, 2023 starting at 10:00 a.m., COUNTY: Mason

South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 10 miles southwest of Allyn.

PRODUCTS SOLD

AND SALE AREA: All timber, except trees marked with blue paint, orange and blue paint, or bounded out by

yellow leave tree area tags, and down timber existing more than 5 years from the day of sale, bounded by the following: white timber sale boundary tags, property boundary marked with white Carsonite posts, and the Powerline 2 Road in Unit #1; white timber sale boundary tags, property boundary marked with white Carsonite posts, and the Powerline Road in Units #2; white timber sale boundary tags, and property line marked

with white Carsonite posts in Units #3, and #4;

All timber, except as described in Road Plan clause 3-6, bounded by orange right of way tags, except that title to timber within the right of way tags is not conveyed to the

Purchaser unless the road segment is actually constructed in Unit #5;

All timber bounded with orange right of way tags in Unit #6;

All forest products above located on part(s) of Sections 25 and 36 all in Township 22 North, Range 2 West, Sections 19 and 30 all in Township 22 North, Range 1 West,

W.M., containing 154 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert

no: PwC-SFIFM-513)

ESTIMATED SALE VOLUMES AND QUALITY:

	Avg I	Ring	Total	MBF by Grade										
Species	DBH C	ount	MBF	1 F	•	2P	3P	SM	1S	2S	3S	4S	UT	
Douglas fir	17.6	9	4,857					28		2,692	1,728	381	28	
Redcedar	19.9		262								231	31		
Hemlock	18.6		176							104	52	19	1	
Red alder	13.1		34								16	18		
White pine	16		14								11	3		
Sale Total			5,343											

MINIMUM BID: \$2,182,000.00 BID METHOD: Sealed Bids

PERFORMANCE

SECURITY: \$150,000.00 SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2025 **ALLOCATION:** Export Restricted

BID DEPOSIT: \$218,200.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised

price.

HARVEST METHOD: Harvest activities are estimated to be 100 percent ground based harvest. Yarding may be

restricted during wet weather if rutting becomes excessive, per clause H-017.

Page 1 of 3 3/30/2023



TIMBER NOTICE OF SALE

Falling, yarding, and timber haul will not be permitted on weekends or State recognized holidays, unless approved in writing by the Contract Administrator.

ROADS:

7.78 stations of required construction. 9.99 stations of required reconstruction. 86.60 stations of optional construction. 340.58 stations of required prehaul maintenance. 77.55 stations of abandonment, if constructed. Purchaser maintenance on Spurs 1-7, the Sherwood Mainline, Powerline, Powerline 2, and Archer roads. Designated maintenance on all other roads used.

Rock for this proposal may be obtained from the State owned Sherwood Pit at no cost to the Purchaser or any commercial rock source at the Purchaser's expense. Rock source development is to be completed per Section 6 and as specified in the Rock Source Development Plan in the Road Plan.

Operation of road construction equipment and rock haul will not be permitted on weekends or State recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator.

This sale includes three stream crossings, two of which are Type 3 fish culvert replacement/installations with one 96"x40' AS12. These are located on the Archer Road, Powerline Road, and Sherwood Mainline. See section 7 and culvert list in the Road Plan for more information. Stream culvert work on the Sherwood Mainline and Archer Road are not permitted between October 1 to July 15 per Road Plan 1-25. Timber haul may be allowed prior to stream culvert installations with approval by the Contract Administrator per Road Plan 1-21.

ACREAGE DETERMINATION

CRUISE METHOD:

Acreage was determined by traversing boundaries by GPS and by multiplying length times width. GPS data files are available at DNR's website for timber sale packets. See cruise narrative for cruise method.

FEES:

\$90,831.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: This sale contains Douglas-fir poles and high quality saw logs.

Purchaser is responsible to acquire and install a steel gate with a 4-lever lock box on the Archer Road at station 2+92. See Road Plan for additional details.

Extreme hazard abatement is required a minimum of 100 feet from the gravel edge of the railroad in Units #2, #3 and #4 and a minimum of 200-250 feet from structures valued over \$1,000.00. Purchaser shall provide a slash disposal plan for hazard abatement, per contract clause S-020.

The haul route for this sale includes crossing an active railroad.

Units #1, and #2 are adjacent to overhead BPA powerlines. A safety plan is required as part of the harvest plan for operations under and adjacent to these lines.

Note to cruisers and appraisers: Please refrain from leaving pink, orange or blue flagging from your cruises in or around the sale area to avoid confusion with DNR's marking. Additionally, for the safety of the public, please remove from roads and trails all string from string boxes used during appraising or cruising this sale.

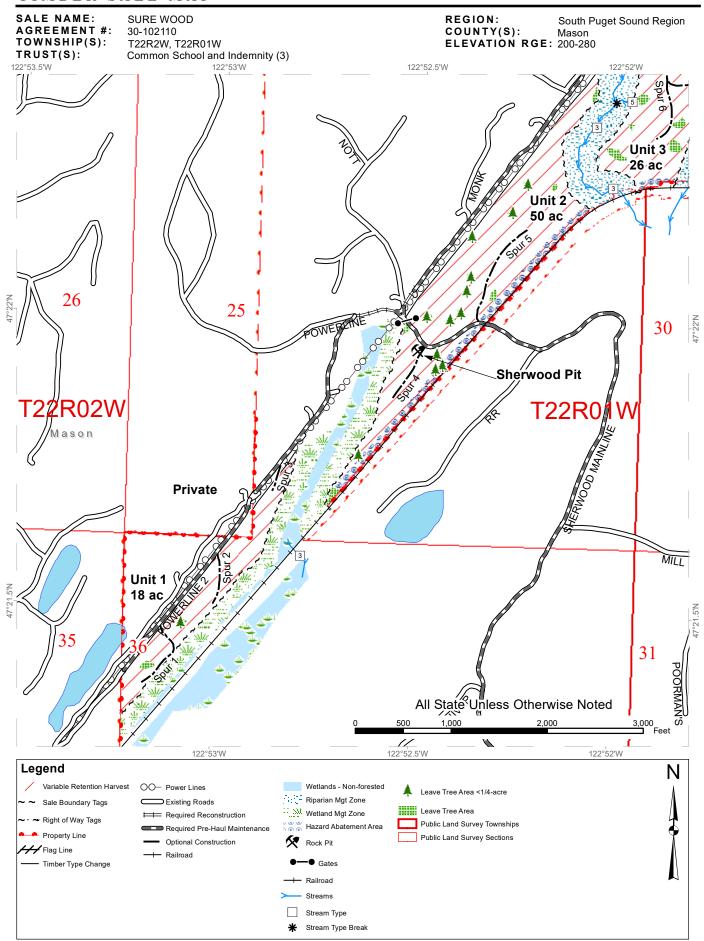
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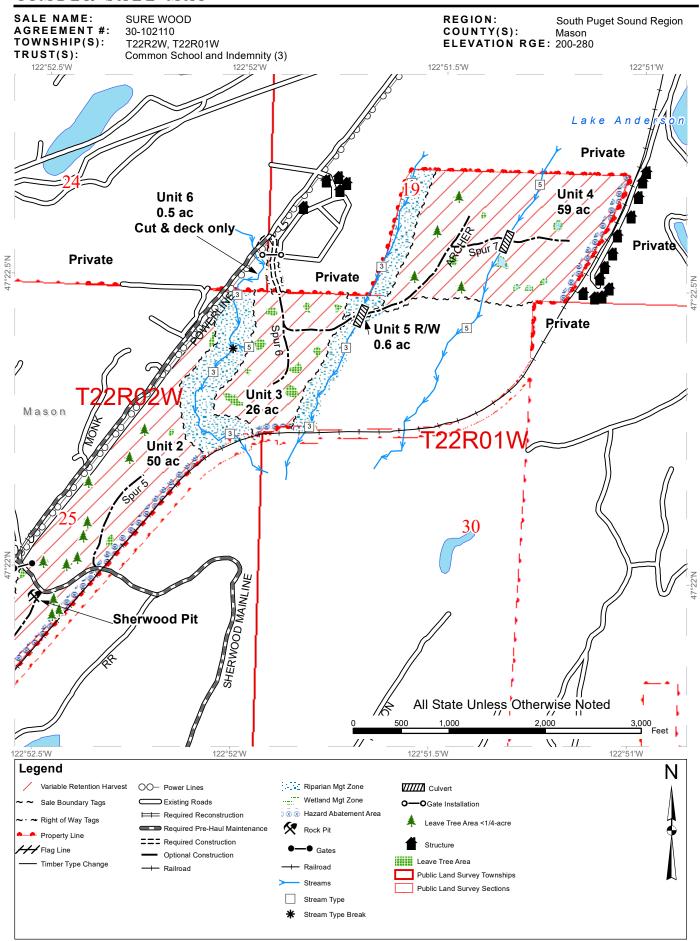


TIMBER NOTICE OF SALE

See map for gate locations. Gate keys may be obtained by contacting the South Puget Sound Region Office at 360-825-1631 or by contacting John Coble at 360-801-6915.

Page 3 of 3 3/30/2023





SURE WOOD SALE NAME: South Puget Sound Region **REGION: AGREEMENT#:** 30-102110 COUNTY(S): Mason TOWNSHIP(S): T22R1W, T22R2W ELEVATION RGE: 200-280 TRUST(S): Common School and Indemnity (3) 22 Unit 6 R/W 23 Unit4 Unit 3 0.8 Miles Unit 5 R/W **Únit 2** 27 0.2 miles 30 T22R0 T22R02W 3.0 miles 1.0 Miles Unit 1 Sherwood Pit 19 34 35 31 3 0.7 miles T21R01W 0.8 miles 1 12.3 Miles to Shelton 10 12 5.8 Miles to Allyn Map may not be to scale **DRIVING DIRECTIONS:** Timber Sale Unit Ø Rock Pit ○○─○ Power Lines Haul Route Form Allyn, drive approximately 5.75 miles south on Hwy 3. Other Road Public Land Survey Townships At orange gate (#301) go 0.8 miles to blue gate (#302) on the Sherwood mainline. Continue on the mainline for 0.7 miles to a Bridge **Public Land Survey Sections** 4 way intersection. Head northwest on the mainline for 3.0 Distance Indicator miles to the RR tacks (Unit 2). Continue 0.2 miles to Gate #305 -● Gate (A383) at powerlines. At powerlines head southwest to unit 1, head northeast to unit 3 and 4 for 0.8 Miles. Gate Installation Milepost Markers

Ν

EXHIBIT B



DEPARTMENT OF NATURAL RESOURCES

SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

360-825-1631

SOUTHPUGET.REGION@DNR.WA.GOV WWW.DNR.WA.GOV

DETERMINATION OF NONSIGNIFICANCE

Description of proposal: Sure Wood Timber Sale #30-102110 and associated Forest Practice Application No. 2423299; more than 221 acres considered for harvest was reduced to 157 net acres consisting of four variable retention harvest units, and two associate right of way as applicable), removing approximately 5,343 MBF of merchantable timber. Road work associated with this proposal consists of 778 feet of required road construction, 8,660 feet of optional road construction, 999 feet of required road reconstruction, 34,058 feet of required pre-haul maintenance, and 7,755 feet of abandonment (if constructed).

Proponent: Department of Natural Resources, State Lands

Location of proposal, including street address, if any:

This proposal is located in Sections 1 and 2 in Township 21 North, Range 02 West, W.M., Sections 19 and 30 in Township 22 North, Range 01 West, W.M., and Sections 25 and 36 in Township 22 North, Range 02 West, W.M. This proposal is located approximately 10 miles by road northwest of Allyn off Highway 3, within Mason County. See the associated Forest Practices Application and driving map.

Lead agency: Department of Natural Resources, State Lands

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21c.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

- [] There is no comment period for this DNS
- [x] This DNS is issued under 197-11-340(2); the lead agency will not act on this proposal for 14 days from February 17, 2023. Comments must be submitted by March 3, 2023.

Responsible official: Scott Sargent

Position/title: South Puget Sound Region Manager Phone: (360) 825-1631

Address: 950 Farman Avenue North, Enumclaw, WA 98022

Date: 2/17/2023 Signature: Scott Sargent

AEM 2/6/23

BM 2/9/2023



DEPARTMENT OF NATURAL RESOURCES

SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

360-825-1631SOUTHPUGET.REGION@DNR.WA.GOV
WWW.DNR.WA.GOV

March 17, 2023

Notice of Final Determination Sure Wood Timber Sale #30-102110 SEPA File No. 23-021701

The Department of Natural Resources issued a [x] Determination of Non-significance (DNS), [] Mitigated
Determination of Non-significance (MDNS), [] Modified DNS/MDNS on February 17, 2023 for this proposa
under the State Environmental Policy Act (SEPA) and WAC 197-11-340(2).

[x] Retained.
[] Modified. Modifications to this threshold determination include the following:
[] Withdrawn. This threshold determination has been withdrawn due to the following:
[] Delayed. A final threshold determination has been delayed due to the following:

Summary of Comments and Responses (if applicable):

This threshold determination is hereby:

Comment: Received March 1, 2023 from Squaxin Island Tribe. No specific cultural resource concerns, defers to DAHP's recommendations, if applicable.

Response: No additional recommendations from DAHP on this proposal.

Comment: Received March 1, 2023 from Joshua Wright regarding the impact on older forest, requesting Sherwood State Forest to be considered for a Natural Area Preserve, and contending that proper notification of proposed activity by DNR was not conducted.

Response: DNR sent a response to Mr. Wright on March 17, 2023.

Comment: Received March 3, 2023 from Department of Ecology. Notification of standard requirements regarding solid waste management, toxic cleanup, and water quality/watershed resources unit.

Response: Standard Forest Practices Rules apply.

Comment: Received March 3, 2023 from Legacy Forest Defense Coalition regarding older forests. **Response**: DNR sent a response to Mr. Kropp with Legacy Forest Defense Coalition on March 17, 2023.



DEPARTMENT OF NATURAL RESOURCES

SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

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Comment: Received March 3, 2023 from J.D. Calkins Law and Consulting PLLC for Mason County Climate Justice regarding SEPA process, impact of proposed activity on environmental health, climate change and nonhuman species.

Response: DNR sent a response to Jen Calkins representing Mason County Climate Justice on March 17, 2023.

Responsible Official: Scott Sargent

Position/title: South Puget Sound Region Manager Phone: (360) 825-1631

Address: 950 Farman Avenue North, Enumclaw, WA 98022

Date: 3/17/2023 Signature: Scott Largent

There is no DNR administrative SEPA appeal.

EXHIBIT C



TIMBER NOTICE OF SALE

SALE NAME: PLUMB BOB AGREEMENT NO: 30-102108

AUCTION: June 13, 2023 starting at 10:00 a.m., COUNTY: Mason

South Puget Sound Region Office, Enumclaw, WA

SALE LOCATION: Sale located approximately 4 miles northwest of Belfair.

PRODUCTS SOLD

AND SALE AREA: All timber, except trees marked with blue paint or bounded out by yellow leave tree area

tags, snags, and down timber existing more than 5 years from the day of sale, bounded by the following: white timber sale boundary tags, the A-1000 Road, and property boundary marked with white Carsonite posts in Units #1, and #2; white timber sale boundary tags, timber type change marked with pink flagging, Management Boundary marked with pink flagging, and the B-4000, and NE Sand Hill roads in Unit #3; white timber sale boundary tags, timber type change marked with pink flagging, Management Boundary marked with

pink flagging, and NE Sand Hill Road in Unit #4;

All forest products above located on part(s) of Sections 13 all in Township 23 North, Range 2 West, Sections 6, 7 and 18 all in Township 23 North, Range 1 West, W.M.,

containing 141 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert

no: PwC-SFIFM-513) and FSC 100% raw materials under the Forest Stewardship

Council® Standard (cert no: BV-FM/COC-080501).

ESTIMATED SALE VOLUMES AND QUALITY:

	Avg 1	Ring	Total			N	IBF by	Grade	,			
Species	DBH C	ount	MBF	1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	14.5	9	3,106						945	1,608	530	23
Hemlock	15.4		174						31	114	23	6
Lodgepole	12		41							31	10	
White pine	10.2		29							12	17	
Redcedar	23.9		25							25		
Red alder	13		3								3	
Sale Total			3.378									

MINIMUM BID: \$1,264,000.00 BID METHOD: Sealed Bids

PERFORMANCE

SECURITY: \$100,000.00 SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2024 **ALLOCATION:** Export Restricted

BID DEPOSIT: \$126,400.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised

price.

HARVEST METHOD: Harvest activities are estimated to be 100 percent ground based harvest. Ground based

equipment, with self-leveling equipment limited to sustained slopes 65 percent or less and all other ground based equipment limited to sustained slopes 45 percent or less. Yarding may be restricted during wet weather if rutting becomes excessive, per clause H-

017.

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TIMBER NOTICE OF SALE

Falling, yarding, and timber haul will not be permitted on weekends, State recognized holiday, or weekdays from 7:00 p.m. - 7:00 a.m., in all units, unless authorized in writing by the Contract Administrator.

ROADS:

24.24 stations of optional construction. 34.89 stations of optional reconstruction. 125.85 stations of required prehaul maintenance. 19.54 stations of required abandonment, if reconstructed. 24.24 stations of required abandonment, if constructed. Purchaser maintenance on Spur 1, Delmore, A-1000, A-1010, A-1200, B-4000, B-4040, B-5000, and B-5010 roads. Designated maintenance on all other roads used.

Rock for this proposal may be obtained from the State owned Sandhill Pit at no cost to the Purchaser or any commercial rock source at the Purchaser's expense. If Purchaser elects to use the Sandhill Rock Pit, rock source development is required per Section 6 in the Road Plan and according to the Rock Source Development Plan.

The operation of road construction equipment, and rock haul will not be permitted on weekends, State recognized holiday, or weekdays from 7:00 p.m. - 7:00 a.m., in all units, unless authorized in writing by the Contract Administrator.

ACREAGE DETERMINATION

CRUISE METHOD:

Acreage was determined by traversing boundaries by GPS and by multiplying length times width. GPS data files are available at DNR's website for timber sale packets. See cruise narrative for cruise method.

FEES:

\$57,426.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: There are high quality Douglas-fir logs present in all units.

Units #3 and #4 are adjacent to Mission Creek Correctional Center. Refer to Schedule B, which is part of the contract, for requirements associated with those units.

Within the timber sale, all trees double banded with orange paint shall be high stumped to identify monumented corner locations. Trees are to be felled away from this area. Location of the monumented corners are shown on the Logging Plan Map. Purchaser will be responsible for repairing or replacing monumented corners that are damaged during any logging activities.

The gate on the B-5000 Road is to remain locked during advertisement but may be opened during active operations.

Purchaser will be required to conduct an onsite review of all infrastructure within one and half tree lengths of the operation with the Contract Administrator. Purchaser will complete the on-site review in conjunction with the Harvest Plan, per contract clause H-040.

The fence adjacent to Units #3 and #4 shall be protected per clause S-140.

This sale includes extreme hazard abatement. Purchaser shall provide a slash disposal plan for hazard abatement within Units #1 - #4, per contract clauses S-020 and H-140. No piling is permitted in Units #3 and #4. Slash for some areas may need to be end hauled to NE Sand Hill Road Rock Pit due to space limitations near NE Sand Hill and Delmore Road in Unit #3.

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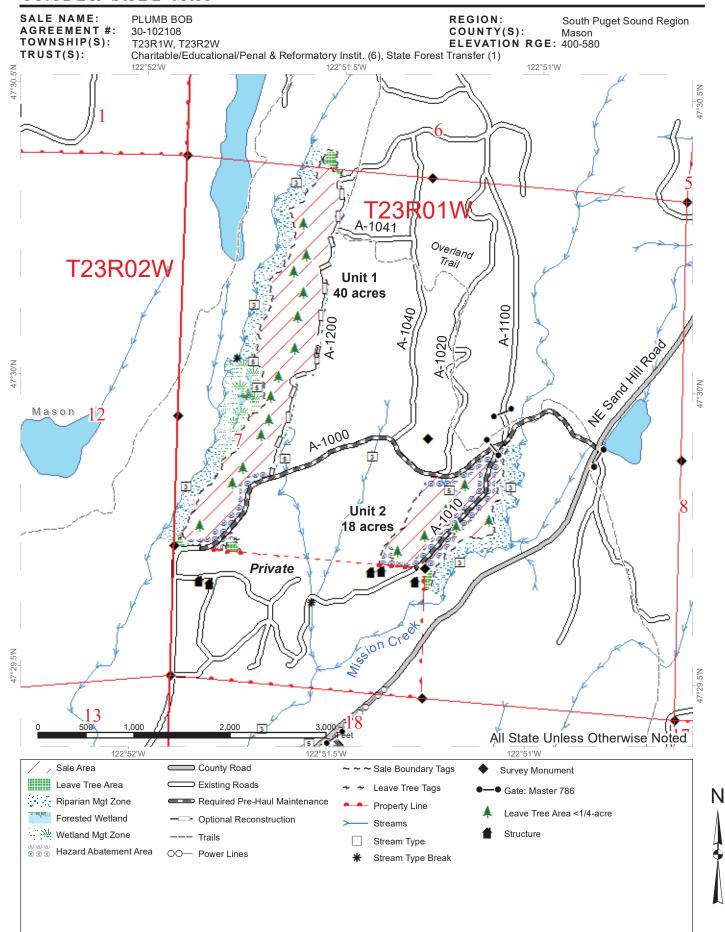
TIMBER NOTICE OF SALE

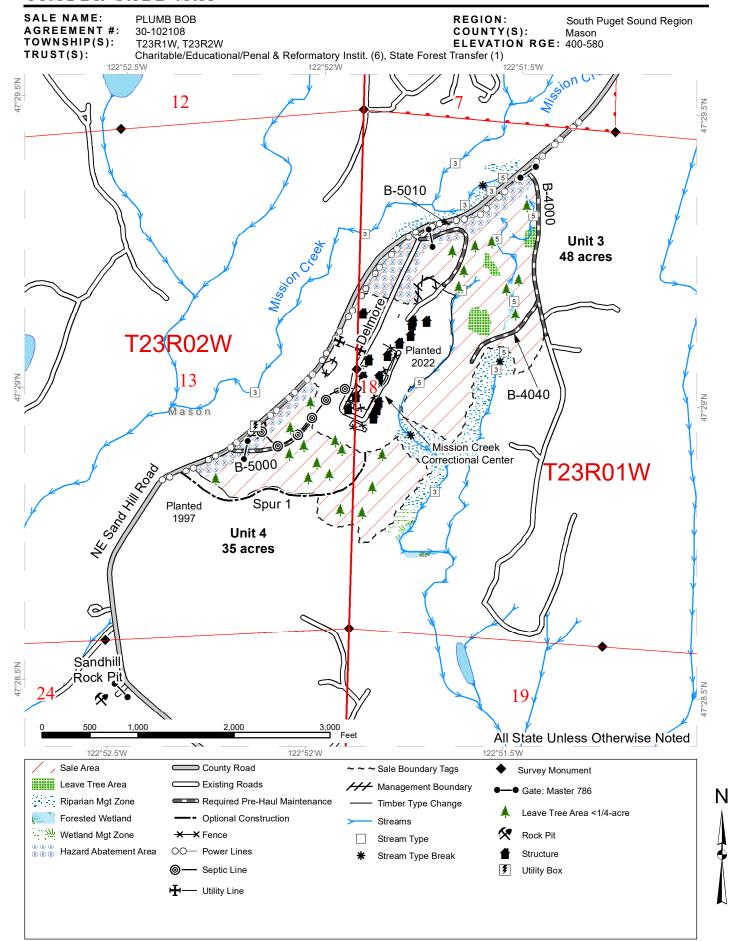
No equipment shall operate on the paved Delmore Road within Unit #3. If damages occur associated with operations, all repairs will be at the Purchaser's expense.

Note to cruisers and appraisers: Please refrain from leaving pink, orange or blue flagging from your cruises in or around the sale area to avoid confusion with DNR's marking. Additionally, for the safety of the public, please remove from roads and trails all string from string boxes used during appraising or cruising this sale.

See map for gate locations. Gate keys may be obtained by contacting the South Puget Sound Region Office at 360-825-1631 or by contacting Nathan McReynolds at 253-381-2015.

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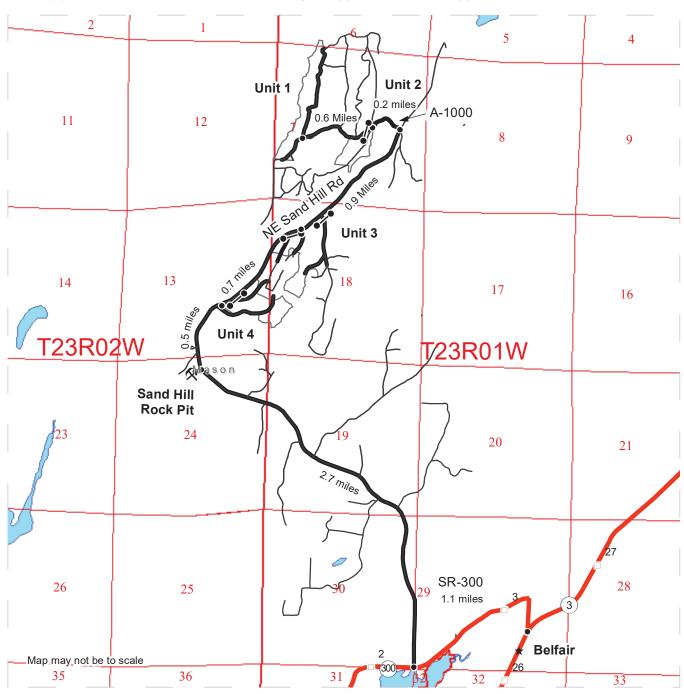


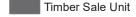


SALE NAME: PLUMB BOB REGION: South Puget Sound Region

AGREEMENT#: 30-102108 COUNTY(S): Mason TOWNSHIP(S): T23R1W, T23R2W ELEVATION RGE: 400-580

TRUST(S): Charitable/Educational/Penal & Reformatory Instit. (6), State Forest Transfer (1)





Distance Indicator

●—● Gate (786)

Rock Pit

★ Town

× IOWII

Haul Route

Other Road

Highway

Milepost Markers

DRIVING DIRECTIONS:

To Sand Hill Rock Pit:

From Belfair, travel west on SR-300 for 1.1 miles. Turn right onto NE Sandhill Road and follow for 2.7 miles to Sandhill Rock Pit on left.

To Unit 4:

From Sand Hill Rock Pit, travel for 0.5 mile, Unit 4 will be on right.

To Unit 3:

From Sand Hill Rock Pit travel for 0.7 mile, Unit 3 will be on right.

To Unit 2:

From Sand Hill Rock Pit, travel for 2.1 miles to the A-1000, turn left and travel for 0.2 mile to Unit 2 To Unit 4:

From Sand Hill Rock Pit, travel for 2.1 miles to the A-1000, turn left and travel for 0.7 mile to Unit 1.

EXHIBIT D



SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

360-825-1631

SOUTHPUGET.REGION@DNR.WA.GOV WWW.DNR.WA.GOV

DETERMINATION OF NONSIGNIFICANCE

Description of proposal: Plumb Bob Timber Sale #30-102108 and associated Forest Practice Application No. 2423202; more than 246 acres considered for harvest was reduced to 140 net acres consisting of four variable retention harvest units, removing approximately 3,825 MBF of merchantable timber. Road work associated with this proposal consists of 3,489 feet of optional reconstruction, 2,424 feet of optional construction, 12,585 feet of required pre-haul maintenance, and 4,378 feet of required abandonment (if built).

Proponent: Department of Natural Resources, State Lands

Location of proposal, including street address, if any:

This proposal is located in Sections 6, 7, and 18 of Township 23 North, Range 01 West, and Sections 13 and 24 of Township 23 North, Range 02 West, W.M. This proposal is located approximately four miles by road northwest of Belfair off NE Sand Hill Road, within Mason County. See the associated Forest Practices Application and driving map.

Lead agency: Department of Natural Resources, State Lands

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21c.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

- [] There is no comment period for this DNS
- [x] This DNS is issued under 197-11-340(2); the lead agency will not act on this proposal for 14 days from November 29, 2022. Comments must be submitted by December 13, 2022.

Responsible official: Scott Sargent

Position/title: South Puget Sound Region Manager Phone: (360) 825-1631

Address: 950 Farman Avenue North, Enumclaw, WA 98022

Date: 11/29/2022 Signature: Signature:



SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

360-825-1631SOUTHPUGET.REGION@DNR.WA.GOV
WWW.DNR.WA.GOV

May 1, 2023

Notice of Final Determination Plumb Bob Timber Sale #30-102108 SEPA File No. 22-112905

The Department of Natural Resources issued a [x] Determination of Non-significance (DNS), [] Mitigated Determination of Non-significance (MDNS), [] Modified DNS/MDNS on November 29, 2022 for this proposal under the State Environmental Policy Act (SEPA) and WAC 197-11-340(2).
This threshold determination is hereby:
[] Retained.
[x] Modified. Modifications to this threshold determination include the following: Discussions between Department of Natural Resources (DNR) and Department of Corrections (DOC) determined in December 2022 to expand DOC's lease with DNR of the Mission Creek Correctional facility area and revise Units 3 and Units 4 of the Plumb Bob timber sale. The revisions to the Plumb Bob timber sale include providing an area of 200 feet between the developed Mission Creek Correctional facility area and the harvest unit boundaries. This resulted in removing 3.2 net acres from Unit 3 and 10.4 net acres from Unit 4. Additionally, Unit 3 was expanded by 13.5 net acres to the southeast of the original proposed unit. This added area excludes a Type 5 stream headwall area and protects the downstream Type 3 stream with an average 152 foot no cut Riparian Management Zone (RMZ) as well as buffers the Type 3 streams between Unit 3 and Unit 4 with a 152 foot no cut RMZ on both sides of the stream. The no cut RMZ buffering Mission Creek was also adjusted to eliminate a narrow strip of the RMZ originally isolated between the originally planned Unit 3 and the NE Sand Hill Road. Additional RMZ area was included on the stream-side of NE Sand Hill Road to create the averaged 167 foot no-cut buffer. This adjustment reduces windthrow potential of the previously isolated, narrow strip of trees, resulting in increased safety for traffic on NE Sandhill Road and increased ecological benefit to the Mission Creek RMZ. These cumulative revisions changed the total proposal net acres from 140 acres to 141 acres and a revised estimated volume of 3,378 mbf. Enclosed is the revised Timber Sale map for Units 3 and 4.
[] Withdrawn. This threshold determination has been withdrawn due to the following:
[] Delayed. A final threshold determination has been delayed due to the following:
Summary of Comments and Responses (if applicable):

Comment: Received December 12, 2022 from Center for Sustainable Economy concerning the impact of timber harvests on climate.

Response: Specific concerns related to climate impact analyses at a regional scale, the sequestration capacity and climate resiliency on DNR's western Washington lands, and data used for previous



SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

360-825-1631SOUTHPUGET.REGION@DNR.WA.GOV
WWW.DNR.WA.GOV

environmental analysis have been addressed in the attached response letter which has also been sent to the commenter.

Comment: Received December 13, 2022 from Washington Department of Ecology. Notification of standard requirements regarding solid waste, toxic clean-up and water quality management.

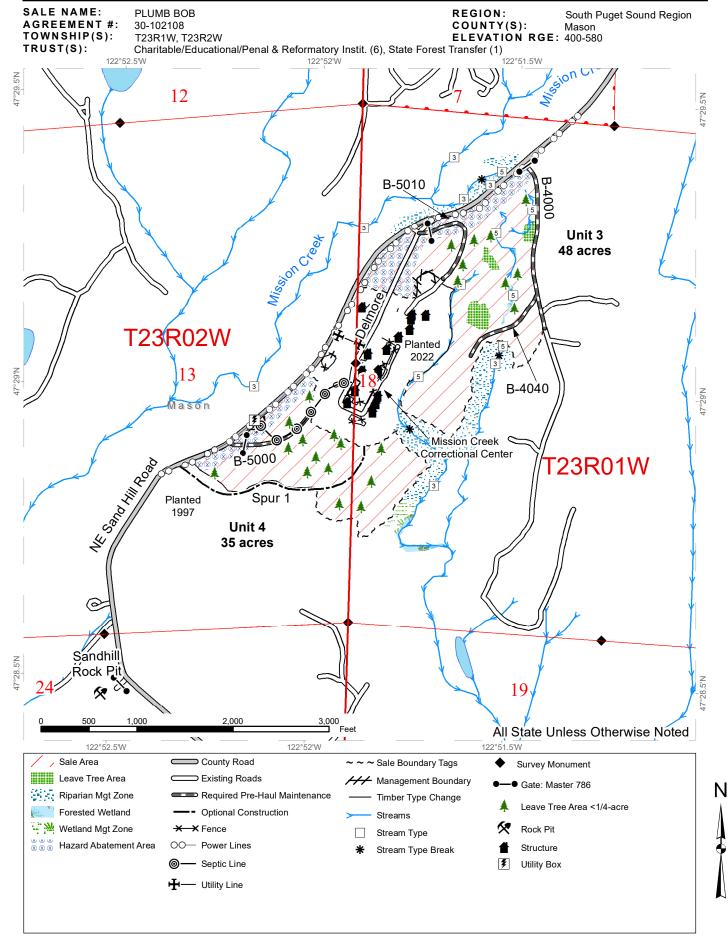
Response: Standard Forest Practices Rules apply.

Comment: Following the SEPA comment period, communication from Joshua Wright was received between March 12, 2023 and April 28, 2023 regarding possible presence within the proposal area of plant community Pseudotsuga menziessii – Tsuga heterophylla / Rhodendron macrophyllum – Vaccinium ovatum Forest (CEGL002615), ranked G2/S2 according to NatureServe.

Response: The Plumb Bob proposal area was assessed by Washington Natural Heritage Program for critically imperiled and imperiled ecosystem presence, ecological integrity and overall conservation value. DNR addressed the results of this survey in the attached response letter, which has also been sent to the commenter.

Responsible Official: Scott Sargent		
Position/title: South Puget Sound Regi	on Manager	Phone: <u>(360)</u> 825-1631
Address: 950 Farman Avenue North, I	Enumclaw, WA 98022	
Date: <u>5/1/2023</u>	Signature:	ott Jargent

There is no DNR administrative SEPA appeal.





SOUTH PUGET SOUND REGION

950 Farman Avenue North Enumclaw, WA 98022

360-825-1631 SOUTHPUGET.REGION@DNR.WA.GOV WWW.DNR.WA.GOV

May 1, 2023

John Talberth, Ph.D. Center for Sustainable Economy Port Townsend, WA italberth@sustainable-economy.org

RE: Plumb Bob timber sale #30-102108, SEPA File No.22-112905

Dear Dr. Talberth:

Thank you for providing comments in your December 12, 2022 letter regarding the Plumb Bob Timber Sale, SEPA File No 22-112905. The following analysis responds to comments received concerning the impact of timber harvests on climate. Comments raised the following issues:

- 1. Analysis of impact to climate done at the region scale rather than the scale of an individual timber sale;
- 2. Sequestration Capacity on DNR's western Washington lands
- 3. Climate resiliency on DNR's western Washington lands
- 4. Data used in the 2019 Final Environmental Impact Statements for the Long-Term Conservation Strategy for the Marbled Murrelet and Alternatives for the Establishment of a Sustainable Harvest Level for Forested State Trust Lands in Western Washington

Landscape Level Analysis

DNR analyzes climate impacts of its timber harvests at the landscape level because this is how the State of Washington, the United States, and the international community analyze impacts associated with the forestry sector. "Landscape-level carbon changes are the sum of stand-level changes, and the impacts of forest management on carbon stocks ultimately need to be evaluated at the landscape level" (Nabuurs et al. 2007). DNR agrees that carbon loss occurs during a timber harvest activity, and the (re)accumulation of carbon can span decades. But how DNR manages each stand is wholly dependent on how the agency manages every other stand. DNR's greenhouse gas analyses do not compare proposed activities to all forest lands in the state or globally. DNR's greenhouse gas analysis examines the carbon released as a result of DNR's forest management activities on DNR-managed lands in Western Washington to all western WA lands within its jurisdiction to manage.

Washington State Environmental Policy Act (SEPA) rule (<u>WAC 197-11</u>) "[do] not describe detailed methods for analyzing any particular pollutant or resource" (Washington Department of Ecology 2021a). "For GHG emissions, the analysis is currently done on a case-by-case basis as determined by the SEPA lead agency" (Washington Department of Ecology 2021a). DNR as the lead agency has determined that the appropriate scale to analyze greenhouse gas emissions for western Washington DNR timber harvest project proposals subject to SEPA is to examine the accumulation of all of DNR's forest land management across all DNR-managed lands in western Washington. Using a gross estimate of carbon dioxide released from the harvest of an individual stand of



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timber provides no useful information in understanding the impact of DNR's forest management on the global climate.

Washington State Department of Ecology (WA DOE) is currently undertaking rulemaking in response to the 2019 Governor's Directive #19-18 (State of Washington Office of the Governor 2019). Per WA DOE the greenhouse gas assessment for projects (GAP) rule "will address analysis and mitigation of GHG emissions for environmental assessments of public and private *industrial and fossil fuel projects*; provide consistent and comprehensive assessment methods for projects covered by the rule; and provide clarity and transparency to industry, the public, and agencies" (Washington Department of Ecology 2021a. Emphasis added). As stated on WA DOE's website the draft GAP rule is expected to be released for public review and comment sometime in 2023. DNR will evaluate the applicability of the new rule to project level SEPA analyses of timber harvest project proposals once the final rulemaking is nearing completion. Currently it is unclear if the new rule will apply to forest management activities as there are no drafts of the rules publicly available except for drafts of definitions and applicability (Washington Department of Ecology 2021b).

Commenters claim that 10,000 metric tons CO₂e threshold is a threshold of significance. No evidence supports this claim. The 10,000 metric tons of CO2e represents the threshold at which facilities, fuel suppliers, and electric power entities are required to report annual emissions to Washington State Department of Ecology (WAC 173-441). The threshold is referenced in WA DOE's Draft GAP Rule Conceptual Framework for Informal Review which states the applicability of the GAP rule will be based on the emissions reporting threshold of 10,000 metric tons CO₂e (Washington Department of Ecology 2021a). As previously mentioned, DNR will evaluate the applicability of the new rule to project level SEPA analyses of timber harvest project proposals once the final rulemaking is nearing completion.

Commenters referenced Hudiburg et al. 2019, which presents a novel approach to conduct life-cycle-analysis. However, Hudiburg's estimates encompass all land managers in Washington State and do not provide estimates specific to DNR-managed lands. While commenter's reference to Hudiburg focuses on the emissions from the forest sector, the Hudiburg paper estimates that the average annual net forest sector carbon balance in Washington is -64.3 MT CO₂e, or a net sink. This means that Washington forests sequester 64.3 MT CO₂e per year.

Conclusions made by commenters about the logging sector being the second largest source of greenhouse gas emissions in the state are erroneous. These commenters are double counting forest product manufacturing and log hauling emissions which are already reported within the electricity and transportation source categories of the state greenhouse gas inventory, respectively (Washington Department of Ecology 2021c). DNR's assessment of carbon emissions associated with forest management activities on state trust lands are in-line with recommendations from the International Panel on Climate Change (Nabuurs et al. 2007).

Sequestration Capacity.

DNR has statutory and other common law obligations regarding its forest management. RCW 79.10.320 mandates DNR to manage state-owned forests under its jurisdiction on a sustained yield basis. Sustained yield plans refers to the management of the forest to provide harvesting on a continuing basis without major prolonged curtailment or cessation of harvest. RCW 79.10.310. To meet these requirements, DNR manages a variety of stand age classes across its land holdings. Sustainable management means that as stands are harvested, other stands are allowed to grow. This also enables them to continue to sequester carbon. Harvested stands are replanted as required by the Forest Practices Rules and these stands begin to grow, eventually becoming stands of mature trees.



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Some commenters used the example of forest roads as an example of land that can no longer sequester carbon. Forest roads provide the necessary infrastructure to transport roundwood and other forest products to purchasers and processing facilities so that DNR's trust beneficiaries can receive revenue from harvesting activities. In addition, forest roads provide opportunities for and/or lower the costs of public recreation and access, construction and maintenance of recreation infrastructure, habitat restoration, infrastructure maintenance such as communication towers, pipelines, and bridges, rapid wildfire suppression activities, and a suite of silvicultural activities employed to rapidly regenerate forest stands.

The claim that all forest roads on DNR lands permanently remove the land as carbon sinks is incorrect. While it is common for DNR to construct new roads to facilitate timber harvesting, hauling activities, silvicultural activities, and fire suppression activities, there are also many miles of forest roads that are abandoned and decommissioned following timber sale completion as can referenced in DNR's HCP Annual Reports. For example, in calendar years 2020 and 2021 there were 69 miles of roads abandoned or decommissioned (Washington Department of Natural Resources 2022a). In addition, abandoned, decommissioned, and inactive roads are often rapidly restocked with pioneering species such as red alder (*Alnus rubra*) within a few years of closure (U.S. Forest Service 1962; DNR Figure 1)).

Figure 1. Red alder ingrowth as of 2015 within the road prism of a 1998 harvest unit on DNR-managed land in Thurston County Washington (left). Location of photo depicted with a green dot; road locations depicted with black lines (right).



Resilience

Commentators argue that DNR's harvest reduces climate resiliency. DNR understands this term to mean being prepared for, and adapting to, current and future climate-related changes. DNR has studied the anticipated effect that climate change has on forests in Western Washington in chapter 3.2 of the Long-Term Conservation Strategy for the Marbled Murrelet Final Environmental Impact Statement (Washington Department of Natural Resources



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2019a) and chapter 3.2 of the Alternatives for the Establishment of a Sustainable Harvest Level Final Environmental Impact Statement (Washington Department of Natural Resources 2019b). As documented in *DNR's Plan for Climate Resilience* (Washington Department of Natural Resources 2020b) the agency is both committed and has a fiduciary responsibility to ensure forested state trust lands are resilient to current and future climate impacts. DNR acknowledges and has occasionally observed climate induced mortality of regenerating seedlings as drought conditions have become more frequent and severe across the state. When seedling mortality reduces a regenerating stand's stocking level below forest practices minimum stocking thresholds DNR conducts replanting efforts to ensure compliance with state law (WAC 222-34). Thus, while climate change impacts pose a risk to DNR-managed forest lands the agency will continue to adapt its sustainable forest management practices to minimize the risk of loss to the trust and maintain compliance with state laws.

DNR is well aware of the increasing frequency and severity of wildfires under a changing climate and the threats they pose to forests, ecosystem services, infrastructure, and life. Increasing wildland firefighting resources and addressing the forest health crisis have been agency priorities for many years (Washington Department of Natural Resources 2017, 2019c, 2020a). Under current DNR forest management practices and fire suppression tactics in western Washington, total acres burned on DNR-managed lands is typically hundreds of acres per year rather than thousands (Washington State Department of Natural Resources 2022b), but as described in the 2019 Final Environmental Impact Statements (FEISs) the acres are predicted to increase if not at least double even after accounting for fire suppression activities (Washington State Department of Natural Resources 2019a, 2019b). The Zald and Dunn 2018 publication referenced in your comment letter examined the drivers of fire severity across a single wildfire that burned both private industrial and federal lands with different management histories in the Klamath Mountains in southeast Oregon. The applicability of this study to DNR-managed lands in western Washington is unclear as the main fire regime and possible drivers of high severity fire may differ. For example, studies more pertinent to the types of forests and fire regime found in western Washington suggest fuel structure matters less during east-wind events, a common feature of the large wildfires that have shaped infrequent forest fires in the past and recently (Halofsky et al. 2018, Reilly et al. 2021, 2022)

Criticism of the 2019 FEIS Data

Commenters suggested that data used in the 2019 FEIS analysis was outdated and that new data "suggested a drastically different picture of carbon stocks and flows of carbon and logging –related emissions". Comparisons of DNR's 2019 FEIS climate analysis conclusions to the Washington Forest Ecosystem Carbon Inventory: 2002-2016 (Christensen et al. 2020) are not appropriate for several reasons. The methodologies employed in Christensen et al. 2020 differ from those utilized in DNR's FEIS which relied primarily on Smith et al. 2006 and Sonne 2006. DNR's inventory data used in the FEIS was derived from DNR's remotely sensed forest resources inventory (RS-FRIS) data from 2018; whereas the FIA data used in Christensen et al. 2020 was based on remeasured FIA plots that spanned an initial measurement period from 2002-2011 and re-measurement period from 2012-2016 (Christensen et al. 2020, Washington Department of Natural Resources 2019b Appendix F). The FIA report looks at change in the past whereas DNR climate analysis was based on forest growth and harvest projections into the future over a 5 decade period. In addition, the large standard errors from Christensen et al. (2020) results from the small number of FIA plots occurring on western Washington DNR managed lands. As the commenters mentioned the standard errors make it difficult to draw definitive conclusions from the data. Commenters present data taken from the USDA FIA, EVALIDator 2.03 program, but provide no error estimates nor an explanation of the specific parameters that were selected to produce the output. For these reasons, DNR does not consider this data useful in evaluating the impact of DNR's harvest activity on the global climate.



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Claims in paragraph 8 of Exhibit B of the comment letter are not wholly accurate. While DNR did not include emissions from log transportation to processing facilities or the manufacturing of forest products, an emissions factor of 9.8 MgCO₂ per hectare derived from Sonne 2006 was used to calculate emissions from logging and other forest management activities (Washington Department of Natural Resources 2019b). This emissions factor represents the average global warming impact for a 50-year rotation including CH₄, CO₂, and N₂O released during seedling production, site preparation, herbicide production, harvesting, pre-commercial thinning, and other direct and indirect emissions sources as detailed in Sonne 2006.

The proforestation (i.e., elimination of active forest management) strategy referenced and advocated by commenters' letter is incompatible with DNR's statutory and fiduciary obligations as a land manager. This strategy was not included in the recent 2021 U.N. publication *Nature-Based Solutions for Climate Change Mitigation* (United Nations Environment Programme and International Union for Conservation of Nature 2021) or the sixth assessment report from the Intergovernmental Panel on Climate Change Working Group III (Intergovernmental Panel on Climate Change 2022) as a potential mitigation strategy. The proforestation strategy proposed by commenters also fails to consider the substitution benefits of harvested wood products (Verkerk et al. 2022), whereby emissions are avoided when wood products are utilized in place of more energy-intensive materials (e.g., steel and concrete). Elimination of active forest management on DNR-managed lands via proforestation fails to acknowledge the suite of ecosystem and societal services that sustainably managed forests provide. The Society of American foresters provide numerous references in a recent white paper that expands on these services as well as other benefits of sustainable forest management (Society of American Foresters 2022).

Alternatives Analysis in the context of a threshold determination

An analysis of a "no action" alternative to a proposed action is required in Environmental Impact Statements. WAC 197-11-440 (5). A no action alternative is not required for a threshold determination. In the context of a threshold determination, RCW 43.21C.030 (2) (e) may require the study, development, and description of appropriate mitigation in situations where a proposal involves unresolved conflicts concerning alternative uses of available sources. DNR's understands this to apply to situations where an "either/or" choice exists between various land or resource uses. The proposed harvests are taking place on land that has historically been used for commercial timber production and that is currently categorized under local land use ordinances as commercial forests. Continuing the practice of harvesting trees on these commercial forest lands does not eliminate the ability of these lands from sequestering carbon in the future as trees are planted and begin to grow. Neither does this planned and sustainably managed harvest activity interfere with sequestration that continues in the state's remaining forest lands.

Thank you for your comments.

Sincerely,

Scott Sargent

Scott Largent

South Puget Sound Region Manager

c: SEPA File No. 22-112905 Olympia File No. 30-102108 Region File No. 30-102108



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May 1, 2023

Joshua Wright Legacy Forest Defense Coalition of Washington joshua@wlfdc.org

RE: Plumb Bob timber sale #30-102108, SEPA File No.22-112905

Dear Mr. Wright:

Thank you for providing comments in your March 18, March 27, April 12, and April 28, 2023 emails regarding the Plumb Bob Timber Sale, SEPA File No.22-112905 concerning the plant community *Pseudotsuga menziesii – Tsuga heterophylla / Rhododendron macrophyllum – Vaccinium ovatum* Forest (CEGL002615), ranked G2/S2 according to NatureServe. We received your comments and associated plot information by both you and Dylan Fischer, Ph.D.

Upon DNR's request, Washington Natural Heritage Program (WNHP) surveyed the Plumb Bob proposal area on April 12, 2023 to classify the forest plant association(s) present and to determine whether those forest stands met the criteria of an element occurrence. WNHP confirmed the presence of the *Pseudotsuga menziesii – Tsuga heterophylla / Rhododendron macrophyllum – Vaccinium ovatum* Forest, however, upon completion of an Ecological Integrity Assessment, the stand was found to have element occurrence rank of D (1.30) within the area of the Plumb Bob timber sale, which does not meet the Natural Heritage Program's (utilizing the *Field Manual for Applying Rapid Ecological Integrity Assessments in Upland Plant Communities of Washington State - Version 1.4* and *An Introduction to NatureServe's Ecological Integrity Assessment Method – July 2016*) criteria of an element occurrence. No other globally critically imperiled or imperiled (G1 or G2) plant communities were documented by WNHP nor found in current databases reviewed by DNR during proposal design and completion of the SEPA checklist. See enclosed Washington Natural Heritage program Site Survey - Plumb Bob Timber Sale report.

Thank you for your comments.

Sincerely,

Scott Sargent

Scott Largent

South Puget Sound Region Manager

Enclosure



SEPA File No. 22-112905 c: Olympia File No. 30-102108 Region File No. 30-102108

DEPARTMENT OF NATURAL RESOURCES

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WASHINGTON NATURAL HERITAGE PROGRAM SITE SURVEY

Plumb Bob Timber Sale

April 12th, 2023

Tynan Ramm-Granberg & Irene Weber

Vegetation Ecologists

Executive Summary

The purpose of this inventory effort was to survey the Plumb Bob timber sale, near Belfair, for element occurrences (EOs) of globally critically imperiled or imperiled (i.e., G1 or G2) plant communities. Neighboring areas on Department of Natural Resources (DNR) property outside the timber sale units were also observed. Natural Heritage Methodology was used to identify plant associations and assess their ecological integrity. The site visit occurred on April 6th, 2023. All four units of the Plumb Bob timber sale contained *Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium ovatum* Forest, an imperiled plant community with a conservation status rank of G2/S2. These stands were found to be in fair condition, but did not score high enough on the Ecological Integrity Assessment (EIA) to be considered an element occurrence, due to their fragmented, small sizes.

Introduction

On April 6th, Tynan Ramm-Granberg and Irene Weber surveyed the Plumb Bob timber sale and neighboring Department of Natural Resources (DNR) for critically imperiled and imperiled ecosystems and, when found, assessed their ecological integrity and overall conservation value. The survey was conducted at the request of the DNR South Puget Sound Region Manager.

Methods

Site Survey Approach

A site walkthrough approach was used to observe the ecological variation within the timber sale units. This approach ensured that the topographic variability of each unit was surveyed. Surveyors stopped frequently to classify and confirm the plant association using Chappell (2006).

Classification of Plant Associations

WNHP uses the U.S. National Vegetation Classification (USNVC; 2022) to document the plant associations that occur in the state. Chappell (2006) classified the forests of the Puget Lowlands using the USNVC—the field keys and plant association descriptions in that document were used to identify the plant associations occurring within the targeted survey areas. These descriptions were also cross-referenced with NatureServe Explorer (https://explorer.natureserve.org/) to check for any revisions that may have occurred since publication.

Conservation Status of Plant Associations

Plant associations are assigned global (G) and subnational (=State, S) conservation status ranks using NatureServe's Conservation Status Assessment Methodology (Faber-Langendoen et al., 2012; Master et al., 2012). A conservation status rank represents an assessment of a specific plant association's risk of elimination. Conservation status ranks have been assigned to each element (ecosystem type) for its entire range, incorporating rarity, threats, and other factors.

Ecological Integrity of Plant Association Stands

The Ecological Integrity Assessment (EIA) methodology provides a rapid, standardized assessment of the current ecological integrity of a stand of a given plant association (Faber-Langendoen et al., 2019; Rocchio et al., 2020a, 2020b). The EIA results in an EIA rank ranging from 'A' to 'D', with 'A' indicating excellent ecological integrity and 'D' indicating poor ecological integrity. A size metric is then integrated to produce an element occurrence rank (EO rank), which is an estimate of the overall conservation value of the stand.

If a plant association with conservation status rank of globally imperiled (G2) or globally critically imperiled (G1) was located, its extent was mapped, and then an EIA was conducted to determine its current ecological condition (landscape context, native plant composition, invasive weed cover, vegetation structure, surficial soil condition, overall size, etc.). We also used DNR forest inventory data, historical aerial imagery, and timber harvest records to determine the stand age, corroborated by keys from Van Pelt (2007) that we also used to assess old-growth characteristics of individual trees. This information was used to help score EIA metrics related to vegetation structure.

Element Occurrence Criteria

WNHP uses the combination of a plant association's conservation status rank and its EO rank to determine whether a stand of a given plant association is an "element occurrence". Element occurrences (EOs) are

populations of species or specific examples of ecosystems with significant conservation value that contribute to the survival or persistence of the element (i.e. the species or ecosystem) (Table 1, NatureServe, 2002). We use NatureServe's Element Occurrence data standards to guide our delineation of occurrences (see http://www.natureserve.org/conservation-tools/standardsassociation methods/element-occurrence-data-standard). The EO data standards provide guidelines for decisions such as whether a particular patch of a given plant association is large enough to be considered an element occurrence. The standard also provides guidance on whether two distinct stands of the same plant association should be lumped as a single EO or split into two occurrences. The EO rank is determined by completing an EIA of the specific stand of the ecosystem in question. Common ecosystems with relatively few threats (e.g. conservation status rank of G5/S5) must be in excellent condition (EO rank 'A+' or 'A-') to be considered EOs, while all critically imperiled ecosystems (G1/S1)—even in poor condition (D)—have significant conservation value. Element occurrences are entered in the Washington Natural Heritage Program's Biotics database used for a variety of conservation and management outcomes. For more information, please see the Washington Natural Heritage Program website (http://www.dnr.wa.gov/natural-heritage-program).

Table 1. Decision Matrix for Ecosystem Element Occurrences. Element conservation status ranks vary from 1 (critically imperiled) to 5 (common/secure), calculated across the element's global (G) and subnational/state (S) range. 'NR' = not ranked.

		Element Conservation Status Rank						
	Global Rank	G1S1, G2S1,	G2S2, GNRS2,	GUS3, GNRS3, G3S3,	G4S3, G4S4, G5S3, G5S4,			
EORANK	State Rank	GNRS1, GUS1	G3S1, G3S2,	G4S1, G4S2, G5S1, G5S2,	G5S5, GNRS4, GNRS5,			
	State Nank	GNN51, G051	GUS2	any SNR	GUS4, GUS5			
A+ (3.8 to 4.0)		EO	EO	EO	EO			
A- (3.5 to 3.79)		EO	EO	EO	EO			
B+ (3.0 to 3.49)		EO	EO	EO				
B- (2.5 to 2.99)		EO	EO	EO	Not an Flement			
C+ (2.0 to 2.49)		2.0 to 2.49) EO		Not an Flement	Occurrence			
C- (1.5 to 1.99)		EO	Not an Element	Occurrence	Occurrence			
D (1.0 to 1.49)		EO	Occurrence	Occurrence				

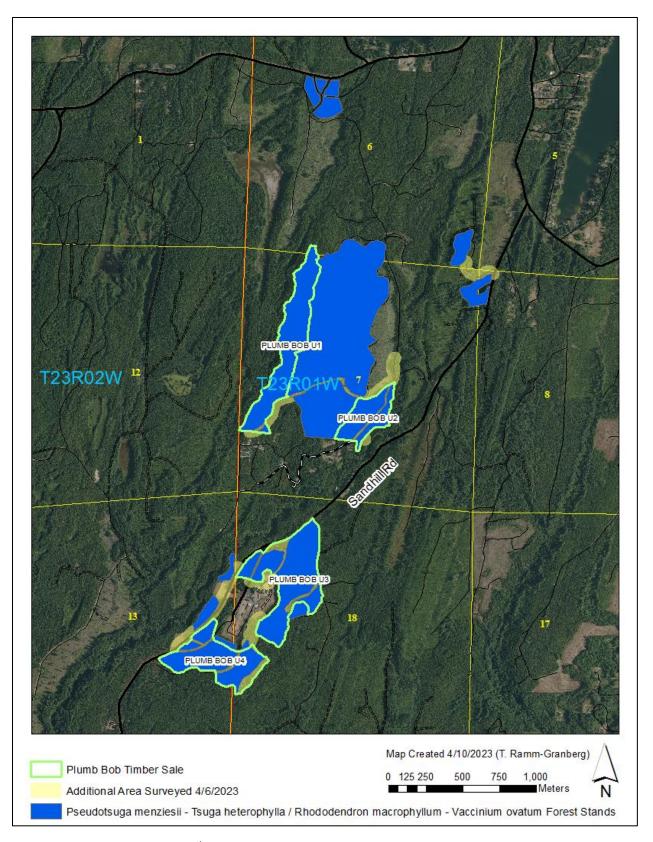


Figure 1. Area surveyed on April 6th, 2023.

Results

G1 & G2 Plant Associations

All four units of the Plumb Bob timber sale contained stands of *Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium ovatum* Forest (G2/S2; Table 2). This association appears to be locally common on this portion of the Kitsap Peninsula, but is globally restricted to the central to northern Puget Lowlands of Washington (Kitsap, Island, Clallam, Jefferson, Mason counties) (https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.690034/Pseudotsuga_menziesii_-

<u>Tsuga heterophylla - Rhododendron macrophyllum - Vaccinium ovatum Forest</u>). Additional stands were found on surrounding DNR parcels, combining with the Plumb Bob sale to total ~320 acres. Note that this survey was by no means comprehensive—based on roadside observations, additional stands of similar integrity occur elsewhere in the locale.

Small (up to ~0.5 acre) inclusions of *Pseudotsuga menziesii - Tsuga heterophylla / Vaccinium ovatum* Forest (G2/S2) were also identified in these units. These areas were primarily younger, denser stands with less light penetrating the understory and tended to occur on lower topographic benches. These patches are included within the mapped stands of *Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium ovatum* Forest because of their small size and the fact that they also represent a closely related G2/S2 community.

EIA Results

These stands received a 'C+' for Condition (2.45) and Landscape Context (2.12). The overall size of the documented stands is ~320 acres (consisting of multiple, smaller individual patches) and the largest single contiguous patch covers ~155 acres—resulting in a size rank of 'CD' (1.50) and an overall EO Rank of 'D' (1.30). That rank does not meet the EO criteria for a G2/S2 community (Table 1). A complete EIA score breakdown may be found in Appendix A.

Table 2. United States National Vegetation Classification (USNVC) hierarchy for imperiled plant (G2/S2) associations encountered. *Found in small patches treated as inclusions.

1 Forest & Woodland

1.B Temperate & Boreal Forest & Woodland

1.B.2 Cool Temperate Forest & Woodland

1.B.2.Nd Vancouverian Forest & Woodland

M024 Vancouverian Lowland & Montane Forest

G240 North Pacific Maritime Douglas-fir - Western Hemlock Forest

A3379 Tsuga heterophylla - Pseudotsuga menziesii / Holodiscus discolor Dry Forest Alliance

CEGL002615 Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium

ovatum Forest

CEGL002614 Pseudotsuga menziesii - Tsuga heterophylla / Vaccinium ovatum Forest*

The Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium ovatum Forest association appears to be locally common, but extensive additional survey work would be necessary to accurately determine the association's local extent.

Note also that there are existing *Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium ovatum* Forest and *Pseudotsuga menziesii - Tsuga heterophylla / - Vaccinium ovatum* Forest EOs (EO identification numbers: 1560, 3270, 3714, 3939, and 5338) located ~7 to 12 km to the north. These include the EOs conserved within Stavis Natural Resources Conservation Area and Kitsap Forest Natural Area Preserve (Figure 2). Identification of additional stands in the intervening area between the Plumb Bob sale units and these existing EOs could reduce the separation distance and thus warrant consideration of the Plumb Bob stands as extensions of these EOs.

Conclusion

The Plumb Bob timber sale near Bangor does not contain element occurrences (EOs) of G2 or G1 plant associations based on current knowledge and mapping efforts. While *Pseudotsuga menziesii - Tsuga heterophylla | Rhododendron macrophyllum - Vaccinium ovatum* Forest (G2/S2) is present in fair condition, the small documented size results in an EO rank of D (1.30). That rank does not meet the EO criteria for a G2/S2 association.

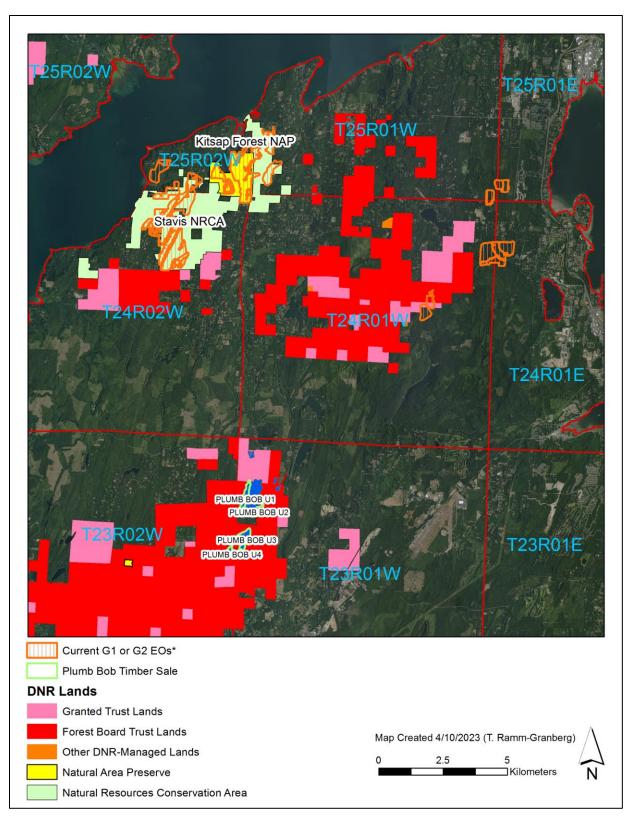


Figure 2. Plumb Bob units in relation to nearby existing EOs and conservation areas. *Only Pseudotsuga menziesii - Tsuga heterophylla / Rhododendron macrophyllum - Vaccinium ovatum Forest and Pseudotsuga menziesii - Tsuga heterophylla / - Vaccinium ovatum Forest EOs shown.

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Appendix A: Ecological Integrity Assessment (EIA) Calculations

Ecological Integrity varied slightly over the four timber sale units and neighboring parcels. The table below presents the range of metric ranks and major ecological factors, followed by the weighted average of primary factors, EIA scores, and the overall EO rank.

Table A-1. EIA Calculations.

Roll-up Calculations	Rating	Score	Comments
LAN1. Contiguous Natural Land Cover	D to B	1 to 3	Varied from 19% (Unit 3) to 80% (Unit 1). Numerous fragmenting roads.
LAN2. Land Use Index	С	2	LUI = 5.24; primarily timberland in various stages of regeneration.
LAN MEF Score = (LAN1+LAN2)/2	C- to B-	1.50 to 2.50	
EDG1. Perimeter with Natural Edge	D to B	1 to 3	Varied from 18% (Unit 3) to 88% (Unit 1)
EDG2. Width of Natural Edge	D to B	1 to 3	Varied from 18 m average (northern most patches assessed, outside of Plumb Bob sale) to 75 m average (Unit 1)
EDG3. Condition of Natural Edge (do not include in calculation if not scored)	В	3	Extensively logged and areas of OHV recreation, but minimal exotic species away from road edges.
EDG MEF Score = $(((EDG1*EDG2)^{1/2})*EDG3)^{1/2}$ [Note: ½ exponent = square root]	C- to B+	1.73 to 3.00	
LANDSCAPE CONTEXT PRIMARY FACTOR SCORE = (EDG Score*0.67)+(LAN Score*0.33)	Matrix		
Matrix = (EDG Score*0.33)+(LAN Score*0.67) Large-Patch = (EDG Score*0.50)+(LAN Score*0.50) Small-Patch = (EDG Score*0.67)+(LAN Score*0.33)	C+	2.12	
VEG1. Native Plant Species Cover	А	4	>99% relative native cover in all units.
VEG2. Invasive Nonnative Plant Species Cover	А	4	In some units, trace cover of <i>Ilex aquifolium</i> (within) and <i>Cytisus scoparius</i> (on edges).
VEG3. Native Plant Species Composition	C to B	2 to 3	Greatly reduced <i>Tsuga heterophylla</i> due to logging and thinning. Some stands with very little or no <i>T. heterophylla</i> due to very young post-harvest stand ages (stem exclusion stage). <i>Rubus spectabilis</i> and other soil disturbance increasers in skid trails.

VEG4. Vegetation Structure	D	1	Logged and likely burned post-logging. Oldest stands ~70-80 years old—very early Maturation I stage (Van Pelt, 2007). Some areas of stem exclusion stage within Plumb Bob units. Most areas outside of Plumb Bob that were visited were in the stem exclusion stage, but some Maturation I also identified. No subcanopy development in any stands. Very little age class diversity. Previous stands harvested in the mid 20 th century were likely mature (judging from surviving stumps), but all stumps larger in diameter than any live trees.
VEG5. Woody Regeneration	C to B	2 to 3	Within Plumb Bob units: unknown if replanted after mid 20 th century logging. <i>Tsuga heterophylla</i> present in regeneration, but may be reduced by lack of CWD (nurse logs). <i>Pinus monticola</i> codominant in some stands. Younger stem exclusion stands outside of Plumb Bob units were likely planted with <i>Pseudotsuga menziesii</i> . These have very little <i>Tsuga heterophylla</i> establishment at this time.
VEG6. Coarse Woody Debris	D	1	Almost no snags. Those present are from current cohort. Minimal size and decay diversity. CWD is nearly all polesized and with minimal decay diversity. No visible debris remnants from previous stands aside from stumps.
VEG MEF Score = (VEG4+VEG6)/2*0.7+(VEG1+VEG2+VEG3+VEG5)/4*0.3	C+	2.13 to 2.47	
SOI1. Soil Condition	B to A	3 to 4	Skid trails common in Units 3 and 4 and several other stands outside of the Plumb Bob units.
SOI MEF Score = SOI1	B to A	3 to 4	
CONDITION PRIMARY FACTOR SCORE = (VEG Score*0.85)+(SOI Score*0.15)	C+	2.45	
ECOLOGICAL INTEGRITY (EIA) SCORE Matrix/Large-Patch = (CONDITION SCORE*0.55)+(LANDSCAPE CONTEXT SCORE*0.45) Small-Patch = (CONDITION SCORE*0.7)+(LANDSCAPE CONTEXT SCORE*0.3)	C+	2.30	
SIZ1. Comparative Size	CD	1.5	Total mapped area = 320 acres; Largest contiguous patch = 155 acres.

SIZ2. Change in Size (optional)	Not Scored		Original stand extent not known at this time.
SIZ MEF Score = SIZ1 OR (SIZ1+SIZ2)/2	CD	1.5	
SIZE Points	CD	-1.0	
CALCULATED EO RANK = EIA Score + SIZE Points	D	1.30	
ASSIGNED EO RANK		D	

Table A-2. Metric Rank / Score Conversions

Rank	А	A-	В	С	C-	D
Score	4	3.5	3	2	1.5	1

Table A-3. Score / Rank Conversions for MEF, EIA, and EORANK calculations

Rank	A+	A-	B+	B-	C+	C-	D
Score	3.8 - 4.00	3.5 - 3.79	3.0 - 3.49	2.5 - 2.99	2.0 - 2.49	1.5 - 1.99	1 - 1.49

Table A-4. Point Contribution of Size Primary Factor Score

Size Primary Factor Rating	Very Small/Small Patch	Large Patch	Matrix
A = Size meets A ranked rating	+ 0.75	+ 1.0	+1.5
B = Size meets B ranked rating	+ 0.25	+ 0.33	+0.5
C = Size meets C ranked rating	- 0.25	- 0.33	-0.5
D = Size meets D ranked rating	- 0.75	-1.0	-1.5