



Legacy Forest Defense Coalition
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Don Melton, South Puget Region Manager
Michael Martinez, Policy Director DNR
Via: SEPA Center
P.O. Box 47015
Olympia, Washington 98504-7015
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Re: Firvana timber sale – SEPA comments (File No. 25-042201)

Dear Mr Melton and Martinez,

I am writing to express my extreme concern with the DNR's decision to proceed with the Firvana timber sale. This timber sale would result in the commercial logging of close to 60 acres of naturally regenerated, 95 year old mixed Douglas-fir and western hemlock conifer forests in the upper reaches of the Tahuya River watershed in the Great Bend WAU. This stand represents one of the only structurally complex forests in the entire Tahuya River watershed. It is one of the only stands of structurally complex forests large enough to support species dependent on interior forest conditions in this region. The DNR is justifying this timber sale due to the presence of three fungal diseases: Heterobasidion Root Disease (HRD), Laminated Root Rot (LRR) and Armillaria Root Disease (ARD), in addition to the Douglas-fir beetle (DFB,) documented by DNR in a March 24, 2025 report by Forest Pathologist Brian Williams.

The DNR is using the presence of these insect and fungal diseases to write off the habitat value of this area, and **functionally exempt this area from DNR's landscape level planning** to protect mature forests. This decision by DNR is likely to have substantial deleterious impacts on local biodiversity and further hinder the agency's ability to meet its stand structure objectives.

1. Fungal and insect disease are important features in structurally complex forests.

According to the DNR, the presence of these insect and fungal diseases is a justification for immediate and catastrophic intervention into this stand. The DNR proposes that we should press the reset button, harvest the present stand and replace it with a plantation. This may be logical from a timber management perspective that is seeking to maximize board feet from the stand, however it is not logical from a conservation perspective, and it is not logical to exempt this area from landscape level planning due to the presence of this disease. From an ecological perspective, literature suggests that these very pathogens should be seen as a feature rather than a bug of native forest ecosystems. Fungal and insect diseases are a valuable disturbance agent that increase structural complexity and habitat value of mature

forests by increasing the quantity of deadwood and standing dead snags, and by creating ecologically rich early seral microhabitats in canopy gaps.

The native forest ecosystem within the Firvana sale is far more diverse than the plantation that DNR is proposing to replace it with. This diversity translates into far greater resilience in controlling the spread of insect and fungal diseases. Every forest has its own unique array of native insects, parasites, and pathogens that help maintain biodiversity and resilience to disease and pest outbreaks¹. In natural forests, tree species have co-evolved with many antagonistic species that do not typically cause major damage². As a result, natural forests have built-in defense mechanisms for controlling the spread of defoliators, bark beetles, root pathogens and parasites, and recover more quickly following outbreaks.

The DNR's forest pathology report does not predict an outcome for the stand if left un-managed. Western Washington's forests evolved with the presence of forest pathogens, it is highly unlikely that their continued persistence on this site would result in the loss of the entire dominant cohort of this stand. Rather, it is more likely that these fungal and insect diseases will create structural complexity within the stand by killing weaker trees, and allowing trees resistant to the pathogens to flourish. Budde et. al. emphasizes the importance of discouraging salvage logging within the vicinity of infested trees, because it results in the removal of large numbers of healthy trees that are disease resistant, diminishing the resilience of the forest as a whole.



Figure 1: Early seral habitat (<1 acre) with dense foliage and a number of snags on steep slope (left 47.551463 -122.802002) dense mature forest with large healthy vigorous trees (right 47.550902 122.801963)

¹ Hessburg, P. F., R. G. Mitchell, and G. M. Filip. 1994. Historical and current roles of insects and pathogens in eastern Oregon and Washington forested landscapes. US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, Oregon. PNW-GTR-327.

² Budde, K. B., L.R. Nielsen, H.P. Ravn, E.D. 2016. The natural evolutionary potential of tree populations to cope with newly introduced pests and pathogens-lessons learned from forest health catastrophes in recent decades, Curr Forest Rep, 2:18-29.

2. The Firvana forest is critical for the conservation of old forest dependent species and for meeting DNR's stand structure targets.

On April 26, I visited the Firvana timber sale. During my site visit, I documented areas of vigorous healthy forest minimally impacted by disease, as well as small patches of early seral habitat where the forest pathogens identified by DNR had created canopy gaps (see Figure 1.) The only area where I observed an acre or more where the majority of trees were dead was a small patch beside the road on the south side of the stand. This area is substantially less complex than the northern part of the stand. For the most part, the trees I observed were healthy and vigorous with new and old snags interspersed throughout the unit. I observed areas with well-developed understory hemlock throughout the unit and epicormic branching was common in the northern part of the stand.

One of the most striking characteristics I observed in this forest was the presence of dozens, perhaps hundreds of remnant old growth snags that appear to have been burned in a wildfire in the early 1900s. These legacy trees provide ideal nesting conditions for cavity nesting species, such as the Myotis Bat, Western Screech Owl, Northern Pygmy Owl and Northern Saw-whet Owl (see Figure 2.) I have personally visited every other mature stand in Green Mountain State Forest, and have not seen as many legacy snags anywhere else in the area.

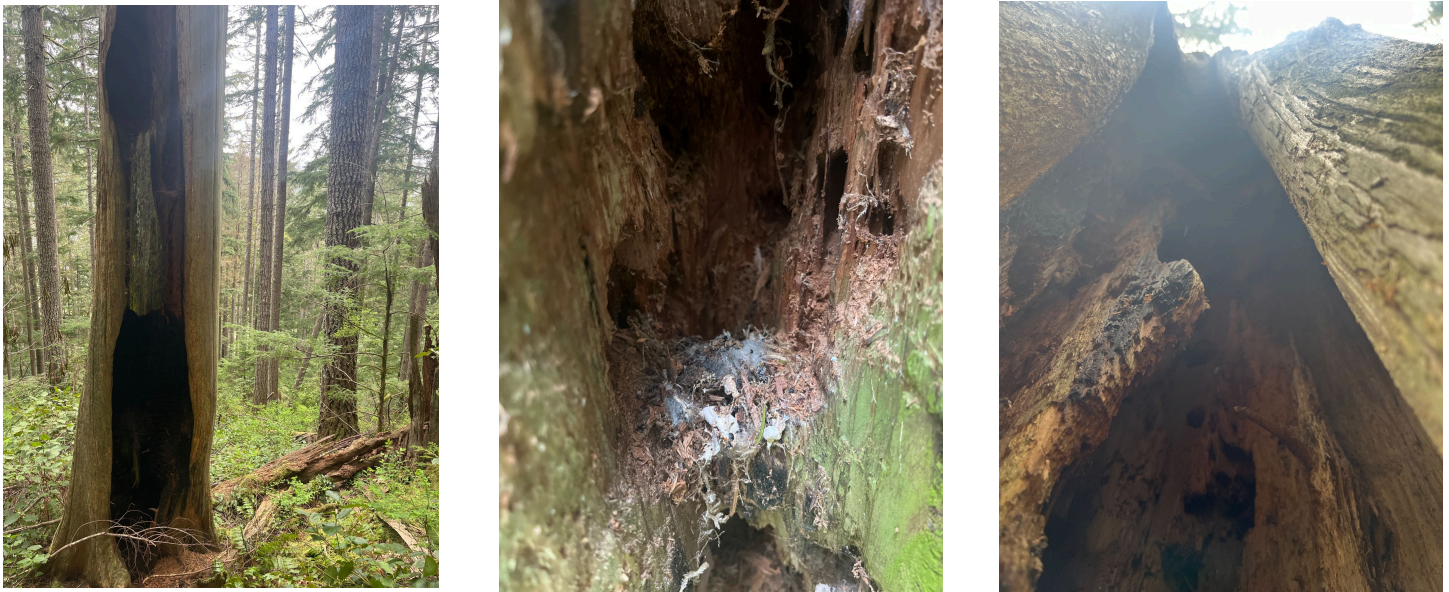


Figure 2: Old growth legacy snag with cavities for bats or small owls and small perch with feathers, one of many in the sale area. (47.552672 -122.799594)

During my visit I documented the following old forest dependent species within the unit. I recorded the calls of each of these birds and uploaded them to a iNaturalist (see links below.) Keep in mind that some of the recordings contain multiple species. I did not capture recordings of the woodpeckers, but instead documented evidence of their activity in the stand (see Figure 4.) The preservation of these and other old forest dependent species is the reason that the DNR's Habitat Conservation Plan (HCP) contains requirements that the DNR meet landscape conditions of 25–35% structurally complex forests and

10–15% fully functional forests across DNR managed lands in Western Washington. **The department is currently farther away from meeting these landscape conditions than it was at the beginning of the life of the HCP**, with almost no fully functional forests in the South Puget planning unit and far less than 25% structurally complex forests across the landscape. This deficiency has translated into scarcity for unlisted, but nevertheless old forest dependent, species that require these habitats. Some of the following species have seen dramatic declines in our region due to current timber harvest practices, and their presence within the Firvana timber sale underscores the need to do landscape level planning to conserve structurally complex forests, including this one.

Golden-crowned Kinglet: The Golden-crowned Kinglet is listed as imperiled (S3) in the State of Washington. This bird is an old forest dependent species reliant on mature stands with interior forest conditions. According to the Audubon society, the bird favors spruce and hemlock forests for nesting, but will sometimes nest in Douglas-fir forests. The Firvana sale area contains some of the only hemlock dominated stands in a region that is dominated by Douglas-fir, and some of the only mature forest habitat in a region dominated by timber plantations (structurally complex forests shown in red in Exhibit 1). According to survey data from the USGS North American Breeding Bird Survey, populations of the Golden-crowned Kinglets in the Puget Sound region declined by more than 91% between 1968 and 2018. The primary driver of this decline is loss of old forest habitat. This timber sale would exacerbate this trend. **There is no doubt that the Golden-crowned Kinglet would be extirpated from the sale area if the Firvana timber sale proceeds.** There are no adjacent stands of mature timber with interior forest conditions that these birds could use, as nearly every stand on the north slope of Gold Mountain has been clear cut in the past 20 years (see Figure 3.)

You can find my recordings of the Golden-crowned Kinglet within the Firvana timber sale at these links:

<https://www.inaturalist.org/observations/275090810>

<https://www.inaturalist.org/observations/275090809>

Pacific Wren: According to the Cornell Lab of Ornithology the Pacific Wren is most commonly found in mature and old growth coniferous stands particularly areas with large amounts of downed woody debris and understory vegetation³. The Firvana timber sale area contains an extremely high volume of downed woody debris resulting from the forest pathogens identified by DNR. This woody debris has provided excellent habitat for the species despite being a “forest health” concern. According to a study by fRI research “the most suitable habitats for Pacific Wren include old western hemlock forests” also noting that features such as downed logs and upturned root balls provide excellent habitat for the species and that large old coniferous forests >30 ha in size are important for the species⁴. Considering the habitat preferences of this species, the presence of disease in the Firvana sale area has likely enhanced habitat for the Pacific Wren by providing more upturned root balls, canopy gaps, and downed logs. There are extremely few mature stands >30 ha in size in the Great Bend WAU, and even fewer that are hemlock dominated (see Exhibit 1.) The Firvana timber sale would clear cut the vast majority of one of them, leaving behind only narrow stream buffers that would provide substantially less and lower quality habitat for this bird. According to fRI research “clear-cutting and partial harvest reduce habitat suitability for the

³ https://www.allaboutbirds.org/guide/Pacific_Wren/lifehistory#habitat

⁴ <https://friresearch.ca/publications/pacific-wren-forestry-fact-sheet>

Pacific Wren for up to 40 years.” **It is impossible to conclude that the Firvana timber sale would not have a substantial long-term impact on the local population of this species.**

You can find my recordings of Pacific Wren within the Firvana timber sale at these links:

<https://www.inaturalist.org/observations/275090742>

<https://www.inaturalist.org/observations/275090739>

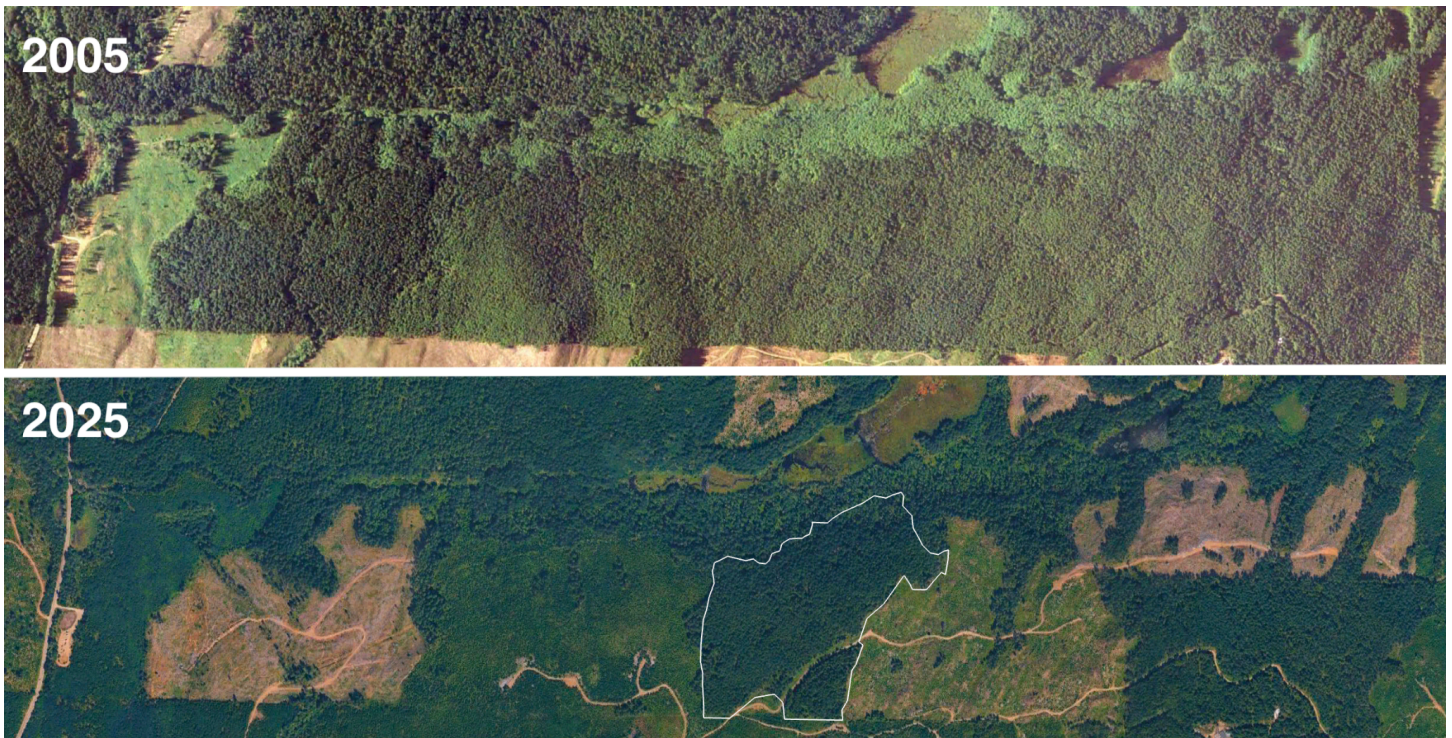


Figure 3: Before and after image showing loss of mature forest habitat on the northern slope of Gold Mountain in Green Mountain State Forest. The Firvana timber sale is outlined in white.

Chestnut-backed Chickadee: The Chestnut-backed Chickadee is a cavity nesting bird that relies on mature coniferous forests with standing deadwood for their survival. According to the Cornell Lab of Ornithology the bird is a species of concern with populations that declined “by about 56% between 1966 and 2015.”⁵ They go on to say that: “Chestnut-backed Chickadees nest in holes in dead limbs and trees, so forest management practices that remove these elements from a forest can make it harder for these birds to find nest sites.” The ample snags created by LRR and HRD, as well as the old growth legacy snags within the Firvana sale provide perfect habitat for this bird, which has been known to nest in woodpecker holes (also prevalent within the sale area). **This timber sale, as currently designed, would eliminate nearly all of these snags and extirpate this species from the sale area.** The Firvana sale currently represents one of the only structurally complex stands with a high density of snags in the Great Band WAU (see Exhibit 1.)

You can find my recordings of Chestnut-backed Chickadee within the Firvana timber sale at these links:

<https://www.inaturalist.org/observations/275090800>

<https://www.inaturalist.org/observations/275090762>

⁵ https://www.allaboutbirds.org/guide/Chestnut-backed_Chickadee/

Brown Creeper: The Brown Creeper is an old forest dependent species that while common, is threatened by logging. According to the Cornell Lab of Ornithology “the Brown Creeper prefers forests with many large live trees for foraging and large loose-barked (often dead or dying) trees for nesting.”⁶ The Firvana timber sale with its combination of post-fire snags and fresh snags killed by the douglas-fir bark beetle, LRR and HRD is an ideal nesting habitat for this species. According to the American Bird Conservancy “in the western United States, timber harvesting—including both clearcutting and selective cutting—has removed many of the large, live trees that creepers use for foraging.”⁷ **The Firvana timber sale will destroy nearly all of the snags currently present in the sale area, destroying the area's capability to support the Brown Creeper.** This timber sale would result in a dramatic loss of habitat for these old forest dependent birds in an area that has very few stands capable of supporting them.

You can find my recordings of Brown Creeper within the Firvana timber sale at these links:

<https://www.inaturalist.org/observations/275090758>

<https://www.inaturalist.org/observations/275090767>

Red Crossbill: According to the Cornell Lab of Ornithology the Red Crossbill favors mature conifer forests, particularly those dominated by Douglas-fir or hemlock for nesting and foraging. According to the American Breeding Bird Survey the species is stable at a continental level, however it has seen its greatest declines in the Pacific Northwest due to loss of mature forest habitat. The Cornell Lab of Ornithology states: “logging of older-growth forest reduces food available to Red Crossbills, as many conifer species reach maximum productivity in their seventh decade or later.” The Firvana timber sale as currently designed would destroy a food source and potential nesting site for the species, contributing to greater habitat loss in a region that already has very few structurally complex forests.

You can find my recording of Red Crossbill within the Firvana timber sale at this link:

<https://www.inaturalist.org/observations/275090830>

Pileated Woodpecker: The Pileated Woodpecker is an old forest dependent, cavity nesting bird that relies on large sanding dead trees and downed wood for their foraging and nesting needs⁸. According to WDFW: “Timber harvest that includes the removal of defective and dead trees can significantly impact pileated woodpecker habitat. The removal of large snags, large decaying live trees and downed woody debris of the appropriate species, size, and decay class eliminates nest and roost sites and foraging habitat.”⁹ The Firvana timber sale area currently contains large quantities of downed woody debris, and dozens of large snags per acre, including old growth legacy snags. Evidence of Pileated Woodpecker activity is obvious throughout the sale area, both on recently dead snags, and the legacy old growth snags (see Figure 4). This species is clearly benefiting tremendously from the mortality caused by the very pathogens that DNR is hoping to eliminate, underscoring the importance of small scale disturbances for biodiversity. Other woodpecker species, including Downy Woodpecker also appear to be active in this stand. If this timber sale proceeds as currently designed these habitat features would be almost entirely

⁶ https://www.allaboutbirds.org/guide/Brown_Creeper/

⁷ <https://abcbirds.org/bird/brown-creeper>

⁸ https://www.allaboutbirds.org/guide/Pileated_Woodpecker/

⁹ <https://wdfw.wa.gov/species-habitats/species/dryocopus-pileatus#conservation>

eliminated from this landscape, destroying high-quality foraging and nesting habitat that took centuries to create.

In addition to documenting the above listed old forest dependent species, **I also captured a recording of a Mountain Quail listed as critically imperiled (S1) in the State of Washington in the southern part of the timber sale.** While this species is generally associated with open brushy habitats (such as fire ecosystems,) and sometimes clear-cuts, I believe that this species may be making use of the early seral micro habitats created by root rot within the Firvana unit. These early seral areas contain much thicker brush, offering a more complex habitat than nearby clear cuts and providing favorable conditions for nesting. Given that this bird is present on site, the sale is likely to have an impact on the species. **The DNR has not surveyed this area for Mountain Quail, and has not analyzed the impact of this harvest on this species.**

You can find my recordings of Mountain Quail within the Firvana timber sale at these links:

<https://www.inaturalist.org/observations/275097605>

<https://www.inaturalist.org/observations/275090795>



Figure 4: Pileated woodpecker holes in legacy snag and new hemlock snag (left 47.553327 -122.799119 & center 47.552575 -122.801669) Downy Woodpecker holes in new douglas-fir snag (right 47.55229 -122.80165.)

3. Firvana was not designed as a "forest health treatment," and would be counterproductive.

The Firvana project was not designed as a forest health treatment: it was designed as an industrial timber sale, with forest health concerns being discovered after the fact. This is an issue because this project is not a well reasoned and logical response to the discovery of diseases within this stand. Rather, this project was designed for timber production then put on pause due to DNR's HCP commitments, and

now it is being un-pause due to the presence of HRD, LLR, ARD, and the Douglas-fir bark beetle. The DNR has presented no logical reason why the presence of these diseases overrides DNR's own policies and procedures. Namely, DNR has not offered a rationalization for why the stand should be logged when it would be in direct violation of their HCP's stand structure objectives.

The DNR's assertion that this sale is necessary because of the presence of disease implicitly assumes that this sale will help reduce the prevalence of disease in the area, and create a "healthier" stand of timber growing in the future. This assumption is contradicted by DNR's own forest pathology report which notes that "HRD presents an additional challenge of spreading quickly and over great distances via spore dispersal. Spores landing on freshly cut stumps or basal wounds readily germinate and colonize the remaining woody tissue." This means that this VRH treatment will not effectively remedy this "forest health issue," but may be actively counterproductive to the DNR's stated goal for this project, leading to a greater level of HRD across the sale area and potentially impacting nearby riparian areas.

Instead of being a "forest health treatment," this project is actually about capturing the current value of standing timber before any new (non- merchantable) snags are created, regardless of their potential value to biodiversity. This project does not have the best interest of this forest or the surrounding ecosystems at heart, it is simply about capturing maximum timber value. This project is being pushed through without regard to the value of, and without the analysis of, the important role that fungal and insect diseases play in the evolution of native forest ecosystems.

The DNR's timber sale fact sheet for this project indicates that this site will be replanted with Western Red Cedar and White Pine which are both resistant to the diseases identified by the forest pathology report. During my site visit I observed that the majority of Western White Pines currently growing in the neighboring stand have been killed or are infected with white pine blister rust, meaning that the harvest of this area might simply introduce an additional disease into the mix (see Figure 5.) Because white pine blister rust is already present in the area it is extremely likely that it will kill many of the white pines that may be planted at the Firvana site. As for Western Red Cedar, they are currently present but quite scarce across the sale area and not well suited to growing in full sun on exposed slopes with shallow soils. Had this project been designed from its inception with forest health in mind it would have been logical to mark the few Western Red Cedar trees within the sale as leave trees to promote natural regeneration of the species over time. During my site visit, I observed numerous unmarked Western Red Cedar¹⁰, underscoring the fact that this project was not designed with the presence of HRD, LLR, or the Douglas-fir bark beetle in mind.

¹⁰ GPS locations of observed, unmarked cedar:

47.55192, -122.80170

47.55229, -122.80172

47.55227, -122.79884

47.55423, -122.79866



Figure 5: White pine blister rust on white pines next to the Tin Mine trail in the “Golden” Timber Sale (16 year old plantation next to Firvana)

4. The Firvana project is unwanted and would cause negative impacts to recreation, scenery and water quality.

In addition to the many ecological concerns surrounding this timber sale, this timber sale would also adversely impact recreation and water quality in Green Mountain State Forest. This timber sale would log a slope directly above the popular Tin Mine Trail, negatively impacting hikers and resulting in a 60 acre clear cut that would be visible from the Gold Creek Trail (see Figures 6 and 7). I have already submitted comments to DNR regarding water quality concerns. If this project proceeds, it would directly and negatively impact the quality of Green Mountain as a recreational resource, and may lead to a decline in visitors. The Kitsap County BOCC have sent multiple letters to DNR requesting a pause on the Firvana project, and expressing a desire to protect all remaining mature forests in Green Mountain State Forest. Kitsap County is a direct beneficiary from this project. The DNR regularly claims to manage trust lands on behalf of trust beneficiaries, yet this project is opposed by its largest beneficiary.

5. The DNR should not move forward with the Firvana project.

The Firvana timber sale is in, and would be producing revenue for, a jurisdiction that has explicitly stated that it values the ecosystem services and public benefits of this stand more than the fairly negligible proceeds from the clearcut logging of this forest (see Exhibit 2.) This stand is currently supporting innumerable old forest dependent species including seven directly documented in this letter, and may also be supporting a critically imperiled species in early seral canopy gaps.

The DNR recognizes that this stand is in the structurally complex Maturation II stage of stand development as described by Robert Van Pelt. The Van Pelt guide explicitly states that “decay from root and stem rots becomes the dominant mortality agent” in Maturation II stands¹¹. As detailed in our other SEPA comments, DNR is required to identify suitable structurally complex forest to equal 10 to 15% of each Western Washington planning unit prior to considering any structurally complex stands for harvest. The DNR has not done so. Structurally complex stands are extremely scarce on the Kitsap Peninsula, the Great Bend WUA and the broader South Puget planning unit.

The auction of the Firvana timber sale would be in direct violation of DNR’s commitments under its HCP and Policy for Sustainable Forests (PSF). The presence of HRD, LRR, ARD and DBF do not change this, fungal and insect diseases are common disturbance agents that are present at varying levels in many mature stands in Western Washington. No matter the stand’s long-term trajectory, which is ultimately impossible to predict with certainty, there is no argument that it is a structurally complex forest today and that it is currently supporting species that are dependent on structurally complex forests. Until the DNR has met the landscape conditions outlined in the HCP, the harvest of this stand should be a non-starter. These landscape conditions were built into the HCP to prevent unlisted, but nevertheless old forest dependent species like those listed above from becoming endangered. Some of these species have seen dramatic declines in our region, and the logging of the stand would only exacerbate this trend.

I respectfully request that the Firvana timber sale be withdrawn, and that this stand be considered for long-term deferral as part of the DNR’s broader landscape planning efforts.

Sincerely,

A handwritten signature in black ink that reads "Joshua Wright". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Joshua Wright
Program Director
Legacy Forest Defence Coalition

¹¹ Pages 37-39 https://www.dnr.wa.gov/publications/lm_hcp_west_oldgrowth_guide_full_lowres.pdf



Figure 6: Firvana timber sale from popular Green Mountain rock climbing cliffs.



Figure 7: View of Firvana timber sale across Beaver Ponds on Gold Creek Trail.