

Figure 1: Overview map of Aldwell Sorts Units 2 and Unit 3. Moderate and High probability hits exist at the eastern end of the unit. Most of this unit is approximately 94-100 years old with a widely spaced scattering of trees older than 120 years.

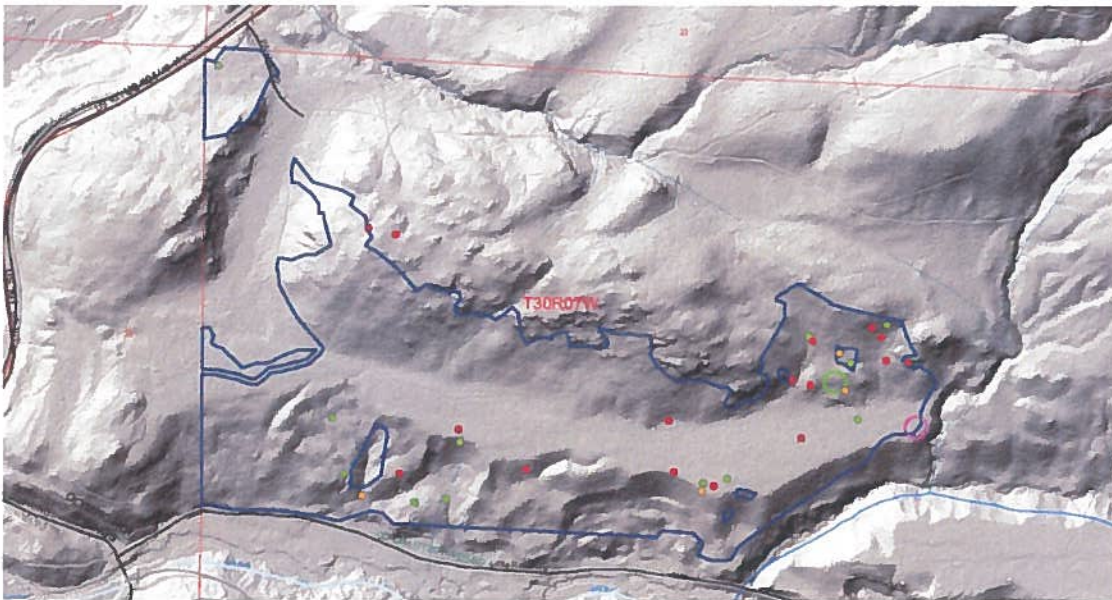


Figure 2: Sampled trees in Units 2 and 3. Green dots represent trees less than 120 years old, yellow are between 120 and 169, and red are over 170 years old. The green and pink circles are the moderate and high WOGHI points.



Figure 3: View of the stand in the vicinity of the "high probability" point. This was a cedar dominated stand with Douglas fir, grand fir, and western hemlock present. We sampled all three species with an age range of 80-100 years old.



Figure 4: View of "moderate" probability hit, showing 80-90 year old Douglas fir and western hemlock.



Figure 5: There are small clumps of trees within the 130-150 age range, though not enough to create a 5 acre patch. This older cohort will be protected in the leave tree strategy.



Figure 6: Scattered old growth Douglas fir are present throughout Unit 2 and will be retained in leave tree areas and as individuals. These trees have fire scarred, deeply furrowed bark and large, gnarly limbs.



Figure 7: Typical view of the second growth in Aldwell Sorts Unit 2.

General comments

This is a mature, naturally regenerated stand, with the dominant cohort that is approximately 100-110 years old. An assessment was triggered by high and moderate WOGHI scores, as well as the presence of large-diameter trees and a mix of shade-tolerant conifer in all canopy layers. This stand is at about 600 feet of elevation and is excellent tree-growing ground, producing trees with diameters over 30" in less than a century. Much of the topographic bench that runs east to west in the middle of the unit was once cleared for human activities. Old growth legacy trees are present, as are clumps of pre-1900 era trees, but not in the quantity or the distribution needed to create a contiguous polygon that is five acres or larger. Fire, past human habitation, and land management activities have created a diverse forest. Patches of big-leaf maple and red alder exist among the larger stands of conifer. Conifer species present include Douglas fir, western red-cedar, western hemlock, and grand fir.

Large tree characteristics

The largest trees in the unit are residual, old growth Douglas fir, with a Maturation II or older score, based on the Van Pelt guide. These trees have large, gnarly limbs in their crowns, deeply furrowed and fire-charred bark. Their diameters exceed 40 inches.

Snag characteristics

Snags are relatively sparse. Most have been recruited from the current stand of second growth and are the result of disease or wind damage.

Down wood characteristics

Downed wood is frequent in this stand and includes all age and decay classes. Some is very old and soft, and is from the legacy cohort. Most is from the current, dominant cohort. It includes both conifer and hardwood. Older pieces of downed wood are fire charred, some have cut ends, and some are from natural windfall.

Stand structure history

Based on fire damage to the oldest trees in the stand, one or more fires burned through the area between 80 and 130 years ago. There are two cohorts of pre 1900 trees in this stand: The first are fire scarred Douglas fir that exceed 250 years in age, based on their size and physical characteristics. The second group range from 130-150 years old and some of these have suspicious scars that could be the result of fire, though no char is present. Stumps exist sporadically throughout the stand, suggesting that perhaps timber harvest was done on an as-needed basis rather than all at once. It is possible that a homestead existed at this site in the early 1900s and much of the flat area was cleared for a, which matches the tree ages that are between 80 and 110 years old. The east end of the unit, the rocky outcrops, and the steep southern edge look like they were lightly managed.

Conclusion

The forest in Aldwell Sorts Unit 2 does not meet the criteria for deferral under DNR's old growth policy, even though it contains scattered old growth trees and has areas with mature forest canopy structure. The spacing is too wide between the old growth trees, and/or the trees that are older than 120 years, to delineate a contiguous 5 acre polygon with at least 20% canopy coverage of legacy trees. I sampled 21 trees that were 150 years old or less, and their average age was 103 years. If the two trees between 120 and 150 years are excluded from this average, it falls to 96.8 years. Great care has been taken by Straits District staff to capture all of the old growth trees in leave tree clumps and as individuals. Additionally, large specimens that aren't technically "old growth" but are in excess of 120 years of age are also prioritized for leave tree retention.

WADNR WEST SIDE OLD GROWTH ASSESSMENT

June, 2007

1. BATCH COVER SHEET TABLE

Older Forest Batch_Id	Primary Twn-Rge-Sect		Name of Assessor	Exam Date	Number Sample Points Visited	Number Old Growth Polys Created	Number LULC FIUs Visited
<i>OF_batch_id</i>	<i>Pri_township</i>	<i>Pri_sect</i>	<i>Assessor_name</i>	<i>Exam_date</i>	<i>num_spt_visit</i>	<i>num_OGpolys</i>	<i>num_lulc_visit</i>
012515_12172020	T30R07W	27	Nattinger, Graywolf	12/17/2020	9	0	02

Sale name:	Access notes: From Hwy 101 Elwha river crossing, follow Olympic Hot Springs Rd east and turn left onto Little River Rd. Follow Little River Rd 0.6 mile. Park and walk north to the unit.
Aldwell Sorts U2	

2. FRIS SAMPLE POINTS TABLE

Field Visited Sample Points Only

(Note: moderate= 50-59 woghi non-OESF and high= 60+ woghi).

RIU Id	Sample Point	Remnant Trees Present? "Y" or "N"	RIU Id	Sample Point	Remnant Trees Present? "Y" or "N"	RIU Id	Sample Point	Remnant Trees Present? "Y" or "N"
<i>Riu_id</i>	<i>spt_no</i>	<i>remn_pres</i>	<i>Riu_id</i>	<i>spt_no</i>	<i>remn_pres</i>	<i>Riu_id</i>	<i>spt_no</i>	<i>remn_pres</i>
012515	0001	Y						
012515	0002	Y						
012515	0004	Y						
012515	0006	N						
012515	0007	N						
012515	0011	N						
012517	0009	N						
012517	0013	N						
012517	0016	N						

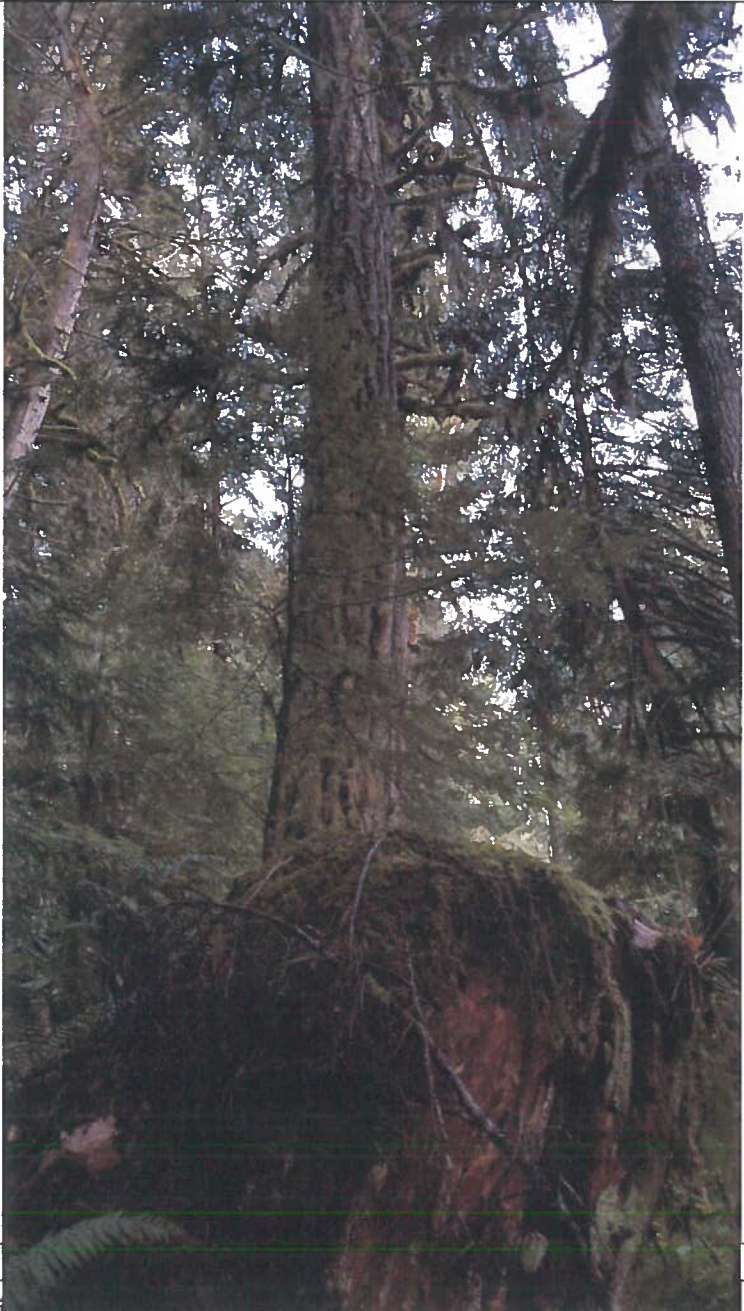
3. OLD GROWTH POLYGONS TABLE

Old Growth Polygon Id	Est. Acres	Number of Photos Taken	Primary FMU Polygon (RMU_Id) (if present)	FRIS Data Source (Enter upper case "X" if applicable, else blank)	
				"Plots"?	"LULC"?

WADNR WEST SIDE OLD GROWTH ASSESSMENT

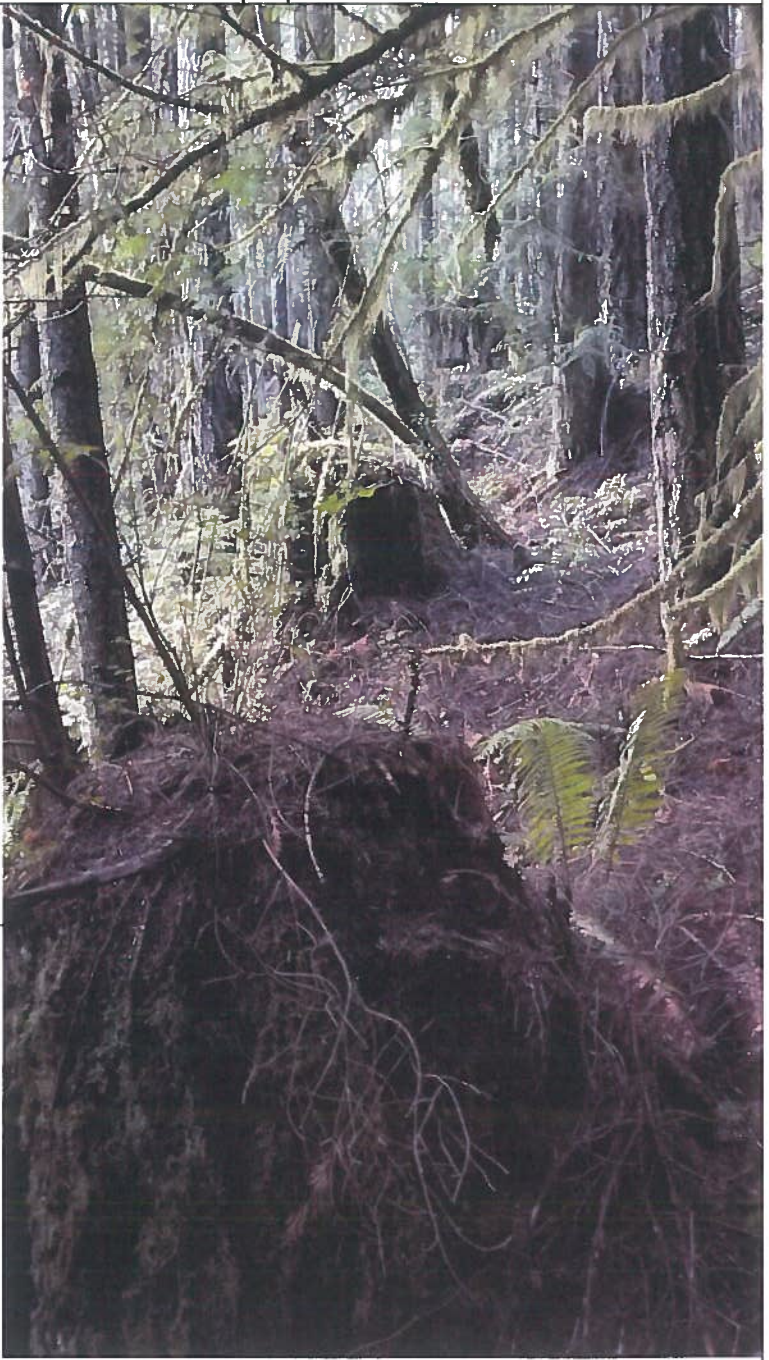
June, 2007

--	--	--	--	--	--

CHOOSE ONE OPTION Per Row BELOW					
<i>Opt. #1: Describes OLD GROWTH POLYGON</i>	<i>Opt. #2: Describes FRIS SAMPLE POINT</i>		<i>Opt. #3: Describes LULC FIU</i>		
Old Growth Polygon Id	RIU Id	Spt No	LULC Riu_Id	Photo Temp. File Name	Photo Description (above), Photo (below):
<i>OG_poly_id</i>	<i>Riu_id</i>	<i>spt_no</i>	<i>Lulc_riu_id</i>	<i>photo_id_temp</i>	<i>photo_descript</i>
	12515	2		1.jpg	Individual, remnant, legacy trees and cut stumps are present around spts 1, 2, and 4 of RIU 12515.
					


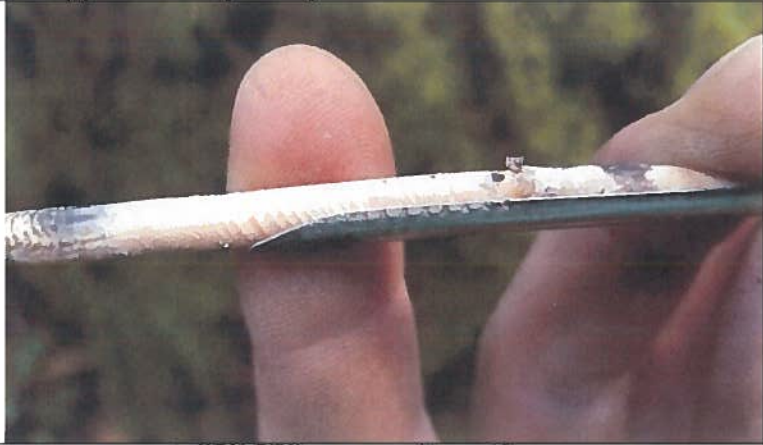
WADNR WEST SIDE OLD GROWTH ASSESSMENT

June, 2007

	12515	2		2.jpg	Cut stumps are more evident within the riparian zone to the east of the proposed harvest unit.
					



WADNR WEST SIDE OLD GROWTH ASSESSMENT

June, 2007

	12515	1		3.jpg	Burn scars are present on legacy trees and cut stumps.
					
	12515	2		4.jpg	One legacy tree was core sampled and determined to be approximately 280 years old.
					

WADNR WEST SIDE OLD GROWTH ASSESSMENT

June, 2007

	12515	4		5.jpg	Near spt 2 and 4 of RIU 12515 there are pockets where shade tolerant species are dominant and canopy gaps exist.
					
				6.pdf	On Aldwell Sorts Canopy Height Map
					

WADNR WEST SIDE OLD GROWTH ASSESSMENT

June, 2007

5. NARRATIVE TABLE(S)

(Note: Copy blank template below and append to end of report for more than 2 sets of narrative).

Opt. #1: Describes Old Growth Polygon		Opt. #2: Describes FRIS Sample Point			Opt. #3: Describes LULC FIU		
Old Growth Polygon Id	xxxxxx_x	RIU Id	12515	Spt No	0002 0004	Lulc Riu_Id	xxxxxx
<i>OG_poly_id</i>		<i>Riu_id</i>		<i>spt_no</i>		<i>Lulc_riu_id</i>	

5a. General Comments (*gen_comm_narr*):

The current stand within RIU_ID 12067 is comprised of mixed age douglas fir (DF), hemlock and cedar. The stand contains several pockets of relatively moist soil conditions within which red alder and big leaf maple are abundant. The dominant cohort of timber within the stand consists of DF ~30" dbh. One dominant DF was cored sampled and determined to be ~150 years old. A distinct cohort of legacy DF are present individually and in small clusters throughout the stand. Cut stumps are present throughout the stand. Areas of the stand which are not affected by localized conifer disturbance have generally closed canopy with hemlock and red cedar mid-story. Areas with localized conifer disturbance maintain individual dominant DF, and mid-story hemlock, cedar are beginning to approach the canopy, interspersed maple and alder.

5b. Large Tree Characteristics (*largetree_narr*):

There exists a distinct legacy cohort of DF within this stand represented by deeply furrowed bark, relatively large dbh, epicormic branches, and burn scars. Legacy DF are scattered individually up to clumps of 3-4 trees throughout the proposed harvest area. Legacy DF range from 50-100% larger dbh than that of the dominant DF cohort.

5c. Snag Characteristics (*snag_narr*):

Snags abundance is low to moderate throughout much of RIU 12515. Snags appear to be of two distinct origins; large diameter, fire scarred red cedar, and small diameter mixed species snags without burn scars.

5d. Down Wood Characteristics (*downwood_narr*):

Down woody debris abundance is high. Downed wood varies in size and species. Areas with relatively moist soil generally have larger diameter down wood present.

5e. Stand Structure History (*stand_struct_narr*):

This stand appears to have been commercially harvested around 1870, after which the unit was burned. Legacy DF left on the landscape were likely passed over due to their minimal market value at the time of harvest. The stand was naturally regenerated, primarily with douglas fir. Patches of shallow soil or which had excessive moisture in the soil and/or root rot had much of the DF component fall out of the canopy allowing for the establishment of shade tolerant and deciduous species within those areas.

5f. Conclusion (*concl_narr*):

This stand does not meet the criteria for an old growth stand. Cut stumps provide evidence of a stand initiating event. The dominant cohort of timber within the stand is douglas fir and appears to have originated around the stand initiating event which occurred after 1850. Individual legacy trees within the stand exhibit distinct old growth characteristics and burn scars, which are not present on any trees within the dominant DF cohort.