

Washington DNR West Side Old Growth Assessment Form

Version 3.0 (Revised and updated Jan 31, 2022)

Date	Assessor name	Primary Twn-Rge-Sect	Timber sale/activity name	Timber sale unit number(s)	FMAs assessed	Old-growth delineated (Y/N)
9/20/22	Sam Lake, Alan Mainwaring	T16R03W S5,T17R03W S32	Juneau	Unit 1	318213	N

Access notes:	From Bordeaux road, access the E-9000 (Master lock H-957) driving to the E-9100 where the unit can be accessed.
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All relevant WOGHI points did NOT pass secondary screening (T/F/NA): F

If True, then full assessment not required; simply list the points in the table below and file form as usual. Photos and a short, few-sentence narrative are highly recommended to document situation.

WOGHI/FRIS points visited

List all points whose vicinity was field-visited, even low-probability WOGHI points.

RIU Id	Sample point #	WOGHI probability (L/M/H)	RIU Id	Sample point #	WOGHI probability (L/M/H)	RIU Id	Sample point #	WOGHI probability (L/M/H)
16601	28	L						
16601	23	L						
16601	22	H						
16601	12	L						

Old-Growth polygons

Send any delineated shapefile(s) to Forest Resources Division along with final assessment.

Old-growth polygon Id (Format: RIU#_1, RIU#_2, etc.)	Acres	WOGHI points included					
		RIU Id	Sample points	RIU Id	Sample points	RIU Id	Sample points

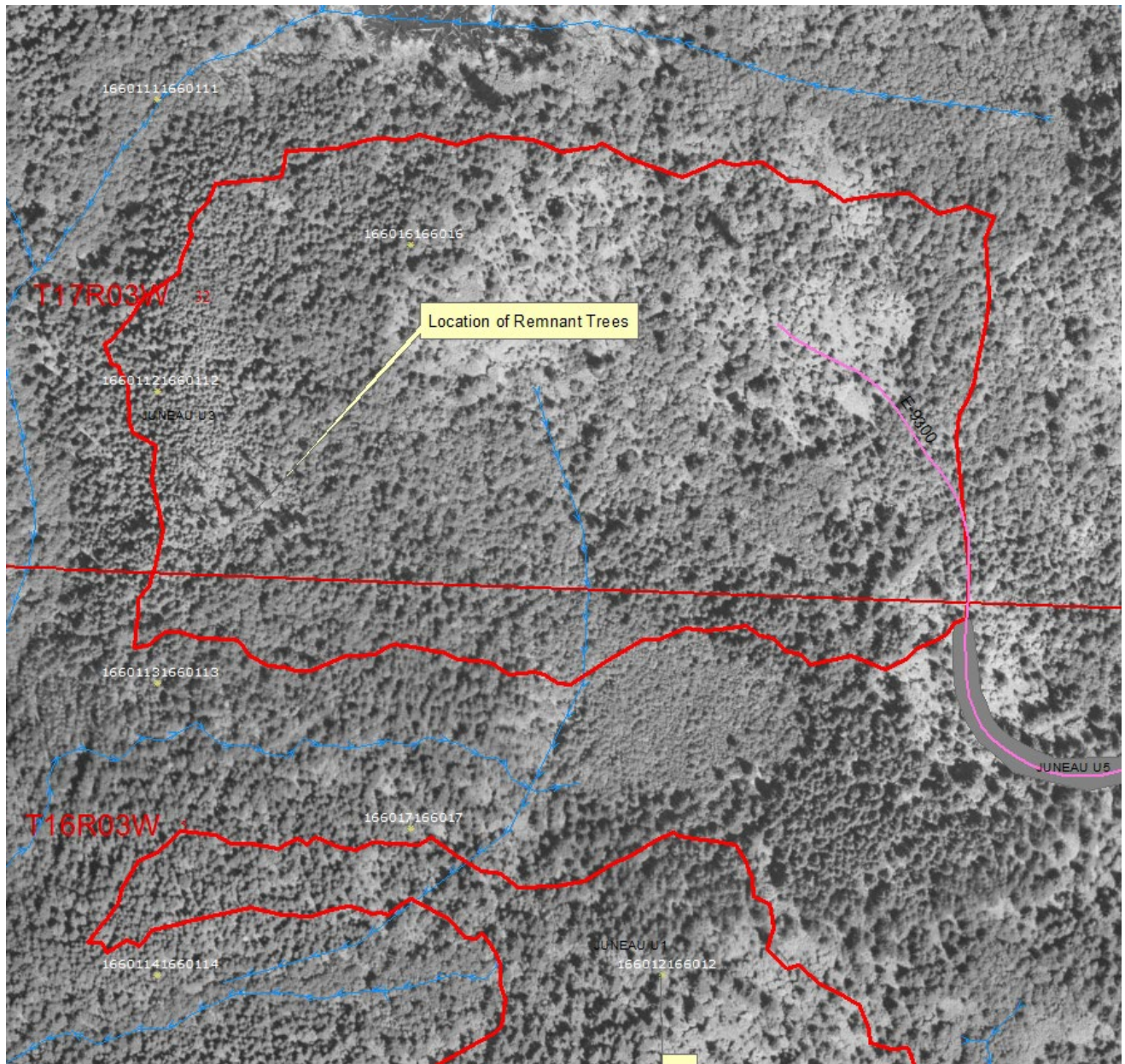


FIG 2. 1958 Orthophoto for Northern portion of stand where Remnant OG trees are observed.

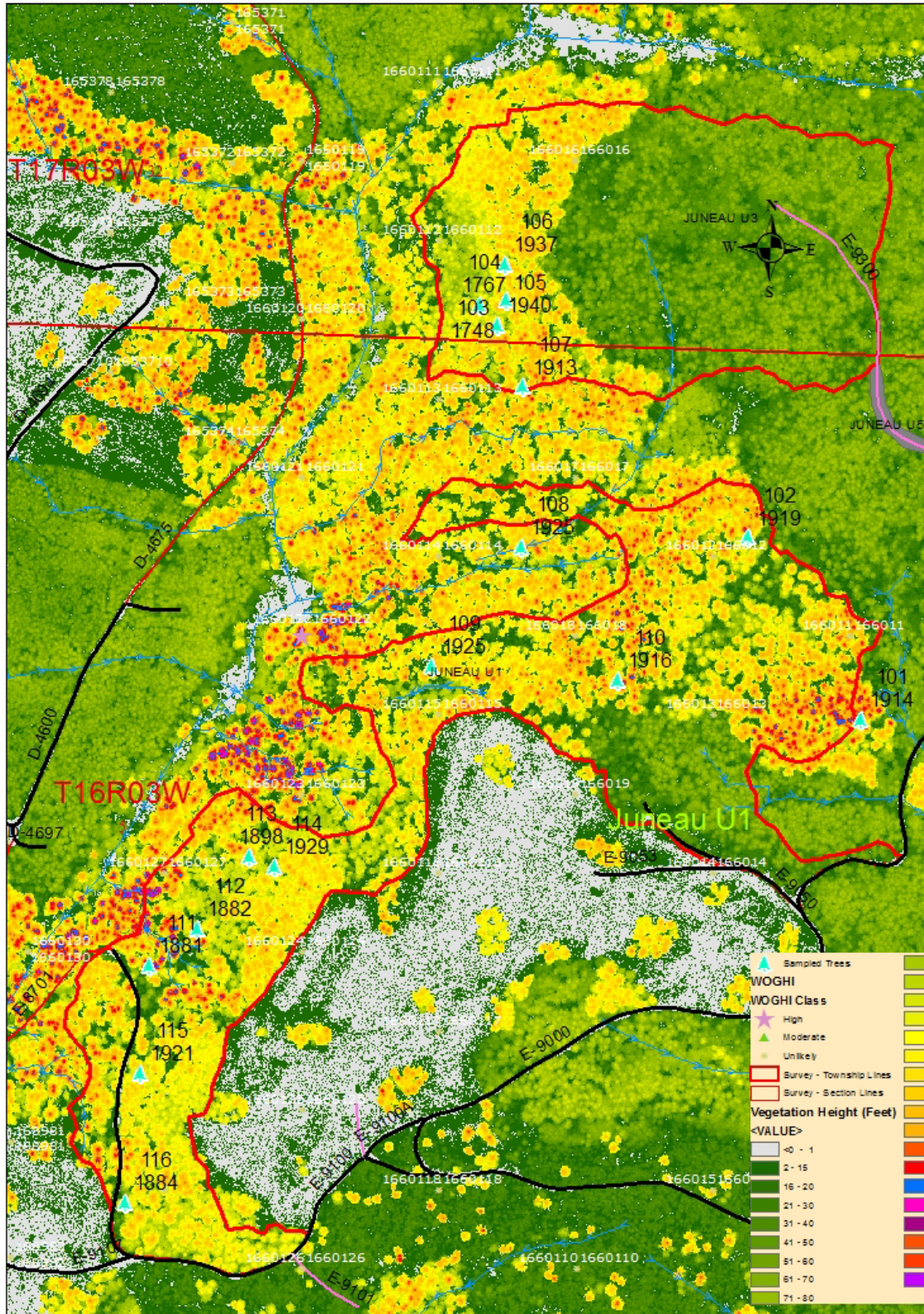



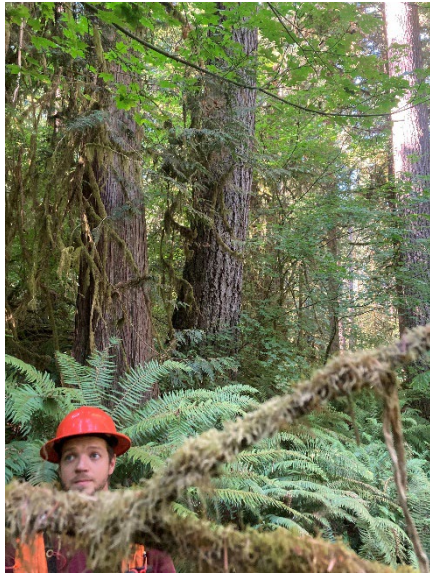
Fig 3. LiDAR Vegetation Height showing location of cored trees with corresponding origin year, labeled on map as Sampled Trees.

Tree List

Tree #	SPP/DBH	VanPelt Indv Tree Score	Cut Stumps present	Age/Origin Yr	Notes
Unit 1 101	DF/46.6	2.5	Y	107/1914	
102	DF/45.0	1.5	Y	98/1923	
103	DF/56.5	5	N	273/1748	Rem OG
104	DF/42.2	5	N	254/1767	Rem OG
105	DF/37.3	1	N	81/1940	
106	DF/39.5	1	Y	84/1937	
107	DF/43.0	1	N	108/1913	
108	DF/38.5	1	N	92/1929	
109	DF/37.8	1	N	96/1925	
110	DF/45.2	1	N	105/1916	
111	DF/51.2	1.5	N	140/1881	
112	DF/49.3	2	N	139/1882	
113	DF/46.7	1.5	N	123/1898	
114	DF/33.9	1	Y	92/1929	
115	DF/31.7	1	Y	100/1921	
116	DF/55.0	1.5	Y	137/1884	

Fig 4. Sampled tree data from Stand Origin Assessment.

<p align="center">Photo (paste image in box and write caption in same box)</p>	<p align="center">Nearest WOGHI point (RIU/Pt#)</p>	<p align="center">In OG polygon? (Y/N)</p>
 <div data-bbox="233 1209 943 1409" style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Douglas-fir stand with some Western Hemlock regen in understory.</p> </div>	<p align="center">16601 28 (Unlikely)</p>	<p align="center">N</p>



Mixed Species stand with Douglas-fir, Western Hemlock, Western Red Cedar.

16601
23
(Unlikely)

N



Large hand felled stump.

16601
23
(Unlikely)

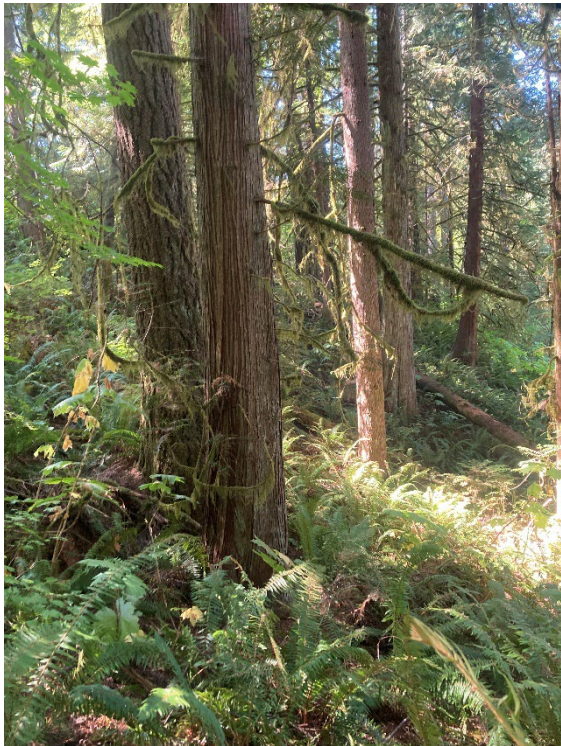
N



Large stump with charcoal. Stump has no indicators it is from harvest.

16601
22
(High)

N



Stems of over-story WRC WH, and DF. Some new recruits for DWD seen in background.

16601
22
(High)

N



Stand with mixed species composition. Old cedar log in decomposition class 3.

16601
22
(High)

N



Hand cut stump located just uphill of sample point.

16601
22
(High)

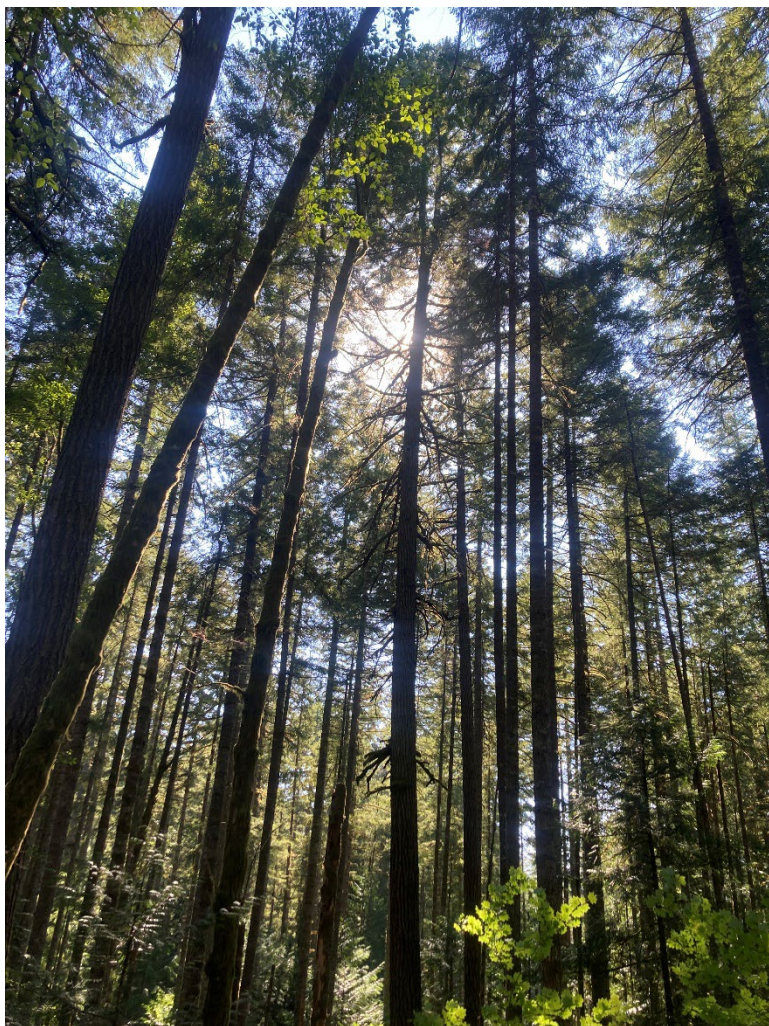
N



Douglas-fir stand with vine maple in understory.

16601
12
(Unlikely)

N



Remnant old-growth with large and gnarly epicormics branches.

Approximately 400'
SE of
16601
12
(Unlikely)

N

Narrative tables

Complete one set for each distinct portion of the assessment area – for example, one for an old-growth polygon if found, and one set describing non-old-growth conditions in other portions of assessment area. (If only one condition characterizes the assessment area, only one narrative is needed.)

Paste additional tables below if more than two narratives are needed.

Narrative set 1:

Old-growth polygon ID	WOGHI points applicable	
	RIU ID(s)	Sample point number(s)
<i>Enter polygon ID, or N/A</i>	16601	22
	16601	23

General comments

This assessment was conducted due to the HIGH WOGHI hit at sample point 22, which has a score of 65. We reviewed this point, and point 23 to help determine the stand origin and history. This land came into DNR ownership in 1933 sold by Mason County Logging Company which operated the nearby Bordeaux Mill from late 1800's to 1940's. This stand was logged within this time period with DNR's 1936 Historical Vegetation layer labeling the approximate area as seedling sapling. The Van Pelt field guide for rating individual trees was used on several dominant trees in the assessment area. Branch stubs are retained on the lower third of the tree bole, the bark is low to moderately fissured at the base and tight, not flaky. Most of the trees have small and wispy epicormic branches. The evaluated trees scored as Maturation 1 or lower. The Van Pelt Stand Development Stages key was used to evaluate the Douglas-fir over-story. Many mature western red cedar and hemlock were identified in the over-story as part of the pioneering cohort, therefore, not evaluated in and of themselves as part of the key. Understory shade tolerant trees were present and used in the key. Both 22 and 23 keyed out to Maturation 2. Douglas-fir overhead, small epicormic branches present, WH and WRC saplings and small poles present yet not in the main canopy.

Large tree characteristics

A dominant, large tree was cored at each of the points visited and are listed here.

Point # Species DBH Age Origin Date Tree Score (Van Pelt)

22 DF 45.9" 121 1901 1.5

23 DF 54.3" 104 1918 3

Throughout these sample points the dominant large Douglas-fir trees had tight bark with shallow fissures with whorls and branch stobs present on the lower third of the tree. Epicormic branches, when present, were small and no "large and gnarly" epicormics branches observed. The coring revealed some variance in origin date for each site but there was not an observed spatial variance in tree characteristics. The WRC and WH in the over-story did also not display any characteristics (large branch size, canopy complexity) that would indicate an origin date prior to the DF.

Snag characteristics

No large remnant snags were present with the exception of a few charred cedar in stage 7 decomposition class.

Down wood characteristics

Down woody debris observed at points 23 is comprised of newly recruited Douglas-fir, mainly from root rot. Some larger remnant cedar, 30-40" diameter, down woody debris is observed near point 22. Some recent recruit alder near point 23 was observed.

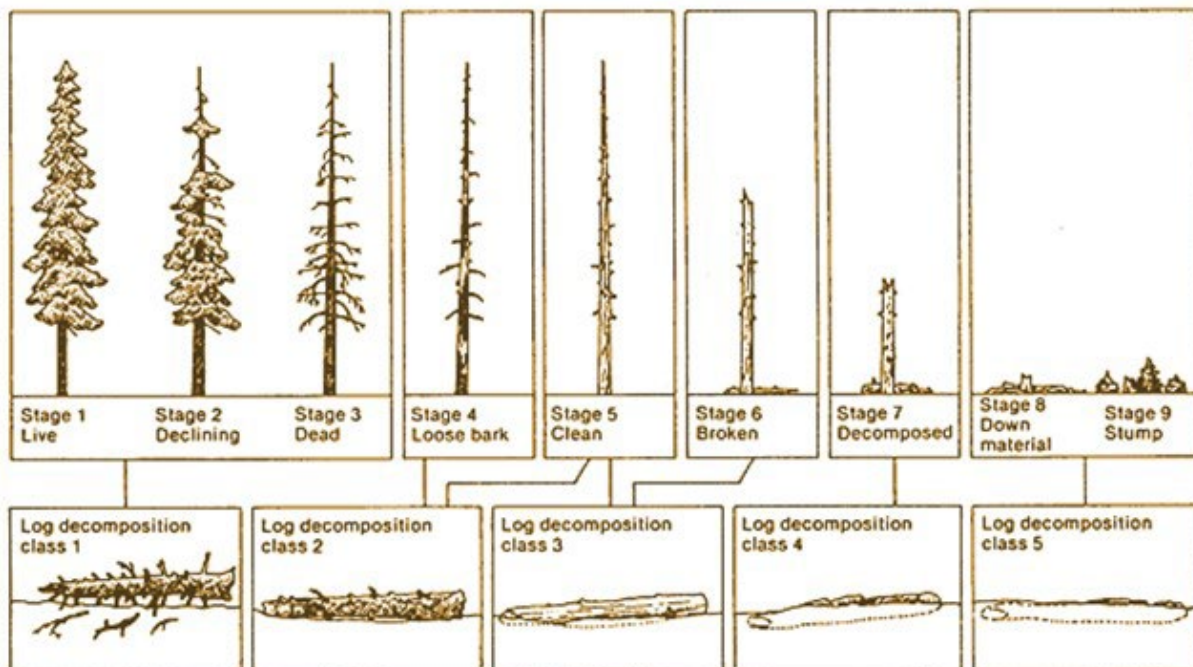
Stand structure history

At these sample points, fire char was observed on hand cut stumps as well as natural mortality stumps. This indicates a higher intensity fire passed through in the late 1800's causing mortality over much of the area, allowing a new cohort to establish. The initial logging entry in early 1900's would have salvaged any commercial trees left post fire, leaving the advance regen intact in areas with little to salvage. These areas have a canopy of majority DF with some over-story western red cedar and western hemlock. The lack of remnant trees, fire char on natural disturbance stumps, lead to the conclusion that the various species are of the same cohort. These points are both located in riparian areas which may explain the consistent presence of Cedar. It is worthy to note that adjacent to point 23 in the riparian area is a heavy component of mature red alder, which displays how site conditions influence species composition.

Conclusion

This stand does not meet the criteria for deferral under OG policy. This is a stand of mature second growth with a mixed species composition. Fire has removed the majority of any remnant DWD and appears to be the cohort initiating disturbance, with hand cut stumps indicating that surviving trees were salvaged in the initial logging entry. The origin date is younger than 1850. Additionally no large remnant trees were observed in this area.

Tree and log decomposition classes (from Maser et al. 1979)



Narrative set 2:

Old-growth polygon ID	WOGHI points applicable	
	RIU ID(s)	Sample point number(s)
<i>Enter polygon ID, or N/A</i>	16601	28
	16601	12

General comments

R16601 28 and 12 are both unlikely WOGHI hits with this area having been intensively harvested. Similar to the two sample points listed above these areas were harvested sometime in early 1900's. These areas are characterized by Douglas-fir over-story with shade tolerant Hemlock and Cedar in the mid-story.

Large tree characteristics

A dominant, large tree was cored at each of the points visited and are listed here.

Point #	Species	DBH	Age	Origin Date	Tree Score (Van Pelt)
28	DF	39"	92	1930	1.5
12	DF	30.1"	102	1920	0

The large trees at the visited sample points were mainly Douglas-fir characterized by tight bark with shallow fissures and branch whorls and stobs present in lower third. At point 28 there was some small "whispy" epicormic branching observed. This may be due in part to root rot in the area allowing sunlight to reach lower portions of tree.

Snag characteristics

Observed snags are comprised of root rot kill Douglas-fir where majority of tree has snapped off. No legacy snags observed.

Down wood characteristics

Down wood in these areas is comprised of recent recruit DF logs from root rot kill, and smaller poles from stem exclusion phase, especially at point 12. No large legacy down wood observed.

Stand structure history

This stand was commercially logged in early 1900's with an over-story removal cut. This opened up a large area for a new cohort to establish. The current stand is of natural regeneration with Douglas Fir as the primary species. Due to root rot and other small single mortality events some hemlock and cedar exists in mid story. It is important to note that some remnant OG trees were observed roughly 350'-400' SE of point 12, as called out in Fig 1. These may have been non-merchantable trees that survived the initial entry and released post-harvest. These trees comprise less than 20% of canopy and they are present in an area approximately 1 acre. A picture of this is included above showing large epicormics. Additionally, Fig 2 shows the presence of over-story trees in this area that are mature relative to adjacent vegetative cover.

Conclusion

This stand does not meet the criteria for deferral under OG policy. These are second growth that lack the qualifying origin date as well as structural complexity. The remnant OG trees will be protected in a leave tree clump following standard leave tree guidance outlined in PR 14-006-090.