Stand Origin Assessment form

Region: South Puget Sound

Timber Sale name: Juneau

Total number of units: 6

Planned auction date (mo/yr): April 2023

Office review:

Names of reviewer(s): Alan Mainwaring, Derwood Duncan, Abe Puz

Date of reviews: June 13, 18 & 22, 2022

Screening tools used in review: DNR GIS Combined Origin Year, LiDAR Vegetation Height, 1951, 1958 and 2017 ortho photos, FRIS (2013 refresh), RS-FRIS, weighted old growth habitat index layer (WOGHI), Land Resource Manager Special Concerns Report, LiDAR -estimated dominant tree polygons

Description of screening results by unit, including ROW units:

Unit 1: The 1958 orthophoto shows what appears to be a young second-growth stand with areas of older forest primarily near the stream to the northwest. This area also contains the oldest Combined Origin Year (COY) pixels of 1850-1900. The COY data showed the majority of the unit had an origin between 1920 and 1970. A high WOGHI point with a score of 65 is located within the northern portion of this unit.

Note: Unit 1 split into Units 1 & 3 following assessment. The northern portion of what is shown in this assessment became Unit 3. References to Unit 1 throughout this assessment also pertain to Unit 3.

Unit 2: The 1958 photo shows advance regeneration of conifer and hardwood. The COY data shows the majority of the unit had an origin between 1920 and 1970.

Unit 3: See above note under Unit 1 above.

Unit 4: origin year 1960 per GIS Combined Origin Year

Unit 5: origin year 1988 per GIS Combined Origin Year

Unit 6: origin year 1986 per GIS Combined Origin Year

Field screening completed: No Yes: for Units 1 & 2

Further assessment needed by Old Growth designee? No X Yes: for Unit 1

Names of reviewer(s): Alan Mainwaring, Drew Albright, Sam Lake

Date(s) of review: 7/12, 18 & 22/2022

Method of assessment: Visual assessment of stand and individual trees. Select sampling of representative trees within Units 1 & 2 that appeared to be older than the rest of the Unit. Used an

District: Black Hills

Unit: Littlerock

increment borer to sample trees. Keying out stand and individual trees using the Identifying mature and Old Forests (Van Pelt) field guide.

Description of field screening findings *by unit* (stand characteristics, presence & distribution of large, structurally unique trees, plan for large, structurally unique trees, and presence/absence of cut stumps, etc. Include maps of where conducted field assessment).

Unit 1 – (The original Unit 1 during this assessment was later split into Unit 1 and Unit 3 after buffering for a wetland.)

This stand is natural regeneration of second-growth conifer dominated by Douglas-fir with scattered western hemlock seedlings and saplings in the understory. Relatively few large down logs or large snags were located. The snags that are present are recent root rot killed trees or from an older cohort of trees, short, fire scared and well decomposed. Hand cut stumps were present in some areas and absent in others. A small patch of remnant old-growth Douglas-fir are located in the north end of the unit. This patch is made up of approximately 20 trees all less than 60 inches DBH and ½ acre in size. The entire clump will be a priority for leave tree retention. The northern tip of the unit (~10 acres) appears to be of a younger cohort than the rest of the unit with an origin in the 1930's. We cored two dominant trees that have an age of 81 and 84. The majority of the unit has two age classes as a result of a pre-harvest fire in the late 1870's and a commercial harvest (salvage and green trees) in the 19teens. The second-growth came in two pulses, one following the fire and the other after the harvest. The two cohorts are separate in some areas and feathered (both together) in others. An emphasis will be made to retain the older cohort as leave trees.

See Washington DNR West Side Old Growth Assessment Form for Juneau Unit 1.

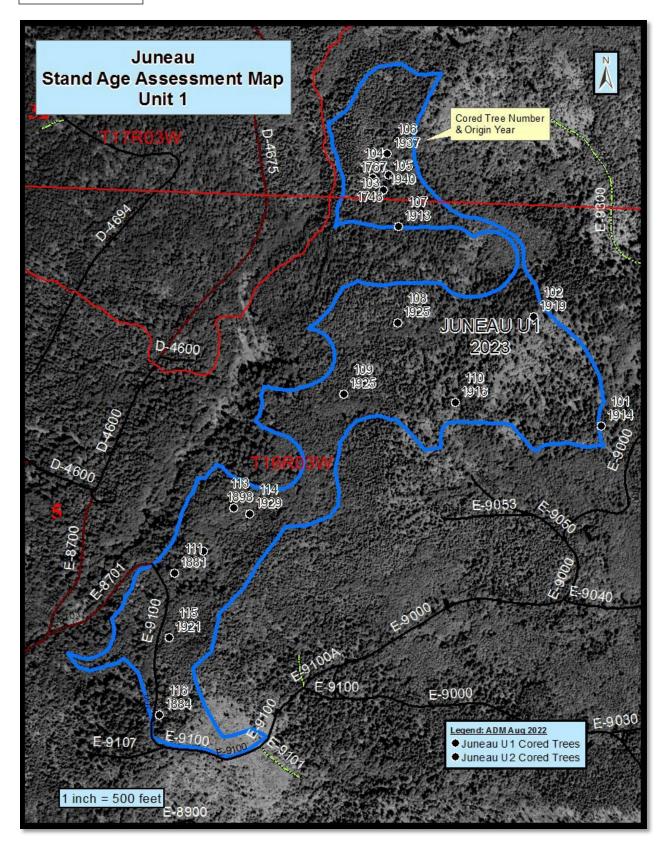
Unit 2- Less complexities than Unit 1. Douglas-Fir dominant with seedling and sapling western hemlock/ red cedar understory. Some larger red cedars within the overstory. Fire char on top and within springboard notches indicate a post-harvest fire came through this unit. Stand origin in Unit 2 appears to be in the 1910's. Cores taken indicated stand origin between 1911 and 1937.

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Tree #	SPP/DBH	VanPelt Indv	Cut Stumps	Age/Origin Yr	Notes
		Tree Score	present		
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	

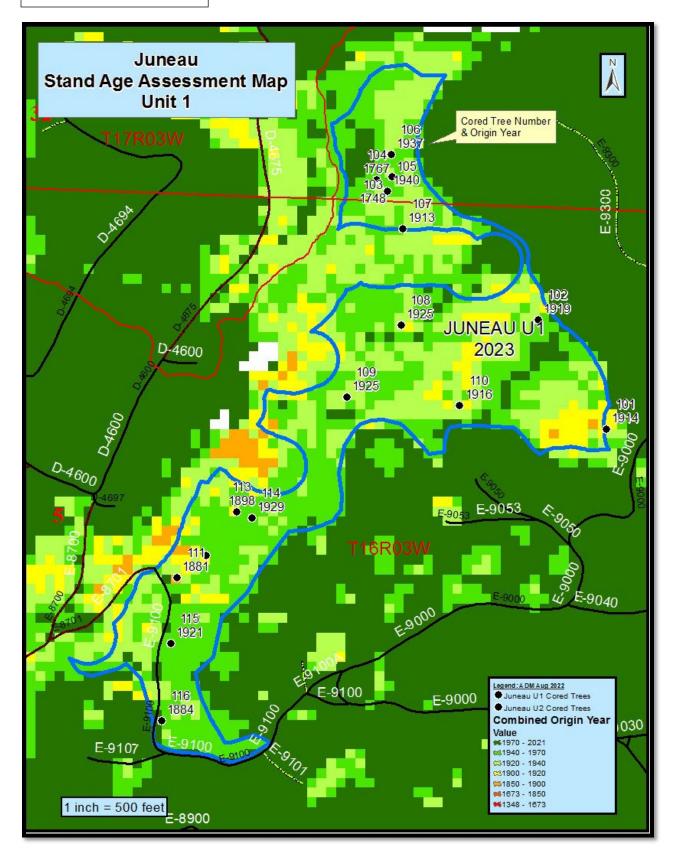
Tree List

116	DF/55.0	1.5	Y	137/1884	
Unit 2 201	DF/36.3	1	Y	104/1917	
202	DF/42.3	1	Y	107/1914	
203	DF/31.2	1	Y	110/1911	
204	DF/36.3	1	Y	97/1924	
205	DF/44.5	1	Y	84/1937	
206	DF/37.3	1	Y	99/1922	
207	DF/45.9	1.5	Y	108/1913	

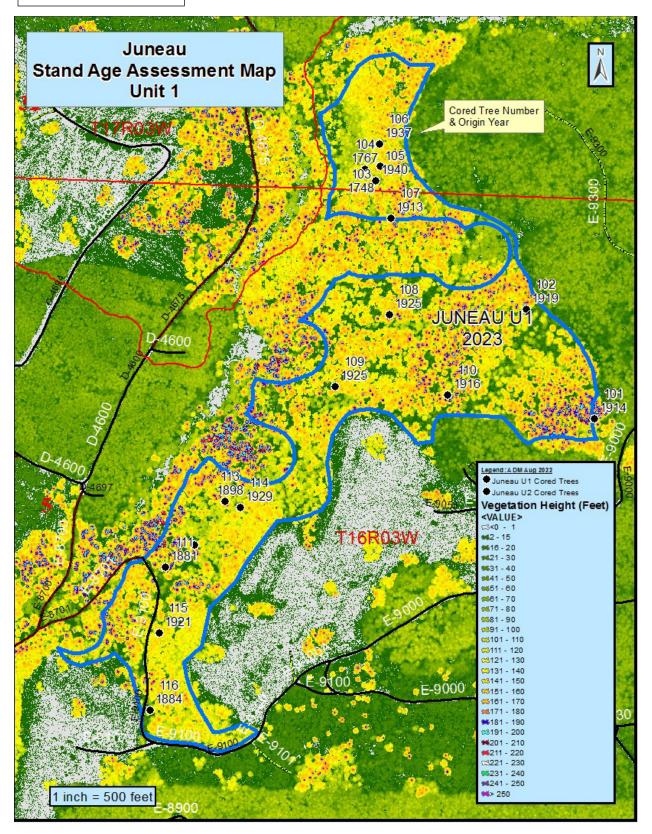
1958 Orthophoto



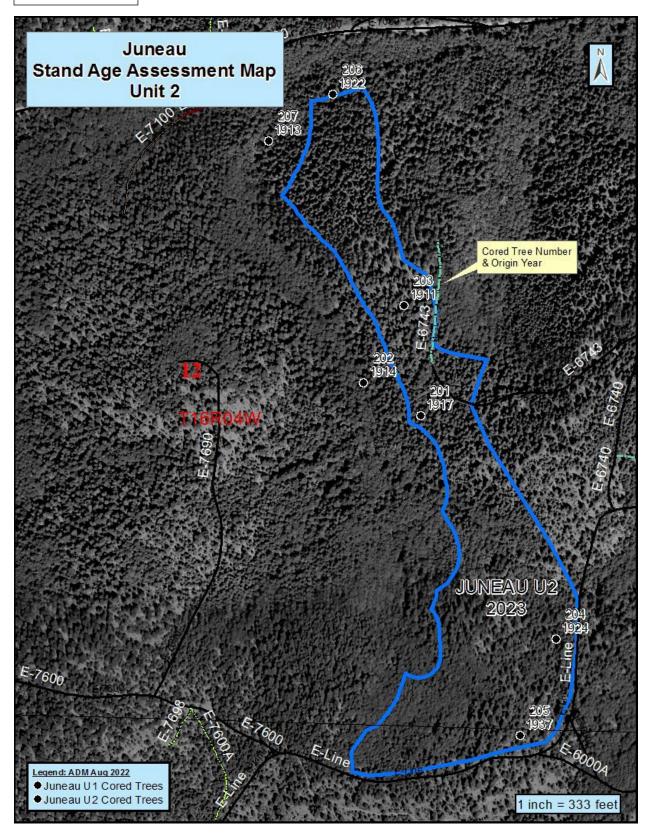
Combined Origin Year (COY)



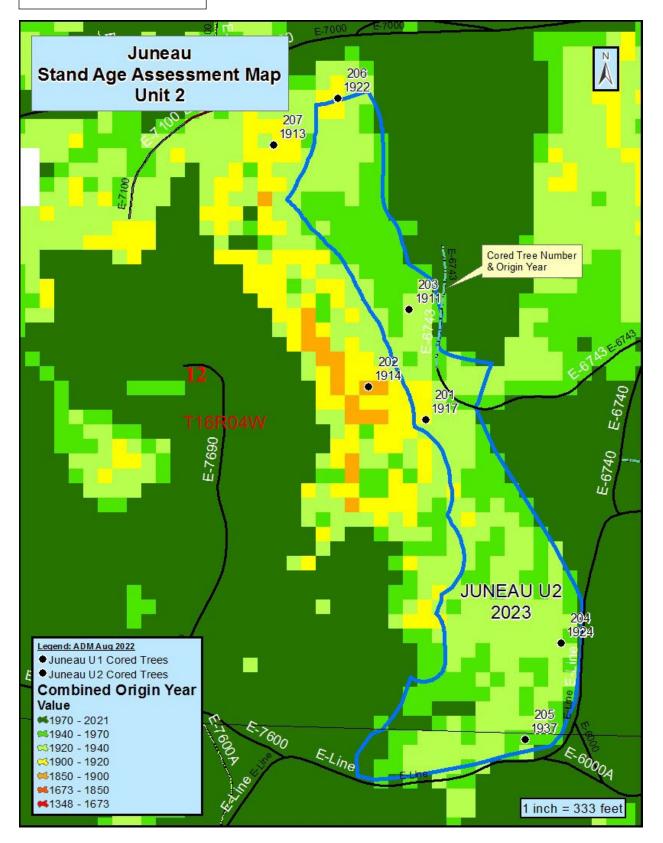
LiDAR Vegetation Height



1958 Orthophoto



Combined Origin Year (COY)



LiDAR Vegetation Height

