

Washington DNR West Side Stand Development Stage (SDS) Form

Version 1.1 (Revised and updated May 2024)

Date	Assessor name	Primary Twn-Rge-Sect	Timber sale/activity name	Timber sale unit number(s)	FMA's assessed
7/1/24, 10/29/24, 3/3/25, 3/4/25	Paul Footen, Quinn Bosselman	T23N R07E Sec 9 and 16	Forrest Stump	1	272473

Instructions

Key each distinct forest stand type in the project area (e.g. timber sale units) in terms of Stand Development Stage (SDS), per the [Van Pelt guide](#), pages 46-47. Distinct stand type is defined as a >5-acre area that is in a different SDS than other parts of the project area. Walk enough of the stand (informed as needed by remote inventory data) to cover the project area. If the entire project area is the same stage, record just one SDS.

This form does **not** replace the *WDNR West Side Old Growth Assessment Form*. Please use that form to conduct old growth assessments.

Stand development stages observed (add rows as needed if several stand types are present)

Unit number	Sector of unit, if applicable (e.g. N, S, E, W, NE, NW, SE, SW, ...or 'all' or 'remainder' or whatever makes sense)	Approximate acres	SDS (Van Pelt guide pg. 46-47) <i>see appendix for crosswalk to other DNR-relevant classifications</i>
1	All		Maturation I

*SDS classes are, in order: Cohort Establishment, Canopy Closure, Biomass Accumulation/Stem Exclusion, Maturation I, Maturation II, Vertical Diversification, Horizontal diversification, Pioneer Cohort Loss.

*Important additional notes on the Van Pelt key are included at the bottom of this form.

Notes / rationale**

Optional narrative text to explain observations above:

Unit 1 consists of mature Douglas-fir and western hemlock, interspersed with western redcedar, silver fir, red alder, and Sitka spruce, that originated post-1920. The understory brush consists of sword fern, salmonberry, red huckleberry, vine maple, Oregon grape and salal. Numerous soft snags and hand cut stumps indicate the stand was fire regenerated and subsequently salvaged for Douglas-fir and western redcedar. A second cohort of western hemlock and silver fir seedlings and saplings ranging from 4 inches to 8 feet in height was observed throughout most of the unit. The northwest corner of the unit, however, did not have an established second cohort and is still in the stem exclusion/biomass accumulation stage. In other areas of the unit, gaps and openings created by mortality from root rot and old grades ranging from 0.25-2 acres have contributed to the establishment of a shade-tolerant mid-canopy reaching over 20 feet in height. Remnant trees with a pre-1850 origin date were also observed amongst the extensive root rot and dwarf mistletoe. However, mature trees in this area did not demonstrate the extensive epicormic branching consistent with a Maturation II stand. Furthermore, the small pockets that exhibited Maturation II characteristics of a developed mid-story did not constitute 5 continuous acres. Given the predominant establishment of a second cohort under 8 feet tall, general lack of epicormic branching, and overwhelming exposed bole zone, this stand is categorized as Maturation I.

Photo documentation

Include photos of relevant features of the stand(s). Add or subtract rows as needed.
(paste image in box and write caption in same box)



Unit 1 - Maturation I observed at SDS Survey Plot 1



Unit 1 - Maturation I observed a SDS Survey Plot 4 with gaps created by nearby laminated root rot and subsequent windthrow.



Unit 1 – Pocket Stem exclusion/biomass accumulation under 2 acres observed at SDS Survey Plot 6. Oregon grape ground cover with no establish second cohort

Unit 1 – Maturation I observed at SDS Survey Plot 10. Extensive understory mat of 4-8' western hemlock.





Unit 1 – Matrix of Maturation I and stand establishment in ~1.5 acre pocket of armillaria root rot with shade tolerant mid-story on the edge observed at SDS Survey Plot 12.



Unit 1 – Western hemlock carpet 2'-5' in height with taller mid-canopy within armillaria root rot succession observed at SDS Survey Plot 13. Extensive dwarf mistle associated with western hemlock visible on bole and branches.



Unit 1 – Maturation I observed at SDS Survey plot 15. Understory growth into the middle canopy visible in 20% of the general area with no epicormic branching.



Unit 1 – Maturation 1 observed at SDS Survey Plot 9. Extensive mat of western hemlock 4' or less in height.



Unit 1 – Maturation I observed at SDS Survey Plot 11 with 4' tall carpet of western hemlock and several cut stumps.

STAND DEVELOPMENT STAGE MAP

SALE NAME: FORREST STUMP
AGREEMENT#: 30-107262
TOWNSHIP(S): T23R7E
TRUST(S): Scientific School (10), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): King
ELEVATION RGE: 1800-2240

