BEC-Tree Species Description: CWHvm1

Old forests dominate the CWHvm1 landscape (61% of the forested are consists of age class 7-9 forests), though about 20% of the forested area consists of younger natural stands resulting from landslide and windthrow events as well as some wildfires. A significant portion of the CWHvm1 landscape (18% of the forested area) consists of immature stands resulting from forest harvesting. Most of this harvested area occurs south of the former North Coast Forest District, and stands are mostly less than 40 years old, though some older second growth stands up to 80+ years old are scattered along the coast. Evidence of hand logging (removal of single trees or small groups of trees) is prevalent along some coastal inlets. In recent years significant helicopter logging, targeting redcedar, has also occurred on the mid and north coast. Old natural stands are western hemlock and redcedar – dominated (36% and 34% respectively), often with an amabilis fir component. Sitka Spruce occurs on nutrient rich sites and some yellow cedar and shore pine are found on poorer, wet sites. Douglas fir occurs only in the southern portions of the CWHvm1. Younger natural stands also tend to be hemlock – cedar dominated, though many have a significant red alder component and variable amounts of the other coniferous species, depending on the disturbance history. Some southern fire-regenerated second growth has a significant Douglas fir component.

Age class distribution as a % of total forest area [Source: VRIMS 2008]

Stand age class	7-9 natural forest	7-9 harvested forest	4-6 natural forest	4-6 harvested forest	1-3 natural forest	1-3 harvested forest
% of total forest area	61	0	10	1	10	18

Tree species distribution in natural old/mature (age class 7-9) and natural immature (age class 4-6) as a % of the total natural old/mature and natural immature forest cover respectively [Source: VRIMS 2008]

Species	Bl	Cw	Fd	Hw	Ss	Yc	Dr	Pl
% of total natural old/mature (age class 7-9) forest cover	11	34	3	36	4	11	0	2
% of total natural immature (age class 4-6) forest cover	5	14	12	48	2	1	14	1

Overall, managed second growth stands contain higher western hemlock percentages (46 to 52%[1]) and lower western redcedar percentages (21 to 26%[1]) compared with old growth stands, reflecting the tendency for abundant natural regeneration of hemlock on most sites; western redcedar regenerates

[1] Range of values reflects differences between VRIMS and RESULTS data sources.

naturally as well but only tends to co-dominate or dominate where it has been planted or where slash burning has occurred. On average, existing second growth stands contain comparable percentages of Sitka Spruce and amabilis fir to the old growth stands. Douglas-fir has been planted on freely drained, warm sites in the southern CWHvm1.

% species composition of post-harvested stands [Source: RESULTS 1988-2008]

Species	Ba	Cw	Fd	H	S	Hardwoods
% of harvested area	13	26	5	52	3	1

With 18% of the CWHvm1 forested area in managed second growth, there has been some impact of tree species selection on overall tree species composition at the landscape level, though not greatly significant at this stage. The historical under emphasis of western redcedar and the overwhelming dominance of western hemlock in second growth stands is of some concern. Moderate increases in the use of amabilis fir and Sitka spruce (where spruce weevil risks are lower) would also enhance species diversity in managed second growth.

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Note: the above write-up does not account for TFL forest cover/regeneration information. This could impact on the tree species and age class percentages described above.