BEC-Tree Species Description: CWHvh2

The CWHvh2 landscape is dominated by very old forests (97% of the forested landscape is dominated by forests older than 200 years); disturbance events are primarily small in extent, resulting from death of one or a few trees at a time. Younger natural stands, originating primarily from landslide and, more rarely, large-scale windthrow events (in localized geographic areas) comprise 1-2 % of the forested matrix. Scattered fire-origin stands also occur, probably related to First Nations burning. Even-aged stands from harvesting comprise about 2% of the variant and are mostly less than 40 years old, though some very impressive 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 close to tidewater throughout. In recent years significant helicopter logging, targeting redcedar and sometimes yellow cedar, has also occurred. Old natural stands are redcedar and western hemlock – dominated (40% and 23% respectively) with yellow cedar, shore pine, Sitka spruce, and amabilis fir (except on Haida Gwaii) occurring with these species (and sometimes dominating) where site conditions are appropriate. Natural young second growth is also cedar-hemlock – dominated, often with a significant red alder component and variable amounts of the other four coniferous species, depending on the disturbance history; fire origin stands are often redcedar-dominated!

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	97	0	1	0	0	2

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	Ba	Cw	Dr	Hw	Pl	Ss	Yc
% of total natural old/mature (age class 7-9) forest cover	3	40	0	23	12	4	18
% of total natural immature (age class 4-6) forest cover	3	22	20	33	5	6	9

Harvested stands are hemlock – dominated (resulting mainly from natural regeneration) but in contrast to natural stands contain significantly more Sitka spruce and amabilis fir except on Haida Gwaii) with less redcedar and yellow cedar . This is in part due to the fact that harvesting on the coast has targeted the more productive stands over the past century, where site conditions and disturbance have favoured

spruce and amabilis fir. In addition there has been an emphasis on planting Sitka spruce since the 1970's. The recent helicopter logging has relied heavily on natural regeneration -- dominantly western hemlock.

% species composition of age class 1-3 young immature stands [Source: VRIMS 2008]

Species	Ba	Cw	Hw	Ss	Yc
% of total harvested immature (age class 1-3) forest cover	8	18	48	21	1

With just 2% of the forested landscape in even-aged managed stands, the impact of tree species selection on tree species composition and diversity at the landscape level has so far been limited. Of significant concern, however, is the reduced role of western redcedar in second growth stands. Considering the ecological, cultural, and economic importance of this species, it should receive greater emphasis in future regeneration strategies on the coast, including areas that are helicopter logged specifically for this species. Regeneration on lower productivity sites should emphasize both redcedar and yellow cedar.

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