

## West Harrop CP155 Block 1 forest structure and tree ages

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CP155 Block 1 (net area 5.0 hectares) in West Harrop Creek is included in a mapped priority deferral polygon identified by the old growth technical advisory panel (TAP) in October 2021. All ICHdw1 polygons in Kootenay Lake Landscape Unit 09 that have been classified in the BC government Vegetation Resources Inventory (VRI) as >140 years old have been identified by the TAP as priority deferral polygons.

This area was identified as a priority deferral area by the TAP because the most recent air photo interpreted VRI mapping done in 2012 classified this 34.5 hectare VRI polygon as 134 years old, or age class 7 (121 to 140 years old). The VRI polygon has now been automatically 'aged' into age class 8 (141 to 250 years old).

VRI species composition and ages are known, based on numerous field assessments in adjacent areas over the past decade, to be frequently inaccurate. The VRI polygon in question was classified in the VRI as 95% Douglas-fir and 5% larch. The actual species composition in CP155 Block 1 is 50% hemlock, 30% cedar, and 20% Douglas-fir, which is radically different from the VRI species composition.

A detailed reconnaissance of CP155 Block 1 indicates that this block has very typical mesic (cool aspect) ICHdw1 mature forest characteristics. It has no significant stand-level old growth structural attributes. It does, like many stands, have a few veteran trees that survived the fire in the early 1900's.

To confirm this qualitative reconnaissance assessment, field verification was completed on May 21, 2022. Field verification was done in conjunction with establishment of HPCC's timber plots in this block.

Erik Leslie, RPF, generally followed the guidance provided in "Verifying old forest status in the field for priority deferral areas – technical guidance" Draft v1.5, March 2, 2022. Based on detailed reconnaissance and the concurrent establishment of timber plots, the largest trees identified within the block were aged using an increment borer (or in the case of right-of-way trees that were felled during road construction in 2020, stump tree rings were counted).



*Typical forest composition and structure CP155 Block 1*



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The table below provides tree species and ages for the largest trees identified in the reconnaissance and timber plots.

Tree #	Species	dbh (cm)	dbh age	Total Age	Comments
1	Fd	62	n/a – road RoW stump	112	Typical growth pattern – not old
2	Fd	75	n/a	242	<b>Veteran tree</b> cut last year by firewood cutter. Clear evidence of release ~110 years ago (due to fire burning this stand)
3	Hw	40	n/a – road RoW stump	108	Typical growth pattern – not old
4	Fd	55	n/a – road RoW stump	120	Typical growth pattern – not old
5	Fd	65	n/a – road RoW stump	118	Typical growth pattern – not old
6	Fd	60	n/a – road RoW stump	106	Typical growth pattern – not old
7	Fd	69	126	136	Steady growth. Largest non-veteran tree found on Block.
8	Fd	80	200+	200+	<b>Veteran tree</b> with fire scar. Veteran tree in in a reserve.
9	Hw	51	93	113	Largest Hw identified on Block. Typical growth pattern – not old

The tree ages recorded above confirm the qualitative reconnaissance assessment that this stand is a very typical mature stand that very likely originated from the large fires in the Kootenay Lake areas circa 1905. **The vast majority of the largest trees in the stand are approximately 105 to 120 years old.**

The veteran tree component of this stand is <10 trees per hectare. Tree #2 and tree #8 are very typical veteran trees that survived the circa 1905 fire. HPCC does not cut veteran trees; clumps of veteran trees are in reserves.

Therefore the forest in CP155 Block 1 clearly does not meet the 'old' forest criteria used to identify the TAP priority deferral polygons.