

**BEC-Tree Species Description: SBSwk1**

Historically, the forests of the Willow variant of the SBSwk1 were dominated by mature fire-origin forests. Hybrid white spruce stands mixed with lodgepole pine and subalpine fir were widespread on upland sites with deeper soils. The lodgepole pine component was higher in younger stands, especially on drier sites, while the subalpine fir component increased with stand age. Douglas-fir dominated stands occurred on warm slopes often on colluvial soils. It is important to note that as a result the mountain pine beetle epidemic most of the mature lodgepole pine and the larger diameter immature pine trees (including age class 3 managed stands) in the SBwk1 have been killed. Depending on stand age, beetle-killed stands often have a live sub-canopy layer of immature spruce and subalpine fir. Aggressive and extensive salvage harvesting is ongoing with a focus on the most merchantable stands. Over 25% of the forested area has already been harvested.

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	39	1	21	4	9	26

Black spruce is common in the localized wetlands occurring on gentle topography. In areas near historic settlements, aboriginal burning and land clearing increased the number of stands dominated by trembling aspen and paper birch. Black cottonwood dominated stands occurred along major water courses.

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	PI	S	Fd	Bl	Ep	Act	At
% of total natural old/mature (age class 7-9) forest cover	13	60	3	18	1	1	2
% of total natural immature (age class 4-6) forest cover	21	38	2	16	6	1	17

RESULTS data for the period 1988 to 2005 indicates that spruce and lodgepole pine are the dominant species being regenerated in harvested stands. These data also indicate that hardwoods, principally aspen with lesser amounts of birch and cottonwood are common. These are naturally regenerated through seeding in and coppicing.

Localized forest high grading (intermediate utilization) of hybrid spruce in the 1950's lead to an increase in subalpine fir. Forest management of the 1960's to present have resulted in stand compositions similar to those on the natural landscape. Planting practices have likely increased the number of stands dominated by lodgepole pine and reduced the number of stands dominated by subalpine fir.

% species composition of post-harvested stands [Source: RESULTS 1988-2005]

	PI	S	Fd	Bl	Hardwoods
% of harvested area	31	48	2	8	10

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Notes:

- Black spruce is common (6% of mature forest cover) in wetlands and on some upland cold air accumulation sites
- Western redcedar and western hemlock is occasionally present in the understory and as scattered mature stems on some sites in areas transitional to ICH

The very high mortality of pine as a result of the most recent MPB outbreak in SBSwk1 landscape means that the current forest cover inventory is not up to date and no longer accurately reflects the area harvested and regeneration status. It is not possible at this time to properly characterize species composition over much of this subzone.

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