

## BEC-Tree Species Description: ESSFv2

The ESSFv2 represents the upper forested elevation landscape dominated by extensive areas of mature forest surrounding patches of younger forest. Wildfires of moderate size were the principal stand initiation disturbances. Many larger fires occurred after periods of extended drought. Prior to the recent catastrophic mountain pine beetle outbreak, the ESSFv2 landscape was dominated by mature mixed species stands dominated by lodgepole pine with lesser amounts of subalpine fir, whitebark pine and Engelmann spruce. As a result of the current mountain pine beetle outbreak much of the mature and larger diameter immature pine trees have been killed over much of the variant and it is anticipated that currently unaffected areas will in time be affected. Depending on stand age, beetle-killed stands often have a residual canopy of subalpine fir and spruce as well as a live sub-canopy layer of immature subalpine fir and spruce. In some drier more open stands advance regeneration of lodgepole pine and whitebark pine is also present.

At this time little salvage harvesting has taken place in this variant.

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	72	0	24	0	1	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	PI	S	Fd	BI	Pa	At
% of total natural old/mature (age class 7-9) forest cover	73	21		4	3	<1
% of total natural immature (age class 4-6) forest cover	94	3		1	1	<1

Only about 2% of the ESSFv2 landscape has been harvested. RESULTS data that exists for only four years (in the period between 1993 to 1999) indicates that lodgepole pine, and to a much lesser extent spruce, both planted and natural regeneration, are the dominant species being regenerated on harvested sites. Subalpine fir is often present and is derived from advance regeneration present in stands at time of harvest. Species suitability is currently somewhat limited in the ESSFv2 with pine, subalpine and spruce being the principal species. Whitebark pine is suitable on mesic and drier sites. Under projected climate conditions many sites in this landscape may be less suitable for spruce and subalpine fir than the current climate.

% species composition of post-harvested stands [Source: RESULTS 1993-1999]

	PI	S	BI
% of harvested area	81	16	4

Author: R. Coupé (January 2012)