BEC-Tree Species Description: ESSFxv1

The ESSFxv1 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 ESSFxv1 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. 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	7-9 natural	7-9	4-6 natural	4-6	1-3 natural	1-3
class	forest	harvested	forest	harvested	forest	harvested
		forest		forest		forest
% of total	80	0	16	0	3	0
forest area						

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]

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Species	Pl	S	Fd	Bl	Pa	At
% of total natural	48	12	1	24	14	<1
old/mature (age class 7-9)						
forest cover						
% of total natural	81	3	1	9	5	1
immature (age class 4-6)						
forest cover						

RESULTS data for the period 1993 to 2002 indicates that lodgepole pine is the dominant species being regenerated on harvested sites. Species suitability is currently somewhat limited in the ESSFxv1 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 1993-2002]

		Pl	S	Bl	Hardwoods
	% of harvested	61	23	15	1
	area				

Author: R. Coupé (January 2012)

Notes:

- The distribution on MPB killed stands is more patchy in the ESSFxv1 than at lower elevations. Areas of the ESSFxv1 in the South Chilcotins have been less affected by MPB at this time.
- Higher elevations of the ESSFxv1, where fires have been less frequent, have a greater abundance of Engelmann spruce, whitebark pine and sub-alpine fir.

The very high mortality of pine as a result of the most recent MPB outbreak in ESSFxv1 landscape means that the current forest cover inventory is not up to date and no longer accurately reflects the area of mature forests and harvested area. It is not possible at this time to properly characterize species composition over much of this subzone.