**Silviculture Appendix B.** Stand density and structure projected for no action and action alternatives. Action is assumed to occur in 2010; projections are made 10 and 20 years into the future for both no action and action alternatives.

Data are derived from listed units within each prescription. FVS file names and stands used are also listed.

**B-1.** Prescription to thin from below to 50% canopy cover stand density, structure and product volume.

# THIN TO 50% CANOPY COVER Thin50deis, Thin50deisNoAction

Stands DFPZ 909 and ITS 7, 33, 579, 584, 613, 638 (for 636)

Weighted by Acres	No Action			Action			
YEAR	2010	2020	2030	2010 Post	2020	2030	
Trees per acre 1-10" dbh	557	878	888	59	123	140	
Trees per acre 10-20" dbh	87	83	72	36	32	25	
Trees per acre 20-30" dbh	25	31	36	25	32	37	
Trees per acre >30" dbh	11	12	13	11	13	14	
Basal Area (ft2/acre)	315	343	359	220	248	275	
Canopy Cover >6" dbh	63	62	62	49	52	54	
Snags per acre >15" dbh	6	8	11	6	5	4	
Quadratic Mean Diameter >6" dbh	17	18	19	22	23	24	
Average Board Feet Removed	n/a	n/a	n/a	3000*	n/a	n/a	
Total Cubic Feet >9"DBH	n/a	n/a	n/a	1451	n/a	n/a	
Merch Cubic Feet >9" DBH	n/a	n/a	n/a	1266	n/a	n/a	
Total Cubic Feet 3-9" DBH	n/a	n/a	n/a	394	n/a	n/a	
QMD of Sawlog Trees Removed	n/a	n/a	n/a	11	n/a	n/a	
QMD of All Trees Removed	n/a	n/a	n/a	7	n/a	n/a	

<sup>\*</sup>drawn from preliminary cruise data, not FVS data

**B-2.** Prescription to thin from below to 40% canopy cover stand density, structure and product volume.

THIN TO 40% CANOPY COVER
Thin40deis,Thin40deisNoAction
Stands DFPZ 905A & 905B

Weighted by Acres	No Action			Action			
				2010			
YEAR	2010	2020	2030	Post	2020	2030	
Trees per acre 1-10" dbh	246	274	177	15	24	23	
Trees per acre 10-20" dbh	78	94	89	18	12	8	
Trees per acre 20-30" dbh	34	34	31	34	33	32	
Trees per acre >30" dbh	8	12	16	8	13	17	
Basal Area (ft2/acre)	310	338	336	205	228	252	
Canopy Cover >6" dbh	60	61	60	40	43	46	
Snags per acre >15" dbh	6	7	9	7	6	4	
Quadratic Mean Diameter >6" dbh	16	17	19	21	26	28	
Average Board Feet Removed	n/a	n/a	n/a	5000*	n/a	n/a	
Total Cubic Feet >9"DBH	n/a	n/a	n/a	2013	n/a	n/a	
Merch Cubic Feet >9" DBH	n/a	n/a	n/a	1753	n/a	n/a	
Total Cubic Feet 3-9" DBH	n/a	n/a	n/a	422	n/a	n/a	
QMD of Sawlog Trees Removed	n/a	n/a	n/a	12	n/a	n/a	
QMD of All Trees Removed	n/a	n/a	n/a	9	n/a	n/a	

<sup>\*</sup>estimated by field plots

## **B-3.** Prescription to plantation thin (CWHR size 3) stand density, structure and product volume.

# PLANTATION THIN (CWHR SZ 3)

DEISplantationthin, DEISplantationthinNoAction

Stands DFPZ 907A & 907B

Weighted by Acres	No Action			Action			
				2010			
YEAR	2010	2020	2030	Post	2020	2030	
Trees per acre 1-10" dbh	267	559	462	18	0	0	
Trees per acre 10-20" dbh	136	147	133	78	84	63	
Trees per acre 20-30" dbh	3	12	28	3	13	33	
Trees per acre >30" dbh	1	1	1	1	1	1	
Basal Area (ft2/acre)	191	244	289	109	146	183	
Canopy Cover >6" dbh	48	56	61	34	41	48	
Snags per acre >15" dbh	1	1	2	1	1	1	
Quadratic Mean Diameter >6" dbh	12	14	15	14	16	19	
Average Board Feet Removed	n/a	n/a	n/a	1500*	n/a	n/a	
Total Cubic Feet >9"DBH	n/a	n/a	n/a	1034	n/a	n/a	
Merch Cubic Feet >9" DBH	n/a	n/a	n/a	855	n/a	n/a	
Total Cubic Feet 3-9" DBH	n/a	n/a	n/a	346	n/a	n/a	
QMD of Sawlog Trees Removed	n/a	n/a	n/a	12	n/a	n/a	
QMD of All Trees Removed	n/a	n/a	n/a	9	n/a	n/a	

<sup>\*</sup>estimated by field plots

**B-4.** Prescription to regenerate aspen stand density, structure and product volume.

Aspen Prescription*						
FEISaspennoaction, FEISaspen						
Stand aspen4 (includes units						
SBaspen3 & SBaspen4)	ı	No Action	n	Action		
				2010		
YEAR	2010	2020	2030	Post	2020	2030
Trees per acre 1-10" dbh	183	188	249	19	920*	905*
Trees per acre 10-20" dbh	47	53	59	15	16	17
Trees per acre 20-30" dbh	11	10	13	4	4	3
Trees per acre >30" dbh	13	14	14	0	0	2
Basal Area (ft2/acre)	200	223	245	34	63	81
Canopy Cover >6" dbh	54	57	58	28	30	31
Canopy Cover of trees >30" dbh	18	20	21	0	1	2
Canopy Cover of trees >20" dbh	28	29	32	8	8	9
Aspen TPA 1 to 10" dbh	16	14	14	16	917*	903*
Aspen TPA 10-20" dbh	14	13	14	14	17	18
Aspen TPA 20-30" dbh	3	3	3	3	3	3
Aspen Basal Area (ft <sup>2</sup> /acre)	25	26	28	25	51	69
Aspen Canopy Cover of aspen						
trees >6" dbh	26	26	26	26	28	29
Snags per acre >15" dbh	0	1	2	0	0	0
Quadratic Mean Diameter >6" dbh	17	17	18	15	16	16
Average Board Feet Removed	n/a	n/a	n/a	30000	n/a	n/a
Total Cubic Feet >9"DBH	n/a	n/a	n/a	1451	n/a	n/a
Merch Cubic Feet >9" DBH	n/a	n/a	n/a	1294	n/a	n/a
Total Cubic Feet 3-9" DBH	n/a	n/a	n/a	373	n/a	n/a
QMD of Sawlog Trees Removed	n/a	n/a	n/a	15	n/a	n/a
QMD of All Trees Removed	n/a	n/a	n/a	8	n/a	n/a

<sup>\*</sup>Note: There is no aspen model for the westside Sierra Nevada. Modeling was done in FVS using other hardwood species. Future growth calculations should be used for \*Aspen suckering estimated by silviculturist.

**Note:** Aspen >30"dbh are not reported because there no aspen >30"dbh were sampled.

**B-5.** Prescription for group selection stand density, structure and product volume. Action alternative figures would represent group selection harvest areas (in other words, the 1/2 to 2 acre harvest areas) and the no action figures would represent the matrix around these cutting areas. In group selection units that also have ITS or DFPZ thinning around group cutting areas, figures displayed in B-1 and B-2 would represent the matrix.

### **GROUP SELECTION TREATMENT** DEISas, DEISasNoAction All stands with FVS slf code "GS" Weighted by Acres No Action Action 2010 YEAR 2010 2020 2030 2030 Post 2020 Trees per acre 1-10" dbh 403 715 683 0\* 200\* 200\* Trees per acre 10-20" dbh 67 66 60 0 0 0 Trees per acre 20-30" dbh 0 25 26 28 0 0 Trees per acre >30" dbh 11 13 15 11 11 11 305 87\*\* 107\*\* Basal Area (ft2/acre) 281 320 125\* 18\*\* 25\*\* 29\*\* Canopy Cover >6" dbh 57 58 58 Snags per acre >15" dbh 4 7 9 4 3 2 Quadratic Mean Diameter >6" dbh 18 19 19 n/a n/a n/a Average Board Feet Removed 23196 n/a n/a n/a n/a n/a Board Feet 9-23" DBH n/a n/a n/a 12038 n/a n/a BF PIPO >23" DBH n/a n/a 628 n/a n/a n/a BF PIJE >23" DBH 332 n/a n/a n/a n/a n/a BF PILA >23" DBH 881 n/a n/a n/a n/a n/a BF ABCO >23" DBH n/a n/a n/a 5370 n/a n/a BF ABMA >23" DBH 607 n/a n/a n/a n/a n/a BF CADE >23" DBH n/a n/a n/a 639 n/a n/a BF PSME >23" DBH n/a n/a n/a 2618 n/a n/a Total Cubic Feet >9"DBH 4952 n/a n/a n/a n/a n/a Merch Cubic Feet >9" DBH 4420 n/a n/a n/a n/a n/a Total Cubic Feet 3-9" DBH 343 n/a n/a n/a n/a n/a QMD of Sawlog Trees Removed n/a n/a 17 n/a n/a

ABCO=white fir, ABMA=red fir, CADE=incense-cedar, LIDE=tanoak, QUKE=black oak, PIJE=Jeffrey pine, PIPO=ponderosa pine, PILA=sugar pine, PSME=Douglas-fir BF=board foot, GS=group selection

<sup>\*</sup>Regeneration is estimated by silviculturist. It is assumed that groups will be managed for approximately 200 TPA (not including overstory residual trees >30" dbh) at approximately 14-16' spacing. Regeneration will be both natural and artificial.

<sup>\*\*</sup>Biomass removal is not prescribed for most group selections. It is assumed that healthy trees <9"dbh in open areas would be maintained for advanced regeneration, and suppressed small trees would be removed (through pile burning) due to logging damage during harvesting or intentional removal for site preparation purposes. Trees of this size are not included in the modelled BA and canopy cover predictions of the action alternative analysis above. For the purposes of this analysis, they would be lumped in with the regeneration figures. It is expected that their basal area and canopy cover contribution would be low.

### Silviculture Appendix B

Basal Area = feet squared/acre QMD=quadratic mean diameter DBH=diameter breast height