

Alberta-Pacific FMA Area - (Revised) 2007 Forest Management Plan
All Operators - Planning Level Silviculture Matrix (2007)

All Forest Management Units (FMU)

L1, L2, L3, L8, L11, S7, S11, S18, S22, A14 and A15

Regenerated Yield Trajectory (leading + secondary species)	Empirical Yield Class #	Mixedwood Management Yield Class (FMU's L1 & L11)	Leading Species/Cover Type	Strata Standard	Transitions Towards Climax	Species proportions	Limitations to Crop Establishment	Silviculture System	Site Prep	Seeding Establishment	Crop Density (sph)	Reforestation Stage Intervention	Seed/Vegetative Collection
Aw (Comp)	1 - 3	Curve 1-Aw Natural	Aw	D	100% to D	> 90% D; <10% C	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance	Clearcut	None	LFN for natural suckering-decid	5,000 - 7,000	None	Not Required
Aw (S)(O) Aw (Sw)(C)(S) Aw (Sw)(C)(N)	4 - 6	N/A	Aw	D	100% to D	> 90% D; <10% C	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance	Clearcut	None	LFN for natural suckering-decid	5,000-7,000	None	Not Required
Aw-Pj	7	Curve 20b-PjMx - Natural	Aw	DC	100% to DC	> 50% D; 30-50% C	Coarse-textured soil, moisture stress, drought, limited germination, competition, duff depth	Clearcut	Drag-for-seeding, elevated microsite; None where straight plant options exist	LFN for natural suckering-decid; LFN for seed in Pj if drag, Plant conifer	Decid-1000 to 15,000 Conif-1000 to 1500	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Aw-Sw (N) Aw-Sw (S)	8 - 9	Curve 2 - AwSw Natural	Aw	DC	100% to DC	>50% D; 30-50% C	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance, competition	Clearcut	Elevated microsite, mixing; None where straight plant options exist	LFN-decid Plant-conifer	Decid-1000 to 15,000 Conif-1000 to 1500	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Mx-Pj	10	Curve 20b - PjMx - Natural	Pj	CD	100% to CD	> 50% C; 30-50% D	Coarse-textured soil, moisture stress, drought, limited germination, competition, duff depth	Clearcut	Drag-for-seeding, elevated microsite; None where straight plant options exist	LFN for suckering-decid; LFN for seed in Pj if drag, Plant conifer	Decid-1000 to 15,000 Conif-1200 to 1800	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Sw-Aw (S) Sw-Aw (N)	11 - 12	Curve 3 - SwAw - Natural	Sw	CD	100% to CD	> 50% C; 30-50% D	Competition, cold wet sites, disturbance, duff depth	Clearcut	Elevated microsite, mixing; None where straight-plant options exist	LFN for suckering-decid; Plant-conifer	Decid-1000 to 15,000 Conif-1200 to 1800	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Sw (O) Sw (C)-FM Sw (C)-G	13 - 15	Curve 4 - Sw Natural	Sw	C	100% to C	>80% C; < 20% D	Competition, cold wet sites, disturbance, duff depth	Clearcut	Elevated microsite, mixing; None where straight-plant options exist	Plant-conifer	Conif-1200 to 1800	Chemical or mechanical stand tending to reduce deciduous competition and maintain maximum conifer component to achieve FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Sb (O) Sb (C)-FM Sb (C)-G	16 - 18 (NOTE: Curves 16 & 17 are only applicable in L3 and A14 for MWI operations. All other operations only target Curve 18 (Sb (C) - G)	Curve 21a - Sb Good site - Natural	Sb	C	100% to C	> 80% C; < 20% D	Competition, cold wet sites, disturbance, duff depth	Clearcut	Elevated microsite, mixing; None where straight-plant options exist	Plant Sb where applicable; approval required where Sb converted to Sw - approved silvicultural prescription	Conif-1200 to 1800	Chemical or mechanical stand tending to reduce deciduous competition and maintain maximum conifer component to achieve FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Pj (O)(C)-FM Pj (C)-G	19 - 21	Curve 20a - Pj pure - Natural	Pj	C	100% to C	> 80% C; < 20% D	Coarse-textured soil, moisture stress, drought, limited germination, competition, duff depth	Clearcut	Drag-for-seeding, elevated microsite; None where straight-plant options exist	LFN for seed in Pj if drag, Plant-conifer	Conif-1200 to 1800	Chemical or mechanical stand tending to reduce deciduous competition and maintain maximum conifer component to achieve FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Aw (U)-FM ***	22	New UP curves (approved March, '07) CD & DC	Aw	D	For all stands >600 stems/ha - 40% to Sw-AW, 40% to Aw-Sw, 20% to AW. For all stands <600 stems/ha - Aw(Sw)(C)	Overstory > 90% D; < 10% C; Conifer Understory is either > or < 600 stems/ha	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance, competition	High-Effort Understory Protection (Strip-Cut) or Avoidance Harvest	Elevated microsite, mixing; None where straight-plant options exist	LFN for suckering-decid; May plant conifer to achieve minimum C component in CD/DC if required	Decid-1000 to 15,000 Conif-1200 to 1800	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Aw (U) - G ***	23	New UP curves (approved March, '07) CD & DC	Aw	D	For all stands >600 stems/ha - 40% to Sw-AW, 40% to Aw-Sw, 20% to AW. For all stands <600 stems/ha - Aw(Sw)(C)	Overstory > 90% D; < 10% C; Conifer Understory is either > or < 600 stems/ha	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance, competition	High-Effort Understory Protection (Strip-Cut) or Avoidance Harvest	Elevated microsite, mixing; None where straight-plant options exist	LFN for suckering-decid; May plant conifer to achieve minimum C component in CD/DC if required	Decid-1000 to 15,000 Conif-1200 to 1800	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Aw-Sw (U)(S) ***	24	New UP curves (approved March, '07) CD & DC	Aw	DC	For all stands >600 stems/ha - 40% to Sw-AW, 40% to Aw-Sw, 20% to AW. For all stands <600 stems/ha - Aw(Sw)(C)	Overstory > 50% D; 30-50% C; Conifer Understory is either > or < 600 stems/ha	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance, competition	High-Effort Understory Protection (Strip-Cut) or Avoidance Harvest	Elevated microsite, mixing; None where straight plant options exist	LFN for suckering-decid; May plant conifer to achieve minimum C component in CD/DC if required.	Decid-1000 to 15,000 Conif-1000 to 1500	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
Aw-Sw (U)(N) ***	25	New UP curves (approved March, '07) CD & DC	Aw	DC	For all stands >600 stems/ha - 40% to Sw-AW, 40% to Aw-Sw, 20% to AW. For all stands <600 stems/ha - Aw(Sw)(C)	Overstory > 50% D; 30-50% C; Conifer Understory is either > or < 600 stems/ha	Moist soils, cool soil temperatures, deep duff, anthropogenic disturbance, competition	High-Effort Understory Protection (Strip-Cut) or Avoidance Harvest	Elevated microsite, mixing; None where straight plant options exist	LFN for suckering-decid; May plant conifer to achieve minimum C component in CD/DC if required.	Decid-1000 to 15,000 Conif-1000 to 1500	Chemical or mechanical stand tending to maintain conifer component, reduce competition and achieve conifer FTG; Fill-plant conifer if required	All operators affirm conifer seed supply by species in relation to amount planned for planting for duration of SHS. Report status by seed zone in Silviculture AOP
MOSA All Sites	1 - 25		Non-sustainable portion of FMU A15				No regenerated yield planned, therefore no silviculture prescription required as per Alberta SRD						

Legend:

Aw = Trembling aspen (read: deciduous tree species)
 Sw = White spruce
 Pj = Jack pine
 Sb = Black spruce
 Mx = Mixedwood
 (O) = open stand, A & B Density
 (C) = closed stand, C & D Density
 (U) = stand with understory (usually conifer under deciduous)
 (Sw) = bracketing a tree species shows it is secondary (incidental)

S = South portion of FMA (see text for details of boundary)
 N = North portion of FMA (see text for details of boundary)
 COMP = composite
 MOSA = Mineable Oil Sands Area (non-sustainable forest management; area is for primary oil-sands extraction, all forest company activities are for salvage)
 F = Fair site
 M = Medium site
 G = Good site

Aw-Sw = two species listed together, neither one bracketed, shows they are in association with each other on that site

*** For 'DU' stands (YC #s 22...25) the application of high-effort understory protection or strip-cuts is based on the AVI indicating the stand has >600 stems/ha of conifer understory. All stands with <600 stems/ha of conifer understory undergo an avoidance treatment system, where operators attempt to minimize damage to residual stems. Timing of understory protection and/or avoidance is based on TSA age criteria - when the mature over-story Aw portion of the stand is available for harvest. All DU stands of appropriate Aw age are included in the 15-year SHS. All DU stands undergoing strip-cuts have the 40/40/20 (CD/DC/D) transition option.