

BGxh1 — Kamloops**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 Big sage – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-
01-MS Big sage – Needle-and-thread grass	non-forested				-	-	-	-	-	-	-	-
02 Antelope brush – Needle-and-thread grass	non-forested				-	-	-	-	-	-	-	-
03 Bluebunch wheatgrass – Selaginella	non-forested				-	-	-	-	-	-	-	-
04* Py – Antelope brush – Red three-awn	Py ²⁷	Fd ²⁷			400	200	200	7	12	15		125
05* Py – Sumac	Py ²⁷	Fd ²⁷		At ^b	400	200	200	7	12	15		125
06* PyAct – Nootka rose – Poison ivy	Fd Py			Act ^a At ^a Ep ^b	600	400	400	7	12	15		125
07* Act – Water birch	Pl ^{1,23} Sx ¹	Fd ¹ Py ¹		Act ^a At ^a Ep ^b	1000	500	400	4	9	15		125
* avoid logging	23 restricted to trial use							a productive, reliable, and feasible regeneration option				
1 elevated microsites are preferred	27 partial canopy cover required for successful establishment							b limited in productivity, reliability and/or feasibility				

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines⁺ TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred



BGxh2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 Big sage – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-
02 Bluebunch wheatgrass – Selaginella	non-forested				-	-	-	-	-	-	-	-
03* Py – Red three-awn		Py ²⁷			400	200	200	7	12	15		125
04* Py – Bluebunch wheatgrass		Py ²⁷	Fd ²⁷		400	200	200	7	12	15		125
05 Big sage – Needle-and-thread grass	non-forested				-	-	-	-	-	-	-	-
06 Rough fescue – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-
07* Act – Snowberry – Dogwood		Fd ¹ Py ¹	Sx ¹	Act ^a At ^a Ep ^b	400	200	200	4	9	15		125
08 Woolly sedge – Arctic rush	non-forested				-	-	-	-	-	-	-	-

* avoid logging

1 elevated microsites are preferred

²⁷ partial canopy cover required for successful establishment

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

[†] **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



BGxw1 — Kamloops**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Primary	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 Bluebunch wheatgrass – Junegrass	non-forested												
02 Bluebunch wheatgrass – Selaginella	non-forested												
03* Py – Bluebunch wheatgrass		Py ²⁷		Fd ²⁷	400	200	200	7	12	15			125
04 Big sage – Bluebunch wheatgrass	non-forested												
05* Py – Rough fescue – Bluebunch wheatgrass		Py ²⁷		Fd ²⁷	400	200	200	7	12	15			125

* avoid logging

²⁷ partial canopy cover required for successful establishment

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

BGxw1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
06 Rough fescue – Bluebunch wheatgrass	non-forested				–	–	–	–	–	–	–	–
07 Giant wildrye	non-forested				–	–	–	–	–	–	–	–
08 At – Snowberry – Kentucky bluegrass			Fd ³²	At ^a	1200	700	600	4	9	15		125
09 Salt grass – Sedge	non-forested				–	–	–	–	–	–	–	–

³² limited by growing-season frosts

^a productive, reliable, and feasible regeneration option

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFdc1 — Kamloops**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Primary	Conifer species		Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
		Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Rhododendron Grouseberry	PI Se	BI			1200	700	600	4	12	20	PI Others	1.6 0.8	125
02 PISe – Pinegrass	PI			BI ¹³ Se	1000	500	400	7	15	20	PI Others	1.2 0.6	125
03 BI – Grouseberry – Cladonia	PI			BI ¹³ Se	1000	500	400	7	15	20	PI Others	1.2 0.6	125
04 BI – Rhododendron – Valerian	PI Se	BI			1200	700	600	4	12	20	PI Others	1.6 0.8	125
05 BI – Trapper's tea	PI Se	BI ^{10,13}			1000	500	400	7	15	20	PI Others	1.2 0.6	125
06 BI – Horsetail – Glow moss	PI ¹ Se ^{1,32}	BI ^{1,32}			1000	500	400	4	12	20	PI Others	1.2 0.6	125
07 Sedge – Sphagnum	non-forested				–	–	–	–	–	–	–	–	–

1 elevated microsites are preferred
10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit
32 limited by growing-season frosts

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFdc2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Rhododendron – Grouseberry	PI Se	BI			1200	700	600	4	12	20	PI Others	1.6 0.8	125
02* Juniper – Pinegrass	PI ⁵²			BI ¹³ Se	–	–	–	–	–	–	–	–	–
03 PISe – Falsebox Pinegrass	PI			BI ¹³ Pa ^{9,17} Se	1000	500	400	7	15	20	PI Others	1.2 0.6	125
04 BI – Grouseberry – Cladonia	PI			BI ¹³ Se	1000	500	400	7	15	20	PI Others	1.2 0.6	125
05 BI – Huckleberry – Feathermoss	PI Se			BI ^{10,13}	1000	500	400	7	15	20	PI Others	1.2 0.6	125
06 BI – Gooseberry – Oak fern	PI Se	BI			1200	700	600	4	12	20	PI Others	1.6 0.8	125

* avoid logging

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

17 restricted to western portion of biogeoclimatic unit in region

52 restricted to sheltered microsites with deep soil

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

+ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFdc2 — Kamloops (continued)**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) ⁺			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
07 BI – Rhododendron – Valerian	PI Se ³²	BI			1200	700	600	4	12	20	PI Others	1.6 0.8	125
08 BI – Trapper's tea	PI ¹ Se ^{1,32}	BI ^{1,32}			1000	500	400	4	12	20	PI Others	1.2 0.6	125
09 Sedge – Sphagnum	non-forested				–	–	–	–	–	–	–	–	–

¹ elevated microsites are preferred
³² limited by growing-season frosts

May 2001

⁺ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFdv — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Rhododendron – Heron’s bill	PI Se	BI ¹³	Pa ^{9,13}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
02* Pa – Junegrass	PI		BI Pa ^{9,13} Se	At ^b	400	200	200	4	9	15	PI Others	1.2 0.6	125
03 BI Pa – Juniper	PI		BI Pa ^{9,13} Se		1000	500	400	7	15	20	PI Others	1.2 0.6	125
04 BI – Huckleberry – Brachythecium	PI Se	BI ^{10,13}	Pa ^{9,13}		1000	500	400	7	15	20	PI Others	1.2 0.6	125
05 BI – Valerian – Arnica	PI Se ³²	BI ³²	Pa ^{9,13}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
06 BI – Horsetail – Glow moss	PI ¹ Se ^{1,32}	BI ^{1,32}	Pa ^{9,13}		1000	500	400	4	12	20	PI Others	1.2 0.6	125

* avoid logging

1 elevated microsites are preferred

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

32 limited by growing-season frosts

b limited in productivity, reliability and/or feasibility

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFmw — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 BIBa – Rhododendron	Se	Ba ¹⁷ BI ¹³	PI ³⁴		1200	700	600	4	12	20	PI Others	2.0 1.0	125
02 BIPi – Juniper – Rhacomitrium	PI	Fd ^{9,14} Se ^{10,13}	BI ^{10,13} Pa ^{9,13,18}		1000	500	400	7	15	20	PI Others	1.4 0.8	125
03 FdBI – Falsebox – Pinegrass	PI	Fd ^{9,14} Se	BI ¹³ Pa ^{9,13,18}		1000	500	400	7	15	20	PI Others	1.4 0.8	125
04 BI – Huckleberry – Falsebox	PI ³⁴ Se	Ba ¹⁷ BI ^{10,13} Fd ^{9,14,34}			1200	700	600	7	15	20	PI Others	2.0 1.0	125
05 BIBa – Azalea – Pipecleaner moss	BI ¹³ Se	Ba ¹⁷	PI ³⁴		1200	700	600	4	12	20	PI Others	2.0 1.0	125
06 BI – Gooseberry – Valerian	BI Se	Ba ¹⁷	PI ³⁴		1200	700	600	4	12	20	PI Others	2.0 1.0	125

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

17 restricted to western portion of biogeoclimatic unit

in region

18 restricted to eastern portion of biogeoclimatic unit

in region

34 risk of snow damage

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFmw — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
07 BIBa – Oak fern – Lady fern	Ba ¹⁷ Bl Se	Pj ³⁴	Cw ^{14,32} Hw ^{14,32}		1000	500	400	4	12	20	PI Others	1.4 0.8	125
08 Bl – Gooseberry – Horsetail	Bl ¹ Se ¹	Pj ^{1,34}	Ba ¹⁷		1000	500	400	4	12	20	PI Others	1.4 0.8	125

¹ elevated microsites are preferred

¹⁴ restricted to lower elevations of biogeoclimatic unit

¹⁷ restricted to western portion of biogeoclimatic unit in region

³² limited by growing-season frosts

³⁴ risk of snow damage

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFvc — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BIHm – Rhododendron – Oak fern	BI Se		Hm		1200	700	600	4	12	20	All	0.8	125
02 BIHm – Rhododendron – Leafy liverwort	Se	BI	Hm PI ^{23,34}		1000	500	400	7	15	20	PI Others	1.2 0.6	125
03 BIHm – Rhododendron – Pipecleaner moss	BI Se		Hm		1000	500	400	7	15	20	All	0.6	125
04 BIHm – Devil's club – Lady fern	BI Se		Hm		1200	700	600	4	12	20	All	0.8	125
05 BIHm – Horsetail	BI ^{1,32} Se ^{1,32}		Hm ¹		1000	500	400	4	12	20	All	0.6	125
06 Sedge – Sphagnum	non-forested				–	–	–	–	–	–	–	–	–

1 elevated microsites are preferred
23 restricted to trial use

32 limited by growing-season frosts
34 risk of snow damage

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFv — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Rhododendron – Foamflower	Bl ³² Se ³²		Hm ¹⁶		1200	700	600	4	12	20	All	0.8	125
02 BI – Huckleberry – Mountain liverwort	Bl ³² Se ³²		Hm ¹⁶ Pl ³⁴		600	400	400	7	15	20	PI Others	1.2 0.6	125
03 BIHm – Rhododendron – Leafy liverwort	Bl ³² Se ³²		Hm ¹⁶		1000	500	400	7	15	20	All	0.6	125
04 BI – Valerian – Groundsel	Bl ³² Se ³²		Hm ¹⁶		600	400	400	4	12	20	All	0.6	125
05 Mountain-heather – Alpine sedge	non-forested				–	–	–	–	–	–	–	–	–

¹⁶ restricted to southern portion of biogeoclimatic unit in region

³² limited by growing-season frosts

³⁴ risk of snow damage

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFwc1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) ⁺			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 BI – Rhododendron – Oak fern	BI Se	Pi ³⁴	Cw ^{9,32} Hw ^{9,32}		1200	700	600	4	12	20	PI 1.6 Others 0.8	125
02 BI – Falsebox – Grouseberry	PI Se		BI Pa		1000	500	400	7	15	20	PI 1.2 Others 0.6	125
03 BI – Devil's club – Lady fern	BI Se		Cw ^{9,32} Hw ^{9,32} p ³⁴		1200	700	600	4	12	20	PI 1.6 Others 0.8	125
04 BI – Horsetail – Brachythecium	BI ^{1,32} Se ^{1,32}	Pi ^{1,34}	Hw ³²		1200	700	600	4	12	20	PI 1.6 Others 0.8	125
05 Sedge – Sphagnum	non-forested				–	–	–	–	–	–	–	–

¹ elevated microsites are preferred

⁹ restricted to southerly aspects

³² limited by growing-season frosts

³⁴ risk of snow damage

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFwc2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Azalea – Oak fern	BI Se		Pj ^{17,34}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
02 PI – Huckleberry – Cladonia	Pj ¹⁷	Bj ^{10,13,14} Se ^{10,13}			1000	500	400	7	15	20	PI Others	1.2 0.6	125
03 BI – Huckleberry – Arnica	Se	Bj ^{10,13,14} Pj ^{17,34}			1000	500	400	7	15	20	PI Others	1.2 0.6	125
04 BI – Rhododendron – Heron's bill	BI Se	Pj ^{17,34}			1200	700	600	7	15	20	PI Others	1.6 0.8	125
05 BI – Azalea – Feathermoss	BI Se		Pj ^{23,34}		1200	700	600	7	15	20	PI Others	1.6 0.8	125
06 BI – Valerian – Oak fern	Bj ³² Se ³²		Pj ^{23,34}		1200	700	600	4	12	20	PI Others	1.6 0.8	125

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

17 restricted to western portion of biogeoclimatic unit in region

23 restricted to trial use

32 limited by growing-season frosts

34 risk of snow damage

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFwc2 — Kamloops (continued)**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
07 BI – Devil's club – Lady fern	BI Se		p ^{23,34}		1200	700	600	4	12	20	PI Others	1.6 0.8	125
08 BI – Horsetail – Sphagnum	BI ^{1,32} Se ^{1,32}		p ^{23,34}		1000	500	400	4	12	20	PI Others	1.2 0.6	125
09* PI – Dwarf blueberry – Sphagnum	PI ¹	BI ^{1,32} Se ^{1,32}			400	200	200	4	12	20	PI Others	1.2 0.6	125
10 Sedge – Sphagnum	non-forested				–	–	–	–	–	–	–	–	–

* avoid logging

1 elevated microsites are preferred

23 restricted to trial use

32 limited by growing-season frosts

34 risk of snow damage

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFwc4 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Rhododendron – Oak fern	BI Se	PI ³⁴			1200	700	600	4	12	20	PI Others	1.6 0.8	125
02 BI – Rhododendron – Falsebox	Se	PI ³⁴	BI Pa		1000	500	400	7	15	20	PI Others	1.2 0.6	125
03 BI – Rhododendron – Woodrush	Se	BI PI ³⁴			1000	500	400	7	15	20	PI Others	1.2 0.6	125
04 BI – Rhododendron – Foamflower	Se	BI PI ³⁴			1200	700	600	7	15	20	PI Others	1.6 0.8	125
05 BI – Rhododendron – Lady fern	BI Se				1200	700	600	4	12	20	All	0.8	125
06 BI – Horsetail – Brachythecium	BI ^{1,32} Se ^{1,32}				1200	700	600	4	12	20	All	0.8	125
07 BI – Sedge – Sphagnum	Se ¹	BI ¹ PI ^{1,34}			1000	500	400	4	12	20	PI Others	1.2 0.6	125
08 Willow – Sedge	non-forested				–	–	–	–	–	–	–	–	–

¹ elevated microsites are preferred

³² limited by growing-season frosts

³⁴ risk of snow damage

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFxc — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 BI – Grouseberry – Valerian	PI Se ³²	BI ^{10,13}			1200	700	600	4	12	20	PI Others	1.6 0.8	125
02 PI – Juniper – Lupine	PI		BI ¹³ Se		600	400	400	7	15	20	PI Others	1.2 0.6	125
03 Bluebunch wheatgrass – Pasqueflower	non-forested				–	–	–	–	–	–	–	–	–
04 Big sage – Pinegrass	non-forested				–	–	–	–	–	–	–	–	–
05 BI – Grouseberry – Cladonia	PI		BI ¹³ Se		1000	500	400	7	15	20	PI Others	1.2 0.6	125
06 BI – Rhododendron – Grouseberry	PI Se	BI ¹³			1200	700	600	7	15	20	PI Others	1.6 0.8	125
07 BI – Gooseberry – Foamflower	PI Se ³²	BI ³²			1200	700	600	4	12	20	PI Others	1.6 0.8	125

10 restricted to northerly aspects

32 limited by growing-season frosts

13 restricted to upper elevations of biogeoclimatic unit

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ESSFxc — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
08 BI – Horsetail – Glow moss	Pl ¹	Bl ^{1,32} Se ^{1,32}			1000	500	400	4	12	20	Pl Others	1.2 0.6	125
09 Bluejoint – Sedge	non-forested				-	-	-	-	-	-	-	-	-
10 Willow – Sedge	non-forested				-	-	-	-	-	-	-	-	-

¹ elevated microsites are preferred
³² limited by growing-season frosts

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmk1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 CwSxw – Falsebox	Fd ^{9,14,32} Lw ^{9,14,32} PI Sx ^{10,13}	BI ^{10,13}	Cw ^{10,13,32}	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
01-YS CwSxw – Aspen	BI ^{10,13} Fd ^{9,14,32} Lw ^{9,14,32} PI Sx ^{10,13}		Cw ^{10,13,32}	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
02 Fd – Penstemon – Pinegrass	Fd PI		BI ^{10,13} Sx ^{10,13}		600	400	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150
03 FdPI – Pinegrass – Twinflower	Fd Lw PI	Sx ^{10,13}	BI ^{10,13} Cw ^{10,13}	At ^a Ep ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.4 1.0 0.8	150
04 FdPI – Sitka alder – Pinegrass	Fd ³² Lw ³² PI	BI ^{10,13} Sx ^{10,13}	Cw ^{10,13,32}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150

9 on south aspects (SSE to WSW)

10 on north aspects (NW to ENE)

13 in upper elevations of biogeoclimatic unit

14 in lower elevations of biogeoclimatic unit

32 risk of frost damage

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmk1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 Sxw – Gooseberry – Sarsaparilla	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Fd 1.4 Others 0.8	2.0 1.4 0.8	150
06 Sxw – Oak fern	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Fd 1.4 Others 0.8	2.0 1.4 0.8	150
07 Sxw – Horsetail	PI ¹ Sx ¹ Lw ^{1,32}	BI ¹ Fd ^{1,32}	Cw ³²	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI, Lw Fd 1.0 Others 0.8	1.4 1.0 0.8	150
08 Sedge – Cinquefoil	non-forested				-	-	-	-	-	-	-	-	-

¹ elevated microsites are preferred

⁹ restricted to southerly aspects

¹⁴ restricted to lower elevations of biogeoclimatic unit

³² limited by growing-season frosts

^a productive, reliable, and feasible regeneration option

^b limited in productivity, reliability and/or feasibility

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmk2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 CwSxw – Falsebox – Knight's plume	Fd ^{9,14,32} PI Sx	BI ^{10,13}	Cw Lw ^{9,14,23,32}	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Sx Others	2.0 1.4 0.8 1.0	150
02 Fd – Juniper – Pinegrass	Fd PI		BI ^{10,13} Sx ^{10,13}	At ^b Ep ^b	600	400	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150
03 Fd – Falsebox – Pinegrass	Fd PI	Sx ^{10,13}	BI ^{10,13} Cw ^{10,13}	At ^a Ep ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150
04 CwSxw – Douglas maple – Fairybells	Fd PI	BI ^{10,13} Sx	Cw ^{10,13} Lw ^{9,14,23,32}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Sx Others	2.0 1.4 0.8 1.0	150

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmk2 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
05 CwSxw – Oak fern – Bunchberry	Fd ^{9,14,32} Pl Sx	Bl ¹³	Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl 2.0 Fd 1.4 Others 1.0	150
06 Sxw – Horsetail	Pl ¹ Sx ¹	Bl ¹ Fd ^{1,32}	Cw ³²	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	Pl 1.4 Fd 1.0 Others 0.8	150

¹ elevated microsites are preferred

⁹ restricted to southerly aspects

¹³ restricted to upper elevations of biogeoclimatic unit

¹⁴ restricted to lower elevations of biogeoclimatic unit

³² limited by growing-season frosts

^a productive, reliable, and feasible regeneration option

^b limited in productivity, reliability and/or feasibility

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmw2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 HwCw – Falsebox – Feathermoss	Fd Lw	Pl ⁵¹	Bl ^{10,13} Cw Hw Pw ³¹ Py ^{9,14,23} Sx ^{10,13}	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
01-YS CwFd – Feathermoss	Fd Lw	Cw ^{10,13} Hw ^{10,13} Pl ⁵¹ Sx ^{10,13}	Bl Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02 FdCw – Falsebox – Prince's pine	Fd Lw Pl ⁵¹		Bl ^{10,13} Cw Hw Pw ³¹ Py ^{9,14,23} Sx	At ^a Ep ^a	1200	700	600	7	12	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
03 CwFd – Falsebox	Fd Lw Pl ⁵¹	Sx ^{10,13}	Bl ^{10,13} Cw Hw Pw ³¹ Py ^{9,14,23}	At ^a Ep ^a	1200	700	600	7	12	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

51 restricted to areas with proven PI performance

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred



ICHmw2 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
04 CwHw – Oak fern – Foamflower	Cw Fd ^{9,14} Hw Lw ^{9,14} Sx	BI PI ⁵¹ Py ^{9,14,23}	Pw ³¹	Act ⁹ At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
05 CwHw – Devil's club – Lady fern	Cw ³² Sx	BI Fd ^{1,32} Hw ³² Lw ^{1,32} pj ⁵¹	Pw ³¹	Act ⁹ At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
06 CwHw – Horsetail	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32} Pj ^{1,51}	Pw ³¹	Act ⁹ At ^b Ep ^b	1000	500	400	4	9	15	PI, Pw Others	1.4 0.8	150
07 CwSxw – Skunk cabbage	Cw ^{1,32} PI ^{1,51} Sx ¹	BI ¹ Hw ^{1,32}		Act ⁹ At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150
08 Bluejoint – Glow moss	non-forested				–	–	–	–	–	–	–	–	–

1 elevated microsites are preferred

9 restricted to southerly aspects

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

51 restricted to areas with proven PI performance

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



ICHmw3 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 HwCw – Falsebox – Feathermoss	Fd	Pl ⁵¹ Sx ^{10,13}	Bl ^{10,13} Cw ^{10,13} Hw ^{10,13} Lw ^{23,32} Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
01-YC HwCw – Feathermoss	Fd	Cw ^{10,13} Hw ^{10,13} Pl ⁵¹ Sx ^{10,13}	Bl ^{10,13} Lw ^{23,32} Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
02 Fd – Juniper – Cladina	Fd Pl	PY ^{9,14,23,32}	Cw ^{10,13} Pw ³¹	Ep ^b	1000	500	400	7	12	15	Pl, Pw Fd Others	1.4 1.0 0.8	150

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

51 restricted to areas with proven Pl performance

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmw3 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
03 FdPI – Pinegrass – Feathermoss	Fd ³² PI		BI ^{10,13} Cw ^{10,13} Hw Lw ^{23,32} Pw ³¹ Sx ^{10,13}	At ^{53,a} Ep ^{53,a}	1000	500	400	7	12	15	PI, Pw Lw Fd Others	1.4 1.4 1.0 0.8	150
04 CwFd – Soopolallie – Twinflower	Fd PI ⁵¹		BI Cw ^{10,13} Hw ^{10,13} Lw ^{23,32} Pw ³¹ Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
05 CwFd – Falsebox	Fd	BI ^{10,13} Cw ^{10,13} PI ⁵¹ Sx ^{10,13}	Hw ^{10,13} Lw ^{23,32} Pw ³¹	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

51 restricted to areas with proven PI performance

53 minor component

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHmw3 — Kamloops (continued)**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
06 CwHw – Oak fern	Cw Fd ¹⁴ Hw Sx	Bl ^{10,13} Pj ⁵¹	Lw ²³ Pw ³¹	Act ³ At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
07 CwHw – Devil's club – Lady fern	Cw ³² Sx	Bl Fd ^{1,32} Hw ³² Pj ⁵¹	Lw ^{1,23,32} Pw ³¹	Act ³ At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
08 CwSxw – Skunk cabbage	Cw ^{1,32} Hw ^{1,32} Pj ^{1,51} Sx ¹	Bl ¹	Pw ³¹	Act ³ At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150
09 Sedge – Sphagnum	non-forested				–	–	–	–	–	–	–	–	–

1 elevated microsites are preferred

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

51 restricted to areas with proven PI performance

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHvk1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 CwHw – Devil's club – Lady fern	Cw ³² Sx	Bl ¹³ Fd ^{1,9,14,32,34} Hw ³²	Pw ³¹	Act ^a At ^{53,a} Ep ^{53,a}	1200	700	600	4	9	15	Pw Fd Others	2.0 1.4 1.0	150
02 HwCw – Falsebox – Feathermoss	Fd ⁹	Bl Cw Hw Sx	Lw ^{9,14,23} Pl ^{23,34,51} Pw ³¹	Act ^b At ^{53,a} Ep ^{53,a}	1200	700	600	4	9	15	Pl, Pw Lw Fd Others	2.0 2.0 1.4 1.0	150
03 CwHw – Oak fern – Foamflower	Cw Fd ^{9,14,34} Hw Sx	Bl ^{10,13}	Lw ^{9,14,23} Pw ³¹		1200	700	600	4	9	15	Pw, Lw Fd Others	2.0 1.4 1.0	150

1 elevated microsites are preferred

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

34 risk of snow damage

51 restricted to areas with proven PI performance

53 minor component

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHvk1 — Kamloops (continued)
Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
04 CwHw – Oak fern Spiny wood fern	Cw Fd ^{9,14} Hw Sx	Bl ¹³	Lw ^{9,14,23} Pw ³¹	Act ^a At ^{53,a} Ep ^{53,a}	1200	700	600	4	9	15	Pw, Lw Fd Others	2.0 1.4 1.0	150
05 CwSxw – Devil's club – Horsetail	Cw ^{1,32} Sx ¹	Bl ¹ Hw ^{1,32}	Pw ^{1,31}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	Pw Others	1.4 0.8	150
06 CwSxw – Skunk cabbage	Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ¹	Pj ^{23,34,51} Pw ^{1,31}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150

1 elevated microsites are preferred

9 restricted to southerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

34 risk of snow damage

51 restricted to areas with proven PI performance

53 minor component

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



ICHwk1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 CwHw – Oak fern	Cw Fd ^{9,14} Hw Sx	BI ^{10,13}	LW ^{9,14,23,32} P ^{23,34,51} P _W ³¹	Act ⁹ At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw 2.0 Fd 1.4 Others 1.0	150
02 PIHw – Velvet-leaved blueberry	Fd P ⁵¹		BI ^{10,13} C _W ^{10,13} Hw ^{10,13} P _W ³¹ Sx ^{10,13}		1000	500	400	7	12	15	PI, Pw Fd 1.0 Others 0.8	150
03 HwCw – Step moss	Fd	C _W ^{10,13} H _W ^{10,13} P ^{23,34,51}	BI ^{10,13} LW ^{9,14,23,32} P _W ³¹ Sx ^{10,13}		1200	700	600	4	9	15	PI, Lw Fd 1.4 Others 1.0	150
04 HwCw – Falsebox – Feathermoss	Fd ^{9,14}	Cw Hw Sx ^{10,13}	BI ^{10,13} LW ^{9,14,23,32} P ^{23,34,51} P _W ³¹	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw 2.0 Fd 1.4	150

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

34 risk of snow damage

51 restricted to areas with proven PI performance

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001



^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

ICHwk1 — Kamloops (continued)
Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 CwHw – Devil's club – Lady fern	Cw ³² Sx	BI Fd ^{1,14,32} Lw ^{1,9,14,23,32}	Hw ³² Pw ³¹	Pj ^{23,34,51}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Others 1.0 PI, Pw 2.0 Lw 2.0 Fd 1.4 Others 1.0	150
06 CwSxw – Devil's club – Horsetail	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32}	Pj ^{1, 23,34,51} Pw ^{1,31}		Act ^a At ^b Ep ^a	1000	500	400	4	9	15	PI, Pw 1.4 Others 0.8	150
07 CwSxw – Skunk cabbage	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ¹	Pj ^{23,34,51}		Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI 1.4 Others 0.8	150
08 Sedge – Sphagnum	non-forested					–	–	–	–	–	–	–	–

1 elevated microsites are preferred

9 restricted to southerly aspects

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

31 risk of white pine blister rust

32 limited by growing-season frosts

34 risk of snow damage

51 restricted to areas with proven PI performance

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



IDFdk1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 FdPI – Pinegrass – Feathermoss	Fd ³² PI	Py ^{9,14}	Lw ^{9,14,23,32} Sx ^{10,13}	At ^a	1000	500	400	7	12	15	PI Lw Fd Sx Py	1.0 1.0 0.8 0.6 0.6	125
02 Fd – Snowberry – Bluebunch wheatgrass	Fd ²⁷ Py ^{9,14}			At ^b	600	400	400	7	12	15	PI Fd Py	1.0 0.8 0.6	125
03 Fd – Juniper – Pinegrass	Fd PI	Py ^{9,14,23}		At ^b	600	400	400	7	12	15	PI Fd Py	1.0 0.8 0.6	125
04 Fd – Pinegrass – Yarrow	Fd PI	Py ^{9,14}	Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI Fd Others	1.0 0.8 0.6	125

9 restricted to southerly aspects 23 restricted to trial use a productive, reliable, and feasible regeneration option
 10 restricted to northerly aspects 27 partial canopy cover required for successful establishment b limited in productivity, reliability and/or feasibility
 13 restricted to upper elevations of biogeoclimatic unit
 14 restricted to lower elevations of biogeoclimatic unit 32 limited by growing-season frosts

Continued next page

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
 * **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



IDFdk1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 SxwFd – Gooseberry – Feathermoss	Fd ^{9,14,32} Sx	Bl ^{10,13} Pl	Lw ^{9,14,23,32}	Act ^a At ^a Ep ^b	1000	500	400	7	12	15	Pl, Lw Fd Others	1.0 0.8 0.6	125
06 Sxw – Horsetail	Pl ¹ Sx ¹	Fd ^{1,32}	Bl ¹	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	Pl Fd Others	1.0 0.8 0.6	125
07 Willow – Sedge	non-forested				–	–	–	–	–	–	–	–	–

1 elevated microsites are preferred

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFdk1a — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
91 Fescue – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-
92 Bluebunch wheatgrass – Junegrass	non-forested				-	-	-	-	-	-	-	-
93 Spreading needlegrass	non-forested				-	-	-	-	-	-	-	-
94 At – Snowberry – Kentucky bluegrass		Fd ³²	PI	At ^a	1200	700	600	4	9	15	Fd PI	1.0 1.4

³² limited by growing-season frosts

^a productive, reliable, and feasible regeneration option

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFdk2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 FdPI – Pinegrass – Feathermoss	Fd ³² PI	Py ^{9,14}	LW ^{23,32} Sx ^{10,13}	At ^a	1000	500	400	7	12	15	PI, Lw Fd Sx Py	1.0 0.8 0.6 0.6	125
02 FdPy – Bluebunch wheatgrass – Pinegrass	Fd ²⁷ Py ¹⁴			At ^b	600	400	400	7	12	15	Fd Py	0.8 0.6	125
03 FdPy – Pinegrass	Fd ²⁷ PI	Py ¹⁴		At ^b	1000	500	400	7	12	15	PI Fd Py	1.0 0.8 0.6	125
04 Fd – Feathermoss	Fd ³² PI	Py ^{9,14} Sx ^{10,13}	LW ^{23,32}	At ^a	1200	700	600	7	12	15	PI, Lw Fd	1.4 1.0	125

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

27 partial canopy cover required for successful establishment

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

IDFdk2 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 SxwFd – Dogwood – Gooseberry	Fd ³² Sx	Pl	Bl ^{10,13} Cw ³² Lw ^{23,32}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Py Pl, Lw Fd Others	0.8 1.4 1.0 0.8	125
06 Sxw – Horsetail	Pl ¹ Sx ¹	Fd ^{1,32}	Bl ¹	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	Pl Fd Others	1.0 0.8 0.6	125
07 CwSxw – Twinberry Soft-leaved sedge	Pl ¹ Sx ¹		Bl Cw ³²	Act ^a At ^a Ep ^a	1000	500	400	4	9	15	Pl Others	1.0 0.6	125
08 Willow – Sedge	non-forested				–	–	–	–	–	–	–	–	–

1 elevated microsites are preferred

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFdk3 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 FdPI – Pinegrass – Feathermoss	Fd ^{27,32} PI		Sx ^{13,28}	At ^a	1200	700	600	7	12	15 Fd Sx	PI 1.0 0.8	1.4	125
02* Fd – Juniper – Kinnikinnick	Fd ²⁷ PI				1000	500	400	7	12	15 Fd	PI 0.8	1.0	125
03* Fd – Juniper – Peltigera	Fd ²⁷ PI				600	400	400	7	12	15 Fd	PI 0.8	1.0	125
04 Fd – Bluebunch wheatgrass – Needlegrass	Fd ²⁷ PI			At ^b	1200	700	600	7	12	15 Fd	PI 1.0	1.4	125
05 Fd – Feathermoss – Step moss	Fd ²⁷ PI			At ^b	1200	700	600	7	12	15 Fd	PI 1.0	1.4	125
06 Fd – Pinegrass – Aster	Fd ²⁷ PI			At ^b	1200	700	600	7	12	15 Fd	PI 1.0	1.4	125

* avoid logging

13 restricted to upper elevations of biogeoclimatic unit

27 partial canopy cover required for successful establishment

28 limited by moisture deficit

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines⁺ TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

IDFdk3 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
07 SxwFd – Prickly rose – Sedge	Fd ³² PI Sx			At ^a Ep ^b	1000	500	400	4	9	15 Fd Sx	PI 0.8 0.6	1.0 125
08 SxwFd – Prickly rose – Sarsaparilla	Fd ³² PI Sx			Act ^a At ^a Ep ^b	1000	500	400	4	9	15 Fd Sx	PI 0.8 0.6	1.0 125
09 Sxw – Horsetail – Glow moss	Sx ^{1,32}	PI ¹		Act ^a	1000	500	400	4	9	15 Sx	PI 0.6	1.0 125

¹ elevated microsites are preferred
³² limited by growing-season frosts

a productive, reliable, and feasible regeneration option
b limited in productivity, reliability and/or feasibility

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFdm1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 FdPI – Pinegrass – Twinflower	Fd ³² Lw ³² PI	Py ^{9,14}	BI ^{10,13} Sx ^{10,13}	At ^a Ep ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.0 0.8 0.6	125
02 Bluebunch wheatgrass – Junegrass	non-forested				–	–	–	–	–	–	–	–	–
03 FdPy – Bluebunch wheatgrass – Pinegrass	Fd ²⁷ Py ¹⁴		PI	At ^b	600	400	400	7	12	15	PI Fd Py	1.0 0.8 0.6	125
04 Fd – Pinegrass – Kinnikinnick	Fd ³² Lw ³² PI Py ^{9,14}		Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.0 0.8 0.6	125
05 FdLw – Spruce – Pinegrass	Fd ³² Lw ³² PI	Sx ^{10,13}	BI ^{10,13} Cw ³² Py ^{9,14}	At ^a Ep ^{53,a}	1200	700	600	7	12	15	PI, Lw Fd Others	1.4 1.0 0.8	125

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

27 partial canopy cover required for successful establishment

32 limited by growing-season frosts

53 minor component

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred



IDFdm1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
06 SxwFd – Dogwood – Gooseberry	Fd ³² Lw ³² Sx	Pl	Bl Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl, Lw Fd Others	1.4 1.0 0.8	125
07 Sxw – Horsetail	Pl ¹ Sx ¹	Fd ^{1,32} Lw ^{1,32}	Bl ¹	Act ^a At ^a Ep ^b	1000	500	400	4	9	15	Pl, Lw Fd Others	1.0 0.8 0.6	125

¹ elevated microsites are preferred
³² limited by growing-season frosts

a productive, reliable, and feasible regeneration option
b limited in productivity, reliability and/or feasibility

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



IDFmw1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 FdCw – Falsebox – Prince's pine	Fd Lw	PI Py ^{9,14}	Cw ^{10,13} Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8	125
01-YC CwFd – Feathermoss	Fd Lw PI	Py ^{9,14}	Cw ^{10,13} Sx ^{10,13}	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8	125
02 FdPy – Snowberry – Bluebunch wheatgrass	Fd ²⁷ Py		PI		600	400	400	7	12	15	PI Fd Py	1.2 0.8 0.6	125
03 Fd – Penstemon – Pinegrass	Fd ²⁷ Py ^{9,14}	PI	Lw ^{10,13}	At ^b Ep ^b	600	400	400	7	12	15	PI, Lw Fd Py	1.2 0.8 0.6	125
04 Fd – Pinegrass – Feathermoss	Fd Lw PI	Py ^{9,14,16}	Cw ^{10,13} Sx ^{10,13}	At ^b Ep ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.2 0.8 0.6	125

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

16 restricted to southern portion of biogeoclimatic unit in region

27 partial canopy cover required for successful establishment

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred



IDFmw1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 CwFd – Dogwood	Fd ³² Lw ³² Sx	Pl	Bl ^{10,13} Cw	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl, Lw Fd Others	1.6 1.0 0.8	125
06 Cw – Devil's club – Foamflower	Sx	Fd ^{1,32} Lw ^{1,32}	Bl ^{10,13} Cw Pl	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl, Lw Fd Others	1.6 1.0 0.8	125

1 on elevated microsites
 10 restricted to northerly aspects
 13 in upper elevations of biogeoclimatic unit
 32 risk of frost damage

a productive, reliable, and feasible regeneration option

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
 * **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



IDFmw2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush		
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)				
01 FdCw – Falsebox – Prince's pine	Fd PI		Cw ^{10,13} Py ^{9,14,16,23}	Lw ^{23,32} Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8	125	
01-YC CwFd – Feathermoss	Fd PI			Bl ^{10,13} Lw ^{23,32}	Cw ^{10,13} Sx ^{10,13}	At ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8	125
01-YS EpAt – Thimbleberry – Falsebox	Fd	PI		Lw ^{23,32}	Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Sx	1.6 1.0 0.8	125
02 Fd – Snowberry – Bluebunch wheatgrass	Fd ²⁷		Py ^{9,14,16,23}		At ^b	600	400	400	7	12	15	PI Fd Py	1.2 0.8 0.6	125	

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

16 restricted to southern portion of biogeoclimatic unit in region

23 restricted to trial use

27 partial canopy cover required for successful establishment

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

IDFmw2 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
03 Fd – Pinegrass – Feathermoss	Fd ¹⁴ Pl	Py ^{9,14,16}	Cw ^{10,13} Lw ^{23,32} Sx ^{10,13}	At ^b Ep ^b	1000	500	400	7	12	15	Pl, Lw Fd Others	1.6 1.0 0.8	125
04 CwSxw – Oak fern	Fd ³² Sx	Pl	Bl ¹³ Cw ^{32,37} Lw ^{23,32}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl, Lw Fd Others	1.6 1.0 0.8	125
05* Dogwood – Sedge	Sx ¹ Pl ¹		Bl ¹ Cw ^{1,32}	Act ^a At ^b Ep ^b	400	200	200	4	9	15	Pl Others	1.2 0.6	125

* avoid logging
 1 elevated microsites are preferred
 9 restricted to southerly aspects
 10 restricted to northerly aspects
 13 restricted to upper elevations of biogeoclimatic unit
 14 restricted to lower elevations of biogeoclimatic unit
 16 restricted to southern portion of biogeoclimatic unit in region
 23 restricted to trial use
 32 limited by growing-season frosts
 37 risk of heart rots
 a productive, reliable, and feasible regeneration option
 b limited in productivity, reliability and/or feasibility

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
 * **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFww — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species		Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
		Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 FdCw – Hazelnut	Fd	PI Py ^{7,16}	Cw Lw ^{16,23}		600	400	400	4	9	15	Sx PI Fd, Lw Cw, Py	3.0 2.0 1.5 1.5	150
02 FdPI – Peltigera	PI		BI ^{10,13} Cw ^{10,13} Fd Lw ²³ Sx ^{10,13}		1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8	125
03 Fd – Falsebox – Feathermoss	Fd	PI Py ^{7,16}	Lw ²³ Sx ^{10,13}		1200	700	600	7	12	15	PI, Lw Fd Sx, Py	1.6 1.0 0.8	125
04 Fd – Douglas maple – Fairybells	Fd	Py ¹⁶	Cw Lw ^{16,23} PI		600	400	400	7	12	15	PI Fd Cw, Py	1.2 0.8 0.6	125

7 restricted to nutrient-medium sites

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

16 restricted to southern portion of biogeoclimatic unit in region

23 restricted to trial use

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFww — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) ⁺			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
05 CwFd – Vine maple	Cw Fd		Sx ^{15,35}		1000	500	400	7	12	15	PI, Lw Fd 1.0 Others 0.8	125
06 Cw – Devil's club – Lady fern	Cw Fd Sx ^{13,15,35}	Bg ¹⁶			1200	700	600	4	9	15	PI, Lw Fd 1.0 Others 0.8	125
07 CwSxw – Skunk cabbage	Cw ¹⁶	Sx ^{1,13,15,35}			400	200	200	4	9	15	PI Others 0.6	125

¹ elevated microsites are preferred

¹³ restricted to upper elevations of biogeoclimatic unit

¹⁵ restricted to northern portion of biogeoclimatic unit in region

¹⁶ restricted to southern portion of biogeoclimatic unit in region

³⁵ risk of weevil damage

⁺ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDF_xh1 — Kamloops**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 FdPy – Pinegrass	Fd ²⁷ Py	Lw ^{1,10,13,32}		At ^b	1000	500	400	7	12	15	All	0.6	125
02* FdPy – Bluebunch wheatgrass – Balsamroot	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6	125
03 FdPy – Bluebunch wheatgrass – Pinegrass	Py	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
04 FdPy – Snowbrush – Pinegrass	Py	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
05 FdPy – Pinegrass – Idaho fescue	Py	Fd ²⁷			600	400	400	7	12	15	All	0.6	125

* avoid logging

1 elevated microsites are preferred

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

27 partial canopy cover required for successful establishment

32 limited by growing-season frosts

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



IDFxh1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) ⁺			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush		
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)				
06 FdPy – Spirea – Feathermoss	Fd ²⁷ Py	Lw ^{1,10,13,32}		At ^b	1000	500	400	7	12	15	All	0.6	125	
07 FdPy – Snowberry – Spirea	Fd Py	Lw ^{1,10,13,32}	Cw ³⁷	At ^b	1000	500	400	7	12	15	All	0.6	125	
08 SxwFd – Douglas maple – Dogwood	Fd ^{1,32} Sx	Pl ¹	Cw ³⁷	Lw ^{1,10,13,32} Py ^{1,32}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl, Lw Others	1.0 0.8	125
09 Willow – Sedge	non-forested				–	–	–	–	–	–	–	–	–	

1 elevated microsites are preferred

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

27 partial canopy cover required for successful establishment

32 limited by growing-season frosts

37 risk of heart rots

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility



^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDF_{xh}1a — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) +			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
91 Fescue – Bluebunch wheatgrass	non-forested					-	-	-	-	-	-	-	-
92 Big sage – Bluebunch wheatgrass – Balsamroot	non-forested					-	-	-	-	-	-	-	-
93 Bluebunch wheatgrass – Balsamroot	non-forested					-	-	-	-	-	-	-	-
94 Big sage – Bluebunch wheatgrass – Idaho fescue	non-forested					-	-	-	-	-	-	-	-

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

+ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDFxh1a — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
95 Big sage – Kentucky bluegrass	non-forested				-	-	-	-	-	-	-	-	
96 Kentucky bluegrass – Stiff needlegrass	non-forested				-	-	-	-	-	-	-	-	
97 Prairie rose – Idaho fescue	non-forested				-	-	-	-	-	-	-	-	
98 At – Snowberry – Kentucky bluegrass		Fd ³² Py ³²		At ^a	1200	700	600	4	9	15	Fd Py	0.8 0.6	125

³² limited by growing-season frosts
^a productive, reliable, and feasible regeneration option

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines
⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDF_xh₂ — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) ⁺			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 FdPy – Pinegrass – Feathermoss	Fd ²⁷ Py			At ^b	1000	500	400	7	12	15	All	0.6	125
02 FdPy – Bluebunch wheatgrass – Rough fescue	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6	125
03 FdPy – Bluebunch wheatgrass – Balsamroot	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6	125
04 FdPy – Bluebunch wheatgrass – Pinegrass	Py	Fd ²⁷			600	400	400	7	12	15	All	0.6	125
05 FdPy – Pinegrass	Fd ²⁷ Py				1000	500	400	7	12	15	All	0.6	125
06 Fd – Feathermoss	Fd Py			At ^b	1200	700	600	7	12	15	All	0.6	125
07 CwFd – Dogwood	Fd ³²	Py ³² Sx	Cw ³²	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	All	0.6	125
08 Sxw – Horsetail	Sx ¹	Fd ^{1,32} P ^{1,23}		Act ^a At ^a Ep ^a	1000	500	400	4	9	15	PI Others	0.8 0.6	125

1 elevated microsites are preferred

23 restricted to trial use

27 partial canopy cover required for successful establishment

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

IDFhx2a — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
91 Fescue – Bluebunch wheatgrass	non-forested				-	-	-	-	-	-	-	-
92 Bluebunch wheatgrass – Needle-and-thread grass	non-forested				-	-	-	-	-	-	-	-
93 Big sage – Kentucky bluegrass	non-forested				-	-	-	-	-	-	-	-
94 Balsam root – Kentucky bluegrass	non-forested				-	-	-	-	-	-	-	-
95 At – Snowberry – Kentucky bluegrass		Fd ³² Py ³²		At ^a	1200	700	600	4	9	15	All	0.8 125

³² limited by growing-season frosts

^a productive, reliable, and feasible regeneration option

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

IDF_{FW} — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSS _{pa}	MSS _{pa}	MSS _p		Early (yrs)	Late (yrs)			
01 Fd – Juniper – Bluebunch wheatgrass	Fd ²⁷ Py				1200	700	600	7	12	15	Fd, Py	0.8	125
02* FdPy – Bluebunch wheatgrass – Pinegrass	Fd ^{27,28} Py ²⁸				600	400	400	7	12	15	Fd, Py	0.6	125
03* FdPy – Western snowberry – Bluebunch wheatgrass	Fd ^{27,28} Py ²⁸				600	400	400	7	12	15	Fd, Py	0.6	125
04 FdPy – Bluebunch wheatgrass – Balsamroot	Fd ^{27,28} Py ²⁸				600	400	400	7	12	15	Fd, Py	0.6	125
05 Fd – Feathermoss	Fd ²⁷				1200	700	600	7	12	15	Fd	0.8	125
06 Sxw – Water birch	Fd Sx				1000	500	400	4	9	15	Fd, Sx	0.6	125
07 Sxw – Prickly rose – Coltsfoot	Fd ³² Sx				1000	500	400	4	9	15	Fd, Sx	0.6	125

* avoid logging

27 partial canopy cover required for successful establishment

28 limited by moisture deficit

32 limited by growing-season frosts

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

MSdc1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 Sxw – Wintergreen – Feathermoss	PI Sx	Bl ^{10,13} Fd ^{9,14,32}			At ^a	1200	700	600	7	12	15	PI Others	1.4 0.8	125
02 FdPI – Juniper	PI	Fd ⁹	Bl ^{10,13} Sx ^{10,13}	Pa ^{9,13,17}		1000	500	400	7	12	15	PI Others	1.0 0.6	125
03 PI – Spirea – Pinegrass	PI	Fd ^{9,14,32}	Bl ^{10,13} Sx ^{10,13}	Pa ^{9,13,17}	At ^b	1000	500	400	7	12	15	PI Others	1.0 0.6	125
04 Sxw – Gooseberry	PI Sx	Bl ¹³ Fd ^{9,14,32}			Act ³ At ^a	1200	700	600	4	9	15	PI Others	1.4 0.8	125
05 Sedge – Glow moss	non-forested					–	–	–	–	–	–	–	–	–

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

17 restricted to western portion of biogeoclimatic unit

in region

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

MSdm1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species		Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
		Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 Sxw – Falsebox – Feathermoss	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}		At ^a	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125
02 Fd – Big sage – Pinegrass	Fd PI	Lw		At ^b	600	400	400	7	12	15	PI, Lw Fd	1.0 0.6	125
03 PI – Grouseberry – Cladonia	PI	Fd ³² Lw ³²	BI ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI, Lw Others	1.0 0.6	125
04 PI – Pinegrass – Kinnikinnick	Fd ^{14,32} Lw ^{14,32} PI		BI ^{10,13} Sx ^{10,13}	At ^b	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125
05 Sxw – Trapper's tea – Grouseberry	PI	BI ^{10,13} Fd ^{9,14,32} Lw ^{9,14,32} Sx		At ^{53,a}	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

32 limited by growing-season frosts

53 minor component

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

MSdm1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
06 Sxw – Gooseberry	Pl Sx	Bl Fd ^{9,14,32} Lw ^{9,14,32}		Act ³ At ^a	1200	700	600	4	9	15	Pl, Lw Others	1.4 0.8	125
07 Sxw – Trapper's tea Horsetail	Pl ¹ Sx ¹	Bl ¹			1000	500	400	4	9	15	Pl Others	1.0 0.6	125
08 Willow – Sedge	non-forested				-	-	-	-	-	-	-	-	-

1 elevated microsites are preferred

9 restricted to southerly aspects

14 restricted to lower elevations of biogeoclimatic unit

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

MSdm2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 Sxw – Falsebox – Feathermoss	PI Sx	BI ^{10,13} Fd ^{9,14,32}	Lw ^{14,23,32}	At ^a	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125
02* Juniper – Pinegrass	non-forested				–	–	–	–	–	–	–	–	–
03 PI – Juniper – Grouseberry	Fd ^{9,14} PI		BI ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI Others	1.0 0.6	125
04 PI – Grouseberry – Pinegrass	PI	Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13} Lw ^{14,23,32}	At ^a	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125
05 Sxw – Gooseberry – Grouseberry	PI Sx	BI Fd ^{9,14,32}	Cw ³² Lw ^{14,23,32}	Act ^a At ^a	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125
06 Sxw – Gooseberry – Devil's club	PI Sx	BI Fd ^{9,14,32}	Lw ^{14,23,32}	Act ^a At ^a	1200	700	600	4	9	15	PI, Lw Others	1.4 0.8	125
07 Sxw – Horsetail – Leafy moss	PI Sx	BI		Act ^a At ^b	1000	500	400	4	9	15	PI Others	1.0 0.6	125

* avoid logging

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines⁺ TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

MSxk — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 PI – Pinegrass – Lupine	PI	Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13}	At ^a	1200	700	600	7	12	15	PI Others	1.4 0.8	125
02 Fd – Juniper – Grouseberry	PI	Fd ^{9,14}			1000	500	400	7	12	15	PI Others	1.0 0.6	125
03 Bluebunch wheatgrass – Junegrass	non-forested				–	–	–	–	–	–	–	–	–
04 Big sage – Pinegrass	non-forested				–	–	–	–	–	–	–	–	–
05 FdPI – Pinegrass – Arnica	PI	Fd ^{9,14}	BI ^{10,13} Sx ^{10,13}		1000	500	400	7	12	15	PI Others	1.0 0.6	125
06 PI – Falsebox – Lupine	PI	BI ^{10,13} Fd ^{9,14,32} Sx ^{10,13}	Lw ^{9,14,23}	At ^a	1200	700	600	7	12	15	PI, Lw Others	1.4 0.8	125

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

Continued next page

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

MSxk — Kamloops (continued)**Tree Species Selection and Free Growing Stocking Standard Guidelines**

Site series	Primary	Conifer species			Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
		Secondary	Tertiary			TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
07 Sxw – Trapper's tea Grouseberry	PI	Bl ^{10,13} Fd ^{1,9,14,32} Sx				1200	700	600	4	9	15	PI 1.4 Others 0.8	125
08 Sxw – Gooseberry – Grouseberry	PI Sx	Bl Fd ^{9,14,32}		Act ^a At ^a		1200	700	600	4	9	15	PI 1.4 Others 0.8	125
09 Sxw – Horsetail – Leafy moss	PI ¹ Sx ¹	Bl ¹		Act ^a At ^b		1000	500	400	4	9	15	PI 1.0 Others 0.6	125

1 elevated microsites are preferred

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

¹ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

PPxh1 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 Py – Bluebunch wheatgrass – Idaho fescue	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125
02* Py – Red three-awn	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125
03 Big sage – Bluebunch wheatgrass – Balsamroot non-forested					–	–	–	–	–	–	–	–
04 Py – Bluebunch wheatgrass – Cheatgrass	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125

* avoid logging

27 partial canopy cover required for successful establishment

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

+ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

May 2001

PPxh1 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 Py – Bluebunch wheatgrass – Rough fescue	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6	125
06 FdPy – Snowberry – Pinegrass	Fd ²⁷ Py			At ^b Ep ^b	600	400	400	7	12	15	All	0.6	125
07 FdPy – Snowberry – Spirea	Fd Py				1000	500	400	7	12	15	All	0.6	125
08 Fd – Water birch – Douglas maple	Fd ¹	Py ^{1,32} Sx ¹	Pl ^{1,12,23}	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	All	0.6	125

1 elevated microsites are preferred
 12 suitable on cold air drainage sites
 23 restricted to trial use

27 partial canopy cover required for successful establishment
 32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option
 b limited in productivity, reliability and/or feasibility

May 2001

^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

PPxh2 — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^Δ	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
01 Py – Bluebunch wheatgrass – Fescue	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125
02* FdPy – Bluebunch wheatgrass – Selaginella	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125
03 Py – Bluebunch wheatgrass	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125
04 Py – Big sage – Bluebunch wheatgrass	Py ²⁷	Fd ²⁷			400	200	200	7	12	15	All	0.6 125

* avoid logging

27 partial canopy cover required for successful establishment

Continued next page

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

+ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

PPxh2 — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) ⁺			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
05 Big sage – Bluebunch wheatgrass (– Fescue)	non-forested				–	–	–	–	–	–	–	–
06 FdPy – Snowberry – Saskatoon	Fd ²⁷ Py				600	400	400	7	12	15	All	0.6 125
07 Act – Water birch	Pl ^{1,23} Sx ¹	Fd ¹ Py ¹		Act ^a At ^a Ep ^b	1000	500	400	4	9	15	All	0.6 125

1 elevated microsites are preferred

23 restricted to trial use

27 partial canopy cover required for successful establishment

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

⁺ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred



SBSmm — Kamloops

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Conifer species			Broadleaf species ^a	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
	Primary	Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
01 Sxw – Falsebox – Knight's plume	PI Sx	BI ^{10,13} Fd ^{9,14,32}	Lw ^{14,23,32}	Act ^b At ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
02 PI – Huckleberry – Cladonia	PI	Fd ^{9,13,32}	BI ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150
03 PI – Douglas-fir – Juniper	Fd ^{9,14,32} PI		BI ^{10,13} Sx ^{10,13}		1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150
04 PI – Soopolallie – Pinegrass	PI	Fd ^{9,14,32}	BI ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8	150

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

Continued next page

May 2001



^a See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

SBSmm — Kamloops (continued)

Tree Species Selection and Free Growing Stocking Standard Guidelines

Site series	Primary	Conifer species		Broadleaf species ¹	Stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. tree height (m)	% tree over brush	
		Secondary	Tertiary		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)			
05 Sxw – Soopolallie – Falsebox	PI	BI ^{10,13} Fd ^{9,14,32} Sx	Lw ^{14,23,32}	At ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
06 Sxw – Huckleberry – Falsebox	PI Sx	BI ^{10,13} Fd ^{9,14,32}	Lw ^{14,23,32}	At ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0	150
07 Sxw – Oak fern	PI Sx	BI Fd ^{9,14,32}	Cw ³²	Act ^a At ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0	150
08 Sxw – Horsetail	PI ¹ Sx ¹	BI ¹		Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8	150
09 Sedge – Sphagnum	non-forested												

1 elevated microsites are preferred

9 restricted to southerly aspects

10 restricted to northerly aspects

13 restricted to upper elevations of biogeoclimatic unit

14 restricted to lower elevations of biogeoclimatic unit

23 restricted to trial use

32 limited by growing-season frosts

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

May 2001

^Δ See Interior Broadleaf guidelines on page 109 for stocking standard and free growing guidelines

* TSS – target stocking standards MSS – minimum stocking standards pa – preferred and acceptable p – preferred

Broadleaf — Interior*

Tree Species Selection and Free Growing Stocking Standard Guidelines**

Target from conifer standards (stems/ha)	Hardwood stocking standards (well-spaced/ha) *			Regen delay (yrs)	Assessment		Min. inter-tree distance (m)	% tree over brush
	TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
400	600	400	400	4	9	12	2	150
600	1000	500	400	4	9	12	2	150
1000	1200	1000	800	4	9	12	2	150
1200	2000	1200	1000	4	9	12	2	150

May 2000

* Cariboo, Kamloops, Nelson, Prince George and Prince Rupert forest regions

** The minimum height for broadleaf trees is based on the minimum height of the tallest conifer for the site series. These standards apply to pure broadleaf stands (black cottonwood, trembling aspen, paper birch, and balsam poplar) for oriented strand board and sawlog production objectives.

+ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

Broadleaf — Coast***Tree Species Selection and Free Growing Stocking Standard Guidelines****

Tree species	Product	Stocking standards (well-spaced/ha) +			Regen delay (yrs)	Assessment		Min. inter-tree distance (m)	% tree over brush
		TSSpa	MSSpa	MSSp		Early (yrs)	Late (yrs)		
Red alder‡ and bigleaf maple	Sawlogs	1200	700	600	3	5	8	2	150
	Pulp	1500	1200	1000	3	5	8	2	150
Coastal black cottonwood (for pulp)	Sawlogs	700	400	400	3	5	8	2	150
	Pulp	900	600	500	3	5	8	2	150

May 2000

* Vancouver Forest Region and the CWH zone of the Prince Rupert Forest Region

** The minimum height for broadleaf trees is based on the minimum height of the tallest conifer for the site series. These standards apply to pure broadleaf stands.

+ **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred

‡ When growing red alder for sawlog production, it is recommended that stands be thinned to 600 well-spaced trees per hectare, but not before the stands have reached 12 to 16 m in height.

Uneven-aged Stocking Standards* — Single-tree selection only

Target from even-aged standards (stems/ha)	Layer**	Stocking standards (well-spaced/ha)***			Target from even-aged standards (stems/ha)	Layer**	Stocking standards (well-spaced/ha)***		
		TSSpa	MSSpa	MSSp			TSSpa	MSSpa	MSSp
1200	1	600	300	250	800	1	300	150	150
	2	800	400	300		2	400	200	200
	3	1000	500	400		3	600	300	300
	4	1200	700	600		4	800	400	400
1000	1	400	200	200	600	1	300	150	150
	2	600	300	250		2	400	200	200
	3	800	400	300		3	500	300	300
	4	1000	500	400		4	600	400	400
900	1	400	200	200	400	1	200	100	100
	2	500	300	250		2	300	125	125
	3	700	400	300		3	300	150	150
	4	900	500	400		4	400	200	200

May 2000

* Maximum regeneration delay is seven years. For a seven-year regeneration delay, the early free growing is 12 years and the late free growing is 15 years. Regeneration delay can be met immediately following harvest if the residual stand has no significant damage or pest problems and meets minimum stocking standards. If regeneration is achieved immediately following harvest, earliest free growing date is five years post harvest and late free growing assessment is at 15 years.

** **Layer 1** = mature layer = trees \geq 12.5 cm dbh; **Layer 2** = pole layer = trees 7.5 cm to 12.4 cm dbh;

Layer 3 = sapling layer = trees \geq 1.3 m in height and up to 7.4 cm dbh; **Layer 4** = regeneration layer = trees < 1.3 m in height

*** **TSS** – target stocking standards **MSS** – minimum stocking standards **pa** – preferred and acceptable **p** – preferred