### **Changes to Seed Transfer Limits - April 2005**

Tree Improvement Branch Ministry of Forests April 15, 2005

The following tables outline the differences between the seed transfer limits, and associated collection criteria, specified in the Code's <u>Seed and Vegetative Material Guidebook</u>, June 1995, and its Updates #1 to 7 (consolidated to September 12, 2003) and those specified in FRPA's <u>Chief Forester's Standards for Seed Use</u> (which came into effect April 1, 2005).

Table 1. Changes to transfer limits - all origins

Table 2. Changes to lodgepole pine superior provenance collection criteria

Table 3. Changes to lodgepole pine superior provenance transfer limits

Table 4. Changes to interior spruce, Sitka spruce and yellow-cedar superior provenance collection criteria

Table 5. Changes to interior spruce, Sitka spruce and yellow-cedar superior provenance transfer limits

Table 6. Changes to non-BC natural stand seed source collection criteria

Table 7. Changes to non-BC natural stand seed source transfer limits

Questions regarding these changes may be submitted using the Q & A website located at: <u>http://www.for.gov.bc.ca/code/cfstandards/</u> or directed to:

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<u>**Table 1. Changes to transfer limits – all origins</u></u> Table does not include natural stand species whose transfer limits did not change.</u>** 

Lot Origin	gin Species Common Code Name		Seed and Vegetative Material Guidebook	Chief Forester's Standards for Seed Use		
Natural Stands (BC)	Ba Amabalis fir		Transfer between Vancouver Island and mainland <u>not</u> permitted <u>Guidebook p. 23</u>	Transfer permitted. <u>Appendix 3</u> of Standards		
	Fdi	Interior Douglas-fir	Transfer between SA and TOD and between CT and QL <u>not</u> permitted. <u>Guidebook p. 25</u>	Transfer permitted if used in same BGC zone of origin Appendix 3 of Standards		
	Hw	Western Hemlock	Transfer between QCI and Vancouver Island to mainland <u>not</u> permitted. <u>Guidebook p. 23</u>	Transfer permitted, but QCI collections cannot be used N of 54 30 latitude on mainland. Appendix 3 of Standards		
	Pw	Western white pine	Unlimited elevation transfer in coastal SPZs	+/- 700 m in <u>all</u> SPZs Appendix <u>3</u> of Standards		
	Yc Yellow-cedar		No limit up in elevation in M SPZ Update #7	If collection elevation ≤ 1100 m, then +400 m/no limit down. If collection elevation >1100 m, then +/- 300 m. Appendix 3 of Standards		
	Other Other		Transfer between mainland and Vancouver Island not permitted.	Restriction removed.		
Superior Provenances	All		Refer to Tables 2-5 below	Refer to Tables 2-5 below		
BC Parent trees (Seed orchard seed)	All		Transfer limits determined at time of registration. Additional restrictions for some orchard lots listed by orchard number Update #2 and Update #4	Transfer limits based on parent trees contributing to lot, and status of trees or lot (e.g. tested, untested or custom) <u>s. 8.3, 8.5</u> and 8.6. of Standards If lot registered under Code, transfer in accordance with limits applied to lot at time of registration – or in accordance with applicable limits determined under CF Standards <u>s. 8.10</u>		
Non-BC natural	Natural stands		Refer to Tables 6-7 below	Refer to Tables 6-7 below		
stands or parent trees (exotic provenances)	Ax	Hybrid poplar	Used in accordance with Ministry recommendations Update #2	Ax parent trees (i.e. clones) treated as tested parent trees. Transfer limits to be based on tested area of use for each tested parent tree.		
	Parent trees (seed orchards)		Transfer limits determined at time of registration. Also, Idaho Pw use S of 52° latitude and 1450 m in elevation. Update #2	In accordance with limits specified in <u>Table 6.2</u> of Standards		
	Other	All	May be used for operational trials if approved in silviculture prescription	If species and source not listed in Tables 6.1 or 6.2, person may apply for alternative to the standards under section 43 of the <i>Forest Planning and Practices Regulation</i> . Confirmation of transfer limits for previously registered lots from non-identified sources pending.		

<u>**Table 2.**</u> Changes to lodgepole pine superior provenance collection criteria</u> Both Guidebook and Standards state that collections must occur within an 8 km radius of latitude and longitude. Changes highlighted in yellow

Guidebook – Update #6				Chief Forester's Standards – Appendix 5				
Provenance	Elevation (+/- 50 m)	Latitude of centre point of area (degrees / minutes)	Longitude of centre point of area (degrees / minutes)	Provenance	Located within the following elevation range (metres)	Latitude of centre point of area (degrees / minutes)	Longitude of centre point of area (degrees / minutes)	
Bowron River	671m	53 54	122 00	Bowron River	620 – 720	53° 54'	122° 00'	
Canoe Creek	890m	50 42	119 11	Canoe Creek	840 - 940	50° 42'	119° 11'	
				Cartwright Lake	<mark>1120 – 1220</mark>	<mark>50° 49'</mark>	<mark>116° 26'</mark>	
Champion Lake	998m	49 11	117 35	Champion Lakes	950 – 1050	49° 11'	117° 35'	
China Valley	1130m	50 44	119 30	China Valley	1080 – 1180	50° 44'	119° 30'	
Inonoaklin	579m	49 54	118 12	Inonoaklin Creek	530 – 630	49° 54'	118° 12'	
Jackfish Creek	457m	58 32	122 42	Jackfish Creek	410 – 510	58° 32'	122° 42'	
Joe Rich Creek	1067m	49 48	119 05	Joe Rich Creek	1020 – 1120	49° 48'	119° 05'	
Larch Hills	777m	50 42	119 11	Larch Hills	730 – 830	50° 42'	119° 11'	
				Marl Creek	<mark>900 – 1000</mark>	<mark>51° 31'</mark>	<mark>117° 11'</mark>	
Nechako River	732m	54 01	124 31	Nechako River	680 – 780	54° 01'	124° 31'	
Oie Lake	991m	52 00	121 12	Oie Lake	940 – 1040	52° 00'	121° 12'	
Olean Creek	1158m	50 27	118 54	Lossie Creek (renamed)	1110 – 1210	50° 27'	118° 54'	
				Settlers Road	<mark>990 – 1090</mark>	<mark>50° 31'</mark>	<mark>115° 44'</mark>	
Telkwa Low.	518m	54 39	127 03	Telkwa Low	470 – 570	54° 39'	127° 03'	
Udy Creek	1100m	53 01	123 14	Udy Creek	1050 – 1150	53° 01'	123° 14'	
Wentworth Creek	1059m	50 58	120 20	Wentworth Creek	1010 – 1110	50° 58'	120° 20'	
Whittier Creek	762m	53 07	122 42	Whittier Creek	710 – 810	53° 07'	122° 42'	
Rocky Mountain Trench		tinuous from 50 along the Colum	30 to 51 30 and between bia River valley.	Split into 3 sources: Cartw	right Lake, Marl Creek a	nd Settlers Road		

# Table 3. Changes to lodgepole pine superior provenance transfer limitsChanges highlighted in yellow

Guidebook Update #7			Chief Forester's Standards – Appendix 5					
Provenance	SPZs	Up	Down	Provenance	SPZ	Up/Down		
Bowron River	MGR, CP, NCH	300m	200m	Bowron River	CHL, CP, CT, MGR, MRB, NCH, QL	+300 / -200		
Canoe Creek	SA, TOA, TOD, WK	300m	200m	Canoe Creek	SA, TOA, TOD, WK	+300 / -200		
		-	-	Cartwright Lake	BSH, EK, MRB, SA, <b>TOA,</b> TOD, WK	+300 / -200		
Champion Lk.	BSH, EK, TOD, WK	300m	200m	Champion Lakes	BSH, EK, <mark>TOA,</mark> TOD, WK	+300 / -200		
China Valley	TOD, SA, TOA	300m	200m	China Valley	SA, TOD, TOA	+300 / -200		
Inonoaklin	BSH, EK, SA, WK, TOD	300m	200m	Inonoaklin Creek	BSH, EK, SA, TOD WK	+300 / -200		
Jackfish Creek	DK, FN	200m	200m	Jackfish Creek	DK, FN	+200 / -200		
Joe Rich Creek	SA, TOA, TOD*	300m	200m	Joe Rich Creek	SA, TOA, TOD	+300 / -200		
Larch Hills	BSH, EK, SA, TOD, WK	400m	200m	Larch Hills	BSH, EK, SA TOD, WK	+400 / -200		
Nechako River	NCH, BLK, CP, MGR	300m	200m	Nechako River	BLK CP, MGR, MRB, NCH, QL	+300 / -200		
				Marl Creek	BSH, EK, MRB, SA, <b>TOA</b> , TOD, WK	+300 / -200		
Oie Lake	CT, CHL, NCH	300m	200m	Oie Lake	BLK CHL, CT, MGR, MRB, NCH, QL	+300 / -200		
Olean Creek	SA, TOA, TOD, WK	300m	200m	Lossie Creek	SA, TOA TOD , WK	+300 / -200		
				(renamed)				
Rocky Mt. Trench	BSH, EK, MRB, SA, WK, TOD	<mark>300m</mark>	<mark>200m</mark>	Split into 3 sources: Cart	Split into 3 sources: Cartwright Lake, Marl Creek and Settlers Rd.			
				Settlers Road	BSH, EK, MRB, SA, <b>TOA,</b> TOD, WK	<mark>+300 / -200</mark>		
Telkwa Low.	BLK	300m	200m	Telkwa Low	BLK	+300 / -200		
Udy Creek	CHL, CT, MRB, NCH, QL	300m	200m	Udy Creek	BLK CHL, CT, MRB, NCH, QL	+300 / -200		
Wentworth Creek	TOA, TOD, BB	300m	200m	Wentworth Creek	BB, TOA, TOD	+300 / -200		
Whittier Creek	NCH, CHL, CT, MGR	300m	200m	Whittier Creek	CHL, CT, MGR, <mark>MRB,</mark> NCH, <mark>QL</mark>	+300 / -200		

### Table 4. Changes to interior spruce, Sitka spruce and yellow-cedar superior provenance collection criteria Changes highlighted in yellow

			Guidebook p. 9-11				Chief Forester's Standards Table 5.2			
Code	Common Name	Provenance	Elevation (metres)	Latitude of centre point of area (degrees / minutes)	Longitude of centre point of area (degrees / minutes)	Additional criteria	Located within the following elevation range (metres)	Latitude of centre point of area (degrees/ minutes)	Longitude of centre point of area (degrees / minutes)	Additional criteria
Ss	Sitka spruce	Big Qualicum	+/- 100m from 0 m p. 11	49° 14	122° 36'	Collected within 15 km radius of lat/long	1 – 100	n/a	n/a	Within natural stands located in coastal plain drainages between 49° 42' (Comox) and 49° 12' (Nanoose Bay) on Vancouver Island
		Haney	+/- 100 m from 195 m p. 11	49° 23	124° 37'	Collected within 15 km radius of lat/long	<mark>100 – 300</mark>	n/a	n/a	Within natural stands located within the UBC Malcolm Knapp Forest and between Kanaka Creek and Alouette River north of Haney
Sx	Interior Spruce (White, Englemann and their	Birch Island	+/- 100 m from 425 m p. 10	51° 37	119° 30'	Collected on floodplain along N Thompson R. from Kamloops to Blue River	<u>400 – 500</u>	n/a	n/a	Within natural stands located along the North Thompson River between 51°35' (Vavenby) and 51°39' (Clearwater)
	hybrids)	Horsefly	+/- 100 m from 900 Update #4	52° 25	121° 25'	Collected within 15 km radius of lat/long	800 – 1000	52° 25'	121° 25'	Within natural stands located within a 15 km radius of the latitude and longitude of centre point
Yc	Yellow- cedar	Waukwass	+/- 100 m from 750 m Update #7	50° 29'	127° 18"	Collected within 8 km radius of lat/long	<mark>700 – 800</mark>	50° 29'	127° 18'	Within natural stands located within a <mark>2 km radius</mark> of the latitude and longitude centre point

# Table 5. Changes to interior spruce, Sitka spruce and yellow-cedar superior provenance transfer limitsChanges highlighted in yellow

				Guidebook p. 25-27		Chief Forester	s Standards <mark>Ta</mark>	ble 5.2
Code	Common name	Provenance	May be used within the following natural stand seed planning zones	May be used within the following elevation range <i>(metres</i> )	Latitude transfer (degrees)	May be used within the following natural stand seed planning zones	May be used within the following elevation range (metres)	May be used within the following latitude range (degrees)
Ss	Sitka spruce	Big Qualicum	M, GL	Up to 500 m and 200 m down <u>Update #7</u>	4 N / 1 S	M, GL	<mark>1 – 500</mark>	48° – 55°
		Haney	M, GL	Up to 500 m and 200 m down <u>Update #7</u>	4 N / 1 S	M, GL	<mark>1 – 500</mark>	<mark>48° – 55°</mark>
Sx	Interior Spruce (White,	Birch Island	BSH, MGR, MIC, MRB, SA, QL	Up to 1000 m <u>Update #4</u>	N/A	BSH, MGR, MIC, MRB, SA, QL	1 – 1000	No limit
	Englemann and their hybrids)	Horsefly	BSH, CP, MGR, MRB, SA, QL	+400/ unlimited down	N/A	BSH, CP, MGR, MRB, SA, QL	<mark>400 – 1000</mark>	No limit
Yc	Yellow-cedar	Waukwass	М	No limit <u>Update #7</u>	4 N / 3 S	М	<mark>0 – 1100</mark>	<mark>48° – 52°</mark>

## <u>Table 6. Changes to non-BC natural stand seed source collection criteria</u> Changes highlighted in yellow

Code	Common name		Guidebook p	<u>. 28</u>	Chief Foresters Standards Appendix 6			
		Elevation limits (metres)	Maximum range between lowest and highest elevation (metres)	Additional criteria	Elevation limits (metres)	Maximum range between lowest and highest elevation (metres)	Additional criteria	
Bn	Noble fir	≥ 1000	-	Within natural stands located north of 45° latitude.	≥ 700	<mark>300</mark>	Within natural stands located north of 45° in Washington or Oregon, USA	
Fdc	Coastal Douglas-fir <u>Update #6</u>		-	Originates between 46° and 49° latitude.	No limit	<mark>350</mark>	Within natural stands located north of 46° in Washington or Oregon, USA	
Ss	Sitka spruce	< 200 m	-	From Wash and Oregon within 30 km from coast.	≤ 200	<mark>250</mark>	Within natural stands located within 30 km of Pacific Ocean in Washington or Oregon, USA	
Pw	Western white pine		From Idah	0	<i>Refer to Appendix</i> in Standards	6 Table 6.2 Non-BC	Parent Tree (Seed Orchards)	

## <u>**Table 7. Changes to non-BC natural stand seed source transfer limits</u></u> Changes highlighted in yellow</u>**

			Guidebook p. 28		Chief Forester's Standards Appendix 6			
Code	Common name	May be used within the following natural stand seed planning zones	May be used within the following range (up/down) from mean elevation of origin (metres)	Latitude transfer (degrees)	May be used within the following natural stand seed planning zones	May be used within the following range (up/down) from mean elevation of origin (metres)	May be used within the following latitude range (degrees)	
Bn	Noble fir	-	+300 / -400 Update #7	Maritime sites on Vancouver Island and S of 50° latitude on Mainland	M, SM	+300 / -400	48° – 52°	
Fdc	Coastal Douglas-fir	Coast of BC	+350 / -350 (derived from natural stand tables)	p. 28 3 N (derived from natural stand tables)	GL, M	+350 / -350	<mark>48° – 52°</mark>	
Ss	Sitka spruce	-	+300 m	4 N	M Queen Charlotte Islands only	+ <mark>300 / no limit</mark> down	No limit	