# TSA-based Volume Comparison of VDYP6 & VDYP7

Appendix Addendum

March 23, 2009

**DRAFT** 

### TABLE OF CONTENTS

1	INTRODUCTION	2
2	FORT NELSON (TSA 8)	3
3	FRASER (TSA 30)	. 11
4	KINGCOME (TSA 33)	. 19
5	LILLOOET (TSA 15)	. 27
6	100 MILE HOUSE (TSA 23)	. 35

## **1** Introduction

In the original TSA-based comparison results reported in January of 2009, the VDYP6 volumes on the inventory files for five TSAs had been modified with volume adjustment factors. The TSAs that were affected were:

- Fort Nelson (TSA 8);
- Fraser (TSA 30);
- Kingcome (TSA 33);
- Lillooet (TSA 15); and
- 100 Mile House (TSA 23).

As a result, the comparison results produced at that time did not accurately reflect the differences between the VDYP6 and VDYP7 models for those TSAs.

This addendum provides *revised comparisons* for these five TSAs based on VDYP6 inventory volumes that have <u>not</u> been modified. Note that areas and polygon numbers in this addendum may differ from the original comparison (January 2009) since they are based on different versions of the inventory files.

## 2 Fort Nelson (TSA 8)

#### 2.1 General statistics for Fort Nelson TSA

This analysis was restricted to ownership 62C within the vegetated treed (VT) portion of the Fort Nelson TSA and included approximately 245,520 polygons or about 6,733,000 hectares.

The following figures describe the analysis area by species and maturity class distribution.



Fig 2.1. Fort Nelson TSA: Area distribution by leading species.



Fig 2.2. Fort Nelson TSA: Area distribution by maturity class.

The volume comparisons in the following sections are based on a 12.5cm+ dbh utilization net dwb for both VDYP6 and VDYP7.

Table 1 indicates the inventory status in the TSA and shows trends by inventory type for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

	Number of polygons	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
Inventory type				VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
F (FIP)	66554	4,010,161	59.6	85.8	76.3	-9.5	-11.1
I (incomplete or non-standard)	0	-	0	na	na	na	na
V (VRI)	178963	2,722,891	40.4	88	91.4	3.4	3.9
Total	245517	6,733,052	100	86.7	82.4	-4.3	-4.9

Table 2.1. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by inventory status.

VDYP6 and VDYP7 use different versions of SINDEX to project heights and hence, as a result, site index curves and height projections may differ for some species<sup>1</sup>. Table 2 provides a comparison of the height projections for VDYP6 and VDYP7.

Laadina	Number			Mean he	eight (m)	Mean height	% difference	Range of height
species	of	Area (ha)	Area %	VDYP6	VDYP7	difference	(V7-V6)/V6 *1000/	differences (V7-
_	polygons					(V/-VO)	*100%	V0)
AC	8774	111,503	1.7	24.2	24	-0.2	-0.8	-13.3 to 2.8
AT	54675	1,195,776	18	21.5	21.6	0.1	0.5	-14.6 to 9.6
В	1148	118,653	1.8	10.7	11.3	0.6	5.6	-3.0 to 4.4
Е	15953	261,423	3.9	16.8	16.9	0.1	0.6	-5.2 to 9.0
Н	7	65	0	22.2	22.1	-0.1	-0.5	-0.2 to 0.2
L	2008	40,447	0.6	12.3	11.9	-0.4	-3.3	-8.6 to 1.3
PL	19363	1,043,488	15.7	15.1	15	-0.1	-0.7	-6.8 to 4.8
S	155387	3,864,595	58.2	14.6	14.6	0	0	-6.2 to 13.9
Total	257315	6,635,949	100	16.5	16.6	0.1	0.6	-14.6 to 13.9

Table 2.2. Fort Nelson TSA: Height projection comparison by leading species<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Height differences may also occur due to differences in leading species assignment. VDYP6 assigns leading species based on volume whereas VDYP7 assigns leading species based on basal area. Where the leading and second species are close in percentage terms, this may result in leading species changes. In addition, where the leading and second species are equal in percentage, VDYP7 assigns the leading species based on alphabetic order (e.g. S50 B50 in VDYP6 would become B50 S50 in VDYP7).

<sup>&</sup>lt;sup>2</sup> Heights were compared wherever the projected ages could be matched between VDYP6 and VDYP7. The number of polygons for the height comparison was not always the same as the number of polygons with volumes.

#### 2.2 Comparisons by Leading Species

The following tables and figures show trends by leading species<sup>3</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Table 2.3. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by leading species (leading species representing less than about 5% of the area may be aggregated with similar species).

Leading	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
species			VDYP6	VDYP7		*100%
Decid	1,566,895	23%	115	135	20	17.6%
PL	1,156,036	17%	88	76	-12	-13.1%
S	4,010,122	60%	75	63	-12	-15.7%
Total	6,733,052	100%	87	82	-4	-4.9%



Fig. 2.3. Fort Nelson TSA: Mean volume/ha by leading species at 12.5cm+ dbh utilization.



Fig. 2.4. Fort Nelson TSA: Total m3 volume by leading species at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>3</sup> Leading species as generated by VDYP7 (i.e. basal area based).

## 2.3 Comparisons by Maturity Class

The following tables and figures show trends by maturity class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Maturity class	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
(years)			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
<=60	1,465,245	22%	15	20	6	39.1%
61-120	2,627,396	39%	90	89	-1	-1.3%
121+	2,640,411	39%	123	110	-13	-10.5%
Total	6,733,052	100%	87	82	-4	-4.9%

Table 2.4. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by maturity class.



Fig. 2.5. Fort Nelson TSA: Mean volume/ha by maturity class at 12.5cm+ dbh utilization.



Fig. 2.6. Fort Nelson TSA: Total m3 volume by maturity class at 12.5cm+ dbh utilization.

## 2.4 Comparisons by Height Class

The following tables and figures show trends by 9m lorey height class<sup>4</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Height	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference	
class			VDYP6	VDYP7		(V7-V6)/V6 *100%	
0	1,969,583	29%	0	0	0	-100.0%	
1	1,166,129	17%	10	11	0	2.5%	
2	2,558,641	38%	118	99	-19	-15.8%	
3+	1,038,659	15%	259	278	18	7.0%	
Total	6,733,012	100%	87	82	-4	-4.9%	

Table 2.5. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by height class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 2.7. Fort Nelson TSA: Mean volume/ha by height class at 12.5cm+ dbh utilization.

Fig. 2.8. Fort Nelson TSA: Total m3 volume by height class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>4</sup> The height classes were defined based on VDYP7 Lorey height. Height class 0 was assigned where VDYP7 did not generate a Lorey height for the polygon (i.e. may occur if a polygon did not meet a minimum QMD threshold). Class limits were: 0 to 10.4m for height class 1; 10.5 to 19.4m for height class 2; 19.5 to 28.4m for height class 3; etc.

#### 2.5 Comparisons by Site Index Class

The following tables and figures show trends by site class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Site class (5	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
m interval)			VDYP6	VDYP7		( <i>v</i> /- <i>v</i> 0)/ <i>v</i> 0 *100%
0, 5	2,994,311	44%	27	18	-9	-32.5%
10	2,087,082	31%	103	87	-16	-15.8%
15	1,066,012	16%	147	152	6	3.9%
20+	585,143	9%	226	269	43	18.9%
unavailable <sup>5</sup>	40	0%	276	1217	941	0.0%
Total	6,732,588	100%	87	82	-4	-4.9%

Table 2.6. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by site class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 2.9. Fort Nelson TSA: Mean volume/ha by site index class at 12.5cm+ dbh utilization.



Fig. 2.10. Fort Nelson TSA: Total m3 volume by site index class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>5</sup> VDYP6 and/or VDYP7 were unable to produce a site index for these polygons.

#### 2.6 Comparisons by Biogeoclimatic Zone

The following tables and figures show trends by biogeoclimatic zone for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Table 2.7. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by biogeoclimatic zone (if area is less than 5%, zones may be aggregated).

	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
BEC zone			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
BWBS <sup>6</sup>	5,536,705	82%	92	91	-1	-1.3%
SWB	1,196,348	18%	63	44	-19	-29.5%
Total	6,733,052	100%	87	82	-4	-4.9%



Fig. 2.11. Fort Nelson TSA: Mean volume/ha by BEC zone at 12.5cm+ dbh utilization.

Fig. 2.12. Fort Nelson TSA: Total m3 volume by BEC zone at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>6</sup> Includes <0.05% BAFA.

## 2.7 Comparisons by Basal Area Class

The following tables and figures show trends by basal area/ha class<sup>7</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Table 2.8. Fort Nelson TSA: VDYP6 and VDYP7 volume comparison by basal area class (classes representing less than about 5% of the area have been aggregated with adjacent classes).

Basal	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference	% difference
class (m2)	Area (na)	Area 70	VDYP6	VDYP7	(V7-V6)	*100%
0- 19.9	3,019,553	45%	7	5	-2	-31.9%
10-19.9	1,247,142	19%	73	52	-21	-29.0%
20-29.9	1,434,272	21%	150	128	-22	-14.5%
30-39.9	651,967	10%	224	236	12	5.4%
40+	380,118	6%	292	364	72	24.6%
Total	6,733,052	100%	87	82	-4	-4.9%



Fig. 2.13. Fort Nelson TSA: Mean volume/ha by basal area/ha class at 12.5cm+ dbh utilization.



Fig. 2.14. Fort Nelson TSA: Total m3 volume by basal area/ha class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>7</sup> Basal area/ha as generated by VDYP7.

## 3 Fraser (TSA 30)

## 3.1 General statistics for Fraser TSA

This analysis was restricted to vegetated treed (VT) portion of the Fraser TSA and included approximately 86,460 polygons or about 1 million hectares.

The following figures describe the analysis area by species and maturity class distribution.



Figure 3.1. Fraser TSA: Area distribution by leading species.





The volume comparisons in the following sections are based on a 17.5cm+ dbh utilization net dwb for both VDYP6 and VDYP7.

Table 1 indicates the inventory status in the TSA and shows trends by inventory type for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

	Number of polygons	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
Inventory type				VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
F (FIP)	50	2,554	0.3	152	180.2	28.2	18.5
I (incomplete or non-standard)	0	-	0	na	na	na	na
V (VRI)	86410	1,013,536	99.7	326.9	333.1	6.2	1.9
Total	86460	1,016,091	100	326.5	332.7	6.2	1.9

Table 3.1. Fraser TSA: VDYP6 and VDYP7 volume comparison by inventory status (based on VT polygons).

VDYP6 and VDYP7 use different versions of SINDEX to project heights and hence, as a result, site index curves and height projections may differ for some species<sup>8</sup>. Table 2 provides a comparison of the height projections for VDYP6 and VDYP7.

Leading	Number	A = (l, r)	Area %	Mean he	eight (m)	Mean height	% difference	Range of height
species	of polygons	Area (ha)		VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%	differences in m (V7-V6)
AC	515	1,569	0.3	29.3	29.3	0	0	-1.8 to 3.9
AT	13	95	0	15.6	15.9	0.3	1.9	-0.1 to 1.46
В	21846	232,461	38.5	19.3	19.4	0.1	0.5	-2.1 to 3.2
С	1435	11,621	1.9	26	26	0	0	-1.9 to 1.0
D	2205	18,338	3	19.6	19.6	0	0	-4.5 to 2.7
E	553	5,297	0.9	20.8	20.8	0	0	-4.6 to 4.8
F	15252	172,507	28.6	25.7	25.8	0.1	0.4	-6.0 to 10.0
Н	12341	130,458	21.6	23.2	23.2	0	0	-8.5 to 6.8
MB	722	5,830	1	21.5	20.6	-0.9	-4.2	-2.7 to 5.4
PA	22	194	0	15.3	15.2	-0.1	-0.7	-0.2 to 0.0
PL	959	10,056	1.7	17.7	17.6	-0.1	-0.6	-1.8 to 1.5
PY	4	25	0	5.3	4.8	-0.5	-9.4	-1.2 to 0.9
S	912	12,276	2	19.3	19.3	0	0	-1.7 to 4.6
Y	272	2,463	0.4	20.6	20.6	0	0	-1.0 to 2.0
Total	57051	603,190	100	22.2	22.2	0	0	-8.5 to 10.0

Table 3.2. Fraser TSA: Height projection comparison by leading species<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> Height differences may also occur due to differences in leading species assignment. VDYP6 assigns leading species based on volume whereas VDYP7 assigns leading species based on basal area. Where the leading and second species are close in percentage terms, this may result in leading species changes. In addition, where the leading and second species are equal in percentage, VDYP7 assigns the leading species based on alphabetic order.
<sup>9</sup> Heights were compared wherever the projected ages could be matched between VDYP6 and VDYP7. The number

of polygons for the height comparison was not always the same as the number of polygons with volumes.

## 3.2 Comparisons by Leading Species

The following tables and figures show trends by leading species<sup>10</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Leading	Area (ha)		Mean v	olume/ha	m3/ha	% difference
species		Area %	VDYP6	VDYP7	difference (V7-V6)	( <i>V</i> /- <i>V</i> 0)/ <i>V</i> 0 *100%
В	311,431	31%	275	266	-9	-3.2%
F	252,025	25%	357	354	-3	-0.9%
Н	263,948	26%	388	395	8	2.0%
Misc conif	101,206	10%	381	398	17	4.4%
Decid	87,481	9%	176	247	71	40.1%
Total	1,016,091	100%	326	333	6	1.9%

Table 3.3. Fraser TSA: VDYP6 and VDYP7 volume comparison by leading species (leading species representing less than about 5% of the area may be aggregated with similar species).



Figure 3.3. Fraser TSA: Mean volume/ha by leading species at 17.5cm+ dbh utilization.



Fig. 3.4. Fraser TSA: Total m3 volume by leading species at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>10</sup> Leading species as generated by VDYP7 (i.e. basal area based).

## 3.3 Comparisons by Maturity Class

The following tables and figures show trends by maturity class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Maturity class (years)	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
<=60	254,814	25%	117	134	17	14.4%
61-120	211,933	21%	296	328	32	10.8%
121+	549,343	54%	435	427	-9	-2.0%
Total	1,016,091	100%	326	333	6	1.9%

Table 3.4. Fraser TSA: VDYP6 and VDYP7 volume comparison by maturity class.



Fig. 3.5. Fraser TSA: Mean volume/ha by maturity class at 17.5cm+ dbh utilization.



Fig. 3.6. Fraser TSA: Total m3 volume by maturity class at 17.5cm+ dbh utilization.

#### 3.4 Comparisons by Height Class

The following tables and figures show trends by 9m lorey height class<sup>11</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Height	Height class Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
class			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
0	86,181	8%	5	0	-5	-100.0%
1	73,089	7%	13	18	5	38.0%
2	206,625	20%	143	113	-30	-21.0%
3	368,769	36%	352	339	-13	-3.7%
4+	281,426	28%	607	670	62	10.2%
Total	1,016,091	100%	326	333	6	1.9%

Table 3.5. Fraser TSA: VDYP6 and VDYP7 volume comparison by height class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 3.7. Fraser TSA: Mean volume/ha by height class at 17.5cm+ dbh utilization.



Fig. 3.8. Fraser TSA: Total m3 volume by height class at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>11</sup> The height classes were defined based on VDYP7 Lorey height. Height class 0 was assigned where VDYP7 did not generate a Lorey height for the polygon (i.e. may occur if a polygon did not meet a minimum QMD threshold). Class limits were: 0 to 10.4m for height class 1; 10.5 to 19.4m for height class 2; 19.5 to 28.4m for height class 3; etc.

## 3.5 Comparisons by Site Index Class

The following tables and figures show trends by site class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Site class (5 m interval)	Area (ha)	4 07	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
		Area %	VDYP6	VDYP7		(V/-V6)/V6 *100%
0, 5	113,209	11%	70	43	-27	-38.1%
10	233,726	23%	300	248	-52	-17.3%
15	268,696	26%	418	436	18	4.2%
20	201,524	20%	366	385	19	5.3%
25	137,788	14%	323	368	45	14.1%
30+	61,149	6%	377	485	107	28.4%
Total	1,016,091	100%	326	333	6	1.9%

Table 3.6. Fraser TSA: VDYP6 and VDYP7 volume comparison by site class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 3.9. Fraser TSA: Mean volume/ha by site index class at 17.5cm+ dbh utilization.



Fig. 3.10. Fraser TSA: Total m3 volume by site index class at 17.5cm+ dbh utilization.

## 3.6 Comparisons by Biogeoclimatic Zone

The following tables and figures show trends by biogeoclimatic zone for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
BEC zone			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
CMA	68,816	7%	159	84	-75	-47.0%
CWH	589,883	58%	357	388	31	8.8%
ESSF	108,110	11%	288	276	-12	-4.2%
IDF	73,488	7%	258	233	-25	-9.7%
МН	175,794	17%	344	321	-22	-6.5%
Total	1,016,091	100%	326	333	6	1.9%

Table 3.7. Fraser TSA: VDYP6 and VDYP7 volume comparison by biogeoclimatic zone (if area is less than 5%, zones may be aggregated).



Fig. 3.11. Fraser TSA: Mean volume/ha by BEC zone at 17.5cm+ dbh utilization.



Fig. 3.12. Fraser TSA: Total m3 volume by BEC zone at 17.5cm+ dbh utilization.

## 3.7 Comparisons by Basal Area Class

The following tables and figures show trends by basal area/ha class<sup>12</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Basal area/ha	Area (ha)	Area 0/	Mean v	Mean volume/ha		% difference
class (m2)	Area (na)	Area 70	VDYP6	VDYP7	(V7-V6)	*100%
0- 9.9	204,289	20%	46	14	-32	-68.7%
10-19.9	101,600	10%	148	75	-73	-49.5%
20-29.9	92,800	9%	229	160	-68	-29.9%
30-39.9	112,806	11%	282	246	-36	-12.9%
40-49.9	127,926	13%	360	349	-11	-3.0%
50-59.9	115,499	11%	440	456	16	3.7%
60-69.9	97,840	10%	522	570	48	9.2%
70-79.9	84,669	8%	607	707	100	16.4%
80+	78,663	8%	699	916	217	31.0%
Total	1,016,091	100%	326	333	6	1.9%

Table 3.8. Fraser TSA: VDYP6 and VDYP7 volume comparison by basal area class (classes representing less than about 5% of the area have been aggregated with adjacent classes).



Fig. 3.13. Fraser TSA: Mean volume/ha by basal area/ha class at 17.5cm+ dbh utilization.



Fig. 3.14. Fraser TSA: Total m3 volume by basal area/ha class at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>12</sup> Basal area/ha as generated by VDYP7.

## 4 Kingcome (TSA 33)

## 4.1 General statistics for Kingcome TSA

This analysis was restricted to vegetated treed (VT) portion of the Kingcome TSA and included approximately 65,620 polygons or about 732,760 hectares.

The following figures describe the analysis area by species and maturity class distribution.



FIg 4.1. Kingcome TSA: Area distribution by leading species.



Flg 4.2. Kingcome TSA: Area distribution by maturity class.

The volume comparisons in the following sections are based on a 17.5cm+ dbh utilization net dwb for both VDYP6 and VDYP7.

Table 1 indicates the inventory status in the TSA and shows trends by inventory type for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

	Number of polygons	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
Inventory type				VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
F (FIP)	3211	67,446	9.2	273.7	299.5	25.8	9.4
I (incomplete or non-standard)	0	-	0	na	na	na	na
V (VRI)	62408	665,314	90.8	344.2	335	-9.2	-2.7
Total	65619	732,760	100	337.7	331.7	-6	-1.8

Table 4.1. Kingcome TSA: VDYP6 and VDYP7 volume comparison by inventory status (based on VT polygons).

VDYP6 and VDYP7 use different versions of SINDEX to project heights and hence, as a result, site index curves and height projections may differ for some species<sup>13</sup>. Table 2 provides a comparison of the height projections for VDYP6 and VDYP7.

Leading Number				Mean he	eight (m)	Mean height	% difference	Range of height
species	of polygons	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%	differences (V7- V6)
AC	225	2,263	0.4	36.2	36	-0.2	-0.6	-2.4 to 1.3
AT	13	161	0	23.9	24.3	0.4	1.7	0.1 to 0.7
В	2942	33,757	5.6	25	25	0	0	-8 to 2.1
С	20947	206,509	34	24.4	24.4	0	0	-1.7 to 1.9
D	2649	16,834	2.8	22.2	22.2	0	0	-8.4 to 6.1
F	667	12,561	2.1	28.7	28.8	0.1	0.3	-0.2 to 2.1
Н	22632	237,439	39.1	25.6	25.6	0	0	-8.4 to 9.5
MB	5	35	0	23.6	22.5	-1.1	-4.7	-1.6 to 0.7
PA	39	1,134	0.2	11.3	11.1	-0.2	-1.8	-0.6 to 0
PL	523	14,214	2.3	15.5	15.3	-0.2	-1.3	-3.6 to 4.8
S	533	3,531	0.6	36.2	36.1	-0.1	-0.3	-10.4 to 1.6
Y	6918	78,786	13	19.5	19.5	0	0	-8.5 to 6.1
Total	58093	607,223	100	24.3	24.3	0	0	-10.4 to 9.5

Table 4.2. Kingcome TSA: Height projection comparison by leading species<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> Height differences may also occur due to differences in leading species assignment. VDYP6 assigns leading species based on volume whereas VDYP7 assigns leading species based on basal area. Where the leading and second species are close in percentage terms, this may result in leading species changes. In addition, where the leading and second species are equal in percentage, VDYP7 assigns the leading species based on alphabetic order (e.g. S50 B50 in VDYP6 would become B50 S50 in VDYP7).

<sup>&</sup>lt;sup>14</sup> Heights were compared wherever the projected ages could be matched between VDYP6 and VDYP7. The number of polygons for the height comparison was not always the same as the number of polygons with volumes.

## 4.2 Comparisons by Leading Species

The following tables and figures show trends by leading species<sup>15</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Leading species	Area (ha)		Mean v	olume/ha	m3/ha	% difference
		Area %	VDYP6	VDYP7	difference (V7-V6)	(V/-V6)/V6 *100%
В	36,139	5%	281	303	21	7.6%
С	251,920	34%	403	366	-38	-9.4%
Н	293,828	40%	334	355	21	6.2%
Υ	90,682	12%	230	177	-53	-22.9%
Misc conif	36,443	5%	318	313	-5	-1.7%
Decid	23,748	3%	214	353	138	64.6%
Total	732,760	100%	338	332	-6	-1.8%

Table 4.3. Kingcome TSA: VDYP6 and VDYP7 volume comparison by leading species (leading species representing less than about 5% of the area may be aggregated with similar species).



Fig. 4.3. Kingcome TSA: Mean volume/ha by leading species at 17.5cm+ dbh utilization.



Fig. 4.4. Kingcome TSA: Total m3 volume by leading species at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>15</sup> Leading species as generated by VDYP7 (i.e. basal area based).

## 4.3 Comparisons by Maturity Class

The following tables and figures show trends by maturity class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Maturity class (years)	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
<=60	126,252	17%	106	123	17	16.5%
61-120	67,367	9%	308	386	78	25.2%
121+	539,141	74%	396	374	-22	-5.5%
Total	732,760	100%	338	332	-6	-1.8%

Table 4.4. Kingcome TSA: VDYP6 and VDYP7 volume comparison by maturity class.



Fig. 4.5. Kingcome TSA: Mean volume/ha by maturity class at 17.5cm+ dbh utilization.



Fig. 4.6. Kingcome TSA: Total m3 volume by maturity class at 17.5cm+ dbh utilization.

#### 4.4 Comparisons by Height Class

The following tables and figures show trends by 9m lorey height class<sup>16</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Height	leight class Area (ha) Area %		Mean v	olume/ha	m3/ha	% difference
class		Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
0	62,931	9%	2	0	-2	-100.0%
1	63,841	9%	10	17	7	63.1%
2	174,957	24%	156	126	-31	-19.7%
3	233,787	32%	400	359	-41	-10.1%
4+	197,244	27%	637	689	52	8.1%
Total	732,760	100%	338	332	-6	-1.8%

Table 4.5. Kingcome TSA: VDYP6 and VDYP7 volume comparison by height class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 4.7. Kingcome TSA: Mean volume/ha by height class at 17.5cm+ dbh utilization.



Fig. 4.8. Kingcome TSA: Total m3 volume by height class at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>16</sup> The height classes were defined based on VDYP7 Lorey height. Height class 0 was assigned where VDYP7 did not generate a Lorey height for the polygon (i.e. may occur if a polygon did not meet a minimum QMD threshold). Class limits were: 0 to 10.4m for height class 1; 10.5 to 19.4m for height class 2; 19.5 to 28.4m for height class 3; etc.

## 4.5 Comparisons by Site Index Class

The following tables and figures show trends by site class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Site class (5 m interval)	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
			VDYP6	VDYP7		(V/-V6)/V6 *100%
0, 5	123,068	17%	54	39	-15	-28.2%
10	232,903	32%	322	265	-57	-17.6%
15	205,183	28%	549	553	3	0.6%
20	68,668	9%	388	440	52	13.5%
25	102,846	14%	258	320	62	24.0%
unavailable <sup>17</sup>	92	0%	3	0	-3	-100.0%
Total	732,760	100%	338	332	-6	-1.8%

Table 4.6. Kingcome TSA: VDYP6 and VDYP7 volume comparison by site class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 4.9. Kingcome TSA: Mean volume/ha by site index class at 17.5cm+ dbh utilization.



Fig. 4.10. Kingcome TSA: Total m3 volume by site index class at 17.5cm+ dbh utilization.

 $<sup>^{17}</sup>$  VDYP6 and/or VDYP7 were unable to produce a site index for these polygons.

## 4.6 Comparisons by Biogeoclimatic Zone

The following tables and figures show trends by biogeoclimatic zone for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

BEC zone	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
CWH	628,519	86%	368	367	-2	-0.4%
МН	75,741	10%	160	128	-31	-19.7%
Misc <sup>18</sup>	28,500	4%	137	102	-35	-25.6%
Total	732,760	100%	338	332	-6	-1.8%

Table 4.7. Kingcome TSA: VDYP6 and VDYP7 volume comparison by biogeoclimatic zone (if area is less than 5%, zones may be aggregated).



Fig. 4.11. Kingcome TSA: Mean volume/ha by BEC zone at 17.5cm+ dbh utilization.



Fig. 4.12. Kingcome TSA: Total m3 volume by BEC zone at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>18</sup> Includes BAFA, CMA, ESSF, IDF & IMA.

## 4.7 Comparisons by Basal Area Class

The following tables and figures show trends by basal area/ha class<sup>19</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Basal area/ha	Area (ha)	Area (ha) Area %		olume/ha	m3/ha difference	% difference
class (m2)	Area (na)	Area 70	VDYP6	VDYP7	(V7-V6)	*100%
0- 9.9	135,754	19%	27	12	-15	-56.0%
10-19.9	75,695	10%	105	56	-49	-46.5%
20-29.9	47,298	6%	207	135	-72	-34.6%
30-39.9	50,130	7%	273	210	-63	-23.2%
40-49.9	57,404	8%	339	284	-54	-16.1%
50-59.9	72,709	10%	407	378	-29	-7.2%
60-69.9	94,886	13%	479	472	-7	-1.5%
70-79.9	98,824	13%	544	573	29	5.3%
80+	100,059	14%	639	749	111	17.3%
Total	732,760	100%	338	332	-6	-1.8%

Table 4.8. Kingcome TSA: VDYP6 and VDYP7 volume comparison by basal area class (classes representing less than about 5% of the area have been aggregated with adjacent classes).



Fig. 4.13. Kingcome TSA: Mean volume/ha by basal area/ha class at 17.5cm+ dbh utilization.



Fig. 4.14. Kingcome TSA: Total m3 volume by basal area/ha class at 17.5cm+ dbh utilization.

<sup>&</sup>lt;sup>19</sup> Basal area/ha as generated by VDYP7.

## 5 Lillooet (TSA 15)

## 5.1 General statistics for Lillooet TSA

This analysis was restricted to ownership 62C within the vegetated treed (VT) portion of the Lillooet TSA and included approximately 38,400 polygons or about 645,000 hectares.

The following figures describe the analysis area by species and maturity class distribution.



Fig 5.1. Lillooet TSA: Area distribution by leading species.



Fig 5.2. Lillooet TSA: Area distribution by maturity class.

The volume comparisons in the following sections are based on a 12.5cm+ dbh utilization net dwb for both VDYP6 and VDYP7.

Table 1 indicates the inventory status in the TSA and shows trends by inventory type for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Inventory type	Number of polygons	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference
				VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
F (FIP)	38432	645,081	100	140.5	132.5	-8	-5.7
I (incomplete or non-standard)	1	3	0	34.2	6.8	-27.4	-80.1
V (VRI)	0	-	0	na	na	na	na
Total	38433	645,084	100	140.5	132.5	-8	-5.7

Table 5.1. Lillooet TSA: VDYP6 and VDYP7 volume comparison by inventory status.

VDYP6 and VDYP7 use different versions of SINDEX to project heights and hence, as a result, site index curves and height projections may differ for some species<sup>20</sup>. Table 2 provides a comparison of the height projections for VDYP6 and VDYP7.

Laadina	Number			Mean he	eight (m)	Mean height	% difference	Range of height
species	of	Area (ha)	Area %	VDYP6	VDYP7	difference	(V7-V6)/V6	differences (V7-
1	polygons					(V/-V6)	*100%	V6)
AC	38	220	0	27.2	27	-0.2	-0.7	-0.4 to 0.0
AT	224	2,256	0.4	16.1	16.1	0	0	-0.1 to 0.6
В	6662	95,764	16.4	18.1	18.1	0	0	-0.8 to 0.6
С	17	285	0	16.1	16.1	0	0	-0.3 to 0.3
D	1	5	0	9.6	11.9	2.3	24	2.3 to 2.3
Е	44	622	0.1	17.3	17.4	0.1	0.6	-0.1 to 1.2
F	12424	212,727	36.5	19.9	19.9	0	0	-2.1 to 0.9
Н	51	744	0.1	24.5	24.5	0	0	-0.2 to 1.0
PA	1882	28,791	4.9	14.3	14.3	0	0	-0.2 to 0.4
PL	9332	160,103	27.5	16.9	16.9	0	0	-2.1 to 1.5
PY	674	18,804	3.2	18.4	18.5	0.1	0.5	-1.8 to 0.4
S	4862	62,875	10.8	22.8	22.8	0	0	-1.8 to 4.5
Total	36211	583,196	100	18.8	18.8	0	0	-2.1 to 4.5

Table 5.2. Lillooet TSA: Height projection comparison by leading species<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> Height differences may also occur due to differences in leading species assignment. VDYP6 assigns leading species based on volume whereas VDYP7 assigns leading species based on basal area. Where the leading and second species are close in percentage terms, this may result in leading species changes. In addition, where the leading and second species are equal in percentage, VDYP7 assigns the leading species based on alphabetic order (e.g. S50 B50 in VDYP6 would become B50 S50 in VDYP7).<sup>21</sup> Heights were compared wherever the projected ages could be matched between VDYP6 and VDYP7. The number

of polygons for the height comparison was not always the same as the number of polygons with volumes.

## 5.2 Comparisons by Leading Species

The following tables and figures show trends by leading species<sup>22</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Leading species	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
			VDYP6	VDYP7		*100%
В	97,835	15%	113	117	4	3.4%
F	239,207	37%	145	129	-16	-11.1%
Р	231,677	36%	122	116	-6	-5.3%
S	70,814	11%	223	221	-3	-1.3%
Misc	5,552	1%	114	114	0	0.0%
Total	645,084	100%	141	133	-8	-5.7%

Table 5.3. Lillooet TSA: VDYP6 and VDYP7 volume comparison by leading species (leading species representing less than about 5% of the area may be aggregated with similar species).



Fig. 5.3. Lillooet TSA: Mean volume/ha by leading species at 12.5cm+ dbh utilization.



Fig. 5.4. Lillooet TSA: Total m3 volume by leading species at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>22</sup> Leading species as generated by VDYP7 (i.e. basal area based).

## 5.3 Comparisons by Maturity Class

The following tables and figures show trends by maturity class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Maturity class			Mean v	olume/ha	m3/ha	% difference
(years)	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
<=60	40,986	6%	12	8	-4	-35.6%
61-120	138,913	22%	116	103	-13	-11.3%
121+	465,185	72%	159	152	-7	-4.3%
Total	645,084	100%	141	133	-8	-5.7%

Table 5.4. Lillooet TSA: VDYP6 and VDYP7 volume comparison by maturity class.



Fig. 5.5. Lillooet TSA: Mean volume/ha by maturity class at 12.5cm+ dbh utilization.



Fig. 5.6. Lillooet TSA: Total m3 volume by maturity class at 12.5cm+ dbh utilization.

#### 5.4 Comparisons by Height Class

The following tables and figures show trends by 9m lorey height class<sup>23</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Hojaht			Mean v	olume/ha	m3/ha	% difference
class	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
0	35,148	5%	1	0	-1	-100.0%
1	48,837	8%	21	14	-8	-36.4%
2	398,364	62%	118	107	-11	-9.3%
3+	162,734	25%	261	259	-2	-0.9%
Total	645,084	100%	141	133	-8	-5.7%

Table 5.5. Lillooet TSA: VDYP6 and VDYP7 volume comparison by height class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 5.7. Lillooet TSA: Mean volume/ha by height class at 12.5cm+ dbh utilization.



Fig. 5.8. Lillooet TSA: Total m3 volume by height class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>23</sup> The height classes were defined based on VDYP7 Lorey height. Height class 0 was assigned where VDYP7 did not generate a Lorey height for the polygon (i.e. may occur if a polygon did not meet a minimum QMD threshold). Class limits were: 0 to 10.4m for height class 1; 10.5 to 19.4m for height class 2; 19.5 to 28.4m for height class 3; etc.

## 5.5 Comparisons by Site Index Class

The following tables and figures show trends by site class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Site class (5 m interval)	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
			VDYP6	VDYP7		( <i>V</i> /- <i>V</i> 0)/ <i>V</i> 0 *100%
0, 5	196,169	30%	83	80	-3	-3.2%
10	312,181	48%	145	133	-12	-8.6%
15	136,732	21%	213	207	-5	-2.6%
Total	645,082	100%	141	133	-8	-5.7%

Table 5.6. Lillooet TSA: VDYP6 and VDYP7 volume comparison by site class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 5.9. Lillooet TSA: Mean volume/ha by site index class at 12.5cm+ dbh utilization.



Fig. 5.10. Lillooet TSA: Total m3 volume by site index class at 12.5cm+ dbh utilization.

## 5.6 Comparisons by Biogeoclimatic Zone

The following tables and figures show trends by biogeoclimatic zone for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

			Mean v	olume/ha	m3/ha	% difference
BEC zone	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
ESSF	263,768	41%	134	134	0	0.0%
IDF	259,762	40%	132	115	-17	-13.2%
MS	121,554	19%	173	168	-5	-2.9%
Total	645,084	100%	141	133	-8	-5.7%

Table 5.7. Lillooet TSA: VDYP6 and VDYP7 volume comparison by biogeoclimatic zone (if area is less than 5%, zones may be aggregated).



Fig. 5.11. Lillooet TSA: Mean volume/ha by BEC zone at 12.5cm+ dbh utilization.



Fig. 5.12. Lillooet TSA: Total m3 volume by BEC zone at 12.5cm+ dbh utilization.

## 5.7 Comparisons by Basal Area Class

The following tables and figures show trends by basal area/ha class<sup>24</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Basal area/ha	Basal area/ha Area (ha) A		Mean v	olume/ha	m3/ha difference	% difference
class (m2)	Area (na)	Area 70	VDYP6	VDYP7	(V7-V6)	*100%
0- 9.9	175,092	27%	9	14	5	53.0%
10-19.9	110,565	17%	91	72	-19	-20.7%
20-29.9	164,815	26%	165	140	-24	-14.8%
30+	194,613	30%	266	267	1	0.2%
Total	645,084	100%	141	133	-8	-5.7%

Table 5.8. Lillooet TSA: VDYP6 and VDYP7 volume comparison by basal area class (classes representing less than about 5% of the area have been aggregated with adjacent classes).



Fig. 5.13. Lillooet TSA: Mean volume/ha by basal area/ha class at 12.5cm+ dbh utilization.



Fig. 5.14. Lillooet TSA: Total m3 volume by basal area/ha class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>24</sup> Basal area/ha as generated by VDYP7.

## 6 100 Mile House (TSA 23)

#### 6.1 General statistics for 100 Mile House TSA

This analysis was restricted to ownership 62C within the vegetated treed (VT) portion of the 100 Mile House TSA and included approximately 50,440 polygons or about 851,000 hectares.

The following figures describe the analysis area by species and maturity class distribution.



Fig 11.1. 100 Mile House TSA: Area distribution by leading species.



Fig 11.2. 100 Mile House TSA: Area distribution by maturity class.

The volume comparisons in the following sections are based on a 12.5cm+ dbh utilization net dwb for both VDYP6 and VDYP7.

Table 1 indicates the inventory status in the TSA and shows trends by inventory type for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

	Number of polygons	Area (ha)	Area %	Mean v	olume/ha	m3/ha	% difference	
Inventory type				VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%	
F (FIP)	38546	707,204	83.1	192.1	185.2	-6.9	-3.6	
I (incomplete or non-standard)	0	-	0	na	na	na	na	
V (VRI)	11896	143,919	16.9	120.7	101.9	-18.8	-15.6	
Total	50442	851,124	100	180.1	171.1	-9	-5	

Table 11.1. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by inventory status.

VDYP6 and VDYP7 use different versions of SINDEX to project heights and hence, as a result, site index curves and height projections may differ for some species<sup>25</sup>. Table 2 provides a comparison of the height projections for VDYP6 and VDYP7.

Table 11.2. 100 Mile House TSA: Height projection comparison by leading species<sup>26</sup>

Logding	Number			Mean he	eight (m)	Mean height	% difference	Range of height
species	of polygons	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%	differences (V7- V6)
AC	57	377	0	18.5	18.2	-0.3	-1.6	-0.9 to 0.0
AT	3792	38,948	4.9	18.1	18.2	0.1	0.6	-0.2 to 1.6
В	663	16,824	2.1	17.4	17.4	0	0	-0.7 to 0.6
С	188	3,092	0.4	22.1	22.4	0.3	1.4	-1.0 to 1.4
E	147	2,473	0.3	20.3	20.4	0.1	0.5	-3.2 to 1.5
F	15843	248,604	31.6	21.2	21.2	0	0	-0.6 to 0.6
Н	4	24	0	17.3	17.3	0	0	-0.2 to 0
L	2	5	0	1.2	1.2	0	0	-0.1 to 0
PA	9	83	0	9.7	9.7	0	0	-0.1 to 0
PL	24666	395,671	50.3	20.1	20.1	0	0	-0.8 to 3.6
PY	188	3,444	0.4	19.9	20.1	0.2	1	0.1 to 0.3
S	5276	77,800	9.9	23.8	23.8	0	0	-0.7 to 7.1
Total	50835	787,346	100	20.6	20.6	0	0	-3.2 to 7.1

<sup>&</sup>lt;sup>25</sup> Height differences may also occur due to differences in leading species assignment. VDYP6 assigns leading species based on volume whereas VDYP7 assigns leading species based on basal area. Where the leading and second species are close in percentage terms, this may result in leading species changes. In addition, where the leading and second species are equal in percentage, VDYP7 assigns the leading species based on alphabetic order (e.g. S50 B50 in VDYP6 would become B50 S50 in VDYP7).

<sup>&</sup>lt;sup>26</sup> Heights were compared wherever the projected ages could be matched between VDYP6 and VDYP7. The number of polygons for the height comparison was not always the same as the number of polygons with volumes.

## 6.2 Comparisons by Leading Species

The following tables and figures show trends by leading species<sup>27</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Table 11.3. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by leading species (leading species representing less than about 5% of the area may be aggregated with similar species).

Leading species	Area (ha)	Area %	Mean v	olume/ha	m3/ha difference (V7-V6)	% difference
			VDYP6	VDYP7		*100%
F	269,871	32%	138	133	-5	-3.6%
PL	427,600	50%	191	177	-14	-7.3%
S	80,800	9%	298	290	-8	-2.8%
Misc conif	20,420	2%	168	167	-2	-1.0%
Decid	52,432	6%	129	136	8	6.0%
Total	851,124	100%	180	171	-9	-5.0%



Fig. 11.3. 100 Mile House TSA: Mean volume/ha by leading species at 12.5cm+ dbh utilization.



Fig. 11.4. 100 Mile House TSA: Total m3 volume by leading species at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>27</sup> Leading species as generated by VDYP7 (i.e. basal area based).

## 6.3 Comparisons by Maturity Class

The following tables and figures show trends by maturity class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Maturity class			Mean volume/ha		m3/ha	% difference
(years)	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
<=60	133,567	16%	32	29	-3	-9.4%
61-120	445,383	52%	205	201	-4	-1.9%
121+	272,173	32%	213	192	-20	-9.6%
Total	851,124	100%	180	171	-9	-5.0%

Table 11.4. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by maturity class.



Fig. 11.5. 100 Mile House TSA: Mean volume/ha by maturity class at 12.5cm+ dbh utilization.



Fig. 11.6. 100 Mile House TSA: Total m3 volume by maturity class at 12.5cm+ dbh utilization.

## 6.4 Comparisons by Height Class

The following tables and figures show trends by 9m lorey height class<sup>28</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Height class Area (			Mean volume/ha		m3/ha	% difference
	Area (ha)	Area %	VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
0	63,834	7%	0	0	0	-100.0%
1	43,169	5%	8	12	5	61.9%
2	376,526	44%	135	116	-19	-14.2%
3+	367,595	43%	277	276	-2	-0.6%
Total	851,124	100%	180	171	-9	-5.0%

Table 11.5. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by height class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 11.7. 100 Mile House TSA: Mean volume/ha by height class at 12.5cm+ dbh utilization.



Fig. 11.8. 100 Mile House TSA: Total m3 volume by height class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>28</sup> The height classes were defined based on VDYP7 Lorey height. Height class 0 was assigned where VDYP7 did not generate a Lorey height for the polygon (i.e. may occur if a polygon did not meet a minimum QMD threshold). Class limits were: 0 to 10.4m for height class 1; 10.5 to 19.4m for height class 2; 19.5 to 28.4m for height class 3; etc.

## 6.5 Comparisons by Site Index Class

The following tables and figures show trends by site class for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Site class (5 m interval)	Area (ha)	Area %	Mean volume/ha		m3/ha	% difference
			VDYP6	VDYP7	difference (V7-V6)	(V/-V6)/V6 *100%
0, 5	55,592	7%	45	40	-5	-10.7%
10	322,866	38%	138	119	-19	-13.5%
15	368,029	43%	207	197	-10	-4.7%
20+	104,636	12%	287	308	21	7.5%
Total	851,124	100%	180	171	-9	-5.0%

Table 11.6. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by site class (classes representing less than 5% of the area have been aggregated with adjacent classes).



Fig. 11.9. 100 Mile House TSA: Mean volume/ha by site index class at 12.5cm+ dbh utilization.



Fig. 11.10. 100 Mile House TSA: Total m3 volume by site index class at 12.5cm+ dbh utilization.

## 6.6 Comparisons by Biogeoclimatic Zone

The following tables and figures show trends by biogeoclimatic zone for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

BEC zone	Area (ha)	Area %	Mean volume/ha		m3/ha	% difference
			VDYP6	VDYP7	difference (V7-V6)	(V7-V6)/V6 *100%
ESSF	71,810	8%	247	243	-4	-1.6%
ICH	50,210	6%	276	295	19	6.7%
IDF	420,161	49%	131	112	-18	-14.1%
MS	37,141	4%	198	194	-4	-2.2%
SBPS	130,487	15%	191	182	-9	-4.5%
SBS	141,315	17%	244	249	5	2.1%
Total	851,124	100%	180	171	-9	-5.0%

Table 11.7. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by biogeoclimatic zone (if area is less than 5%, zones may be aggregated).



Fig. 11.11. 100 Mile House TSA: Mean volume/ha by BEC zone at 12.5cm+ dbh utilization.





## 6.7 Comparisons by Basal Area Class

The following tables and figures show trends by basal area/ha class<sup>29</sup> for VDYP6 volumes compared with VDYP7 volumes. Mean volume/ha values in these comparisons have been area weighted.

Table 11.8. 100 Mile House TSA: VDYP6 and VDYP7 volume comparison by basal area class (classes representing less than about 5% of the area have been aggregated with adjacent classes).

Basal area/ha	Area (ha)	Araa %	Mean volume/ha		m3/ha difference	% difference (V7-V6)/V6
class (m2)	Area (na)	Area 70	VDYP6	VDYP7	(V7-V6)	*100%
0- 9.9	135,064	16%	17	10	-7	-39.8%
10-19.9	136,049	16%	99	74	-25	-25.2%
20-29.9	259,337	30%	167	147	-20	-11.9%
30-39.9	217,809	26%	264	259	-5	-1.9%
40+	102,863	12%	356	385	29	8.1%
Total	851,124	100%	180	171	-9	-5.0%



Fig. 11.13. 100 Mile House TSA: Mean volume/ha by basal area/ha class at 12.5cm+ dbh utilization.



Fig. 11.14. 100 Mile House TSA: Total m3 volume by basal area/ha class at 12.5cm+ dbh utilization.

<sup>&</sup>lt;sup>29</sup> Basal area/ha as generated by VDYP7.