



A.

Appendix A
*Harvest Sequence
and Net Landbase
Database Structure
and Description*

DFMP

APPENDIX A HARVEST SEQUENCE AND NET LANDBASE DATABASE STRUCTURE & DESCRIPTION

The following data has been prepared and is included on the enclosed DVD:

- ◆ Tolko FMA PFMS Sequence and Landbase (Harvest_LB_Joint.dbf) – see Table A-1 for the data structure document.

**TABLE A-1: HARVEST SEQUENCE AND NET LANDBASE DATABASE
 STRUCTURE & DESCRIPTION – JOINT FMA**

Number of data records: 87,167

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
1.	AREA	Numeric	20	5	Area in square metres
2.	PERIMETE	Numeric	20	5	Perimeter in metres
3.	GIS_LINK	Numeric	20	0	Unique link to spatial coverage
4.	TILE_NAM	Character	32		Name assigned to tile, made up of twp, rge and mer
5.	FMA	Numeric	2	0	Forest Management Agreement area
6.	OLD_FMU	Character	3		Old Forest Management Unit identified as follows: ◆ S1 – Portion of FMU S21 that previously was S1; ◆ P3 – Portion of FMU S21 that previously was P3.
7.	BUF30	Numeric	2	0	30 metre stream buffer identifier
8.	BUF60	Numeric	2	0	60 metre large permanent stream buffer identifier
9.	BUF60R	Numeric	2	0	60 metre river buffer identifier
10.	BUF100	Numeric	2	0	100 metre lake buffer identifier
11.	BUFTRUMP	Numeric	2	0	200 metre trumpeter swan nesting site buffer identifier
12.	CUT_LINK	Numeric	11	0	Unique cutblock identifier
13.	BLOCKNUM	Numeric	3	0	Cutblock number
14.	ALPHA	Character	1		Cutblock suffix
15.	HARV_YR	Character	5		Year cutblock was harvested
16.	CUT_SPP	Character	5		Species group cutblock assignment (Assigned by Tolko and Buchanan): ◆ C – Pure conifer; ◆ CD – Conifer dominated mixedwood; ◆ DC – Deciduous dominated mixedwood; ◆ D – Pure deciduous; ◆ PR91 – Harvested before 1991.
17.	BLK_SPP	Character	2		Leading species cutblock assignment (Assigned by Tolko and Buchanan): ◆ AW – Trembling Aspen; ◆ PL – Lodgepole Pine; ◆ SB – Black Spruce; ◆ SW – White Spruce.
18.	CUT_PASS	Numeric	2	0	Pass that the cutblock was harvested in
19.	SOURCE	Character	3		Cutblock source of reference: ◆ FI – Forest Inventory; ◆ UPD – Cutblock updates; ◆ UP2 – Cutblock orthophoto updates from 1999-2000; ◆ DFM – DFMP Cutblock updates.

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
20.	OWNER	Character	7		Organization that harvested the cutblock: ♦ APL – Alberta Plywood Ltd.; ♦ AUDY – Audy; ♦ BUCH – Buchanan Lumber Ltd.; ♦ MOF – Alberta Ministry of Forests; ♦ MTU – Miscellaneous Timber Use program; ♦ TOLKO – Tolko Industries Ltd.; ♦ PRE 91 – Pre 1991 cutblocks.
21.	LICENSE	Character	15		Permit that the cutblock was harvested under
22.	OPENNUM	Character	13		Cutblock opening number
23.	TDA	Numeric	2	0	Timber Damage Assessment identifier
24.	FIRENUMB	Character	12		Fire identifying number
25.	FIREYEAR	Numeric	6	0	Year of burn
26.	NR_NAME	Character	20		Name of Natural Region
27.	NSR_NAME	Character	25		Name of Natural Sub-Region
28.	TPA	Character	7		Trapper boundaries
29.	WSHD_NUM	Numeric	3	0	Watershed boundary number
30.	DRS	Numeric	2	0	Disposition reservation identifier
31.	GRL	Numeric	2	0	Grazing lease identifier
32.	BUCKWILD	Numeric	2	0	Buck-for-wildlife special management area identifier
33.	OP_NAME	Character	15		Operating area name
34.	COMP_NUM	Numeric	2	0	Compartment number identifier
35.	MER	Numeric	2	0	Meridian
36.	TWP	Numeric	3	0	Township
37.	RGE	Numeric	2	0	Range
38.	PID	Numeric	4	0	Polygon identifier (stand number)
AVI Overstorey Attributes					
39.	MOIST	Character	1		Moisture regime identified as follows: ♦ A – Aquatic; ♦ D – Dry; ♦ M – Mesic; ♦ W – Wet.
40.	CROWN	Character	1		Crown closure identified as follows: ♦ A – 6 – 30% crown closure; ♦ B – 31 – 50% crown closure; ♦ C – 51 – 70% crown closure; ♦ D – 71 – 100% crown closure.
41.	HEIGHT	Numeric	2	0	Height (m)
42.	SP1	Character	2		Species 1 identified as follows: ♦ AW – Trembling Aspen; ♦ PB – Balsam Poplar; ♦ BW – White Birch; ♦ LT – Larch; ♦ P – Pine; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.
43.	PER1	Numeric	2	0	Species 1 percent

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
44.	SP2	Character	2		Species 2 identified as follows: ♦ AW – Trembling Aspen; ♦ PB – Balsam Poplar; ♦ BW – White Birch; ♦ FB – Balsam Fir; ♦ LT – Larch; ♦ P – Pine; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.
45.	PER2	Numeric	2	0	Species 2 percent
46.	SP3	Character	2		Species 3 identified as follows: ♦ AW – Trembling Aspen; ♦ PB – Balsam Poplar; ♦ BW – White Birch; ♦ FB – Balsam Fir; ♦ LT – Larch; ♦ P – Pine; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.
47.	PER3	Numeric	2	0	Species 3 percent
48.	SP4	Character	2		Species 4 identified as follows: ♦ AW – Trembling Aspen; ♦ PB – Balsam Poplar; ♦ BW – White Birch; ♦ FB – Balsam Fir; ♦ LT – Larch; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.
49.	PER4	Numeric	2	0	Species 4 percent
50.	SP5	Character	2		Species 5 identified as follows: ♦ AW – Trembling Aspen; ♦ LT – Larch.
51.	PER5	Numeric	2	0	Species 5 percent
52.	STR	Character	1		Stand structure identified as follows: ♦ C – Complex; ♦ H – Horizontal;
53.	STRVAL	Numeric	2	0	Stand structure value
54.	ORIGIN	Numeric	4	0	Origin
55.	TPR	Character	1		Timber Productivity Rating identified as follows: ♦ G – Good; ♦ M – Medium; ♦ F – Fair; ♦ U – Unproductive.

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
56.	MOD1	Character	2		Stand modifier 1 identified as follows: ♦ BU – Burn; ♦ CC – Clearcut; ♦ CL – Clearing; ♦ CW – Abandoned wellsite; ♦ FL – Flooded; ♦ FT – Fire tower; ♦ PI – Pipeline; ♦ SN – Snags; ♦ ST – Scattered timber; ♦ TH – Thinned; ♦ TL – Transmission line.
57.	EXT1	Numeric	2	0	Extent of modification 1
58.	YEAR1	Numeric	4	0	Year of modification 1
59.	MOD2	Character	2		Stand modifier 2 identified as follows: ♦ BU – Burn; ♦ CC – Clearcut; ♦ CL – Clearing; ♦ CW – Abandoned wellsite; ♦ PI – Pipeline; ♦ PL – Planted; ♦ SC – Scarified; ♦ SN – Snags; ♦ ST – Scattered timber.
60.	EXT2	Numeric	2	0	Extent of modification 2
61.	YEAR2	Numeric	4	0	Year of modification 2
62.	MOD3	Character	2		Stand modifier 3 identified as follows: ♦ BU – Burn; ♦ PL – Planted; ♦ SC – Scarified; ♦ SN – Snags; ♦ ST – Scattered timber.
63.	EXT3	Numeric	2	0	Extent of modification 3
64.	YEAR3	Numeric	4	0	Year of modification 3
65.	MOD4	Character	2		Stand modifier 4 identified as follows: ♦ BU – Burn.
66.	EXT4	Numeric	2	0	Extent of modification 4
67.	YEAR4	Numeric	4	0	Year of modification 4
68.	NAT_V	Character	2		Naturally non-forested vegetated land identified as follows: ♦ HF – Herbaceous forbs; ♦ HG – Herbaceous grassland; ♦ SC – Closed shrubs; ♦ SO – Open shrubs.
69.	NAT_CL	Numeric	2	0	Non-forested natural vegetated land shrub closure
70.	ANTH_V	Character	3		Anthropogenic vegetated land identified as follows: ♦ CIP – Pipeline; ♦ CIW – Geophysical activity (wellsite); ♦ CP – Cropland (perennial).
71.	ANTH_N	Character	3		Anthropogenic non-vegetated land identified as follows: ♦ AIG – Gravel or borrow pit; ♦ AIH – Permanent right-of-way; ♦ All – Industrial sites.

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
72.	NAT_N	Character	3		Naturally non-vegetated land identified as follows: ♦ NMB – Recent burn; ♦ NMC – Cutbank; ♦ NMS – Sand; ♦ NWF – Flooded; ♦ NWL – Lake or pond; ♦ NWR – River.
73.	REF_SC	Character	1		Reference source identified as follows: ♦ A – Air call; ♦ F – Field plot; ♦ I – Interpreted TPR.
74.	REF_YR	Numeric	4	0	Reference year
AVI Understorey Attributes					
75.	U_MOIST	Character	1		Moisture regime identified as follows: ♦ A – Aquatic; ♦ D – Dry; ♦ M – Mesic; ♦ W – Wet.
76.	U_CROWN	Character	1		Crown closure identified as follows: ♦ A – 6 – 30% crown closure; ♦ B – 31 – 50% crown closure; ♦ C – 51 – 70% crown closure; ♦ D – 71 – 100% crown closure.
77.	U_HEIGHT	Numeric	2	0	Height (m)
78.	U_SP1	Character	2		Species 1 identified as follows: ♦ AW – Trembling Aspen; ♦ BW – White Birch; ♦ FB – Balsam Fir; ♦ PB – Balsam Poplar; ♦ LT – Larch; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.
79.	U_PER1	Numeric	2	0	Species 1 percent
80.	U_SP2	Character	2		Species 2 identified as follows: ♦ AW – Trembling Aspen; ♦ BW – White Birch; ♦ FB – Balsam Fir; ♦ PB – Balsam Poplar; ♦ LT – Larch; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.
81.	U_PER2	Numeric	2	0	Species 2 percent
82.	U_SP3	Character	2		Species 3 identified as follows: ♦ AW – Trembling Aspen; ♦ BW – White Birch; ♦ FB – Balsam Fir; ♦ PB – Balsam Poplar; ♦ LT – Larch; ♦ PL – Lodgepole Pine; ♦ SB – Black Spruce; ♦ SW – White Spruce.

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
83.	U_PER3	Numeric	2	0	Species 3 percent
84.	U_SP4	Character	2		Species 4 identified as follows: <ul style="list-style-type: none"> ◆ AW – Trembling Aspen; ◆ BW – White Birch; ◆ PB – Balsam Poplar; ◆ PL – Lodgepole Pine; ◆ SB – Black Spruce; ◆ SW – White Spruce.
85.	U_PER4	Numeric	2	0	Species 4 percent
86.	U_SP5	Character	2		Species 5
87.	U_PER5	Numeric	2	0	Species 5 percent
88.	U_STR	Character	1		Stand structure identified as follows: <ul style="list-style-type: none"> ◆ H – Horizontal.
89.	U_STRVAL	Numeric	2	0	Stand structure value
90.	U_ORIGIN	Numeric	4	0	Origin
91.	U_TPR	Character	1		Timber productivity rating identified as follows: <ul style="list-style-type: none"> ◆ G – Good; ◆ M – Medium; ◆ F – Fair; ◆ U – Unproductive.
92.	U_MOD1	Character	2		Stand modifier 1 identified as follows: <ul style="list-style-type: none"> ◆ BU – Burn; ◆ CC – Clearcut; ◆ CL – Clearing; ◆ CW – Abandoned wellsite; ◆ FL – Flooded; ◆ PI – Pipeline; ◆ SN – Snags; ◆ ST – Scattered timber; ◆ TH – Thinned.
93.	U_EXT1	Numeric	2	0	Extent of modification 1
94.	U_YEAR1	Numeric	4	0	Year of modification 1
95.	U_MOD2	Character	2		Stand modifier 2 identified as follows: <ul style="list-style-type: none"> ◆ CC – Clearcut; ◆ CL – Clearing; ◆ CW – Abandoned wellsite; ◆ PL – Planted; ◆ SC – Scarified; ◆ SN – Snags; ◆ ST – Scattered timber; ◆ TL – Transmission line.
96.	U_EXT2	Numeric	2	0	Extent of modification 2
97.	U_YEAR2	Numeric	4	0	Year of modification 2
98.	U_MOD3	Character	2		Stand modifier 3 identified as follows: <ul style="list-style-type: none"> ◆ PL – Planted; ◆ SN – Snags; ◆ ST – Scattered timber.
99.	U_EXT3	Numeric	2	0	Extent of modification 3
100.	U_YEAR3	Numeric	4	0	Year of modification 3
101.	U_NAT_V	Character	2		Non-forested natural vegetated land type identified as follows: <ul style="list-style-type: none"> ◆ HF – Herbaceous forbs; ◆ HG – Herbaceous grass; ◆ SC – Closed shrubs; ◆ SO – Open shrubs.

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
102.	U_NAT_CL	Numeric	2	0	Non-forested natural vegetated land shrub closure
103.	U_ANTH_V	Character	3		Anthropogenic vegetated land identified as follows: ♦ CIP – Pipeline; ♦ CIW – Wellsite.
104.	U_ANTH_N	Character	3		Anthropogenic non-vegetated land identified as follows: ♦ AIG – Gravel pit; ♦ AIH – Highway; ♦ All – Industrial sites.
105.	U_NAT_N	Character	3		Naturally non-vegetated land identified as follows: ♦ NMB – Sand; ♦ NWF – Flooded land; ♦ NWL – Lake.
106.	U_REF_SC	Character	1		Reference source identified as follows: ♦ A – Air call; ♦ F – Field plot; ♦ I – Interpreted TPR.
107.	U_REF_YR	Numeric	4	0	Reference year
Calculated Fields					
108.	AREAHA	Numeric	8	2	Area (hectares)
109.	HFLAG	Numeric	4	0	Horizontal component identifier ♦ Use overstorey component (HFLAG = 1); ♦ Use understorey component (HFLAG = 2).
110.	SPGP	Character	4		Overstorey species group
111.	USPGROUP	Character	4		Understorey species group
112.	NONFOR	Numeric	4	0	Non-forested polygon identifier: ♦ Timber Damage Assessment area (NONFOR = 1); ♦ Natural vegetated (NONFOR = 2); ♦ Natural non-vegetated (NONFOR = 3); ♦ Anthropogenic vegetated (NONFOR = 4); ♦ Anthropogenic non-vegetated (NONFOR = 5); ♦ Forested (NONFOR = 0).
113.	NONFSPGP	Character	2		Cutblock species group derived from largest component of update cutblock
114.	CUTFLAG	Numeric	6	2	Cutblock identifier – identifies all cutblocks including: ♦ Non-vegetated islands within cutblocks (CUTFLAG = 0.5); ♦ Cutblock updates (CUTFLAG = 1); ♦ Buchanan Cutblock updates (CUTFLAG = 2); ♦ DFMP Cutblock updates (CUTFLAG = 3); ♦ Forest inventory cutblocks (CUTFLAG = 4).
115.	CUT_SPGP	Character	2		Cutblock species group
116.	MERCH	Numeric	1	0	Non-merchantable polygon identifier: ♦ Unproductive timber productivity rating (MERCH = 1); ♦ Larch as primary or secondary species (MERCH = 2); ♦ Low productivity black spruce stands (MERCH = 3).
117.	CUT_YEAR	Numeric	4	0	Year cutblock was harvested
118.	AGE	Numeric	4	0	Stand age
119.	AGECLASS	Numeric	4	0	10 year age class
120.	YC_SPGP	Character	2		Yield curve species group
121.	YC_CRWN	Character	1		Yield curve crown class

FIELD NO.	FIELD NAME	FIELD TYPE	FIELD WIDTH	NO. OF DECIMALS	FIELD DESCRIPTION
122.	YC_SP	Character	2		Yield curve species
123.	NATREG	Numeric	4	0	Natural Sub-Region Identifier: ♦ Central Mixedwood (NATREG = 1); ♦ Dry Mixedwood (NATREG = 2); ♦ Lower Foothills (NATREG = 11).
124.	YC_STRAT	Character	12		Yield curve strata developed from volume sampling
125.	YC_NUM	Numeric	4	0	Yield curve number developed from volume sampling and assigned as follows: ♦ MX-AB-D-A-G (YCNUM = 1); ♦ MX-AB-D-A-MF (YCNUM = 2); ♦ FH-AB-D-A-G (YCNUM = 3); ♦ FH-AB-D-A-MF (YCNUM = 4); ♦ MX-CD-D-A-G (YCNUM = 5); ♦ MX-CD-D-A-MF (YCNUM = 6); ♦ FH-CD-D-A-G (YCNUM = 7); ♦ FH-CD-D-A-MF (YCNUM = 8); ♦ A-AB-DC-A-A (YCNUM = 9); ♦ A-CD-DC-A-A (YCNUM = 10); ♦ A-AB-CD-A-A (YCNUM = 11); ♦ A-CD-CD-A-A (YCNUM = 12); ♦ A-AB-C-SW-A (YCNUM = 13); ♦ A-AB-C-PL-A (YCNUM = 14); ♦ A-AB-C-SB-A (YCNUM = 15); ♦ A-CD-C-SW-A (YCNUM = 16); ♦ A-CD-C-PL-A (YCNUM = 17); ♦ A-CD-C-SB-A (YCNUM = 18).
126.	DISP	Numeric	6	2	Disposition identifier: ♦ Special management area, buck-for-wildlife disposition (DISP = 0.75); ♦ Grazing leases (DISP = 1); ♦ Disposition Reservation (DISP = 4).
Net Landbase Determination Field					
127.	NETDOWN	Numeric	6	2	Net down items – identifies all landbase categories: ♦ Net landbase (NETDOWN = 0); ♦ Water (NETDOWN = 1); ♦ Disposition (NETDOWN = 2); ♦ Trumpeter swan nesting site buffer – 200m (NETDOWN = 4); ♦ Lake buffer – 100m (NETDOWN = 5); ♦ River and large permanent stream buffer – 60m (NETDOWN = 6); ♦ Stream buffer – 30m (NETDOWN = 7); ♦ Anthropogenic vegetated, anthropogenic non-vegetated and TDA areas (NETDOWN = 8); ♦ Naturally vegetated and naturally non-vegetated (NETDOWN = 9); ♦ Merchantability deletions (NETDOWN = 10); ♦ Recent burns – since 1997 AVI (NETDOWN = 11).
Harvest Sequence					
128.	AOP	Numeric	8	2	Planned block identifier
129.	CUTYEAR1	Numeric	8	2	First entry harvest
130.	CUTYEAR2	Numeric	8	2	Second entry harvest
131.	CUTYEAR3	Numeric	8	2	Third entry harvest