

Table and Column Definitions Report

Filename:	G:\!Workgrp\HISDA\MODELS\KIRA\VGIS_table.pdf
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Parameters

Workarea:	GLOBAL SHARED WORKAREA
Container:	VGIS
Table Name:	%
Data Structure Diagram:	
Include Column Descriptions?	Y
Include Column Notes?	Y
Include Unique Constraints?	Y
Include Foreign Key Constraints?	Y
Include Check Constraints?	Y
Include Indexes?	Y

Table: ACCESS_NOTES*Description:*

A sequence of directions along a route, designed to enable personnel to navigate to the sample location from a predominant start point.

The route is made up of a series of legs, such that the directions for a leg will take one to the start point for the next leg.

The level of directions is to be written for those unfamiliar with the vicinity.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	PLOC_POINT_LOCN_SKEY	NOT NULL	NUMBER(7,0)
3	CMT	NOT NULL	VARCHAR2(256)
	Text describing the direction, junctions, turns, and landmarks associated with this note. If this is the final leg the instructions on locating the tie point or trail to the sample should be included.		
	<i>HH93_S ACCESS_AN_COMMENT</i>		
	<< 1998-03-25-16:45 sourced from:346868:346807 >>		
4	SEQUENCE_ID	NOT NULL	NUMBER(2,0)
	The sequence number for an occurrence of a leg along an access route. This specifies the order in the legs are travelled. Leg numbers start at 1 and the highest number identifies the leg that terminates at a visible trail to the sample.		
	<i>HH93_S ACCESS_AN_SEQNMBR</i>		
	<< 1998-03-25-16:45 sourced from:346868:346805 >>		
* 5	ACCESS_NOTE_SKEY	NOT NULL	NUMBER(7,0)
	<< 1998-03-25-16:45 sourced from:346868:346969 >>		

Table: ACCESS_NOTES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
6	CUMUL_DIST	NULL	NUMBER(4,1)

The cumulative distance of the road travel associated with travelling to the sample location.

This is usually calculated from the vehicle odometer start value for one occurrence and the odometer start value for the subsequent leg.

A! Incremental length not retained

HH93_S ACCESS_AN_ODOMETER

<< 1998-03-25-16:45 sourced from:346868:346806 >>

Foreign Keys:

ACCNT_PLOC_FK
PLOC_POINT_LOCN_SKEY = POINT_LOCATIONS.POINT_LOCN_SKEY

Indexes:

ACCNT_PLOC_FK_I
PLOC_POINT_LOCN_SKEY

Notes:

A? Check with BD to find the source of indexed access file notes from

HH

<< 1998-03-25-16:45 sourced from:346868:346804 >>

Table: ADJUSTMENT_FACTORS*Description:*

A factor or constant value applied to the derivation of data.

Historically, decay, waste and breakage have been applied to the tree volumes (as reductions) though under the Vegetation Inventory design, adjustments can be applied to many attributes, either as reductions or increases.

A factor to approximate breakage of wood in the course of its extraction during harvesting operation.

The FIP supplied adjustment factor as per the FIP Dictionary, named as VOLUME ADJUSTMENT FACTOR.

This tree volume adjustment factor is user supplied in the circumstances where a silvicultural determination is such that the volume production would be less than the VDYP or other mathematical growth model would predict.

This is not a Vegetation Inventory attribute, as this will be replaced by a statistically rigorous process based on samples, the LOSS subtype of ADJUSTMENT FACTOR.

NB: the value of zero, curiously meaning no adjustment, is not permitted in this design, it is represented by its absence (no relationship to DERIVED VALUE) to eliminate any potential confusion.

A generalized parameter that allows for a reduction in inventory volume which represent associated sound volume that is 'wasted' (i.e. not commercially viable) on account of proximate decay.

Table: ADJUSTMENT_FACTORS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ADJ_FACTOR_SKEY System generate unique identifier using ORACLE SEQUENCE adj_factor_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-11:36 sourced from:236464:433869 >>			
2	ADJF_TYPE	NOT NULL	VARCHAR2(10)
3	FIP_ADJUST_FACTOR A localized factor used to adjust the derivation of net tree volumes. This factor would be applied subsequent to the standard Ministry adjustments for decay, waste and breakage. This factor is supplied by individual interpreters, and is to reflect the condition, based on a silvicultural determination, of lower (usually) volume production than can be predicted from current mathematical models (e.g. VDYP). This is retained for FIP legacy purposes only; adjustments for Vegetative Cover would be derived from samples in the land unit of interest (LOSS subtype of ADJUSTMENT FACTOR).	NULL	NUMBER(4,2)
<< 1998-03-26-11:55 sourced from:236464:508605 >>			
4	DESCRIPTION A dummy attribute inserted for table generation pending complete analysis of the required attributes.	NULL	VARCHAR2(50)

<< 1998-03-26-11:36 sourced from:236464:433872 >>

Table: ADJUSTMENT_FACTORS (cont'd)*Notes:*

A! 1 JRT 21 Jan 97 - further detailed analysis is required to define the attribution for this entity. and the source of the adjustment factors

A! 2 JH, DEC-04-97 -upon further analysis, relationships may be (should be?) formed with the inheriting entities of BUSINESS OBJECT ASSESSMENT, e.g. VOLUME ASSESSMENT, SITE INDEX ASSESSMENT, BASAL AREA ASSESSMENT, CULMINATION ASSESSMENT, MEAN DIAMETER ASSESSMENT

<< 1998-03-26-11:36 sourced from:236464:427137 >>

<< 1998-03-26-11:37 sourced from:236464:427163 >>

<< 1998-03-26-11:55 sourced from:236464:508599 >>

<< 1998-03-26-11:55 sourced from:236464:427145 >>

<< 1998-03-26-11:55 sourced from:236464:427151 >>

<< 1998-03-26-11:55 sourced from:236464:427157 >>

Table: AGENCY_PERSON_ASSOCIATIONS*Description:*

The association of a person with an agency. This is typically, but not limited to, an employee. This reflects the temporal association of a person with many agencies over time.

No reliable population of attribute values is anticipated owing to the vagaries of collecting this temporal data.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGENCY_PERSON_SKEY The surrogate identifier of agency-person association	NOT NULL	NUMBER(7,0)
<< 1998-03-25-16:59 sourced from:416792:524020 >>			
2	CREATE_DATE The date the association of a Person with an Agency was created in the application.	NOT NULL	DATE
<< 1998-03-25-16:59 sourced from:416792:432494 >>			
3	MODIFY_DATE The date the association of a Person with an Agency was modified in the application.	NULL	DATE
<< 1998-03-25-16:59 sourced from:416792:492761 >>			
4	CREATE_USER_ID The user id that created the association of a Person with an Agency.	NULL	VARCHAR2(30)
<< 1998-03-25-16:59 sourced from:416792:432495 >>			

Table: AGENCY_PERSON_ASSOCIATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	MODIFY_USER_ID The user id that created the association of a Person with an Agency.	NULL	VARCHAR2(30)

<< 1998-03-25-16:59 sourced from:416792:492762 >>

7	PER_PERSON_SKEY	NOT NULL	NUMBER(7,0)
9	AGNCY_AGENCY_SKEY	NOT NULL	NUMBER(7,0)

Unique Constraints:

APA_UK
 PER_PERSON_SKEY
 AGNCY_AGENCY_SKEY

Foreign Keys:

APA_AGENCY_FK
 AGNCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY
 APA_PER_FK
 PER_PERSON_SKEY = PEOPLE.PERSON_SKEY

Indexes:

APA_AGENCY_FK_I
 AGNCY_AGENCY_SKEY
 APA_PER_FK_I
 PER_PERSON_SKEY

Notes:

A!; This same entity is named Agency Personnel Staff in the SPD v.5 data model and is re-named to remove any perceived limitations in the name. This MUMS version can be considered to be the definitive source of name and definition on account of development preceeding that of SPD.

<< 1998-03-25-16:59 sourced from:416792:422504 >>

Table: AGE_ASSESSMENTS*Description:*

Measurements, estimations and derivations of tree age. In the field, age is usually measured from the annual growth increments counted from an (increment) core sample extracted at a prescribed height (HEIGHT). The measured age has historically been collected at various heights as low to the germination point as practical. A correction factor is then applied to reflect the total age (age at the germination point). The present practise is to collect age at a standard 1.30 breast height.

An age assessment may be corrected to both total age or to breast height, 1.30 m.

For certain tree species, age may be derived from a count of the whorls (tree branch nodes indicating 1 year's growth) above a certain height or above germination point.

Each of these AGE factors (original counts, whorl counts, adjustments) are recorded in a separate row occurrence in AGE COMPONENT FACTOR with an appropriate TYPE CD to indicate what the recorded value represents.

N.B. Analysis only.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_ASSMT_SKEY A unique identifier for an occurrence if a tree age.	NOT NULL	NUMBER(7,0)

Table: AGE_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	CREATE_USER_ID <i><< 1998-03-26-10:19 sourced from:346868:583468 >></i>	NOT NULL	VARCHAR2(30)
3	CREATE_DATE <i><< 1998-03-26-10:19 sourced from:346868:583469 >></i>	NOT NULL	DATE
4	ASSESSED_FEATURE A code that defines the physical tree feature used for age assessment. Valid values are whorls, core increment or stump. <i><< 1998-03-26-10:19 sourced from:346868:583474 >></i>	NOT NULL	VARCHAR2(3)
6	MEASMT_HEIGHT The height in meters above germination point or highest side at which the age measurement was taken. Depending on the method, it is either the height of the stump or the height the core sample was bored at. <i><< 1998-03-26-10:19 sourced from:346868:583455 >></i>	NOT NULL	NUMBER(4,2)
7	BARK_THICKNESS Bark thickness, at MEASUREMENT HEIGHT, as measured during an AGE ASSESSMENT. <i><< 1998-03-26-10:19 sourced from:346868:586535 >></i>	NULL	NUMBER(3,0)
8	CORE_CONDITION_CD A code that describes the condition and/or completion of extracting	NULL	VARCHAR2(3)

Table: AGE_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	the of the increment core. Valid values include CRC - can't reach center ROT - rotten center FUL - full core to pith		
	<< 1998-03-26-10:19 sourced from:346868:586622 >>		
9	MODIFY_USER_ID << 1998-03-26-10:19 sourced from:346868:583470 >>	NULL	VARCHAR2(30)
10	GERMINATION_DATE The date the tree germinated from seed. Derived from the AGE ASSESSMENT COMPONENTS (i.e. total tree age (age to pith plus or minus adjustments) subtracted from the MEASUREMENT DATE as recorded in the MEASUREMENT VISITATION).	NULL	DATE
	<< 1998-03-26-10:19 sourced from:346868:613815 >>		
11	MODIFY_DATE << 1998-03-26-10:19 sourced from:346868:583471 >>	NULL	DATE
12	CORE_SOURCE_IND A code that indicates whether the age boring core came from the tree defined or from an out-of-plot tree of the same species. An out-of-plot tree is bored if the in-plot tree cannot be bored due to inaccessibility in the field or a field determination that the	NULL	VARCHAR2(3)

Table: AGE_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	actual in-plot tree is not representative for some reason.		
	<< 1998-03-26-10:19 sourced from:346868:597900 >>		
13	DIAM_AT_BORING_HT The outside bark (OB) diameter measured at the boring height for age assessment.	NULL	NUMBER(4,1)
	<< 1998-03-26-10:19 sourced from:346868:583473 >>		
14	REPRESENTATIVE_IND An indicator to denote if theTOTAL AGE is representative of the tree population of the sample or experimental unit. Tree ages that are not representative may not be included in age related calculations for the sample. Representative ages can be either determined in the field where no discretion of collection is allowed, or post data processing where an age may be chosen to be excluded. <i>Previously named REPRESS IND. Named changed to avoid confusion with the recoding of 'repressed growth'.</i>	NULL	VARCHAR2(1)
16	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

AGEA_TRMEA_FK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

AGEA_TRMEA_FK_I

Table: AGE_ASSESSMENTS (cont'd)*Indexes:*

TRMEA_TREE_MEASMT_SKEY

Notes:

03 sep 97 JRT; see further notes below;

- this entity was copied from AGE ASSMTS and modified.

<< 1998-03-26-10:19 sourced from:346868:583454 >>

A! 98-09-02 JH this is retained for analysis purposes only: this entity represents the most up-to-date analysis that can satisfy the Veg. Sample data collection requirements where pieces of increment cores are ring counted and 'alternate' ages (physiological (sic)) are recorded

Rationalization and normalization with AGE ASSMTS to follow at a future date

Table: AGE_ASSMTS*Description:*

Reverse Engineered from table AGE_ASSMTS (from the physical). Is a
denormalized format in support of Veg Ground Samples. Will be later
modified to AGE_ASSESSMENTS and AGE_ASSESSMENT_COMPONENTS.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_ASSMT_SKEY	NOT NULL	NUMBER(7,0)
2	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
3	HEIGHT	NOT NULL	NUMBER(4,2)
4	ASSESSED_AGE	NULL	NUMBER(3,0)
5	QUALIFIER_CD	NOT NULL	VARCHAR2(7)
6	REPRES_IND	NOT NULL	VARCHAR2(1)
7	CORRTN_FTR	NULL	NUMBER(2,0)
8	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
9	CREATE_DATE	NOT NULL	DATE
10	PITH_IND	NULL	VARCHAR2(1)
11	RADIAL_INC_10_YR	NULL	NUMBER(3,0)
12	RADIAL_INC_20_YR	NULL	NUMBER(3,0)
13	SOUND_TREE_IND	NULL	VARCHAR2(1)
14	MEAN_SEL_IND	NULL	VARCHAR2(1)
15	TOTAL_AGE	NULL	NUMBER(3,0)
16	MODIFY_USER_ID	NULL	VARCHAR2(30)
17	MODIFY_DATE	NULL	DATE
18	AGASM_TYPE	NULL	VARCHAR2(10)
19	AGE_ADJUSTMENT	NULL	NUMBER(4,0)
20	AGE_ADJUSTMENT_REASON_CD	NULL	VARCHAR2(3)
21	BARK_THICKNESS	NULL	NUMBER(3,0)
22	PRORATE_LENGTH	NULL	NUMBER(4,1)
23	RING_COUNT	NULL	NUMBER(4,0)
24	TAPER_EQN_AGE_CORRTN_FTR	NULL	NUMBER(4,0)
25	WHORLS_ABOVE_HT	NULL	NUMBER(2,0)
26	WHORLS_BELOW_HT	NULL	NUMBER(2,0)
27	RADIAL_INC_5_YR	NULL	NUMBER(3,0)
28	DIAM_AT_BORING_HT	NULL	NUMBER(4,1)
29	BORED_HEIGHT_AGE	NULL	NUMBER(4,0)
30	PHYSIOLOGICAL_AGE	NULL	NUMBER(4,0)

Foreign Keys:

AGASM_TRMEA_PK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

AGASM_TRMEA_PK_I
TRMEA_TREE_MEASMT_SKEY

Table: AGE_ASSMT_COMPONENTS*Description:*

A component (expressed in years) used in the determination of total tree age at time of measurement. Typically, tree age is determined from an increment core sample taken at a measurement height. The ring count from this core would be saved as one row occurrence (with TYPE CD ='RING'.

Since trees are tapered, an adjustment is made to estimate the tree age from germination point (height = 0.0) to measurement height (1.3 m. typically). This adjustment factor is stored in a row occurrence with TYPE CD='ADJ20' (adjust to height 0.0).

Total age for a tree at a specific tree measurement is then calculated as the sum of these 2 row occurrences - i.e. count + adjustment.

Procedurally, rules are used to enforced a precedence of precision in age counts from bored cores. Microscope counts are used preferentially if an ocular count exists.

Any actual counts (ocular or microscope) are considered better than a physiological count and would be used if both exist.

N.B. Analysis only.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_COMPONENT_SKEY UID generated from an Oracle sequence number.	NOT NULL	NUMBER(7,0)

Table: AGE_ASSMT_COMPONENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	COMPONENT_TYPE_CD A code that indicates what the quantity in years represents. The age may be applied for radial and longitudinal occurrences. Valid values are defined in the Age Component Type Cd domain. << 1998-03-26-10:19 sourced from:346868:597915 >>	NOT NULL	VARCHAR2(8)
3	YEAR_COUNT The number of years assessed for the component of the age assessment. << 1998-03-26-10:19 sourced from:346868:597916 >>	NOT NULL	NUMBER(3,0)
4	ASSESSMENT_METHOD_CD A code that describes how the quantity_in_yrs was determined. << 1998-03-26-10:19 sourced from:346868:614029 >>	NOT NULL	VARCHAR2(8)
6	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
9	MODIFY_USER_ID	NULL	VARCHAR2(30)
11	MODIFY_DATE	NULL	DATE
12	CREATE_DATE	NOT NULL	DATE
13	CORE_SECTION_LENGTH The core length used in proration or adjustent calculations. << 1998-03-26-10:19 sourced from:346868:614035 >>	NULL	NUMBER(4,1)
15	AGEA_AGE_ASSMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

AAC_AGEA_FK

Table: AGE_ASSMT_COMPONENTS (cont'd)*Foreign Keys:*

AGEA_AGE_ASSMT_SKEY = AGE_ASSESSMENTS.AGE_ASSMT_SKEY

Indexes:

AAC_AGEA_FK_I

AGEA_AGE_ASSMT_SKEY

Notes:

<< 1998-03-26-10:19 sourced from:346868:597901 >>

A! 98-09-02 JH this is retained for analysis purposes only: this entity represents the most up-to-date analysis that can satisfy the Veg. Sample data collection requirements where pieces of increment cores are ring counted and 'alternate' ages (physiological (sic)) are recorded

Table: AGE_CLASSES*Description:*

The standard Resouce Inventory Branch age class code and the bounds for its determination. It is expected that this would be the rule table from which Age Class is derived, as it is proposed that Tree Layer specific age class data will not be stored.

As analysed, this is a stand-alone rule table and has no relationships.

Populate the values from the FIP Dictionary, p 3-96.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_CLASS_SKEY The surrogate identifier of an Age Class.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-13:05 sourced from:236464:508520 >>			
2	MIN_AGE_BND The minimum age bound of the age class.	NOT NULL	NUMBER(3,0)
<< 1998-03-26-13:05 sourced from:236464:508525 >>			
3	AGE_CLASS_CD The business assigned code for a range of ages.	NULL	NUMBER(2,0)
<< 1998-03-26-13:05 sourced from:236464:508521 >>			
4	MAX_AGE_BND The maximum age bound of the age class. If no value (null), then no maximum applies.	NULL	NUMBER(3,0)

Table: AGE_CLASSES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-13:05 sourced from:236464:508526 >>		

Notes:

<< 1998-03-26-13:05 sourced from:236464:508514 >>

Table: AGE_STATISTICAL_ESTIMATES*Description:*

The statistical estimates of tree age of the population.

Note that the tree age for purpose of statistical summary is converted to the year of tree origin. This is to facilitate provision of current tree age without annual conversion of measured age.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_STATISTICAL_SKEY A surrogate identifier of the calculation of Mean Age (Year of Origin) as no identifiers have been kept previously. The data and time of calculation would, in the future, become the key. << 1998-03-26-10:21 sourced from:346868:347080 >>	NOT NULL	NUMBER(7,0)
2	MEASMT_HT Measurement height to which the age estimate calculation applies (e.g. breast height). Total age is assumed to have a zero measurement height. << 1998-03-26-10:21 sourced from:346868:347026 >>	NOT NULL	NUMBER(4,2)
3	AGE_MID_POINT_IND An indicator to denote that the mean age (MEAN YR OF ORIGIN) is based on age class mid points rather than the statistical summary of the individual trees. This historical data processing practise inherited from ather group, is no longer followed. It is only applicable to the Inventory temporary inventory samples (TSP's) where the aggregation of trees by age and height class was a common processing technique.	NOT NULL	VARCHAR2(1)

Table: AGE_STATISTICAL_ESTIMATES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	In time, these MEAN AGE's should be recalculated from the individual trees (95-3).		
	<i>SEF_S CT1:66 AGE HEIGHT MIDPT</i>		
	<i>SEF_C Blank = 'N', 'M' = 'Y'</i>		
	<i>A! Not on HH; default = 'N'</i>		
	<< 1998-03-26-10:21 sourced from:346868:347110 >>		
4	DATE_OF_CALC	NOT NULL	DATE
	The date the statistical estimates of age (in the forms of origin year) were calculated. If the calculation date is unknown, the default is the date in which the data was loaded from existing files.		
	<i>SEF_C default to load data</i>		
	<< 1998-03-26-10:21 sourced from:346868:347027 >>		
5	STAT_VARIANCE	NULL	NUMBER(6,4)
	Variance of year of origin for trees of the representative selected trees to characterize the layer and species.		
	<< 1998-03-26-10:21 sourced from:346868:347031 >>		
6	MIN_YR_OF_ORIGIN	NULL	NUMBER(4,0)
	Minimum year of origin for trees of the representative selected trees to characterize a layer and species.		
	<< 1998-03-26-10:21 sourced from:346868:347028 >>		
7	MAX_YR_OF_ORIGIN	NULL	NUMBER(4,0)
	Maximum year of origin for trees of selected trees to characterize a layer and species.		

Table: AGE_STATISTICAL_ESTIMATES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-10:21 sourced from:346868:347029 >>			
8	MEAN_YR_OF_ORIGIN	NULL	NUMBER(4,0)
	The mean (average) year of origin calculated from individual trees (an exception being for AGE MID POINT IND ='Y'). This value has been converted from the mean age as it is stored in the Standard Edit File, to a mean year of origin on account of the fact that mean age changes as does time. (In order to keep the value correct, it must be updated every year.) Therefore as the data meaning is constant, it has been converted on data loading.		

<< 1998-03-26-10:21 sourced from:346868:347030 >>

10	LYSPC_LAYER_SPP_SKEY	NOT NULL	NUMBER(7,0)
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Foreign Keys:

AGSTE_LYSPC_FK
 LYSPC_LAYER_SPP_SKEY = LAYER_SPECIES_COMPOSITIONS.LAYER_SPP_SKEY

Indexes:

AGSTE_LYSPC_FK_I
 LYSPC_LAYER_SPP_SKEY

Notes:

<< 1998-03-26-10:21 sourced from:346868:347025 >>

Table: AUGMENTED_ASSMT_ACTIVITIES*Description:*

The association of a Tree assessment for additional measurement, Tree Height or Tree Age, with the Selection Method, for a specific Purpose.

For example, there may exist, at the time of collection, multiple purposes in selecting a given Tree Height or Tree Age - the sampling regime may require a Top Height Tree, a Leading Species Tree and a Random Tree which in some cases, can be the same tree.

Another example is where a tree is selected as the Top Height tree, and then selected again as the Random tree in the current Vegetation InventorySampling practise.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ASS_ACT_SKEY A system generated surrogate identifier.	NOT NULL	NUMBER(7,0)
Created to address the complexity of the unique identification of an occurrence and to minimize future table maintenance should other individual business items need to be selected. (No primary key update required).			
2	SEL_SELECTION_SKEY	NOT NULL	NUMBER(7,0)
4	CREATE_DATE	NULL	DATE
7	MODIFY_USER_ID	NULL	VARCHAR2(30)
9	MODIFY_DATE	NULL	DATE
10	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
11	AGEA_AGE_ASSMT_SKEY	NULL	NUMBER(7,0)
12	HTASM_HT_ASSMT_SKEY	NULL	NUMBER(7,0)
13	PURPOSE_CD A code used to represent the assessment purpose.	NULL	VARCHAR2(8)

Examples would be:

Table: AUGMENTED_ASSMT_ACTIVITIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
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CH_STND -characterization of stand/layer height or age

CH_HT/DI -characterization of height/diameter relationship.

Foreign Keys:

AACT_AGEA_FK
AGEA_AGE_ASSMT_SKEY = AGE_ASSESSMENTS.AGE_ASSMT_SKEY
AACT_HTASM_FK
HTASM_HT_ASSMT_SKEY = HT_ASSMTS.HT_ASSMT_SKEY
AACT_SEL_FK
SEL_SELECTION_SKEY = SELECTION_METHODS.SELECTION_SKEY

Indexes:

AACT_AGEA_FK_I
AGEA_AGE_ASSMT_SKEY
AACT_HTASM_FK_I
HTASM_HT_ASSMT_SKEY
AACT_SEL_FK_I
SEL_SELECTION_SKEY

Table: BASAL_AREA_ASSESSMENTS*Description:*

The cross sectional tree area at breast height.

This attribute may be either observed, as per Vegetation Inventory data collection specifications, or calculated from growth projection models, e.g. VDYP.

Definition Source: p. 6-18, PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BASAL_AREA_SKEY The system generated surrogate identifier populated from BASAL_AREA_SEQ.	NOT NULL	NUMBER(7,0)
	<< 1998-03-26-11:30 sourced from:236464:678441 >>		
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who craeted the record.	NOT NULL	VARCHAR2(30)
	<<1997-12-09-14:23 sourced from:236464:422006>>		
	<< 1998-03-26-11:30 sourced from:236464:681646 >>		
4	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE
	<<1997-12-09-14:23 sourced from:236464:422005>>		
	<< 1998-03-26-11:30 sourced from:236464:681645 >>		

Table: BASAL_AREA_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	BASAL_AREA_PER_HA The cross sectional tree area at breast height.	NOT NULL	NUMBER(8,4)
	<p>This attribute may be either observed, as per Vegetation Inventory data collection specifications, or calculated from growth projection models, e.g. VDYP.</p> <p>Definition Source: p. 6-18, PIP</p> <p><<1997-12-05-16:04 sourced from:236464:544886>></p> <p><< 1998-03-26-11:30 sourced from:236464:679741 >></p>		
6	SOURCE_TYPE The basic source type of the data; either Collected or Derived. This is utilized to distinguish occurrences of attributes that can come from either source.	NOT NULL	VARCHAR2(5)
	<p>Expected to be used for FIP sourced data only; all within-database derivations will have a DERIVATION TRANSACTION occurrence to identify derived data.</p> <p><< 1998-03-26-11:30 sourced from:236464:786453 >></p>		
7	ULA_AREA_ASSN_SKEY	NULL	NUMBER(7,0)
8	MODIFY_USER_ID ORACLE user id of the last user to modify the record.	NULL	VARCHAR2(30)
	<p><<1997-12-09-14:23 sourced from:236464:422008>></p> <p><< 1998-03-26-11:30 sourced from:236464:681648 >></p>		

Table: BASAL_AREA_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
9	MODIFY_DATE The date the record was last modified. <i><<1997-12-09-14:23 sourced from:236464:422007>></i> <i><< 1998-03-26-11:30 sourced from:236464:681647 >></i>	NULL	DATE
10	BUSINESS_REVISION_DATE The date the basal area was revised after it was originally interpreted as part of the Vegetation Inventory classification. This is not the same as a system generated audit MODIFY DATE. <i><< 1998-03-26-11:30 sourced from:236464:681153 >></i>	NULL	DATE
11	CONFIDENCE_INDEX_NUM A subjective discrete assignment from 1 to 9 which reflects the photo interpreter's confidence in the estimation of the stand Basal Area Estimate. The higher the number, the greater the confidence in the interpretation. The confidence index should not reflect the individual interpreter's abilities, but an estimate of the difficulty of making the interpretation due to polygon complexity and reliability of data sources. Definition Source: p. 6-20, PIP <i><<1997-12-05-16:04 sourced from:236464:544888>></i>	NULL	NUMBER(1)

Table: BASAL_AREA_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-11:30 sourced from:236464:679739 >>		
12	INTERPRETATION_SOURCE_CD The source of data used for the interpretation of basal area.	NULL	NUMBER(2)
	<<1997-12-05-16:04 sourced from:236464:670115>>		
	<< 1998-03-26-11:30 sourced from:236464:679740 >>		

Foreign Keys:

BAA_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY
BAA_ULA_FK
ULA_AREA_ASSN_SKEY = UTILIZATION_LEVEL_AREA_ASSNS.AREA_ASSN_SKEY

Indexes:

BAA_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY
BAA_ULA_FK_I
ULA_AREA_ASSN_SKEY

Notes:

<< 1998-03-26-11:30 sourced from:236464:678401 >>

Table: BCLCC_BOUND_SETS*Description:*

A set of constraints which specify the range of values of the BC
Land Cover Classification.

For example, the BC Land Cover Classification System is bound by a
number of restrictive ranges governing the association of a
classification to a polygon based on, among other things, the
percentage of tree coverage within the polygon (i.e. a polygon is
considered Treed if between 10 and 100 percent (inclusive) of the
polygons surface area, by crown closure, consists of tree species of
any size).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LCCBS_CODE An alphanumeric code used to uniquely identify a BCLCC BOUND SET.	NOT NULL	VARCHAR2(8)
<< 1998-03-26-11:14 sourced from:236464:563652 >>			
2	BOUND_MINIMUM A number representing the minimum allowable value for the BOUND SET.	NOT NULL	NUMBER(6,2)
<< 1998-03-26-11:14 sourced from:236464:563654 >>			
3	BOUND_MAXIMUM A number representing the maximum allowable value for the BOUND SET.	NOT NULL	NUMBER(6,2)
<< 1998-03-26-11:14 sourced from:236464:563655 >>			
4	DESCRIPTION A description of the application of the BOUND SET (e.g. SUM(FIP.LAYER.CROWN CLOSURE AIR PCT) for all FIP based layers	NULL	VARCHAR2(256)

Table: BCLCC_BOUND_SETS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u> ('1', '2', '3', 'V').	<u>Nulls?</u>	<u>Type</u>
-------------	--	---------------	-------------

<< 1998-03-26-11:14 sourced from:236464:563653 >>

6	LCC_CLASS_CODE_SKEY	NOT NULL	NUMBER(7,0)
8	SGDEF_SPP_GROUP_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

LCCBS_LCC_FK
LCC_CLASS_CODE_SKEY = BC_LAND_COVER_CLASS_CDS.CLASS_CODE_SKEY
LCCBS_SGDEF_FK
SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY

Indexes:

LCCBS_LCC_FK_I
LCC_CLASS_CODE_SKEY
LCCBS_SGDEF_FK_I
SGDEF_SPP_GROUP_SKEY

Notes:

<< 1998-03-26-11:14 sourced from:236464:563646 >>

Table: BCLCC_FIP_SOURCE_DERVTN_RULES*Description:*

A BC Land Cover Classification Derivation Rule specific to the derivation of BC Land Cover Classifications from FIP based information.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LCCDR_SKEY System generated surrogate identifier.	NOT NULL	NUMBER(7,0)
	Prefixed LCCDR to retain prefix of former supertype entity sourced short name to reduce maintenance of reconciliation or repository with physical structures.		
2	LCC_CLASS_CODE_SKEY	NULL	NUMBER(7,0)
3	POLYGON_NP_DESCRIPTOR A classification code describing land, water or wetland that is incapable of supporting commercial forests. A Non-Productive descriptor does not imply that the land is unproductive for other valuable resources, such as wildlife, fisheries, recreation, etc. The Non-Productive classification is one of the major classes in the Forest Classification System.	NULL	VARCHAR2(5)
	<< 1998-03-26-11:33 sourced from:236464:564201 >>		
4	LAYER_NON_FOREST_DESCRIPTOR A classification code indicating that the forest cover type is not currently forested, but is capable of supporting commercial forests. The Non-Forest Descriptor is distinctly different from the Non-Productive Descriptor found in the Polygon Record. The Non-Forest Descriptor indicates that the	NULL	VARCHAR2(5)

Table: BCLCC_FIP_SOURCE_DERVTN_RULES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	forest cover polygon is potentially productive, but is not currently supporting commercial forests, whereas the Non-Productive Descriptor indicates that the stand is not capable of supporting commercial forests.		
	<< 1998-03-26-11:33 sourced from:236464:564365 >>		
5	SPECIES_PERMITTED_INDICATOR A flag used to indicate whether or not species are permitted for the polygon in conjunction with the information contained in the FIP file. A value of 'N' indicates that no species are permitted to be associated with the polygon. A value of 'Y' indicates that species may be associated with the polygon but are not required. For example: If the Polygon is described as being alpine, as indicated by a value of 'A' for non-productive descriptor, then the existence of species for this polygon is not allowed.	NULL	VARCHAR2(1)
	<< 1998-03-26-11:33 sourced from:236464:564366 >>		
6	BCLCC_LEVEL_1 BC Land Classification Level 1 code (Land Base) to use as default.	NULL	VARCHAR2(3)
	<< 1998-03-26-11:33 sourced from:236464:572002 >>		
7	BCLCC_LEVEL_2 BC Land Classification Level 2 code (Land Cover Type) to use as default.	NULL	VARCHAR2(3)
	<< 1998-03-26-11:33 sourced from:236464:572003 >>		

Table: BCLCC_FIP_SOURCE_DERVTN_RULES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
8	BCLCC_LEVEL_3 BC Land Classification Level 3 code (Landscape Position) to use as default. << 1998-03-26-11:33 sourced from:236464:572004 >>	NULL	VARCHAR2(3)
9	BCLCC_LEVEL_4 BC Land Classification Level 4 code (Vegetation Type/Non-Vegetated Cover Type) to use as default. << 1998-03-26-11:33 sourced from:236464:572005 >>	NULL	VARCHAR2(3)
10	BCLCC_LEVEL_5 BC Land Classification Level 5 code (Vegetated Density Class/ Subdivision of Non-Vegetated Category) to use as default. << 1998-03-26-11:33 sourced from:236464:572006 >>	NULL	VARCHAR2(3)

Unique Constraints:

LCCFS_LCCFS2_UK
 POLYGON_NP_DESCRIPTOR
 LAYER_NON_FOREST_DESCRIPTOR
 BCLCC_LEVEL_1
 BCLCC_LEVEL_2
 BCLCC_LEVEL_3
 BCLCC_LEVEL_4
 BCLCC_LEVEL_5

Foreign Keys:

LCCFS_LCC_FK
 LCC_CLASS_CODE_SKEY = BC_LAND_COVER_CLASS_CDS.CLASS_CODE_SKEY

Indexes:

LCCFS_LCC_FK_I
 LCC_CLASS_CODE_SKEY

Notes:

<< 1998-03-26-11:33 sourced from:236464:563640 >>

Table: BCLCC_FIP_SOURCE_DERVTN_RULES (cont'd)*Notes:*

Table: BC_LAND_COVER_CLASS_CDS*Description:*

A classification scheme of land cover based on hierarchial levels of detail developed by the Vegetation Inventory Working group, under the auspices of the Resource Inventory Committe (RIC).

The classification has 5 levels and is meant to be applied in the interpretation and estimation of vegetative land cover in the course of defining homogeneous areal units as seen on medium scale photography.

The classification is of a dichotomous construct. That is, the first level, Land Base is of two types, vegetated and non-vegetated, and each of these has particular classifications, treed/non-treed and land/water respectively.

The classification scheme is also referenced as a collected item for Vegetation Inventory samples. It is associated with the assessment of each site series that occurs on a sample.

Definition Source: Photo Interpretation Procedures Manual, Section 1

*Columns:*Seq.ColumnNulls?Type

Table: BC_LAND_COVER_CLASS_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CLASS_CODE_SKEY << 1998-03-26-11:31 sourced from:236464:331751 >>	NOT NULL	NUMBER(7,0)
2	CLASSIFICATION_CD The code for the land cover classification. The codes are approved by the Resource Inventory Committee, RIC. << 1998-03-26-11:31 sourced from:236464:285632 >>	NOT NULL	VARCHAR2(3)
3	CLASSIFICATION_DESC The description of the land classification as supplied by the manual, Photo Interpretation Procedures. << 1998-03-26-11:31 sourced from:236464:285633 >>	NOT NULL	VARCHAR2(256)
5	LCLC_CLASSIFICATION_LEVEL	NOT NULL	NUMBER(2,0)
7	LCC_CLASS_CODE_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

LCC_LCC_FK
LCC_CLASS_CODE_SKEY = BC_LAND_COVER_CLASS_CDS.CLASS_CODE_SKEY
LCC_LCLC_FK
LCLC_CLASSIFICATION_LEVEL = BC_LAND_COVER_LEVEL_CDS.CLASSIFICATION_LEVEL

Indexes:

LCC_LCC_FK_I
LCC_CLASS_CODE_SKEY
LCC_LCLC_FK_I
LCLC_CLASSIFICATION_LEVEL

Notes:

A_S! construct from Sec. 1, pp. 1-5 to 1-16, PIP

A! seems that the Level 4 and 5 have semantically overloaded names

as the code value is contingent on the higher category which it

refines; no attempt was made to change names.

<< 1998-03-26-11:31 sourced from:236464:236575 >>

Table: BC_LAND_COVER_LEVEL_CDS*Description:*

The code indicating the LEVEL in the BC Land Cover Classification coding scheme.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CLASSIFICATION_LEVEL The assigned business identifier of the classification level. This has hierarchial implications, Level 1 identifying a Vegetated or Non-vegetated state, with further dichotomous refinement to Level 5, which identifies the Vegetation Density Class related to Vegetated land, or specific Non-vegetated state cover such as beaches, mudflats etc. << 1998-03-26-11:31 sourced from:236464:332047 >>	NOT NULL	NUMBER(2,0)
2	LEVEL_DESCRIPTION The description of the land classification level as supplied by the manual, Photo Interpretation Proceedures. << 1998-03-26-11:31 sourced from:236464:332048 >>	NULL	VARCHAR2(50)
4	LCLC_CLASSIFICATION_LEVEL	NULL	NUMBER(2,0)

Foreign Keys:

LCLC_LCLC_FK
LCLC_CLASSIFICATION_LEVEL = BC_LAND_COVER_LEVEL_CDS.CLASSIFICATION_LEVEL

Indexes:

LCLC_LCLC_FK_I
LCLC_CLASSIFICATION_LEVEL

Notes:

<< 1998-03-26-11:31 sourced from:236464:331727 >>

Table: BGC_ZONAL_CLASSFN_CDS*Description:*

An areal unit that represents classes of ecosystems under the influence of the same regional climate. The units represent broad homogenous macroclimate with characteristic plant orders, prevailing soil forming processes and one or more typical major climax species of tree, shrub, herb and/or moss.

The units are defined under the Ministry of Forest's Biogeoclimatic Ecosystem Classification (BGC) system.

A Ministry of Forests Standard Table.

Data Custodian: Research Ecologist, Integrated Resource Management Section, Research Branch.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BGC_SKEY	NOT NULL	NUMBER(7,0)
	System generated UID from ORACLE SEQUENCE bgc_zone_seq.		

<< 1998-03-26-11:35 sourced from:236464:435090 >>

2	BGC_CD	NOT NULL	VARCHAR2(8)
	A code used to reference the full Bio-Geoclimatic code.		

<< 1998-03-26-11:35 sourced from:236464:433867 >>

Table: BGC_ZONAL_CLASSFN_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	DESCRIPTION << 1998-03-26-11:35 sourced from:236464:433868 >>	NOT NULL	VARCHAR2(50)
5	BGCL_LEVEL_NUM	NOT NULL	NUMBER(2,0)
7	BGZC_BGC_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

BGZC_BGCL_FK
BGCL_LEVEL_NUM = BGC_ZONAL_CLASSFN_LEVELS.LEVEL_NUM
BGZC_BGZC_FK
BGZC_BGC_SKEY = BGC_ZONAL_CLASSFN_CDS.BGC_SKEY

Indexes:

BGZC_BGCL_FK_I
BGCL_LEVEL_NUM
BGZC_BGZC_FK_I
BGZC_BGC_SKEY

Notes:

A! 21 JAN 97 JRT

This definition and the corresponding data was copied from the
GYDV51.1 model and database. The design intention here was to
normalize the heirarchical definition/structure of the code.

<< 1998-03-26-11:35 sourced from:236464:433200 >>

Table: BGC_ZONAL_CLASSFN_LEVELS*Description:*

The explicit levels that comprise the heirarchical BGC Zonal
Classification System.

Implemented to enforce the valid set of values.

Current values as of Jan 22, 1997 are:

ZONE

SUBZONE

PHASE

VARIANT

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LEVEL_NUM A number used to order the segments that comprise the BGC code. These are: BGC ZONE BGC SUBZONE BGC VARIANT BGC PHASE << 1998-03-26-11:35 sourced from:236464:433864 >>	NOT NULL	NUMBER(2,0)
2	LEVEL_CD << 1998-03-26-11:35 sourced from:236464:547450 >>	NOT NULL	VARCHAR2(10)
3	DESCRIPTION << 1998-03-26-11:35 sourced from:236464:433865 >>	NULL	VARCHAR2(50)

Table: BGC_ZONAL_CLASSFN_LEVELS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	BGCL_LEVEL_NUM	NULL	NUMBER(2,0)

Foreign Keys:

BGCL_BGCL_FK
BGCL_LEVEL_NUM = BGC_ZONAL_CLASSFN_LEVELS.LEVEL_NUM

Indexes:

BGCL_BGCL_FK_I
BGCL_LEVEL_NUM

Notes:

!A 22-JAN-97 JRT

- although this is a very short list of valid entries, it was

implemented as a table with a relationship to the BCC ZONAL

CLASSIFICATION CD's so that the heirarchial structure of the segmenets

could be driven into the pig's ear relationship to itself.

<< 1998-03-26-11:35 sourced from:236464:433194 >>

Table: BIOMETRIC_DESIGN_SPECIFICATION*Description:*

An association of taxonomic or species group characteristics (such as minimum and maximum dbh for commercial trees) and the plot delimiters (the area over which these species/taxonomic groups are measured) of a sample or BIOMETRIC DESIGN.

Some Design Specs do not have an area component. For example, aerial photo interpretations would be for certain tree and/or vegetation species but the areas are derived from the polygons delimited during the interpretations. For Veg Ground samples, there is a definitive set of plot sizes to be used for ALL sampling.

To reflect field conditions, portions of the prescribed plot sizes may be used e.g. where partially damaged. These actual field observations are recorded in CLUSTER ELEMENTS.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BD_SPEC_SKEY System generated UID.	NOT NULL	NUMBER(7,0)

<< 1998-03-25-16:36 sourced from:236464:612338 >>

Former name of CLUSTER ELEMENT SPECIFICATION retained.

2	EFFECTIVE_DATE The calendar date when use of the Biometric Design Specification became effective.	NOT NULL	DATE
---	--	----------	------

Table: BIOMETRIC_DESIGN_SPECIFICATION (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-25-16:36 sourced from:236464:612339 >>		
3	CREATE_DATE << 1998-03-25-16:36 sourced from:236464:612341 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-25-16:36 sourced from:236464:612342 >>	NOT NULL	VARCHAR2(30)
5	TERMINATION_DATE The calendar date when use of the Biometric Design Specification was terminated.	NULL	DATE
	<< 1998-03-25-16:36 sourced from:236464:612340 >>		
6	DESCRIPTION Business description of the specification.	NULL	VARCHAR2(256)
	<< 1998-03-25-16:36 sourced from:236464:612345 >>		
7	MODIFY_DATE << 1998-03-25-16:36 sourced from:236464:612343 >>	NULL	DATE
8	MODIFY_USER_ID << 1998-03-25-16:36 sourced from:236464:612344 >>	NULL	VARCHAR2(30)
12	SPTLD_SPATIAL_DELIM_SKEY	NOT NULL	NUMBER(7,0)
14	SUBP_SUB_POP_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

BDSPEC_SPTLD_FK
 SPTLD_SPATIAL_DELIM_SKEY = SPATIAL_DELIMITERS.SPATIAL_DELIM_SKEY

Table: BIOMETRIC_DESIGN_SPECIFICATION (cont'd)*Foreign Keys:*

BDSPEC_SUBP_FK
SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

BDSPEC_SPTLD_FK_I
SPTLD_SPATIAL_DELIM_SKEY
BDSPEC_SUBP_FK_I
SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-25-16:36 sourced from:236464:612326 >>

Table: BUSINESS_OBJECT_ASSESSMENTS*Description:*

The occurrence of a set of observed or derived values against an object of business interest. This entity serves two purposes:

-to set the bounds of the association(s) of business attribute (objects) for all child entities (e.g. '...ASSESSMENTS')

-in practical business terms, retention of miscellaneous attribution, e.g. FIP NON FOREST DESC CD, OPERABILITY CD, QUADRATIC MEAN DIAMETER etc.

For example, in the first case above, a tree volume could be related to a species of a layer, or may be related to all species of a layer, either of which is determinable from the relationship to TREE SPECIES LAYER COMPOSITION or TREE LAYER respectively.

This entity, formerly named BUSINESS ATTRIBUTE, previously contained all business collected and derived attributes. Where specific business clarity of business attribution was required, the attribution was separated into the following related entities:

VEGETATIVE VOLUME ASSESSMENT,
SITE INDEX ASSESSMENT,
MEAN HEIGHT ASSESSMENT,
MEAN DIAMETER ASSESSMENT,
BASAL AREA ASSESSMENT,
CULMINATION ASSESSMENT,
DENSITY ASSESSMENT,
YEAR OF ORIGIN ASSESSMENT

Table: BUSINESS_OBJECT_ASSESSMENTS (cont'd)*Description:*

The above entities will inherit the business association from the
parent BUSINESS OBJECT ASSESSEMENT.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BUSINESS_OBJECT_SKEY System generated UID from ORACLE sequence ADA_SEQ.	NOT NULL	NUMBER(14,0)
<< 1998-03-26-13:07 sourced from:236464:426752 >>			
2	CREATE_USER_ID ORACLE user id of the person who craeted the record.	NOT NULL	VARCHAR2(30)
<< 1998-03-26-13:07 sourced from:236464:422006 >>			
3	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE
<< 1998-03-26-13:07 sourced from:236464:422005 >>			
4	TSC_TREE_LAYER_SPP_SKEY	NULL	NUMBER(7,0)
5	ESAI_INTERP_SKEY	NULL	NUMBER(7,0)
6	LCCO_INTERP_SKEY	NULL	NUMBER(7,0)
7	NTVI_INTERP_SKEY	NULL	NUMBER(7,0)
8	NVI_INTERP_SKEY	NULL	NUMBER(7,0)
9	TL_INTERP_SKEY	NULL	NUMBER(7,0)
11	ADJF_ADJ_FACTOR_SKEY	NULL	NUMBER(7,0)
12	MODIFY_USER_ID ORACLE user id of the last user to modify the record.	NULL	VARCHAR2(30)

Table: BUSINESS_OBJECT_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-13:07 sourced from:236464:422008 >>		
13	MODIFY_DATE The date the record was last modified.	NULL	DATE
	<< 1998-03-26-13:07 sourced from:236464:422007 >>		
14	FIP_NON_FOREST_DESC_CD Non commercial forest vegetation on a polygon that is capable of supporting commerical forests. Maps directly to the FIP attribute, NON FOREST DESCRIPTOR and is also utilized for the determination of the BC Land Cover Classification. This is a FIP classification based attribute only, and is retained for the purposes of business transition from FIP to Vegetation Inventory. (The understanding is that this and associated values do not resolve to a single BC Land Classification value, and consequently cannot be replicated from the Vegetative Cover database. The current growth projection model, 'VDYP', requires this attribute and will not be replaced in within two years. There is no expectation that this attribute would be updated or created under Vegetation Inventory classification practise. (97-06, JH)	NULL	VARCHAR2(5)
	<<1997-11-18-15:24 sourced from:236464:524043>>		
	<< 1998-03-26-13:07 sourced from:236464:670142 >>		

Table: BUSINESS_OBJECT_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
16	FIP_STOCKING_CLASS_CD A FIP base attribute that is sematically overloaded with meaning. It is being retained in the Vegetative Cover database to facilitate the interim operation of the tree volume derivation routine, VDYP. Stocking Class variously means: immature, mature trees, density and diameter distribution combinations for certain tree species, and harvested with a remaining canopy. It is expected that this attribute will be eliminated once VDYP dependencies are removed. << 1998-03-26-13:07 sourced from:236464:733569 >>	NULL	VARCHAR2(1)
17	FIP_STOCKING_CLASS_SOURCE_CD The source of FIP based Stocking Class attribute. Originally determined by the interpreter of forest cover classification, it can also be assigned if missing by a table lookup or << 1998-03-26-13:07 sourced from:236464:735741 >>	NULL	VARCHAR2(1)
18	NON_STANDARD_VALUE The value of a attribute that is not part of the Vegetation Inventory standard for data collection. This attribute is designed to accomodate collected data on a specialized or project or locational basis where it is determined that there is a particular data collection requirement.	NULL	VARCHAR2(75)

Table: BUSINESS_OBJECT_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	For example, in some locations, the occurrence of 'culturally modified trees' is of importance, and assuming a standardized classification system, then the value of the observation would be retained in this attribute with an association with NON STANDARD ATTRIBUTE DEFINITION.		
	<<1997-11-18-15:24 sourced from:236464:508511>>		
	<< 1998-03-26-13:07 sourced from:236464:670139 >>		
19	FIP_TYPE_ID_REFERENCE A FIP file sourced legacy attribute that categorizes various differing layer characteristics. Stocking class (itself often derived), non-forest descriptor and non-productive descriptor are the contributing attributes.	NULL	NUMBER(1)
	Type Id Reference is required for VDYP input; for FIP sourced records it would be directly loaded from FIP, for Vegetation Inventory it would be derived from a rule.		

Foreign Keys:

BOA_ADJF_FK
 ADJF_ADJ_FACTOR_SKEY = ADJUSTMENT_FACTORS.ADJ_FACTOR_SKEY
 BOA_ESAI_FK
 ESAI_INTERP_SKEY = ESA_INTRPRTNS.INTERP_SKEY
 BOA_LCCO_FK
 LCCO_INTERP_SKEY = LAND_COVER_COMPONENT_INTRPRTNS.INTERP_SKEY
 BOA_NTVI_FK
 NTVI_INTERP_SKEY = NON_TREED_VEG_INTRPRTNS.INTERP_SKEY
 BOA_NVI_FK
 NVI_INTERP_SKEY = NON_VEGETATION_INTRPRTNS.INTERP_SKEY
 BOA_TL_FK
 TL_INTERP_SKEY = TREE_LAYER_INTRPRTNS.INTERP_SKEY
 BOA_TSC_FK
 TSC_TREE_LAYER_SPP_SKEY = TREE_LAYER_SPP_COMPS.TREE_LAYER_SPP_SKEY

Indexes:

BOA_ADJF_FK_I
 ADJF_ADJ_FACTOR_SKEY
 BOA_ESAI_FK_I
 ESAI_INTERP_SKEY
 BOA_LCCO_FK_I

Table: BUSINESS_OBJECT_ASSESSMENTS (cont'd)*Indexes:*

LCCO_INTERP_SKEY
BOA_NTVI_FK_I
NTVI_INTERP_SKEY
BOA_NVI_FK_I
NVI_INTERP_SKEY
BOA_TL_FK_I
TL_INTERP_SKEY
BOA_TSC_FK_I
TSC_TREE_LAYER_SPP_SKEY

Notes:

<< 1998-03-26-13:07 sourced from:236464:363706 >>

Table: BUSINESS_OBJECT_VALUE_BOUNDS*Description:*

Minimum and/or maximum values for a business object that is dependent on any related object.

That is to say, this entity contains value bound sets where minimum and/or maximum values are dependent on tree species, or tree species group, Coast/Interior code (known dependencies to date, 98-07).

The purpose of the bound sets is to reflect minimum and/or maximum values that are within the bounds of database constraints (enforced by rules). For example, the database enforced bounds for tree age are 0 to 999. However, for a given tree species in an region (interior/coast) say, *Alnus rubra* on the coast, the maximum would be 0 to 200 years.

The envisioned use of this entity is to apply maximum age, height for a tree species and Coast/Interior code. The relationship to BGC ZONAL CLASSIFICATION has been added in the expectation that an ecologically based bound set would be later introduced.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BOUND_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(7,0)
2	BUSINESS_OBJECT_NAME The business name of the object to which the minimum and maximum values apply.	NOT NULL	VARCHAR2(30)

Expected examples are:

Table: BUSINESS_OBJECT_VALUE_BOUNDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Tree Volume		
	Tree Diameter		
	Tree Height		
	Tree Height Ratio		
	Tree Site Index		
	Tree Mean Annual Increment		
	Tree Age (in years)		
3	UNIT_OF_MEASURE The unit of measure the bound values are in.	NULL	VARCHAR2(30)
	Expected values would be:		
	meters		
	years		
	m** per hectare		
	unitless		
4	MAX_NUMERIC_BOUND The maximum numeric bound of the value.	NULL	VARCHAR2(12)
5	MIN_NUMERIC_BOUND The minmum bounding value.	NULL	VARCHAR2(12)
7	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
9	CIA_COAST_INTERIOR_CD	NULL	VARCHAR2(1)
11	BGZC_BGC_SKEY	NULL	NUMBER(7,0)
13	BOVB_BOUND_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

BOVB_BGZC_FK
 BGZC_BGC_SKEY = BGC_ZONAL_CLASSFN_CDS.BGC_SKEY
 BOVB_BOVB_FK
 BOVB_BOUND_SKEY = BUSINESS_OBJECT_VALUE_BOUNDS.BOUND_SKEY
 BOVB_CIA_FK
 CIA_COAST_INTERIOR_CD = VGIS_COAST_INTERIOR_AREAS.COAST_INTERIOR_CD

Table: BUSINESS_OBJECT_VALUE_BOUNDS (cont'd)*Foreign Keys:*

BOVB_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

Indexes:

BOVB_BGZC_FK_I
BGZC_BGC_SKEY
BOVB_BOVB_FK_I
BOVB_BOUND_SKEY
BOVB_CIA_FK_I
CIA_COAST_INTERIOR_CD
BOVB_GTO_FK_I
GTO_GROUP_TAXON_SKEY

Table: CLASS_INTERVAL_GROUPS*Description:*

The group of class intervals which is applied to a data frequency count collection purpose. For example, there may be a group of diameter classes for dead trees, another for site indices, live dead trees for a certain sampling initiative etc.

This can be used for more than diameter classes.

A further enhancement would have an associative relationship to DESIGN SPECIFICATION, as typically, an INTERVAL GROUP be specific to a data collection initiative.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CLASS_INTERVAL_SKEY A system generated surrogated identifier.	NOT NULL	NUMBER(7,0)
2	FEATURE The predominant tree feature, measured or assessed, that is classified. The word 'predominant' is used as some diameter classifications actually use a height at the lower bound. Examples would be Diameter, Site Index, Height, Crown Closure etc.	NOT NULL	VARCHAR2(15)
3	CLASS_INTERVAL The predominate internal the diameter class is based on. Typically a diameter class is based on a specific interval. Eg. 5 cm., applying to diameter class 5.0 - 9.9, 10.0 - 15.0 etc. However, at each end of the range an exception may apply to accomodate practical considerations, eg. 100.0 cm.	NOT NULL	NUMBER(4,1)
4	DESCRIPTION	NULL	VARCHAR2(75)

Table: CLASS_INTERVAL_GROUPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u> A text description used to label the class for reporting.	<u>Nulls?</u>	<u>Type</u>
5	MEASMT_SYSTEM_AS_DESIGNED The measurement system, either imperial or metric, that is the basis for the design of the classes. All Upper and Lower Bounds (of DIAM CLASS CODE) are in metric units, although some were converted from the original bounds in imperial units.	NULL	VARCHAR2(2)

Table: CLIENT_LOCN_TEMP*Description:*

It is thought to be a temporary table for the purposes of loading data from the VM Forest Client system into the Resources Inventory Branch Oracle application containing the AGENCIES and CLIENT_LOCATIONS tables.

Used in GYD_INTERFACE.PB.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	ADDRESS_1	NULL	VARCHAR2(40)
3	ADDRESS_2	NULL	VARCHAR2(40)
4	CITY	NULL	VARCHAR2(30)
5	CL_LOCN	NULL	VARCHAR2(2)
6	CL_NUMBER	NULL	VARCHAR2(8)
8	PROVINCE	NULL	VARCHAR2(5)
9	COUNTRY	NULL	VARCHAR2(2)
10	LOCN_NAME	NULL	VARCHAR2(40)
11	POSTAL_CODE	NULL	VARCHAR2(10)
12	UPD_FLAG	NULL	VARCHAR2(1)

Table: CLIENT_TEMP*Description:*

It is thought to be a temporary table for the purposes of loading data from the VM Forest Client system into the Resources Inventory Branch Oracle application containing the AGENCIES and CLIENT_LOCATIONS tables.

It is used in GYD_INTERFACE.PB.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	CL_NUMBER	NULL	VARCHAR2(8)
3	CL_NAME	NULL	VARCHAR2(60)
4	FIRST_NAME	NULL	VARCHAR2(30)
5	MIDDLE_NAME	NULL	VARCHAR2(30)
6	TYPE_CODE	NULL	VARCHAR2(1)
7	UPD_FLAG	NULL	VARCHAR2(1)

Table: CLUSTER_ELEMENTS*Description:*

The implementations of a 'plot' at a location at which an object(s) of interest is measured or assessed. This is a linkage of a BIOMETRIC DESIGN SPECIFICATION to a location at a point in time.

With this convention, the representation of the concentrically nested Inventory Branch termed 'Main Plot' and 'Sub Plot' (at a common plot centre) would be two CLUSTER ELEMENTs.

Note that concentrically nested plots share the same POINT LOCATION VISITATION. Non-concentric nested plots would each have a unique POINT LOCATION VISITATION inside a larger plot.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CLUSTER_ELEMENT_SKEY << 1998-03-26-14:39 sourced from:346868:544083 >>	NOT NULL	NUMBER(7,0)
2	PLOT_IDENTIFIER An up to 8 character identifier to be used as a unique identifier for Cluster Element (Subpopulation, Spatial Delimiter intersection) in a Plot Cluster. Generally this identifier will be used for the 'Plot Number' associated with a Cluster Element. << 1998-03-26-14:39 sourced from:346868:561058 >>	NULL	VARCHAR2(8)
3	AZIMUTH_BEARING For transect (line) type Spatial Delimiters, this is the Azimuth	NULL	NUMBER(3,0)

Table: CLUSTER_ELEMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	bearing of the transect line from the plot center represented by the relationship to Point Location.		

<< 1998-03-26-14:39 sourced from:346868:561059 >>

9	BDSPEC_BD_SPEC_SKEY	NOT NULL	NUMBER(7,0)
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Foreign Keys:

CELMT_BDSPEC_FK	BDSPEC_BD_SPEC_SKEY = BIOMETRIC_DESIGN_SPECIFICATION.BD_SPEC_SKEY
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Indexes:

CELMT_BDSPEC_FK_I	BDSPEC_BD_SPEC_SKEY
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Notes:

<< 1998-03-26-14:39 sourced from:346868:544077 >>

Table: COARSE_WOODY_DEBRIS_MEASMTS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

The assessment of Coarse Woody Debris as defined in the subpopulation that are common to all categories.

The two main categories of Coarse Woody Debris assessment are; Pieces and Accumulations.

Non-linear, or non-bole shaped decomposing woody material. This refers to odd shaped chunks, and cross sectional slices from logs ('lily pads').

Table: COARSE_WOODY_DEBRIS_MEASMTS (cont'd)**Description:**

Separable from decomposing woody material in the form of logs
or log portions.

Coarse woody debris in the form of logs. Coarse woody
debris accumulations may be naturally fallen material, or
as caused by harvesting operations.

Decked logs (logs stacked and forwarded for loading onto
trucks) are also included under this definition.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	CWDM_TYPE	NOT NULL	VARCHAR2(10)
* 3	CWD_SKEY	NOT NULL	NUMBER(7,0)
The surrogate identifier of a Coarse Woody Debris measurement.			
<< 1998-03-26-15:00 sourced from:7003:399711 >>			
4	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
5	SOURCE_NUM	NOT NULL	NUMBER(3,0)
The identifying number supplied from the field sheet (source) from			
the pre-printed first column. This is unique within the context of a			
transect.			
<< 1998-03-26-15:00 sourced from:7003:399710 >>			
6	DECAY_CLASS_CD	NOT NULL	VARCHAR2(1)
<< 1998-03-26-15:00 sourced from:7003:223232 >>			
7	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
9	TRANSECT_HORIZN_LENGTH	NULL	NUMBER(4,2)
The horizontal length of coarse woody debris accumulation			
intersecting the transect line.			

Table: COARSE_WOODY_DEBRIS_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The intent is to obtain an estimate of cross sectional area.		
	<< 1998-03-26-15:15 sourced from:7003:223240 >>		
10	DIAMETER The diameter of the coarse woody debris piece (ie. in log form) measured where it crosses the transect line. The diameter is taken perpendicular to the direction of the bole, as is normally practised. (Stated to dispell the potential notion that the transect line determines the alignment of the diameter measure).	NULL	NUMBER(4,1)
	<< 1998-03-26-15:15 sourced from:7003:223238 >>		
11	TRANSECT_VERTICAL_DEPTH The vertical depth of coarse woody debris accumulation intersecting the transect line. The intent is to obtain an estimate of cross sectional area.	NULL	NUMBER(4,2)
	<< 1998-03-26-15:15 sourced from:7003:223241 >>		
12	TILT_ANGLE The tilt at which the log lies, measured from the horizontal.	NULL	NUMBER(2,0)
	<< 1998-03-26-15:15 sourced from:7003:223239 >>		
13	LENGTH_GREATER_THAN_3M_IND The indication that the item assessed as coarse	NULL	VARCHAR2(1)

Table: COARSE_WOODY_DEBRIS_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	woody debris is greater than 3.0 m in length.		
	<< 1998-03-26-15:00 sourced from:7003:223236 >>		
14	LIKELY_TO_BE_REMOVED_IND The indication that the item assessed as coarse woody debris is likely to be removed, eg. merchantable logs.	NULL	VARCHAR2(1)
	<< 1998-03-26-15:00 sourced from:7003:223237 >>		
15	PIECE_LENGTH The length of the coarse woody debris piece measured to the nearest 0.1m per Chapter 8 - Vegetation Ground Sample Procedures.	NULL	NUMBER(4,2)
	<< 1998-03-26-15:00 sourced from:7003:556068 >>		

Foreign Keys:

CWDM_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
CWDM_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

Indexes:

CWDM_CEV_FK_I
CEV_CE_VISIT_SKEY
CWDM_GTO_FK_I
GTO_GROUP_TAXON_SKEY

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

This entity is intended for physical implementation.

<< 1998-03-26-15:00 sourced from:7003:222098 >>

<< 1998-03-26-15:15 sourced from:7003:222119 >>

Table: COARSE_WOODY_DEBRIS_MEASMTS (cont'd)*Notes:*

<< 1998-03-26-15:15 sourced from:7003:222112 >>

Table: CONTRACTS*Description:*

In the context of the natural resource inventory business, an agreement to undertake prescribed work for a given price.

This is a large business area, and is being included to recognize work undertaken for vegetation inventory purposes where map and attribute updates occur.

There will likely be other inventory initiatives by contract that will not be included in the MUMS application. This entity could be replaced in time, by a link to a contract management application, if and when built.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CONTRACT_SKEY The surrogate identifier for a contract.	NOT NULL	NUMBER(7,0)
Populated from Oracle sequence, CONTRACT SKEY SEQ.			
<< 1998-03-25-16:59 sourced from:416792:435085 >>			
2	CONTRACT_NUM The Ministry assigned number for the contract, usually comes from the pre-printed paper form.	NOT NULL	VARCHAR2(25)
A? data type unknown at this time (97-01-08). it may be a number (as indicated in the requirements document) or it may be alphanumeric. To be determined.			
<< 1998-03-25-16:59 sourced from:416792:420480 >>			

Table: CONTRACTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492767 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492769 >>	NOT NULL	VARCHAR2(30)
5	START_DATE The date the contract is to begin, as stated in the contract document. << 1998-03-25-16:59 sourced from:416792:420492 >>	NULL	DATE
6	ESTIMATED_END_DATE The date the contract is expected to finish. A? the actual source is unknown at this time (97-01-08). This could be the termination date of the initial contract, or of any subsequent amendments, or of the contract administrator's estimate prior to award. << 1998-03-25-16:59 sourced from:416792:420493 >>	NULL	DATE
7	ACTUAL_END_DATE The date the contract ended, including any subsequent amendments to the original contract. << 1998-03-25-16:59 sourced from:416792:420494 >>	NULL	DATE
8	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492768 >>	NULL	DATE
9	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492770 >>	NULL	VARCHAR2(30)

Table: CONTRACTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
11	PRJ_PROJECT_SKEY	NOT NULL	NUMBER(7,0)

Unique Constraints:

CON_CON2_UK
CONTRACT_NUM

Foreign Keys:

CON_PRJ_FK
PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY

Indexes:

CON_PRJ_FK_I
PRJ_PROJECT_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418239 >>

Table: COORDINATE_SETS*Description:*

The coordinate position of an physical location that belongs to a sample. The coordinate data may be collected by GPS instruments, map based GIS overlays or other means.

It is expected that there may be more than one coordinate for the same Point Location, although there should be only one that represents the location, or centroid of many locations, where there is a generalized requirement such as GIS applications. Hence the expected identification of only one coordinate set at each Point Location Visitation for use (e.g. BEST REPRESENT USE IND).

NB: This could be expanded to include identification of a coordinate system: e.g. local, map projection based, world etc.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	COORDINATE_SKEY Surrogate key for coordinate set.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-15:06 sourced from:7003:344028 >>			
2	BEST_REPRES_USE_IND An affirmation that the coordinate set is deemed the most precise for the purpose of representing the location. Only one coordinate set would be representative for a given location and plot cluster.	NOT NULL	VARCHAR2(1)
<< 1998-03-26-15:06 sourced from:7003:344035 >>			
3	COLLECTION_METHOD_CD The method by which the geographic coordinates were collected for a location. This may even reflect that the	NULL	VARCHAR2(5)

Table: COORDINATE_SETS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	coordinates were derived, usually by traversing a set distance and bearing, from a proximate location that was collected by a GPS instrument.		
	<< 1998-03-26-15:06 sourced from:7003:344023 >>		
4	DATUM	NULL	VARCHAR2(4)
5	COORDINATE_SYSTEM	NULL	VARCHAR2(20)
	The geographic system from which all positional information is referenced. This can be in the form of a coordinate system (e.g. latitude and longitude) or a projection system (UTM etc.)		
6	X_COORD	NULL	NUMBER(9,3)
	The X geographic coordinate. Depending the COORDINATE SYSTEM, the X coordinate would be termed easting (in metres) or latitude (in degrees and decimal fraction).		
	<< 1998-03-26-15:06 sourced from:7003:344019 >>		
7	Y_COORD	NULL	NUMBER(10,3)
	The Y geographic coordinate. Depending the COORDINATE SYSTEM, the Y coordinate would be termed northing (in metres) or longitude (in degrees and decimal fraction).		
	<< 1998-03-26-15:06 sourced from:7003:344020 >>		
8	Z_COORD	NULL	NUMBER(6,2)
	The elevation or Z coordinate, in metres, above a datum reference.		

Table: COORDINATE_SETS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-15:06 sourced from:7003:344021 >>		
10	PCLTR_PLOT_CLUSTER_SKEY	NULL	NUMBER(7,0)
12	GF_GPS_FILE_SKEY	NULL	NUMBER(7,0)
13	COORD_COLLTN_DATE	NULL	DATE
14	UTM_ZONE	NULL	NUMBER(2,0)

Foreign Keys:

CSET_GF_FK
GF_GPS_FILE_SKEY = GPS_FILES.GPS_FILE_SKEY
CSET_PCLTR_FK
PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY

Indexes:

CSET_GF_FK_I
GF_GPS_FILE_SKEY
CSET_PCLTR_FK_I
PCLTR_PLOT_CLUSTER_SKEY

Notes:

<< 1998-03-26-15:06 sourced from:7003:344012 >>

Table: CORP_ORG_UNIT*Description:*

Records codes for ministry Organizational Units (offices), such as Branch, Region, or District office. Codes are currently defined to the office, section/program, and subsection level.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ORG_UNIT_NO Unique physical identifier for the storage of organizational unit codes for the Ministry of Forests' offices. Values stored here are for the computer's use only, and are not to be used by people as "ministry codes".	NOT NULL	NUMBER(5)
2	ORG_UNIT_CODE Identifies any office within the ministry. First character identifies Exec, HQ Branch, Region, or District; next two chars identify the office name; next two the section (HQ Branch) or program (Region or District); last char identifies the subsection.	NOT NULL	VARCHAR2(6)
3	ORG_UNIT_NAME The name or title of a ministry office or section; for example Kamloops Forest Region; Silviculture Branch; Kispiox Forest District Protection program.	NOT NULL	VARCHAR2(100)
4	AREA_CODE A 3-digit number that identifies each telephone service area in a country.	NOT NULL	VARCHAR2(3)
5	TELEPHONE_NO The general office telephone number (excluding the area code) for a Ministry of Forests office.	NOT NULL	VARCHAR2(7)
6	ORG_LEVEL_CODE Represents the organizational level of the Ministry, and is one of D District Forestry Office, E Executive, H Headquarters Branch, and R Regional Forestry Office.	NOT NULL	VARCHAR2(1)
7	ROLLUP_REGION_NO Identifier designating the region to which the org unit is rolled into for reporting purposes. Values stored here are for the computer's use only, and are not to be used by people as "Ministry codes".	NOT NULL	INTEGER
8	ROLLUP_REGION_CODE Identifier designating the region to which the org unit is rolled into for reporting purposes.	NOT NULL	VARCHAR2(6)
9	ROLLUP_DIST_NO Identifier designating the district to which the org unit is rolled into for reporting purposes. Values stored here are for the computer's use only and are not to be used by people as "Ministry codes".	NOT NULL	INTEGER
10	ROLLUP_DIST_CODE Identifier designating the district to which the org unit is rolled into for reporting purposes.	NOT NULL	VARCHAR2(6)

Table: CORP_ORG_UNIT (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
11	EFFECTIVE_DATE The date the Organizational Unit became effective as a valid Org Unit within the ministry's organizational structure.	NULL	DATE
12	UPDATE_TIMESTAMP The date and time of the last update.	NULL	DATE
13	EXPIRY_DATE The date the Organizational Unit is Obsoleted and is no longer an active Org Unit within the ministry's organizational structure. At the determination of Human Resources Branch, an expired Org Unit may be retained for historical purposed, or may be deleted	NULL	DATE
14	OFFICE_NAME_CODE Represents an office within a specific organizational level.	NOT NULL	VARCHAR2(2)

Table: CULMINATION_ASSESSMENTS*Description:*

The stand age (in the form of a date) at which the mean annual increment of a stand reaches its maximum.

This assessment is created only by derivation from collected interpretations of other observed features of a stand. Hence no SOURCE TYPE attribute to distinguish collected or derivations.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CULMIN_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(7,0)
	Populated from sequence CULMIN_SEQ.		
	<< 1998-03-26-16:50 sourced from:236464:678724 >>		
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who craeted the record.	NOT NULL	VARCHAR2(30)
	<<1997-12-09-14:24 sourced from:236464:422006>>		
	<< 1998-03-26-16:50 sourced from:236464:681650 >>		
4	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE
	<<1997-12-09-14:24 sourced from:236464:422005>>		
	<< 1998-03-26-16:50 sourced from:236464:681649 >>		

Table: CULMINATION_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	MEAN_ANNUAL_INCREMENT The total increment of tree volume to a given age in years divided by that age. <<1997-11-18-15:19 sourced from:236464:427626>> <<1997-12-05-16:07 sourced from:236464:670138>> << 1998-03-26-16:50 sourced from:236464:679743 >>	NOT NULL	NUMBER(6,4)
6	ULA_AREA_ASSN_SKEY	NULL	NUMBER(7,0)
7	MODIFY_USER_ID ORACLE user id of the last user to modify the record. <<1997-12-09-14:24 sourced from:236464:422008>> << 1998-03-26-16:50 sourced from:236464:681652 >>	NULL	VARCHAR2(30)
8	MODIFY_DATE The date the record was last modified. <<1997-12-09-14:24 sourced from:236464:422007>> << 1998-03-26-16:50 sourced from:236464:681651 >>	NULL	DATE
9	CULMINATION_DATE The date or origin, in effect age, at culmination of the Mean Annual increment. <<1997-11-18-15:19 sourced from:236464:427625>> <<1997-12-05-16:07 sourced from:236464:670137>> << 1998-03-26-16:50 sourced from:236464:679742 >>	NULL	DATE

Table: CULMINATION_ASSESSMENTS (cont'd)*Foreign Keys:*

CA_BOA_FK

BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY

CA_ULA_FK

ULA_AREA_ASSN_SKEY = UTILIZATION_LEVEL_AREA_ASSNS.AREA_ASSN_SKEY

Indexes:

CA_BOA_FK_I

BOA_BUSINESS_OBJECT_SKEY

CA_ULA_FK_I

ULA_AREA_ASSN_SKEY

Notes:

<< 1998-03-26-16:50 sourced from:236464:678497 >>

Table: CWD_DECAY_ASSMTS*Description:*

The DECAY CLASS and % observed for Coarse Woody Debris measurements
per Col 13-15 on Ccard 6 and 7 - Coarse Woody Debris (EW).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CWDM_CWD_SKEY	NOT NULL	NUMBER(7,0)
* 2	DECAY_CLASS_CD	NOT NULL	VARCHAR2(1)
	<< 1998-03-26-15:00 sourced from:7003:555498 >>		
3	PERCENT_OBSERVED	NULL	NUMBER(3,0)
	<< 1998-03-26-15:00 sourced from:7003:555506 >>		

Foreign Keys:

CWDD_CWDM_FK
CWDM_CWD_SKEY = COARSE_WOODY_DEBRIS_MEASMTS.CWD_SKEY

Indexes:

CWDD_CWDM_FK_I
CWDM_CWD_SKEY

Notes:

<< 1998-03-26-15:00 sourced from:7003:555492 >>

Table: DAMAGE_AGENT_CATEGORY_CDS_FCAP*Description:*

The Ministry standard Attribute Code Catagories for Damage Agents which include; Distrubance (DI), Site Preperation (SI), Stand Tending (ST) and Plantation (PL).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DAM_CAT_CD Category code in History Activity (Attribute) for Damage Agents.	NOT NULL	VARCHAR2(2)
<< 1998-05-01-12:43 sourced from:236464:578427 >>			
2	DESCRIPTION Damage agent Attribute Code discription.	NOT NULL	VARCHAR2(50)

<< 1998-05-01-12:43 sourced from:236464:578428 >>

Notes:

<< 1998-05-01-12:43 sourced from:236464:578421 >>

Table: DAMAGE_AGENT_CDS_FCAP_VERSION*Description:*

The Ministry standard table of damage agents, pest disease or abiotic activity, and their associated attributes for qualifying the severity or other damage conditions.

Data Custodian: Forest Health Officer, Silviculture Branch

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DAFV_SKEY Surrogate key for Damage Agent.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-11:59 sourced from:236464:575698 >>			
2	ACTIVITY_CD A code indicating the category of insect or disease that has caused a disturbance in the stand's history. Stands with a disturbance caused by insects or disease can be further described by the ACTIVITY SUB CODE.	NULL	VARCHAR2(2)
The code for the damage agent as it is currently collected (94-3).			
The FIP based version of Damage Agent code, retained on an 'as is' basis until migration to a stable Ministry version of Damage Agent is available.			
<< 1998-03-26-11:59 sourced from:236464:575696 >>			
3	COMMON_NAME The common or descriptive name of the damage agent.	NULL	VARCHAR2(50)

<< 1998-03-26-11:59 sourced from:236464:575697 >>

Table: DAMAGE_AGENT_CDS_FCAP_VERSION (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
4	LATIN_NAME The latin species name of the damage agent (if applicable).	NULL	VARCHAR2(50)
	<< 1998-03-26-11:59 sourced from:236464:575694 >>		
5	ACTIVITY_SUB_CD A code indicating the type of insect or disease that has caused a disturbance in the stand's history.	NULL	VARCHAR2(3)
	This FIP based version of Damage Agent code, is retained on an 'as is' basis until migration to a stable Ministry version of Damage Agent is available.		
	<< 1998-03-26-11:59 sourced from:236464:575695 >>		
7	DAMCDV_DAM_CAT_CD	NOT NULL	VARCHAR2(2)

Foreign Keys:

DAGNC_DAMCDV_FK
DAMCDV_DAM_CAT_CD = DAMAGE_AGENT_CATEGORY_CDS_FCAP.DAM_CAT_CD

Indexes:

DAGNC_DAMCDV_FK_I
DAMCDV_DAM_CAT_CD

Notes:

Jun 16 1997 JRT

- this table is to be superceded by the Veg_SAMPLE version....

-also awaiting Ministry business definition of codes (agents) and the associated schemes of their assessment.

-the Sample Plot Data Base and the FCAP (FIP) version are being maintained separately until the Ministry definition is stable enough to migrate to. Sept 8, 1997, JH

Table: DAMAGE_AGENT_CDS_FCAP_VERSION (cont'd)*Notes:*

<< 1998-03-26-11:59 sourced from:236464:575693 >>

Table: DAMAGE_AGENT_ST_TBL*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 10	CODE_ARGUMENT	NOT NULL	VARCHAR2(3)
20	EXPANDED_RESULT	NOT NULL	VARCHAR2(120)
30	EFFECTIVE_DATE	NOT NULL	DATE
40	EXPIRY_DATE	NOT NULL	DATE
50	UPDATE_DATE	NOT NULL	DATE

Table: DAMAGE_AGENT_VEG_SAM_VERSIONS*Description:*

The damage agents used in the collection of data from Vegetation
Inventory Sampling activities.

Formerly known as entity DAMAGE AGENT CD and table DAMAGE_AGENT_CDS.

At a future date, when the business custodian has stablized the
definition, attribution and values in a generically normalized design
that permits multiple assessment values for a given 'pest' or 'damage
agent', this and all other 'DAMAGE AGENT versions will be amalgamated.

Note that this model/application contains the most generic and
normalized version to date. The DRM group is waiting for the business
to catch up.

Data Custodian: Forest Health Officer, Silviculture Branch

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DAVSV_SKEY Surrogate key for Damage Agent.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-15:24 sourced from:7003:7533 >>			
2	BIOTIC_CD An indicator for the first level categorization of a damage agent; biotic or abiotic.	NOT NULL	VARCHAR2(1)
<< 1998-03-26-15:24 sourced from:7003:7424 >>			
3	DAMAGE_AGENT_CD The code for the damage agent as it is currently collected (94-3). These are also known as 'field' codes, ostensibly to expedite data	NULL	VARCHAR2(4)

Table: DAMAGE_AGENT_VEG_SAM_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	collection. This represents a 3 alpha character long representation; past values were heirarchial 1 character long subsets of a category (e.g. Insects), sub-category (e.g. weevils) and a individual damage agent (e.g. Root Collar Weevil). Rationalization and normalization with a longer code is ultimately required.		
	<< 1998-03-26-15:24 sourced from:7003:7425 >>		
4	COMMON_NAME The common or descriptive name of the damage agent.	NOT NULL	VARCHAR2(50)
	<< 1998-03-26-15:24 sourced from:7003:7426 >>		
5	SRD_RATING_CD A code to represent the Severity Rating Definition.	NULL	VARCHAR2(8)
	Examples would be 'SEVCODE' to represent Severity Codes as describes in the Vegetation Ground Sample Procedures Appendix C.		
	<< 1998-03-26-15:21 sourced from:7003:547424 >>		
6	TVLC_TREE_LOSS_CD The code for the tree loss indicator as defined for the Vegetation Inventory program.	NULL	VARCHAR2(3)
	<< 1998-03-26-16:34 sourced from:7003:231856 >>		
7	DAGNC_DAVSV_SKEY Surrogate key for Damage Agent.	NULL	NUMBER(7,0)

Table: DAMAGE_AGENT_VEG_SAM_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-15:24 sourced from:7003:7533 >>			
8	DAST_CODE_ARGUMENT	NOT NULL	VARCHAR2(3)

Foreign Keys:

DAGNC_DAGNC_FK
 DAGNC_DAVSV_SKEY = DAMAGE_AGENT_VEG_SAM_VERSIONS.DAVSV_SKEY
 DAGNC_DAST_FK
 DAST_CODE_ARGUMENT = DAMAGE_AGENT_ST_TBL.CODE_ARGUMENT
 DAGNC_SRD_FK
 SRD_RATING_CD = SEVERITY_RATING_DEFINITIONS.RATING_CD
 DAGNC_TVLC_FK
 TVLC_TREE_LOSS_CD = TREE_VOLUME_LOSS_CDS.TREE_LOSS_CD

Indexes:

DAGNC_DAGNC_FK_I
 DAGNC_DAVSV_SKEY
 DAGNC_DAST_FK_I
 DAST_CODE_ARGUMENT
 DAGNC_SRD_FK_I
 SRD_RATING_CD
 DAGNC_TVLC_FK_I
 TVLC_TREE_LOSS_CD

Notes:

OT_S Code table

A! Some PEST SEVERITY codes apply to only certain PESTS/DAMAGE

AGENTS; the definitive rule set needs to be acquired from/with

J Beale

A? Ask JH if the first pos. of DAMAGE AGENT CD should be split out

as a CATEGORY attribute

<< 1998-03-26-15:24 sourced from:7003:7076 >>

Table: DAMAGE_OCCURRENCES*Description:*

The occurrence of a damage agent (formerly known as 'pest') to the stand in which the plot cluster resides. The damage agent may be either biotic or abiotic, but in both cases only the general nature of the damage agent is recorded.

This entity assumes the attributes of the Inventory Branch, Growth & Yield Section, STAND HISTORY, Complete and Partial Disturbance.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	DAST_CODE_ARGUMENT	NULL	VARCHAR2(3)
2	DISTURB_PCT	NULL	NUMBER(3,0)
	The degree of disturbance by a damage agent assessed as a percentage of trees in the plot.		
	<< 1998-03-26-15:24 sourced from:7003:7438 >>		
3	DISTURB_YR	NULL	NUMBER(4,0)
	The year the disturbance by a damage agent was thought to have occurred.		
	HH93_S SP_MEAS_SM_YEAR		
	SEF S CT3:55-56,61-62 YEAR		
	SEF C Add '19' for century		
	<< 1998-03-26-15:24 sourced from:7003:7439 >>		
* 4	DAM_OCC_SKEY	NOT NULL	NUMBER(7,0)
	A unique identifier for the occurrence of a damage agent afflicting the stand the sample/plot lies in.		
	<< 1998-03-26-15:24 sourced from:7003:7588 >>		

Table: DAMAGE_OCCURRENCES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	DISTURB_ASSMT A non numeric damage assessment of a specific subset of pests. << 1998-03-26-15:24 sourced from:7003:168073 >>	NULL	VARCHAR2(1)
6	DATA_DA_TAX_SKEY System generated UID from ORACLE sequence da_tax_occu_seq. System generated UID from ORACLE sequence da_tax_occu_seq. << 1998-03-26-15:24 sourced from:7003:537271 >> << 1998-03-26-15:24 sourced from:7003:537271 >>	NULL	NUMBER(7,0)
7	SDC_SITE_DISTR_CD_SKEY System generated UID from ORACLE sequence site dist cd seq System generated UID from ORACLE sequence site dist cd seq << 1998-03-26-16:13 sourced from:7003:537282 >> << 1998-03-26-16:13 sourced from:7003:537282 >>	NULL	NUMBER(7,0)
8	DAGY_DAGYV_SKEY System generated surrogate identifier. System generated surrogate identifier.	NULL	NUMBER(7,0)
9	DAGNC_DAVSV_SKEY	NULL	NUMBER(7,0)

Table: DAMAGE_OCCURRENCES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Surrogate key for Damage Agent.		
	Surrogate key for Damage Agent.		
	<< 1998-03-26-15:24 sourced from:7003:7533 >>		
	<< 1998-03-26-15:24 sourced from:7003:7533 >>		
10	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
	<< 1998-03-27-11:01 sourced from:346868:586591 >>		
	<< 1998-03-27-11:01 sourced from:346868:586591 >>		

Foreign Keys:

DMGO_DAGNC_FK
 DAGNC_DAVSV_SKEY = DAMAGE_AGENT_VEG_SAM_VERSIONS.DAVSV_SKEY
 DMGO_DAST_FK
 DAST_CODE_ARGUMENT = DAMAGE_AGENT_ST_TBL.CODE_ARGUMENT
 DMGO_SDC_FK
 SDC_SITE_DISTR_CD_SKEY = SITE_DISTURBANCE_CDS.SITE_DISTR_CD_SKEY
 DMGO_TRMEA_FK
 TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

DMGO_DAGNC_FK_I
 DAGNC_DAVSV_SKEY
 DMGO_DAGY_FK_I
 DAGY_DAGYV_SKEY
 DMGO_DAST_FK_I
 DAST_CODE_ARGUMENT
 DMGO_DATA_FK_I
 DATA_DA_TAX_SKEY
 DMGO_SDC_FK_I
 SDC_SITE_DISTR_CD_SKEY
 DMGO_TRMEA_FK_I
 TRMEA_TREE_MEASMT_SKEY

Notes:

<< 1998-03-26-15:24 sourced from:7003:7437 >>

Table: DAMAGE_OCC_ATTR_VALUES*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SRA_SEVERITY_ATTR_SKEY	NOT NULL	NUMBER(7,0)
2	VALUE_RECORDED	NOT NULL	VARCHAR2(30)
<< 1998-03-26-15:24 sourced from:7003:547441 >>			
* 4	DMGO_DAM_OCC_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

DOAV_DMGO_FK
DMGO_DAM_OCC_SKEY = DAMAGE_OCCURRENCES.DAM_OCC_SKEY
DOAV_SRA_FK
SRA_SEVERITY_ATTR_SKEY = SEVERITY_RATING_ATTRIBUTES.SEVERITY_ATTR_SKEY

Indexes:

DOAV_DMGO_FK_I
DMGO_DAM_OCC_SKEY
DOAV_SRA_FK_I
SRA_SEVERITY_ATTR_SKEY

Notes:

<< 1998-03-26-15:24 sourced from:7003:547068 >>

Table: DATA_RECONCILLIATION_ERRORS*Description:*

Errors that are unreconcillable based on the application of software rules which detect inconsistencies between the source graphics (*.FC1), text (*.FIP) and their pairing.

An error maybe common to more than one source; for example, a Datum error may arise from an internal check of the graphics file, or may be caused from a graphics file-text file pairing inconsistency. Other errors are particular to a source type, e.g. Layer Count would only occur on the text (FIP) file.

The errors are logged by the data collection software developed by Robin Quenet of Pacific International Mapping.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DATA_ERROR_KEY The surrogate identifier of a data error.	NOT NULL	NUMBER(7,0)
<< 1998-03-25-16:59 sourced from:416792:446860 >>			
2	PMSGC_MESSAGE_ID	NOT NULL	NUMBER(6)
3	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492771 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492773 >>	NOT NULL	VARCHAR2(30)
5	GTP_GRFV_GRAPHICS_FILE_SKEY	NULL	NUMBER(7,0)
6	GTP_TFV_TEXT_FILE_SKEY	NULL	NUMBER(7,0)
7	TFV_TEXT_FILE_SKEY	NULL	NUMBER(7,0)
8	GRFV_GRAPHICS_FILE_SKEY	NULL	NUMBER(7,0)
9	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492772 >>	NULL	DATE

Table: DATA_RECONCILIATION_ERRORS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
10	MODIFY_USER_ID	NULL	VARCHAR2(30)
	<< 1998-03-25-16:59 sourced from:416792:492774 >>		

Unique Constraints:

DRE_DRE2_UK
 GRFV_GRAPHICS_FILE_SKEY
 TFV_TEXT_FILE_SKEY
 PMSGC_MESSAGE_ID

Foreign Keys:

DRE_GRFV_FK
 GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_FILE_VERSIONS.GRAPHICS_FILE_SKEY
 DRE_GTP_FK
 GTP_GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_TEXT_FILE_PAIRS.GRFV_GRAPHICS_FILE_SKEY
 GTP_TFV_TEXT_FILE_SKEY = GRAPHICS_TEXT_FILE_PAIRS.TFV_TEXT_FILE_SKEY
 DRE_PMSGC_FK
 PMSGC_MESSAGE_ID = PROCESS_MESSAGE_CDS.MESSAGE_ID
 DRE_TFV_FK
 TFV_TEXT_FILE_SKEY = TEXT_FILE_VERSIONS.TEXT_FILE_SKEY

Indexes:

DRE_GRFV_FK_I
 GRFV_GRAPHICS_FILE_SKEY
 DRE_GTP_FK_I
 GTP_GRFV_GRAPHICS_FILE_SKEY
 GTP_TFV_TEXT_FILE_SKEY
 DRE_PMSGC_FK_I
 PMSGC_MESSAGE_ID
 DRE_TFV_FK_I
 TFV_TEXT_FILE_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:446820 >>

Table: DATE_OF_ORIGIN_ASSESSMENTS*Description:*

The date (year) the stand was established as applied to a layer (FIP) or a tree species (Vegetative Cover). Known as the Year of Stand Establishment in the FIP file.

The month/date value of JAN-01 is assigned by business default.

This is a conversion of 'Age', a departure from previous business practise. The intent of conversion to Year of Origin is to maintain currency, as 'Age' would become outdated with the passing of a calendar year.

This value is typically an estimate from aerial photo interpretation and applies to the dominant and codominant trees and can be augmented from the possible sources of:

- site history, (previous surveys),
- field measurements,
- age-height relationships, and
- age patterns.

No projected DATE OF ORIGIN is expected to be retained in this entity.

The PROJECTION DATE would be retained by a DERIVATION TRANSACTION, or by the attribute of the same name in VERSION AUDIT METADATA for legacy sources.

Definition Source: p 6-13, 14, PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
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Table: DATE_OF_ORIGIN_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ORIGIN_SKEY The surrogate system identifier.	NOT NULL	NUMBER(7,0)
	Populated by ORIGIN_SEQ.		
	<< 1998-03-26-16:53 sourced from:236464:670237 >>		
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who created the record.	NOT NULL	VARCHAR2(30)
	<<1997-12-09-14:27 sourced from:236464:422006>>		
	<< 1998-03-26-16:53 sourced from:236464:681674 >>		
4	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE
	<<1997-12-09-14:27 sourced from:236464:422005>>		
	<< 1998-03-26-16:53 sourced from:236464:681673 >>		
5	DATE_OF_ORIGIN The year the tree began to grow; applied to a layer (FIP) or a tree species (Vegetative Cover). Known as the Year of Stand Establishment in the FIP file.	NOT NULL	DATE
	This value is typically an estimate from aerial photo interpretation and applies to the dominant and codominant trees and can be augmented from the possible sources of:		

Table: DATE_OF_ORIGIN_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	-site history, (previous surveys), -field measurements, -age-height relationships, and -age patterns. Definition Source: p 6-13, 14, PIP <<1997-12-05-16:17 sourced from:236464:508449>> << 1998-03-26-16:53 sourced from:236464:679752 >>		
6	MODIFY_USER_ID ORACLE user id of the last user to modify the record. <<1997-12-09-14:27 sourced from:236464:422008>> << 1998-03-26-16:53 sourced from:236464:681676 >>	NULL	VARCHAR2(30)
7	MODIFY_DATE The date the record was last modified. <<1997-12-09-14:27 sourced from:236464:422007>> << 1998-03-26-16:53 sourced from:236464:681675 >>	NULL	DATE
8	DATE_MINIMUM The minimum value of the year the tree began growing. <<1997-12-05-16:17 sourced from:236464:508450>> << 1998-03-26-16:53 sourced from:236464:679755 >>	NULL	DATE

Table: DATE_OF_ORIGIN_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
9	DATE_MAXIMUM The maximum value of the year the tree began growing.	NULL	DATE
	<<1997-12-05-16:17 sourced from:236464:508451>>		
	<< 1998-03-26-16:53 sourced from:236464:679754 >>		
10	INTERPRETATION_SOURCE_CD The source of data used for the interpretation of year of origin (age).	NULL	NUMBER(2)
	<<1997-12-05-16:17 sourced from:236464:670114>>		
	<< 1998-03-26-16:53 sourced from:236464:679757 >>		
11	CONFIDENCE_INDEX_NUM A subjective discrete assignment from 1 to 9 which reflects the photo interpreter's confidence in the estimation of the tree Age Estimate. The higher the number, the greater the confidence in the interpretation of tree age. The confidence index should not reflect the individual interpreter's abilities, but an estimate of the difficulty of making the interpretation due to polygon complexity and reliability of data sources. Definition Source: p. 6-20, PIP	NULL	NUMBER(1)
	<<1997-12-05-16:17 sourced from:236464:508614>>		
	<< 1998-03-26-16:53 sourced from:236464:679753 >>		
12	BUSINESS_REVISION_DATE The date the DATE OF ORIGIN (tree age to many users) was revised after	NULL	DATE

Table: DATE_OF_ORIGIN_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	it was originally interpreted as part of the Vegetation Inventory classification.		
	<<1997-12-05-16:17 sourced from:236464:670179>>		
	<< 1998-03-26-16:53 sourced from:236464:679756 >>		

Foreign Keys:

DOOA_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY

Indexes:

DOOA_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY

Notes:

<< 1998-03-26-16:53 sourced from:236464:670231 >>

Table: DBH_HT_SPP_FIZ_CODES*Description:*

A table of maximum expectable total tree heights and diameters (dbh) individually or in combination for a given tree species and FIZ for the purpose of validating individual tree measurements.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	GTO_GROUP_TAXON_SKEY	NOT NULL	NUMBER(7,0)
* 2	FIZ_CD	NOT NULL	VARCHAR2(1)
	A geographic area of BC delineated to approximate broad climatic and ecological factors. It was developed by the Inventory Branch for grouping samples and will be superceded by biogeoclimatic classification.		
	<i>OT_S Table on VAX</i>		
	<i>A? Check with BD</i>		
	<< 1998-03-27-11:07 sourced from:346868:346853 >>		
3	MAX_DBH_1_3M	NOT NULL	NUMBER(4,1)
	The maximum expectable tree diameter in centimetres as measured at breast height.		
	<< 1998-03-27-11:07 sourced from:346868:346854 >>		
4	MAX_TREE_HT	NOT NULL	NUMBER(4,2)
	The maximum expectable total tree height in metres above germination point or highest side. Validates TOTAL HEIGHT MEASURED of TREE MEASUREMENT.		
	<< 1998-03-27-11:07 sourced from:346868:346855 >>		

Foreign Keys:

Table: DBH_HT_SPP_FIZ_CODES (cont'd)*Foreign Keys:*

DHSFC_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

Indexes:

DHSFC_GTO_FK_I
GTO_GROUP_TAXON_SKEY

Notes:

<< 1998-03-27-11:07 sourced from:346868:346852 >>

Table: DEFAULT_CROWN_CLOSURES*Description:*

The crown closures that are supplied as a default if missing from the FIP file. In the course of rule creation it was found that approximately 407,000 forested FIP polygons were missing crown closure which should be a mandatory attribute for forested polygons.

These default crown closures apply to Age Class 1 (1-20 years) and Age Class 2 (21-40 years) only. The MEAN CROWN CLOSURE values are supplied from a SAS analysis of the FIP file (98-01-23).

For stands older than 40 years, the default crown closure is taken from VDYP APPLICATION BOUND.DEFAULT CROWN CLOSURE.

The mapsheet components are grouped into four broad business areas of BC: they are, Southern Coast, Southern Interior, Central Interior, and Northern.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AC_AGE_CLASS_SKEY	NOT NULL	NUMBER(7,0)
* 2	MCMP_MAP_COMP_SKEY	NOT NULL	NUMBER(7,0)
3	MEAN_CROWN_CLOSURE	NOT NULL	NUMBER(3,0)

The mean crown closure assigned to FIP polygons 40 years or less, where 'missing'. Missing crown closure in the FIP file is determined by a value of zero when the stand age is greater than zero.

<< 1998-03-26-16:55 sourced from:236464:769438 >>

Foreign Keys:

DCC_AC_FK
 AC_AGE_CLASS_SKEY = AGE_CLASSES.AGE_CLASS_SKEY
 DCC_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY

Table: DEFAULT_CROWN_CLOSURES (cont'd)*Indexes:*

DCC_AC_FK_I
AC_AGE_CLASS_SKEY
DCC_MCMP_FK_I
MCMP_MAP_COMP_SKEY

Notes:

<< 1998-03-26-16:55 sourced from:236464:769432 >>

Table: DENSITY_ASSESSMENTS*Description:*

The number of trees per hectare. Typically gathered within the bounds of a prescribed subpopulation, e.g. live trees, min 2.0 dbh.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DENSITY_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(7,0)
	Populated from DENSITY_SEQ.		
	<< 1998-03-26-16:55 sourced from:236464:678733 >>		
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who craeted the record.	NOT NULL	VARCHAR2(30)
	<<1997-12-09-14:25 sourced from:236464:422006>>		
	<< 1998-03-26-16:55 sourced from:236464:681654 >>		
4	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE
	<<1997-12-09-14:25 sourced from:236464:422005>>		
	<< 1998-03-26-16:55 sourced from:236464:681653 >>		
5	STEMS_PER_HA The number of tree stems on an unitary per hectare basis.	NOT NULL	NUMBER(10,4)

Table: DENSITY_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<<1997-11-18-15:24 sourced from:236464:508904>>		
	<<1997-12-05-16:15 sourced from:236464:670144>>		
	<< 1998-03-26-16:55 sourced from:236464:679749 >>		
6	SOURCE_TYPE The source of the data; either Collected or Derived. This is utilized to distinguish occurrences of attributes that can come from either source. Expected to be used for FIP sourced data only; all within-database derivations will have a DERIVATION TRANSACTION occurrence to identify derived data. << 1998-03-26-16:55 sourced from:236464:786442 >>	NOT NULL	VARCHAR2(5)
7	POPULATION_QUALIFIER The population for which the density was collected. For a single interpretation, this could be Live Trees, Dead Trees and Well Spaced Stems. << 1998-03-26-16:55 sourced from:236464:786441 >>	NOT NULL	VARCHAR2(8)
8	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)
9	MODIFY_USER_ID ORACLE user id of the last user to modify the record. <<1997-12-09-14:25 sourced from:236464:422008>> << 1998-03-26-16:55 sourced from:236464:681656 >>	NULL	VARCHAR2(30)

Table: DENSITY_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
10	MODIFY_DATE The date the record was last modified.	NULL	DATE
	<<1997-12-09-14:25 sourced from:236464:422007>>		
	<< 1998-03-26-16:55 sourced from:236464:681655 >>		
11	INTERPRETATION_SOURCE_CD The source of data used for the interpretation of stand density.	NULL	NUMBER(2)
	<<1997-11-18-15:24 sourced from:236464:670116>>		
	<<1997-12-05-16:15 sourced from:236464:670145>>		
	<< 1998-03-26-16:55 sourced from:236464:679750 >>		

Foreign Keys:

DA_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY

DA_SUBP_FK
SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

DA_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY

DA_SUBP_FK_I
SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-26-16:55 sourced from:236464:678727 >>

Table: DERIVATION_MODULES*Description:*

A software module that applies logic to derive business required attribution.

Two known examples are:

- Freddie or perhaps more accurately, the Sindex module, and
- VDYP, the tree growth projection module.

A! analysis is incomplete; module, parameter set, actual parameters and transactions all need to be considered such that full auditability within the Veg. Cover system is realized.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MODULE_SKEY The system generated surrogate identifier of the derivation module.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-16:55 sourced from:236464:508491 >>			
2	SOFTWARE_NAME Th name of the software module. Examples would be FREDDIE, VDYP.	NOT NULL	VARCHAR2(25)
<< 1998-03-26-16:55 sourced from:236464:508492 >>			
3	VERSION_ID The version identifier of the sotware module that was used for derivation. An alpha numeric field to accomodate lettered versions: e.g. 1.1a.	NOT NULL	VARCHAR2(240)
<< 1998-03-26-16:55 sourced from:236464:508493 >>			

Table: DERIVATION_MODULES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
4	VERSION_RELEASE_DATE The date the software module was released by the custodial agency.	NOT NULL	DATE

<< 1998-03-26-16:55 sourced from:236464:508494 >>

6	ADJF_ADJ_FACTOR_SKEY	NULL	NUMBER(7,0)
---	----------------------	------	-------------

Foreign Keys:

DM_ADJF_FK
ADJF_ADJ_FACTOR_SKEY = ADJUSTMENT_FACTORS.ADJ_FACTOR_SKEY

Indexes:

DM_ADJF_FK_I
ADJF_ADJ_FACTOR_SKEY

Notes:

<< 1998-03-26-16:55 sourced from:236464:508485 >>

Table: DESIGN_SPECIFICATIONS*Description:*

Specific and directed data collecting implementations of a Program Initiative under which surveys and experiments are conducted. This subsumes the precedent entity named INVESTIGATION INITIATIVE.

All business rules are to be associated with the parent occurrence. Recursively related child occurrences of Design Specifications are for business edification purposes only.

For forest/vegetationPolygon, Tree Layer, Tree Layer, Business Object Assessment, Culmination Assessment inventory applications examples would be:

FIP (Forest Inventory) related:

Forest Cover areal coverage,
Growth Natural Stand plot clusters,
Growth Temporary plot clusters,
Growth Intensive plot clusters,
Growth Silvicultural Monitoring plot clusters,
Volume sampled trees,
Decay sampled trees

Vegetation Inventory related:

Vegetation Inventory Phase 1, areal coverage (Vegetative Cover),
Vegetation Inventory Phase 2, plot clusters (Vegetation Inv. samples)
Vegetation Inventory Phase 3, sampled trees (Vegetation Inv. Net
Volume Adjustment Factor trees),

Research Experimental Program (EP) related:

EP initiatives and recursive identifiers or Project Num, Sub Project

Table: DESIGN_SPECIFICATIONS (cont'd)*Description:*

Num

acquired experimental plots from other agencies.

This is not meant to reflect data formats, which are retained in the
DATA FORMATS entity.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DESIGN_SKEY System assigned unique identifier.	NOT NULL	NUMBER(7,0)

<< 1998-04-13-09:08 sourced from:236464:612261 >>

2	BUSINESS_IDENTIFIER_VALUE A generic business identifier to uniquely identify a	NOT NULL	VARCHAR2(10)
---	---	----------	--------------

DESIGN SPECIFICATION. This is applied to both air photo
interpretation and ground based mensurational activities
(samples and experiment plots).

This generic identification subsumes common business identifiers used
in sample/experiment plots such as:

Sample Type Cd (used by the RIB Growth and Yield Section),
EP Number (used by the Research Branch).

Specific examples would be:

G, R, ,I, T, S, (used by the RIB Growth and Yield Section),

Table: DESIGN_SPECIFICATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Q, A, N, O (used by the RIB Vegetation Inventory), numbers (used by the Research Branch to identify EP's) FIP (meaning Forest Cover 1954-1994), VEG INV (parent of samples types 'Q', 'A', 'N'). << 1998-04-13-09:08 sourced from:236464:612262 >>		
3	DESIGN_TYPE_CD The type of Biometric Design that is applied to investigation Typical designs are by ground sampling, aerial survey or experimenting, though there are combinations of ground samples and experiments termed hybrids. Valid values are: SURVEY which has types such as: GROUND SAMPLE AERIAL COVER EXPMT (ground based mensuration usually on fixed area plots), HYBRID (of a ground sample and an experiment e.g. Intensive Forestry) << 1998-04-13-09:08 sourced from:236464:617490 >>	NULL	VARCHAR2(8)
4	EFFECTIVE_DATE	NOT NULL	DATE

Table: DESIGN_SPECIFICATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The date when the Inventory Design Specification came into effect.		
	<< 1998-04-13-09:08 sourced from:236464:612264 >>		
5	VERSION_NUM A system maintained version number.	NULL	NUMBER(3,0)
	<< 1998-04-13-09:08 sourced from:236464:612267 >>		
6	BUSINESS_IDENTIFIER_NAME The name a business gives as the identifying attribute for a Design Specification.	NOT NULL	VARCHAR2(30)
	Examples are:		
	SAMPLE TYPE (used by the Growth and Yield Section)		
	EP NUM (used by the Research Branch)		
	VEG INV COVER		
	VEG INV SAMPLE		
	FOREST COVER		
	<< 1998-04-13-09:08 sourced from:236464:785625 >>		
7	DESCRIPTION A generic text description that describes the design.	NULL	VARCHAR2(256)
	The description can include the design name (say, ' three by three randomized factorial block design') and/or experiment project title.		

Table: DESIGN_SPECIFICATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-04-13-09:08 sourced from:236464:612263 >>		
8	EXPIRY_DATE The date when an Inventory Design Specification ceased to be used.	NULL	DATE
	<< 1998-04-13-09:08 sourced from:236464:612265 >>		
9	VERSION_DATE The date the a version was created. This date, along with the version numbers are maintained by the system at insert time using database triggers.	NULL	DATE
	<< 1998-04-13-09:08 sourced from:236464:612268 >>		
10	OBJECTIVE_DESC A textual description of the objective(s) of the project as stated in the working plan. Typically this would be gleaned from the introductory documentation of the initiative.	NULL	VARCHAR2(256)
	<< 1998-04-13-09:08 sourced from:236464:617498 >>		
11	LOCATION_NAME The general geographic location assigned. This is typically used for experimental plots for a given Experimental Program (EP Number) where a group of Plot Clusters are proximally located.	NULL	VARCHAR2(256)
	<< 1998-04-13-09:08 sourced from:236464:785622 >>		

Table: DESIGN_SPECIFICATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
12	HYPOTHESIS A description of the formal assumptions being tested by the experiment.	NULL	VARCHAR2(256)

<< 1998-04-13-09:08 sourced from:236464:785623 >>

14	PROG_PROGRAM_INITIATIVE_SKEY	NOT NULL	NUMBER(7,0)
16	DES_DESIGN_SKEY	NULL	NUMBER(7,0)
18	SGDEF_SPP_GROUP_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

DES_DES_FK
DES_DESIGN_SKEY = DESIGN_SPECIFICATIONS.DESIGN_SKEY
DES_PROG_FK
PROG_PROGRAM_INITIATIVE_SKEY = PROGRAM_INITIATIVES.PROGRAM_INITIATIVE_SKEY
DES_SGDEF_FK
SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY

Indexes:

DES_DES_FK_I
DES_DESIGN_SKEY
DES_PROG_FK_I
PROG_PROGRAM_INITIATIVE_SKEY
DES_SGDEF_FK_I
SGDEF_SPP_GROUP_SKEY

Notes:

<< 1998-04-13-09:08 sourced from:236464:612255 >>

Table: DIAM_ASSMTS*Description:*

Quantified assessments of tree diameter from field data collection and
/or derivations from taper equation algorithms.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DIAM_ASSMT_SKEY << 1998-03-27-11:10 sourced from:346868:347417 >>	NOT NULL	NUMBER(7,0)
2	CREATE_USER_ID << 1998-03-27-11:10 sourced from:346868:347357 >>	NOT NULL	VARCHAR2(30)
3	CREATE_DATE << 1998-03-27-11:10 sourced from:346868:347358 >>	NOT NULL	DATE
4	REPRES_IND An indicator to denote that the DIAMETER as collected in the field is representative of the tree population within the sample or experimental unit. Normally, the collection of tree diameters is not the problem that collection of ages and heights present. Often, the location of the diameter measurement on the tree is modified to obtain a representative measure. It is expected that this attribute may only be used in post collection (validation) processing. <i>Denotes if the diameter is representative of the population.</i> << 1998-03-27-11:10 sourced from:346868:347400 >>	NOT NULL	VARCHAR2(1)
5	ASSMT_QUAL_CD A unique identifier for the occurrence of a tree diameter.	NOT NULL	VARCHAR2(10)

Table: DIAM_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-11:10 sourced from:346868:346957 >>		
6	DIAMETER The tree diameter, as measured estimated or derived at a prescribed position on the tree (Measurement Height).	NOT NULL	NUMBER(4,1)
	<< 1998-03-27-11:10 sourced from:346868:346932 >>		
7	MEASMT_HT The height on the tree, at which the diameter was measured. This is usually called 'Breast Height' to reflect a convenient but uniform location of the measurement on the tree.	NOT NULL	NUMBER(4,2)
	<< 1998-03-27-11:10 sourced from:346868:346933 >>		
8	POSITION_CD The position on the tree the diameter was measured to.	NOT NULL	VARCHAR2(3)
	<< 1998-03-27-11:10 sourced from:346868:523586 >>		
9	MODIFY_USER_ID << 1998-03-27-11:10 sourced from:346868:347359 >>	NULL	VARCHAR2(30)
10	MODIFY_DATE << 1998-03-27-11:10 sourced from:346868:347360 >>	NULL	DATE
11	BASAL_AREA The diameter of the tree converted to the area it circumscribes. Basal area is expressed in square metres, where diameter is measured in centimetres.	NULL	NUMBER(7,4)
	<< 1998-03-27-11:10 sourced from:346868:347102 >>		

Table: DIAM_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
12	BASAL_AREA_PER_HA The tree basal area of tree, (derived from diameter), converted to a per hectare basis. A derived field and is dependent on the plot area (spatial delimiter) at the Measurement Visitation. << 1998-03-27-11:10 sourced from:346868:347121 >>	NULL	NUMBER(8,4)
13	INCLUDED_BARK_CD The identification as to whether tree bark was included in the measurement of diameter. Normally the bark is included, exceptions may be dead or felled trees and special studies. << 1998-03-27-11:10 sourced from:346868:523584 >>	NULL	VARCHAR2(2)
15	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
16	INSIDE_OUTSIDE_BARK_CD	NULL	VARCHAR2(2)

Foreign Keys:

DIASM_TRMEA_FK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

DIASM_TRMEA_FK_I
TRMEA_TREE_MEASMT_SKEY

Notes:

<< 1998-03-27-11:10 sourced from:346868:346907 >>

Table: ECOSYSTEM_DESC_DETAILS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

Observed BC Land Clasification Codes and SiteSeries recorded on Vegetation Cover Sample Card EP - Ecological Decsription 12 - Ecosystem Decsription section.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ECOSYS_DESCR_SKEY	NOT NULL	NUMBER(7,0)
	System generated UID from ORACLE sequence ecosys_desc_seq.		

Table: ECOSYSTEM_DESC_DETAILS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-17:06 sourced from:7003:537291 >>			
2	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
3	PLOT_CENTRE_IND	NOT NULL	VARCHAR2(1)

Indicates whether or not the ecological description details

relates to the plot centre within the cluster element.

If the ecological description details relate to the plot centre

(indicator = 'Y') then the point location for the description

if known - the point location relating to the cluster element,

the plot centre. If the details do not relate to the plot centre,

the actual physical location is not known, only that the details

relate to some point within the plot, defined by the

cluster element.

<< 1998-03-26-17:06 sourced from:7003:569259 >>

4	SS_SITE_SERIES_SKEY	NULL	NUMBER(7,0)
5	LCC_CLASS_CODE_SKEY	NULL	NUMBER(7,0)
6	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
7	SOIL_MOISTURE_LOW_BND	NULL	VARCHAR2(1)

A code to denote, on a relative scale, the available moisture supply

for plant growth. The relative moisture supply refers to the

hygrotope as it relates to the capacity of a soil to hold loose or

receive water. It is determined from the soil's properties and

position in the landscape, regardless of climate.

The lower bound is to accommodate a range. If there is no range, the

upper bound equals lower bound.

Reference: "Describing Ecosystems in the Field", MOE Manual

Table: ECOSYSTEM_DESC_DETAILS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	11, Province of B.C. 1990, p 34-37.		
8	SOIL_MOISTURE_UPPER_BND A code to denote, on a relative scale, the available moisture supply for plant growth. The relative moisture supply refers to the hygrotape as it relates to the capacity of a soil to hold loose or receive water. It is determined from the soil's properties and position in the landscape, regardless of climate. The upper bound is to accommodate a range. If there is no range, the upper bound equals lower bound. Reference: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p 34-37. << 1998-03-26-17:06 sourced from:7003:537312 >>	NULL	VARCHAR2(1)
9	SOIL_NUTRIENT_LOWER_BND A code to denote, on a relative scale, the available nutrient supply for plant growth. The soil's nutrient regime (trophotope) integrates any environmental and biotic parameters which, in combination, determine the actual amounts of available nutrients. The bound is to accommodate a range. If there is no range in the assessment of soil nutrient regime, then upper bound equals lower bound. Reference: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p37-40	NULL	VARCHAR2(1)

Table: ECOSYSTEM_DESC_DETAILS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-17:06 sourced from:7003:537313 >>		
10	SOIL_NUTRIENT_UPPER_BND A code to denote, on a relative scale, the available nutrient supply for plant growth. The soil's nutrient regime (trophotope) integrates any environmental and biotic parameters which, in combination, determine the actual amounts of available nutrients. The bound is to accomodate a range. If there is no range in the assessment of soil nutrient regime, then upper bound equals lower bound. Reference: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p37-40	NULL	VARCHAR2(1)
11	SITE_SERIES_COVERAGE Ecosystem Description Site Series coverage percent. Up to three coverages can be entered.	NULL	NUMBER(3,0)
	<< 1998-03-26-17:06 sourced from:7003:537290 >>		
12	FIELD_SEQ_NUM A number representing the order the ecosystem details were captured from the VRI field cards.	NULL	NUMBER(3,0)
	<< 1998-03-26-17:06 sourced from:7003:578418 >>		
13	DISTRIBUTION_TRANSITION_CD	NULL	NUMBER(2)

Foreign Keys:

ESDD_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY

Table: ECOSYSTEM_DESC_DETAILS (cont'd)*Foreign Keys:*

ESDD_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
ESDD_LCC_FK
LCC_CLASS_CODE_SKEY = BC_LAND_COVER_CLASS_CDS.CLASS_CODE_SKEY
ESDD_SS_FK
SS_SITE_SERIES_SKEY = SITE_SERIES_CDS.SITE_SERIES_SKEY

Indexes:

ESDD_CEV_FK_I
CEV_CE_VISIT_SKEY
ESDD_GTO_FK_I
GTO_GROUP_TAXON_SKEY
ESDD_LCC_FK_I
LCC_CLASS_CODE_SKEY
ESDD_SS_FK_I
SS_SITE_SERIES_SKEY

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-17:06 sourced from:7003:537109 >>

Table: ECO_REGIONS*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ECO_REGION_SKEY	NOT NULL	NUMBER(7,0)
2	ECO_REGION_CD << 1998-03-26-15:35 sourced from:7003:230027 >>	NOT NULL	VARCHAR2(1)
3	DESCRIPTION << 1998-03-26-15:35 sourced from:7003:230028 >>	NOT NULL	VARCHAR2(50)

Notes:

<< 1998-03-26-15:35 sourced from:7003:229762 >>

Table: ENV_SENSITIVE_AREA_CDS*Description:*

The valid codes for areas delineated in the course of an forest inventory, that represent areas delineated for the purpose of identifying environment, technical social and economic constraints. The 'inventory' in this context refers to the period of 1973 the inception of the ESA initiative, to 1996 the beginning of the the Vegetation Inventory.

The Vegetation Inventory does not incorporate the precepts of ESA classification, and it is expected that this subject area will be assumed by another business area.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ESA_SKEY The system-generated surrogate identifier of an Environmentally Sensitive Area.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-11:44 sourced from:236464:506705 >>			
2	ESA_CD The code value for an Environmentally Sensitive Area.	NOT NULL	VARCHAR2(3)
<< 1998-03-26-11:44 sourced from:236464:506703 >>			
3	ESA_DESC The description of the Environmentally Sensitive Area.	NULL	VARCHAR2(50)
<< 1998-03-26-11:44 sourced from:236464:506704 >>			

Notes:

<< 1998-03-26-11:44 sourced from:236464:506697 >>

Table: ENV_SENSITIVE_AREA_CDS (cont'd)

Notes:

Table: ESA_INTRPRTNS*Description:*

The collected data of the activity of interpretation, usually with the aid of aerial photography, of a land area delineated as a POLYGON.

The following types of interpretations are shown as subtypes;

TREE LAYERS

NON VEGETATION

NON TREE VEGETATION

Land Cover Components

The classification as an Environmentally Sensitive Area (ESA).

The ESA program, initiated in 1976, classifies areas according to a number of criteria with the objective of delinating areas that are:

-sensitive to extractive forest practise (that is causing long term degradation of growing capacity), or

-are valuable to resources other than wood fibre, e.g. recreation, wildlife, etc.

NB: In the course developing the Vegetation Inventory, and in conjunction with the Resource Inventory Committee (RIC), the ESA activities are not a component of classification of the Vegetative Inventory and are to be retained as a separate theme with another data custodian.

The inclusion of ESA in this Vegetative Cover application is temporary only; when this activity and cumulative data has a 'owner'

Table: ESA_INTRPRTNS (cont'd)*Description:*

and 'home' it will transferred to a separately accessible theme.

(J Hughes, 97-04-8)

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INTERP_SKEY System generated UID for all subtypes.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-11:40 sourced from:236464:421327 >>			
2	ESAC_ESA_SKEY	NOT NULL	NUMBER(7,0)
3	PLY_POLYGON_SKEY	NOT NULL	NUMBER(14,0)
4	DATA_SOURCE_REFERENCE_DATE The date of the source data on which the interpretation is based. Known as the 'Reference Year' in the FIP file.	NULL	DATE
<< 1998-03-26-11:40 sourced from:236464:508613 >>			
5	CREATE_DATE The date the interpretation was made.	NOT NULL	DATE
<< 1998-03-26-11:40 sourced from:236464:569090 >>			
6	CREATE_USER_ID The system user id of the person that made the interpretation.	NOT NULL	VARCHAR2(30)
<< 1998-03-26-11:40 sourced from:236464:569091 >>			
7	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)
8	ESA_CATEGORY_NUM The relative level, or in business terms, 'category' of importance of	NULL	NUMBER(1,0)

Table: ESA_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	the observation of an Environmentally Sensitive Area (ESA).		
	It is expected that there will be only two observations per polygon, as per the maximum contained in the source FIP file.		
	<< 1998-03-26-11:44 sourced from:236464:506680 >>		
9	ESA_WILDLIFE_SPECIES_2_CD A wildlife species or other threatened or endangered species that occurs in an Environmentally Sensitive area.	NULL	VARCHAR2(1)
	NB: the denormalized design represents a decision based on the short term nature of retaining this attribution in the Vegetative Cover database. JH		
	denormalized design on account of short term business need		
	<< 1998-03-26-11:44 sourced from:236464:506722 >>		
10	ESA_WILDLIFE_SPECIES_3_CD A wildlife species or other threatened or endangered species that occurs in an Environmentally Sensitive area.	NULL	VARCHAR2(1)
	NB: the denormalized design represents a decision based on the short term nature of retaining this attribution in the Vegetative Cover database. JH		
	denormalized design on account of short term business need		
	<< 1998-03-26-11:44 sourced from:236464:506723 >>		
11	ESA_WILDLIFE_SPECIES_1_CD	NULL	VARCHAR2(1)

Table: ESA_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	A wildlife species or other threatened or endangered species that occurs in an Environmentally Sensitive area.		
	NB: the denormalized design represents a decision based on the short term nature of retaining this attribution in the Vegetative Cover database. JH		
	<i>denormalized design on account of short term business need</i>		
	<i><< 1998-03-26-11:44 sourced from:236464:506709 >></i>		
12	DATA_SOURCE_CD The source of the data that contributed to the determination of the classification description as per the specifications of the Photo Interpretation Procedures, Vegetation Inventory.	NULL	NUMBER(2)
	All values taken from Table 3-1, PIP		
	This list of values is similar, but not identical to the FIP DATA SOURCE which will be used to validate the FIP file prior to loading.		
	Non-conforming FIP DATA SOURCE values will be converted to the VEGETATION DATA SOURCE values on load to the Vegetative Cover database.		
	<i><< 1998-03-26-11:40 sourced from:236464:507409 >></i>		
13	MODIFY_DATE The date the interpretation was modified.	NULL	DATE
	<i><< 1998-03-26-11:40 sourced from:236464:569092 >></i>		

Table: ESA_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
14	MODIFY_USER_ID The system user id of the person who modified the interpretation.	NULL	VARCHAR2(30)

<< 1998-03-26-11:40 sourced from:236464:569094 >>

15	INTERPRETATION_DATE The date when the interpretation was done.	NULL	DATE
----	---	------	------

This may be different than the date a FIP file was updated or the date the computer records were actually processed.

<< 1998-03-26-11:40 sourced from:236464:569165 >>

16	DATA_ENTRY_DATE The date the interpretation was entered into an off-line electronic storage source file. Sourced from the FIP attribute, INPUT DATE of the Polygon record.	NULL	DATE
----	---	------	------

This attribute would be redundant if there was on-line access to the Vegetative Cover database, as the audit field, CREATE DATE, would satisfy this requirement.

The current and planned technical architecture allows for entry into an intermediary local subset data file, either FIP or VIF, using the FCAP or replacement data entry tool. The FCAP application inserts a local (client) system date into the INPUT DATE, though the integrity is suspect because the local date can be modified by the user.

Table: ESA_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-11:40 sourced from:236464:578391 >>		

Foreign Keys:

ESAI_ESAC_FK
 ESAC_ESA_SKEY = ENV_SENSITIVE_AREA_CDS.ESA_SKEY
ESAI_PLY_FK
 PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY
ESAI_SUBP_FK
 SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

ESAI_ESAC_FK_I
 ESAC_ESA_SKEY
ESAI_PLY_FK_I
 PLY_POLYGON_SKEY
ESAI_SUBP_FK_I
 SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-26-11:40 sourced from:236464:392874 >>

06 MAY 97 - JRT - This is denormalized to allow storage of the FIP originated attributes. Since this is not a business area that MOF is responsible for, there is little value in any effort to model this data beyond its current form.

<< 1998-03-26-11:44 sourced from:236464:506674 >>

Table: FEATURE_CLASS_CODES*Description:*

A code that specifies the type of spatial feature being represented
 e.g. river, Forest Cover Polygon, Road). Feature Codes are assigned on
 a province-wide basis by the Data Administration Group of ISB.
 Feature Codes are assigned using the Canadian Council on Surveying
 and Mapping (CCSM) feature code specifications (as used by GDBC).

CCSM Feature Codes are 12 character alphanumeric strings in the form
 AANNNNNNNNNN. To facilitate storing Feature Codes in GIS files that
 can not handle alphanumeric keys, a Feature Code Number will be used
 to represent them. Each Feature Code will be assigned a Feature
 Number.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FEATURE_CODE_NUMBER A unique identifier assigned by ISP to represent a alphanumeric Feature Code to adapt to those GIS systems that can not handle such alpha codes.	NOT NULL	NUMBER(14,0)
<< 1998-03-26-17:12 sourced from:236464:345532 >>			
2	FEATURE_CODE A 12 character alphanumeric code assigned by Data Administration that uniquely identifies a type of spatial feature being represented e.g. river, lake, road, Forest Cover Polygon...	NOT NULL	VARCHAR2(12)
Feature Codes are unique on a province wide basis.			

Table: FEATURE_CLASS_CODES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-17:12 sourced from:236464:345748 >>		
3	DESCRIPTION << 1998-03-26-17:12 sourced from:236464:439843 >>	NULL	VARCHAR2(50)

Notes:

! 10 sept 96 - JRT - there are some other spatial definition attributes (e.g. line type, fill color, overlapping/non overlapping polygons, continuous/non continuous lines etc) that are not included in this definition as the attribute data only needs the feature code for cross reference between the spatila data source and the RDBMS.

<< 1998-03-26-17:12 sourced from:236464:345516 >>

Table: FEATURE_ID_NUMBER_CONTROLS*Description:*

These are the control numbers for each district and region that are used to generate the FEATURE NUMBER unique identifier for a new occurrence of a FEATURE CODE in that Organization Unit.

Each FEATURE NUMBER is concatenated from the Control ID number which is unique for each district/region and the Generated Number which is an increasing sequence number, beginning at 1, for that Feature Code within a Control Id.

Control Id's are assigned by the Data Administration Group of ISB.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FEATURE_CONTROL_SKEY The District/region id control number assigned by Data Administration to each District Region office that can create spatial objects.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-17:12 sourced from:236464:345975 >>			
2	CONTROL_SEQUENCE_NUMBER The next number to be assigned for a FEATURE CODE for an administration unit.	NOT NULL	NUMBER(20,0)

<< 1998-03-26-17:12 sourced from:236464:345976 >>

Table: FEATURE_ID_NUMBER_CONTROLS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	EFFECTIVE_DATE The calendar date indicating when use of a control id and control number began.	NOT NULL	DATE
<< 1998-03-26-17:12 sourced from:236464:345749 >>			
4	CREATE_DATE The calendar date timestamp when a record was created.	NOT NULL	DATE
<< 1998-03-26-17:12 sourced from:236464:345754 >>			
5	CREATE_USER_ID The Oracle user id of the person who created a record.	NOT NULL	VARCHAR2(30)
<< 1998-03-26-17:12 sourced from:236464:345755 >>			
6	EXPIRY_DATE The calendar date when a control id and control number ceased to be used.	NULL	DATE
<< 1998-03-26-17:12 sourced from:236464:345750 >>			
7	MODIFY_DATE The date timestamp when a record was last modified.	NULL	DATE
<< 1998-03-26-17:12 sourced from:236464:345756 >>			

Table: FEATURE_ID_NUMBER_CONTROLS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
8	MODIFY_USER_ID The Oracle userid of the person who originated the last change to a record.	NULL	VARCHAR2(30)

<< 1998-03-26-17:12 sourced from:236464:345757 >>

Notes:

! 10 sept 96 - JRT - a pre-insert trigger on the Vegetative Cover

Classification Table would use these control fields to generate the

Feature NUmber for the specific occurrence of a Vegetative COver

Polygon being inserted.

<< 1998-03-26-17:12 sourced from:236464:345522 >>

Table: FIELD_DATA_BIT_MAP_IMAGES*Description:*

The scanned image associated with an activity relating to sample measurement/data collection.

Currently, no operational system exists to capture this data, though there maybe one-off projects to capture this data.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	IMAGE_SKEY The surrogate identifier of a bit map image.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-15:02 sourced from:7003:344045 >>			
2	IMAGE_SUBJECT_TYPE The main subject/purpose for which the image was taken. Known examples are still photos taken and field sheets.	NOT NULL	VARCHAR2(10)
<< 1998-03-26-15:02 sourced from:7003:414974 >>			
3	BIT_MAP_IMAGE The bit map image.	NOT NULL	IMAGE
<< 1998-03-26-15:02 sourced from:7003:344046 >>			
4	FIELD_SHEET_SEQ_NUM A business assigned number to a field sheet. Optional, usually only a Field Sheet ID (a character based id) is assigned.	NULL	NUMBER(2,0)
<< 1998-03-26-15:02 sourced from:7003:414975 >>			
5	IMAGE_ACQUISITION_DATE	NULL	DATE

Table: FIELD_DATA_BIT_MAP_IMAGES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The date the image was aquired. For photograhs, it would be the same as the Measurement Date.		
	<< 1998-03-26-15:02 sourced from:7003:414976 >>		
6	PHOTO_DIRECTION_ANGLE	NULL	NUMBER(3,0)
	The azimuth bearing of the direction of the photograph. Usually a prescribed rule is followed, though it can differ.		
	<< 1998-03-26-15:02 sourced from:7003:414977 >>		
7	FIELD_SHEET_ID	NULL	VARCHAR2(10)
	The business field sheet identifier, often called the 'card type' from which the image was taken.		
	For example, Vegetation Inventory has 'EO', 'ET' 'TD' etc.		
	<< 1998-03-26-15:02 sourced from:7003:344059 >>		
9	CLELV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

BIT_CLELV_FK
 CLELV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY

Indexes:

BIT_CLELV_FK_I
 CLELV_CE_VISIT_SKEY

Notes:

<< 1998-03-26-15:02 sourced from:7003:344038 >>

Table: FIP_DAMAGE_AGENT_REDUNDANT_CDS*Description:*

The mapping of a FIP based damage agent to the equivalent FCAP damage agent code.

The Damage Agents are being converted for the purpose of removing redundancies. e.g. the values for the Douglas Fir Tussock Moth, ' 3', '03' will be converted to the Ministry standard value of 'IDT'. (The current FCAP version is deemed to be the Ministry standard, until such time as the Damage Agent codes are stabilized).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FIPDADC_SKEY Surrogate key for FIP Damage Agent Redundant Code.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-12:05 sourced from:236464:609140 >>			
2	ACTIVITY_CD A redundant ACTIVITY CODE.	NOT NULL	VARCHAR2(2)
<< 1998-03-26-12:05 sourced from:236464:578437 >>			
3	ACTIVITY_SUB_CD A redundant ACTIVITY SUB CODE.	NULL	VARCHAR2(3)
<< 1998-03-26-12:05 sourced from:236464:594988 >>			
4	LATIN_NAME The latin name of the Damage Agent.	NULL	VARCHAR2(50)
<< 1998-03-26-12:05 sourced from:236464:594989 >>			

Table: FIP_DAMAGE_AGENT_REDUNDANT_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	COMMON_NAME Common name of the FIP Damage Agent Code value.	NULL	VARCHAR2(50)

<< 1998-03-26-12:05 sourced from:236464:578438 >>

7	DAGNC_DAFV_SKEY	NOT NULL	NUMBER(7,0)
---	-----------------	----------	-------------

Unique Constraints:

FIPDACD_FIPDACD2_UK
ACTIVITY_CD
ACTIVITY_SUB_CD

Foreign Keys:

FIPDACD_DAGNC_FK
DAGNC_DAFV_SKEY = DAMAGE_AGENT_CDS_FCAP_VERSION.DAFV_SKEY

Indexes:

FIPDACD_DAGNC_FK_I
DAGNC_DAFV_SKEY

Notes:

<< 1998-03-26-12:05 sourced from:236464:578429 >>

Table: FIP_LAYER_LOAD_RULES*Description:*

A rule used in the conversion of an historical FIP based layer classification of a vegetated layer to the corresponding Vegetation Inventory based layer classification.

For example, if a veteran layer is present (i.e. layer type is 'V' in the FIP file), then convert the veteran layer to layer '1', layer '1' to layer '2', layer '2' to layer '3' etc..

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FIP_LAYER_LOAD_RULE_SKEY The surrogate identifier of a FIP LAYER LOAD RULE.	NOT NULL	NUMBER(7,0)
<< 1998-05-01-12:42 sourced from:236464:521290 >>			
2	FIP_STAND_LAYER_CD The unique business identification of a layer, or horizontal stratum, in a stand. Each layer is normally characterized as a distinct canopy containing a common forest cover structure with timber of similar ages and heights. Layers are assigned from the tallest layer downward.	NULL	VARCHAR2(1)
This set of values applies to the FIP file and differs from the proposed flat ASCII output file as described in the VEG FOREST COVER LAYER domain.			
<< 1998-05-01-12:42 sourced from:236464:521288 >>			
3	FIP_SECONDARY_ELEMENT_CD A code indicating that the stand has a secondary layer despite being described as having only one layer in the FIP file (i.e. only one	NULL	VARCHAR2(1)

Table: FIP_LAYER_LOAD_RULES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Layer Record). The code defines the "type" of secondary layer; for example, Veterans, Immature, etc. This code is only found on records collected (e.g. CC Card Source Records) prior to the present method of collecting and storing information by layer.		
	<< 1998-05-01-12:42 sourced from:236464:521289 >>		
4	VET_LAYER_PRESENT_INDICATOR	NULL	VARCHAR2(1)
	An indication of the existence or non-existence of a Veteran Layer record for the Polygon or the existence of a Veteran or Volume Secondary Element as defined on the Polygon Record.		
	A value of 'N' indicates that none of the previously mentioned conditions exist. A value of 'Y' indicates that at least one of the previously mentioned conditions exist. A value of '%' indicates that the absense/presence of the previously mentioned conditions has no bearing on the FIP LAYER LOAD RULE.		
	<< 1998-05-01-12:42 sourced from:236464:521293 >>		
6	LCD_LAYER_CLASS_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

FLLR_LCD_FK
 LCD_LAYER_CLASS_SKEY = LAYER_CLASSFN_DESCRIPTIONS.LAYER_CLASS_SKEY

Indexes:

FLLR_LCD_FK_I
 LCD_LAYER_CLASS_SKEY

Notes:

<< 1998-05-01-12:42 sourced from:236464:521280 >>

Table: FIP_REG_DIST_REDUNDANT_CDS*Description:*

The mapping of the FIP based Forest Region District codes to the Ministry standard Organization Unit Code (ORG UNIT).

The purpose is to rationalize codes for Forest Regions and Districts to a single standard.

For example, the FIP based code for the Chilliwack District is '31A' and is converted (by way of mapping) to 'DCK'.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	REGION_DISTRICT_SKEY The system assigned identifier of a redundant Forest Region or District Code. Assigned by sequence FOR_R_D_SEQ. << 1998-05-01-12:42 sourced from:236464:581856 >>	NOT NULL	NUMBER(7,0)
2	REGION_DISTRICT_CD The identifying (redundant) business code for a Forest Region or District. << 1998-05-01-12:42 sourced from:236464:581857 >>	NOT NULL	VARCHAR2(8)
3	REGION_DISTRICT_NAME The name of the Forest Region or District. << 1998-05-01-12:42 sourced from:236464:581858 >>	NULL	VARCHAR2(50)
5	AGENCY_AGENCY_SKEY	NOT NULL	NUMBER(7,0)

Table: FIP_REG_DIST_REDUNDANT_CDS (cont'd)*Unique Constraints:*

FRDRC_FRDRC2_UK
REGION_DISTRICT_CD

Foreign Keys:

FRDRC_AGENCY_FK
AGENCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY

Indexes:

FRDRC_AGENCY_FK_I
AGENCY_AGENCY_SKEY

Notes:

<< 1998-05-01-12:42 sourced from:236464:581848 >>

Table: FORAGE_PRODUCTION_MEASMTS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

The weight of forage, edible plant material utilized by animals, that is produced within a designated period of time on a given area.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FORAGE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
	System Generated UID from ORACLE sequence number		FORAGE_MEASMT_SEQ.

Table: FORAGE_PRODUCTION_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	OBSERVED_PLOT_FRACTION	NULL	NUMBER(3,2)
4	FORBS_COLLECTED_IND	NOT NULL	VARCHAR2(1)
	A confirmation that samples of forbs were collected in the field.		
	This is to ensure that later activities of oven drying and recording of the weight are trackable.		
	<< 1998-03-26-15:42 sourced from:7003:400003 >>		
5	GRAMINOIDS_COLLECTED_IND	NOT NULL	VARCHAR2(1)
	A confirmation that samples of graminoids were collected in the field.		
	This is to ensure that later activities of oven drying and recording of the weight are trackable.		
	<< 1998-03-26-15:42 sourced from:7003:400005 >>		
6	FORBS_DRY_WEIGHT	NULL	NUMBER(4,1)
	The oven dry weight, in grams, of the forbs collected from a forage plot.		
	Data is entered after field sampling and subsequent oven drying.		
	<< 1998-03-26-15:42 sourced from:7003:223210 >>		
7	GRAMINOIDS_DRY_WEIGHT	NULL	NUMBER(4,1)
	The oven dry weight, in grams, of the graminoids collected from a forage plot.		
	Data is entered after field sampling and subsequent oven drying.		

Table: FORAGE_PRODUCTION_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-15:42 sourced from:7003:223211 >>		
8	GRAZING_UTILIZATION_CD << 1998-03-26-15:42 sourced from:7003:223220 >>	NULL	VARCHAR2(6)
10	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
12	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

FPM_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
FPM_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

Indexes:

FPM_CEV_FK_I
CEV_CE_VISIT_SKEY
FPM_GTO_FK_I
GTO_GROUP_TAXON_SKEY

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-15:42 sourced from:7003:222559 >>

Table: FORAGE_UTILIZATION_CDS*Description:*

A codified series of classes that describe the amount of grazing of herbaceous cover.

Load values from the vegetation inventory sampling manual, Table 9.1, March 31, 1997.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FORAGE_UTILZN_CLASS_CD The numeric code to of a class of forage utilization. Values are 0 to 5.	NOT NULL	NUMBER(2,0)
<< 1998-03-26-15:42 sourced from:7003:400018 >>			
2	MIN_UTILIZATION_PCT The minimum bound of the percentage applied to the observation of grazed forage.	NOT NULL	NUMBER(3,0)
<< 1998-03-26-15:42 sourced from:7003:400021 >>			
3	CLASS The assigned name of the class of forage utilization. Valid values are: Nil, Slight, Light, Moderate, Heavy, and Extreme.	NULL	VARCHAR2(6)
<< 1998-03-26-15:42 sourced from:7003:400019 >>			
4	DESCRIPTION The description of forage utilization. (From the table of the Sample Manual).	NULL	VARCHAR2(256)

Table: FORAGE_UTILIZATION_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-15:42 sourced from:7003:400020 >>		
5	MAX_UTILIZATION_PCT The maximum bound of the percentage applied to the observation of grazed forage.	NULL	NUMBER(3,0)

<< 1998-03-26-15:42 sourced from:7003:400022 >>

Notes:

<< 1998-03-26-15:42 sourced from:7003:400012 >>

Table: FORAGE_UTILIZATION_ASSMTS*Description:*

The observation of forage utilization in each of the 4 micro-plots in
Vegetation Ground Samples per Page 9-4 of the sampling procedures
manual.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FPM_FORAGE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
* 2	PLOT_NUMBER	NOT NULL	NUMBER(2,0)

The plot number (1-4 are valid entries) where the observation was
made.

<< 1998-03-26-15:42 sourced from:7003:557429 >>

4	FUC_FORAGE_UTILZN_CLASS_CD	NOT NULL	NUMBER(2,0)
---	----------------------------	----------	-------------

Foreign Keys:

FUA_FPM_FK
FPM_FORAGE_MEASMT_SKEY = FORAGE_PRODUCTION_MEASMTS.FORAGE_MEASMT_SKEY
FUA_FUC_FK
FUC_FORAGE_UTILZN_CLASS_CD = FORAGE_UTILIZATION_CDS.FORAGE_UTILZN_CLASS_CD

Indexes:

FUA_FPM_FK_I
FPM_FORAGE_MEASMT_SKEY
FUA_FUC_FK_I
FUC_FORAGE_UTILZN_CLASS_CD

Notes:

<< 1998-03-26-15:42 sourced from:7003:557423 >>

Table: FREQUENCY_COUNTS*Description:*

For selected sub-populations of trees, (typically small trees on small fixed area plots), a frequency count by species and diameter class. Also known by the name 'Dot Count' on account of the paper-bound method of collecting this data, though no dots were ever counted, but only used as an aid in tallying.

The group of assessments on a plot cluster at a visitation (e.g. location and time) which are observed or measured on biophysical objects or object groups other than individual trees (TREE MEASUREMENTS).

This entity includes tree species by diameter class and frequency count, as this represents groups of trees. Other assessments that would be included are:

ecosystem description,
site features,
succession interpretations,
vegetation layer assessments,
range vegetation measurements,
forage production measurements and
coarse woody debris measurements.

A! as an analysis note, this is a purely logical entity, as this entity serves to inherit a single relationship to the plant species table (GROUP TAXONOMIC MEMBERSHIP) for all the nested subtypes (above). The TREE MEASUREMENT subtype differs in that it inherits its relationship to GROUP TAXONOMIC MEMBERSHIP through TREE, which can be re-identified and measured on many occasions over time (i.e. VISITATIONS).

Table: FREQUENCY_COUNTS (cont'd)*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FREQ_CNT_SKEY << 1998-03-27-13:05 sourced from:346868:347421 >>	NOT NULL	NUMBER(7,0)
2	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
3	CREATE_DATE The date of creation of the record.	NOT NULL	DATE
4	TREE_COUNT	NOT NULL	NUMBER(4,0)

Table: FREQUENCY_COUNTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The count, also called 'dot count' or frequency of the tree belonging to a species and a diameter class.		

<< 1998-03-27-13:05 sourced from:346868:346982 >>

5	MODIFY_DATE	NULL	DATE
6	MODIFY_USER_ID	NULL	VARCHAR2(30)
8	INTCL_INTERVAL_CLASS_SKEY	NOT NULL	NUMBER(7,0)
14	GTO_GROUP_TAXON_SKEY	NOT NULL	NUMBER(7,0)
16	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

FRQCNT_CEV_FK
 CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
 FRQCNT_GTO_FK
 GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
 FRQCNT_INTCL_FK
 INTCL_INTERVAL_CLASS_SKEY = INTERVAL_CLASSES.INTERVAL_CLASS_SKEY

Indexes:

FRQCNT_CEV_FK_I
 CEV_CE_VISIT_SKEY
 FRQCNT_GTO_FK_I
 GTO_GROUP_TAXON_SKEY
 FRQCNT_INTCL_FK_I
 INTCL_INTERVAL_CLASS_SKEY

Notes:

<< 1998-03-27-13:05 sourced from:346868:346732 >>

<< 1998-03-26-10:24 sourced from:346868:348631 >>

Table: GIS_RESULTANTS*Description:*

Resultant Records calculated by the GIS system for various themes and areas which bisect the VEGETATION POLYGON.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	RESULTANT_SKEY The system generated surrogate identifier of a resultant.	NOT NULL	NUMBER(14,0)
<< 1998-03-26-17:13 sourced from:236464:441259 >>			
2	RESULTANT_ID Th business identifir for each of the resultant polygons in a polygonn. The resultant numbers are generated during overlay processing.	NOT NULL	NUMBER(6,0)
<< 1998-03-26-17:13 sourced from:236464:432504 >>			
3	RESULT_AREA The area of the resultant polygon. The resultant area is determined during Overlay Processing. Resultant areas within a polygon must add to the entire polygon area.	NOT NULL	NUMBER(10,3)
<< 1998-03-26-17:13 sourced from:236464:432508 >>			
4	UTM_2000_M_GRID_ID The numeric identifier of the 2000 x 2000 meter UTM grid that occurs within a 6' x 12' mapsheet. For a biven 6' x 12' mapsheet the grid maybe partial or a full 400 ha.	NULL	NUMBER(8,0)

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>The Grid Number is defined by the first 3 numbers of the easting, and first 4 numbers on the northing of the south west corner of the grid.</p> <p>Grid origin is on even 2000 metre UTM positions. Partial grids maybe identified by coordinates that are outside the mapsheet.</p> <p>For example, a value of 5266048 implies that the easting has a value of 526 and a northing of 6048.</p> <p><< 1998-03-26-17:13 sourced from:236464:432502 >></p>		
5	UTM_2000_M_GRID_AREA	NULL	NUMBER(6,2)
	<p>The area of a 2000 meter x 2000 meter grid that would occur within a 6' x 12' mapsheet.</p> <p>The highest value of 410 ha. reflects the business practise of incorporating adjoining 'slivers' with larger grids. (Slivers are small geographic areas usually created by overlayment of near coincident lines).</p> <p><< 1998-03-26-17:13 sourced from:236464:432503 >></p>		
6	OVERLAY_CREATE_DATE	NULL	DATE
	<p>The date Overlay Processing was completed. This process involves overlaying levels contained in the Graphics Design File with the Forest Cover Map (levels 9 and 10) to create resultant polygons.</p> <p>Maps to FIP attribute, UPDATE DATE.</p> <p><< 1998-03-26-17:13 sourced from:236464:432505 >></p>		

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
7	ROAD_AREA Area in the polygon that is removed from the Productive Forest Land Base due to the presence of roads within the polygon.	NULL	NUMBER(8,2)

<< 1998-03-26-17:13 sourced from:236464:432514 >>

8	FISH_AREA The area in the polygon that is removed from the Productive Forest Land Base because it is used to protect fish habitat. This area is usually a buffer area along waterways.	NULL	NUMBER(8,2)
---	---	------	-------------

<< 1998-03-26-17:13 sourced from:236464:432515 >>

9	ALR_PRESENCE_CD The FIP based indication, with additional meaning, of the presence of a Agricultural Land Reserve (ALR) portion.	NULL	NUMBER(2)
---	---	------	-----------

Values are:

00 meaning no ALR

01 meaning unreported ALR

88 meaning ALR present.

The Agricultural Land Reserve designation(s) that fall within the forest cover polygon. Agricultural Land Reserves (ALR) are areas designated as having a high agricultural value. An ALR designation does not preclude the management of the land for forest production. These

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>Reserves are defined under Sections 1 and 8 of the Agricultural Land Commission Act.</i> <i><< 1998-03-26-17:13 sourced from:236464:432523 >></i>		
10	REC_MGMNT_CD The Recreation Management Code describes the recommended objectives for guiding preharvest prescriptions in cutblock approval. These objectives result from analyses, management objectives, or approved prescriptions. Numeric values permitted only, dashes converted to null. <i><< 1998-03-26-17:13 sourced from:236464:432572 >></i>	NULL	VARCHAR2(2)
11	PROV_FOREST_PRESENCE_IND 1 character subcode designating inclusions/exclusions within a Provincial Forest. <i><< 1998-03-26-17:13 sourced from:236464:549506 >></i>	NULL	VARCHAR2(1)
12	REC_FEATURE_CD The Recreation Feature(s) that fall within the polygon. This code describes the biophysical, visual or cultural features, and subfeatures, of the area. Typical features include Aquatic, Beaches, Hydrologic Features, Vegetation, Waterfalls and Rapids, Glaciers and Icefields, Landforms, Waterbody, Topographic Features, Rock Formations, Springs, etc. Subfeatures are used to further define the feature. For example, the Springs Feature can be subdivided into Thermal Springs (S1), Freshwater Springs (S2) and Mineral	NULL	VARCHAR2(6)

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>Springs (S3). This attribute can contain up to 3 of the most important features in the resultant.</p> <p><i>July 3, 1997</i></p> <p><i>This attribute is directly populated from information in the FIP file and has not been normalized as it is currently being revisited by Recreation Branch (the custodian).</i></p> <p><i><< 1998-03-26-17:13 sourced from:236464:432573 >></i></p>		
13	<p>REC_ACTIVITY_CD</p> <p>The Recreation Activity Code describes the existing or potential recreational use for the land based on its Recreational Features. For example, a Recreation Feature of "Waterbody" could have a Recreational Activity of angling, canoeing, etc.</p> <p><i>July 3, 1997</i></p> <p><i>This attribute is directly populated from information in the FIP file and has not been normalized as it is currently being revisited by Recreation Branch (the custodian).</i></p> <p><i><< 1998-03-26-17:13 sourced from:236464:432574 >></i></p>	NULL	VARCHAR2(3)
14	<p>REC_FEATURE_SIG</p> <p>The significance of recreational features within the polygon. The Recreation Feature Significance is a code describing the ability of the Recreational Feature to attract recreation, educational, or scientific users. The code is based on a 4 point rating scale.</p> <p><i><< 1998-03-26-17:13 sourced from:236464:432575 >></i></p>	NULL	VARCHAR2(1)

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
15	<p>REC_MGMNT_CLASS_CD</p> <p>The Recreation Management Class indicates whether commonly accepted (i.e. normal) local management practices can provide adequate protection to the recreational values within the polygon. For example, areas with outstanding recreational value may be more appropriately managed exclusively for the purposes of recreation and not in conjunction with forest management practices.</p> <p><< 1998-03-26-17:13 sourced from:236464:432577 >></p>	NULL	VARCHAR2(1)
16	<p>REC_ROS</p> <p>The Recreation Opportunity Spectrum contains seven categories that describe the opportunity for users to access and experience the recreational values in the area (e.g. primitive, road access, rural, etc.).</p> <p><< 1998-03-26-17:13 sourced from:236464:432578 >></p>	NULL	NUMBER(1)
17	<p>PLANNING_CELL</p> <p>A unit of land created for the purposes of forest management and planning purposes. Planning areas are usually delineated along heights of land and administrative boundaries are typically created or modified in advance of a Timber Supply analysis. From the forest inventory perspective, a common purpose is to serve as a more localized unit of data summary.</p> <p><< 1998-03-26-17:13 sourced from:236464:432533 >></p>	NULL	VARCHAR2(4)
18	ELEVATION_100M_CLASS	NULL	NUMBER(3,0)

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The mean elevation above sea level grouped into a class of one hundred metre increments.		
	Formally, based on the FIP Dictionary, it was thought that this attribute was the actual elevation value. Found to be not true.		
	<< 1998-03-26-17:13 sourced from:236464:432541 >>		
19	SLOPE_10_PCT_CLASS The slope, grouped into classes of 10 percent.	NULL	NUMBER(2,0)
	Class 0 is 0 to 10 percent		
	2 is 11 to 20 percent		
	3 is 21 to 30 percent		
	4 is 31 to 40 percent		
	5 is 41 to 50 percent		
	6 is 51 to 60 percent		
	7 is 61 to 70 percent		
	7 is 71 to 80 percent		
	8 is 81 to 90 percent		
	9 is 91 to 100 percent		
	Formally, as per the FIP Dictionary, this attribute was thought to be the actual slope value, but has been later found to be a class.		
	<< 1998-03-26-17:13 sourced from:236464:432542 >>		
20	ASPECT_CLASS The direction a slope faces, classed into 8 partitioned ranges of the	NULL	NUMBER(1,0)

Table: GIS_RESULTANTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	0 to 360 azimuth.		
	Level ground has no aspect, hence the value of null, with the ASPECT LEVEL IND set to 'Y'.		
	<< 1998-03-26-17:13 sourced from:236464:432543 >>		
21	ASPECT_LEVEL_IND Indicates whether or not the land area is determined as level.	NULL	VARCHAR2(1)
	'Y' means level (having no aspect, or a minimal slope(<2%) under the current Vegetation Inventory standard.		
	'N' means not level with an expected accompanying azimuth bearing to denote the slope (>2%).		
	Replaces the various semantically overloaded conventions for no aspect (level ground), e.g. 0, dashes, 99 etc. Identical attribution to the Vegetation Inventory sample database implementation (not shared).		
	<< 1998-03-26-17:13 sourced from:236464:569138 >>		
23	PLY_POLYGON_SKEY	NOT NULL	NUMBER(14,0)
25	RUC_RANGE_UNIT_CD_SKEY	NULL	NUMBER(7,0)
27	BGZC_BGC_SKEY	NULL	NUMBER(7,0)
29	SRU_STOCK_SKEY	NULL	NUMBER(7,0)
31	OC_OWNERSHIP_CD_SKEY	NULL	NUMBER(7,0)
33	PFC_PROVINCIAL_FOREST_SKEY	NULL	NUMBER(7,0)
35	OAC_OPERABILITY_SKEY	NULL	NUMBER(7,0)
37	TFLC_TFL_SKEY	NULL	NUMBER(7,0)
39	TSA_TSA_NUM	NULL	VARCHAR2(3)
43	AGNCY_AGENCY_SKEY	NULL	NUMBER(7,0)
45	RCLVC_RCL_AREA_VALIDN_SKEY	NULL	NUMBER(7,0)
47	RFA_RFA_SKEY	NULL	NUMBER(7,0)
50	TSB_BLOCK	NULL	VARCHAR2(1)
51	TSB_TSA_TSA_NUM	NULL	VARCHAR2(3)

Table: GIS_RESULTANTS (cont'd)*Foreign Keys:*

RSLT_AGENCY_FK
 AGENCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY
 RSLT_BGZC_FK
 BGZC_BGC_SKEY = BGC_ZONAL_CLASSFN_CDS.BGC_SKEY
 RSLT_OAC_FK
 OAC_OPERABILITY_SKEY = OPERABLE_AREA_CDS.OPERABILITY_SKEY
 RSLT_OC_FK
 OC_OWNERSHIP_CD_SKEY = OWNERSHIP_CDS.OWNERSHIP_CD_SKEY
 RSLT_PFC_FK
 PFC_PROVINCIAL_FOREST_SKEY = PROVINCIAL_FOREST_CDS.PROVINCIAL_FOREST_SKEY
 RSLT_PLY_FK
 PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY
 RSLT_RCLVC_FK
 RCLVC_RCL_AREA_VALIDN_SKEY = VGIS_RCL_AREA_VALIDN_CODES.RCL_AREA_VALIDN_SKEY
 RSLT_RFA_FK
 RFA_RFA_SKEY = REGULATED_FOREST_AREAS.RFA_SKEY
 RSLT_RUC_FK
 RUC_RANGE_UNIT_CD_SKEY = RANGE_UNIT_CDS.RANGE_UNIT_CD_SKEY
 RSLT_SRU_FK
 SRU_STOCK_SKEY = STOCK_RANGE_UNITS.STOCK_SKEY
 RSLT_TFLC_FK
 TFLC_TFL_SKEY = TFL_CODES.TFL_SKEY
 RSLT_TSA_FK
 TSA_TSA_NUM = TSA_NUMBER_CODES.TSA_NUM
 RSLT_TSB_FK
 TSB_BLOCK = TSB_NUMBER_CODES.BLOCK
 TSB_TSA_TSA_NUM = TSB_NUMBER_CODES.TSA_TSA_NUM

Indexes:

RSLT_AGENCY_FK_I
 AGENCY_AGENCY_SKEY
 RSLT_BGZC_FK_I
 BGZC_BGC_SKEY
 RSLT_OAC_FK_I
 OAC_OPERABILITY_SKEY
 RSLT_OC_FK_I
 OC_OWNERSHIP_CD_SKEY
 RSLT_PFC_FK_I
 PFC_PROVINCIAL_FOREST_SKEY
 RSLT_PLY_FK_I
 PLY_POLYGON_SKEY
 RSLT_RCLVC_FK_I
 RCLVC_RCL_AREA_VALIDN_SKEY
 RSLT_RFA_FK_I
 RFA_RFA_SKEY
 RSLT_RUC_FK_I
 RUC_RANGE_UNIT_CD_SKEY
 RSLT_SRU_FK_I
 SRU_STOCK_SKEY
 RSLT_TFLC_FK_I
 TFLC_TFL_SKEY
 RSLT_TSA_FK_I
 TSA_TSA_NUM
 RSLT_TSB_FK_I
 TSB_BLOCK
 TSB_TSA_TSA_NUM

Notes:

<< 1998-03-26-17:13 sourced from:236464:392913 >>

Table: GIS_RESULTANTS (cont'd)*Notes:*

Table: GPS_FILES*Description:*

An digital file in which Global Positioning System data is stored. The file is collected with a GPS reciever and is captured in a raw (uncorrected) state. Subsequent modification is usually applied to correct coordinates of the point feature.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	GPS_FILE_SKEY	NOT NULL	NUMBER(7,0)
2	FILE_TYPE_CD	NOT NULL	VARCHAR2(5)
	The type of file which contains the GPS coordinates.		
	There is usually a sequence of raw coordinates collected in the field, followed by their differential correction. Optionally the corrected coordinates could be modified for expected improvements of precision.		
	<i>Source! The file type will come from the file extension as per the convention of the Vegetation Inventory Sample data collection practice.</i>		
	<< 1998-03-26-15:44 sourced from:7003:235024 >>		
3	FILE_NAME	NOT NULL	VARCHAR2(10)
	The name of the GPS source file. The convention of the file name is follows:		
	pos. 1 crew identifier		
	pos. 2-3 month of data capture		
	pos. 4-5 day of data capture		
	pos. 6-7 hour of data capture		
	pos. 8 file identifier		

Table: GPS_FILES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The extension of the file name is used to also designate raw or corrected data; modified data is not identified by extension name.		
	The extension is not stored in FILE NAME; it is stored as a FILE TYPE.		
	<< 1998-03-26-15:44 sourced from:7003:235030 >>		
4	DATA_FILE The file as generated by GPS data capture or subsequent processing.	NOT NULL	IMAGE
	<< 1998-03-26-15:44 sourced from:7003:235031 >>		
5	BASE_STATION_NAME The name of the GPS base station that provides the data for the differential correction of the coordinates.	NULL	VARCHAR2(10)
	<< 1998-03-26-15:44 sourced from:7003:235060 >>		
6	FIX_STD_DEVIATION The standard deviation of the 'fixes' of the GPS measurements. This provides a measure of quality of the GPS measurement.	NULL	NUMBER(6,2)
	<< 1998-03-26-15:44 sourced from:7003:235059 >>		
7	FIX_NUM The number of GPS measurements from individual satellites over the duration of GPS measurement.	NULL	NUMBER(3,0)

Table: GPS_FILES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u> Known as 'fixes'.	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-15:44 sourced from:7003:235058 >>			
8	TO_POINT_OFFSET_BRG Where the GPS measurements cannot be taken at the point feature, the measurements are taken at an alternative point (offset). The bearing is taken from GPS location to the point feature.	NULL	NUMBER(3,0)
<< 1998-03-26-15:44 sourced from:7003:235057 >>			
9	TO_POINT_OFFSET_HOR_DIST Where the GPS measurements cannot be taken at the point feature, the measurements are taken at an alternative point (offset). The horizontal distance between the GPS measurement offset and the POINT FEATURE.	NULL	NUMBER(3,1)
<< 1998-03-26-15:44 sourced from:7003:235053 >>			
11	CLELV_CE_VISIT_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

GF_CLELV_FK
CLELV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY

Indexes:

GF_CLELV_FK_I
CLELV_CE_VISIT_SKEY

Notes:

<< 1998-03-26-15:44 sourced from:7003:235018 >>

Table: GPS_FILES (cont'd)*Notes:*

Table: GRAPHICS_FILE_VERSIONS*Description:*

The electronic file of the graphic data (e.g. neatlines, polygon boundaries etc.) of a 6' x 12' BCGS mapsheet. Typically these are stored in IGDS (Intergraph Design File) format.

It should be noted that a graphics file will (often) contain the full complement of levels (themes) even though there is no intrinsic collected data about that theme. That is, the default is the creation of a level, even though there is no business data to satisfy the various downstream data processing activities. Hence the occurrence of a Default Value (Theme Version.Default Value Presence Ind) is intended to signify the occurrence, though it may not represent the entire level being set to a default value.

Successive versions will be released upon update to the data covered in the geographic extent of the mapsheet (either graphically or attributively).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	GRAPHICS_FILE_SKEY The surrogate identifier of the graphics file version.	NOT NULL	NUMBER(7,0)
System generated UID from an Oracle sequence number, GRAPH FILE SEQ.			
<< 1998-03-25-16:59 sourced from:416792:432454 >>			
2	MCMP_MAP_COMP_SKEY	NOT NULL	NUMBER(7,0)
3	SERIAL_VERSION_NUM The number simultaneously assigned to a graphics file and its associated text file for the purpose of uniquely identifying a version.	NOT NULL	NUMBER(4,0)

Table: GRAPHICS_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

This attribute is one of three components of the compound business key, file 'Serial Number'. The three components in their commonly used order are:

Mapsheet Id (BCGS 6x12 MAPSHEET ID)

SERIAL NUM DATE

SERIAL VERSION NUM.

The SERIAL VERSION NUM is assigned at the time of creation of the 'resultants', (forest cover polygons bisected by multiple themes in the '.EDI file) and their integration with the text file.

It should be noted that despite the intention of this attribute contributing to the business key identifier, SERIAL VERSION NUM appears to be of limited usefulness. Firstly, the Mapsheet Id and the SERIAL NUM DATE (above) provide all the unique identification required, and secondly, the Object Distribution Management system (ODM) creates a version number based on checking in/out for data maintenance that is independently assigned. This confusion, borne of a disconnected activities, causes loss of integrity for business use.

No other business meaning such as release, revision date, processing date is inferred.

<< 1998-03-25-16:59 sourced from:416792:420137 >>

4	ODM_OBJECT_STATE_CD	NOT NULL	VARCHAR2(3)
	The status of the electronic file with respect to update and revision as supplied from the Object Distribution Management system.		

Table: GRAPHICS_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-25-16:59 sourced from:416792:421312 >>		
5	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492775 >>	NOT NULL	DATE
6	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492777 >>	NOT NULL	VARCHAR2(30)
7	DISK_FARM_CREATE_DATE The date the file was created on the disk farm which may be different from either the Release Date and the Serial Num Date. << 1998-03-25-16:59 sourced from:416792:444971 >>	NULL	DATE
8	SERIAL_NUM_DATE The date simultaneously assigned to a graphics file and its associated text file for the purpose of uniquely identifying a version. In this entity, it is sourced from a graphics file (FC1). This attribute is one of three components of the compound business key, file 'Serial Number'. The three components in their commonly used order are: Mapsheet Id (BCGS 6x12 MAPSHEET ID) SERIAL NUM DATE SERIAL VERSION NUM. The SERIAL NUM DATE is assigned at the time of creation of the 'resultants', (forest cover polygons bisected by multiple themes in the '.EDI file) and their integration with the text file. Assignment	NULL	DATE

Table: GRAPHICS_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	is made by a controlled process on a secure, multiuser system, and therefore, the date retains integrity unlike those sourced from the stand-alone PC systems.		
	Also known as GRAPHICS CREATION DATE in the FIP file, though a misnomer.		
	It is planned that this be retrieved from the title block of the electronic mapsheet and be compared to the 'REFERENCE YEAR' in the FIP text file. The expectation is that these two dates be the same or close, and if not, it will be supplied by parsing part of the Serial Num.		
	<< 1998-03-25-16:59 sourced from:416792:420143 >>		
9	LEVEL_62_NAD_DATUM_YR The year in which the version of the North American Datum was released as sourced from the neatline level, #62, of the mapsheet.	NULL	VARCHAR2(4)
	Any value is permitted, which will be validated against a rule.		
	<< 1998-03-25-16:59 sourced from:416792:447619 >>		
10	TITLE_BLOCK_NAD_DATUM_YR The year in which the version of the North American Datum was released sourced from the title block of the mapsheet.	NULL	VARCHAR2(4)
	Any value is permitted, which will be validated against a rule.		
	<< 1998-03-25-16:59 sourced from:416792:420138 >>		

Table: GRAPHICS_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
11	TITLE_BLOCK_UTM_ZONE A longitudinal grid zone, representing 6 degrees of the earth's coverage, which a 6 x12 minute mapsheet falls within as sourced from the title block of the graphics file version. The UTM zone serves to provide bounds on the earth's surface which is projected to a flat surface for mapping. Any value is permitted, which will be validated against a rule. << 1998-03-25-16:59 sourced from:416792:447620 >>	NULL	VARCHAR2(2)
12	NON_TFL_AND_NON_TSA_COVERAGE_P The coverage of non-Timber Supply Area and non Tree Farm Licence area in a graphics file. This represents a summary of a number of Themes (levels) and cannot be directly attributed to a individual themes. Examples of areas that would be included are; Alberta, saltwater (sometimes it is thought), and excluded tenures. << 1998-03-25-16:59 sourced from:416792:492445 >>	NULL	NUMBER(3,0)
13	NAD_TRANSFORMATION_METHOD_CD The method by which the mapsheet is transformed from the 1927 North American Datum (NAD) to the to the 1983 NAD. (No other datums are known at this time). Known examples of transformation methods are: monorestitution and the National (Canadian) Transformation algorithm.	NULL	VARCHAR2(5)

Table: GRAPHICS_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-25-16:59 sourced from:416792:420139 >>		
14	MAPSHEET_AREA The derived area, in hectares, of the mapsheet. This may change by version of mapsheet to accomodate a new datum in a later version.	NULL	NUMBER(8,3)
	<< 1998-03-25-16:59 sourced from:416792:420140 >>		
15	FORMAT_TYPE The format of the graphics file as stored. The only known format is the FC1 file, though other software is in use that creates different formats.	NULL	VARCHAR2(5)
	<< 1998-03-25-16:59 sourced from:416792:420141 >>		
16	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492776 >>	NULL	DATE
17	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492778 >>	NULL	VARCHAR2(30)

Unique Constraints:

GRFV_GRFV2_UK
 MCMP_MAP_COMP_SKEY
 SERIAL_VERSION_NUM
 SERIAL_NUM_DATE

Foreign Keys:

GRFV_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY

Indexes:

GRFV_MCMP_FK_I
 MCMP_MAP_COMP_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418206 >>

Table: GRAPHICS_FILE_VERSIONS (cont'd)*Notes:*

Table: GRAPHICS_TEXT_FILE_PAIRS*Description:*

The association of an electronic mapsheet graphics file version and a central text data file that contains the descriptive information (e.g. forest cover in the form of the FIP file). Pairing is explicitly made by the respective 'Serial Numbers' of each member.

(The serial number being a compound key made of the Serial Num Date and the Serial Version Num.

As graphics files and text (FIP) files are processed, the pairing takes place as the last activity before release by way of ODM. There is no inherent business attribution known.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	GRFV_GRAPHICS_FILE_SKEY	NOT NULL	NUMBER(7,0)
* 2	TFV_TEXT_FILE_SKEY	NOT NULL	NUMBER(7,0)
3	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492779 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492781 >>	NOT NULL	VARCHAR2(30)
5	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492780 >>	NULL	DATE
6	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492782 >>	NULL	VARCHAR2(30)

Foreign Keys:

GTP_GRFV_FK
GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_FILE_VERSIONS.GRAPHICS_FILE_SKEY

Table: GRAPHICS_TEXT_FILE_PAIRS (cont'd)*Foreign Keys:*

GTP_TFV_FK

TFV_TEXT_FILE_SKEY = TEXT_FILE_VERSIONS.TEXT_FILE_SKEY

Indexes:

GTP_GRFV_FK_I

GRFV_GRAPHICS_FILE_SKEY

GTP_TFV_FK_I

TFV_TEXT_FILE_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418260 >>

Table: GROUP_TAXON_MEMBERSHIPS*Description:*

The period for which the group of species is defined. The same group may include different tree species over time.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	SGDEF_SPP_GROUP_SKEY	NOT NULL	NUMBER(7,0)
* 2	GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
<i>NB: changed to optional to accomodate the situation where a there is an unknown member of the 'TREE' group (short code of 'X').</i>			
<i>jh, 98-12-12-15</i>			
3	LONG_CD	NOT NULL	VARCHAR2(8)
The long code which identifies the combination of the species group and the point in the taxonomic hierarchy.			
This attribute is created to support codes that the group is known, but the point in the taxonomic hierarchy is only known at a level to be too general. For eample: an unknown Herb and an Unknown shrub both exist at the same level in the taxonomic hierarchy as seeded plants but have different groups.			
Since the business has a tendency to work in culturally defined groups (Trees, Shrubs, Herbs, ...), this attribute provides the facility to be specific on a cultural group (eg Shrub) while remaining general on the point int he taxonomic hierarchy (something with seeds).			
4	SHORT_CD	NULL	VARCHAR2(4)
The shortcode which identifies the combination of the species group			

Table: GROUP_TAXON_MEMBERSHIPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

	and different points in the taxonomic hierarchy.		
--	--	--	--

This attribute is created to support codes that the group is known, but the point in the taxonomic hierarchy is only known at a level to be too general. For example: an unknown Tree and an Unknown Shrub both exist at the same level in the taxonomic hierarchy as seeded plants but have different groups.

Since the business has a tendency to work in culturally defined groups (Trees, Shrubs, Herbs, ...), this attribute provides the facility to be specific on a cultural group (eg Shrub) while remaining general on the point in the taxonomic hierarchy (something with seeds).

Since short codes are currently used exclusively for trees, this attribute is used to provide Tree codes at varying points in the Taxonomic Hierarchy. For example Xc, representing a plant belonging to the group TREE at the taxonomic Class Coniferea (i.e. an unknown Coniferous tree).

5	SEQUENCE_ORDER	NULL	NUMBER(4,0)
	The order of the species within a group. This was added to accommodate the inclusion of the Inventory Type Group where there is an explicit order to the tree species. For example, the Inventory Type Group, number 2, Fir Hemlock, infers an order that the Douglas-Fir must occur first (i.e. is predominant).		

Table: GROUP_TAXON_MEMBERSHIPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
6	<p>MINIMUM_PCT</p> <p>The minimum percentage of coverage, volume etc. that a species must have to define a group.</p> <p>This was added to accomodate the inclusion of the Inventory Type Group characteristics. For example, Inventory Type Group 1, must be 80% Douglas Fir.</p> <p><< 1998-03-26-17:15 sourced from:236464:776570 >></p>	NULL	NUMBER(3,0)
7	<p>EFFECTIVE_DATE</p> <p>The inclusive date after which the taxonomy or species can be considered a member in the group. This attribute facilitates the transition of the movement from one species group to another over time.</p> <p>The classic example is the continuing debate over whether a Willow is considered a Tree or a Shrub i.e. is a member in the culturally defined group TREE or curturally defined group SHRUB. For VRI Ground Sampling 97, it was considered a Tree; for 98 it is to be considered a Shrub.</p> <p>Further anticipated uses are: species move from report groups as species requirements become more granular over time; log grade groups are broken down further or imalgimated for a particular year but with the requirement to support the old years data as well; etc.</p> <p>A null value indicates no minimum date restriction for use in the group membership.</p>	NULL	DATE

Table: GROUP_TAXON_MEMBERSHIPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
8	<p>EXPIRY_DATE</p> <p>The inclusive date before which the taxonomy or species can be considered a member in the group. This attribute facilitates the transition of the movement from one species group to another over time.</p> <p>The classic example is the continuing debate over whether a Willow is considered a Tree or a Shrub i.e. is a member in the culturally defined group TREE or culturally defined group SHRUB. For VRI Ground Sampling 97, it was considered a Tree; for 98 it is to be considered a Shrub.</p> <p>Further anticipated uses are: species move from report groups as species requirements become more granular over time; log grade groups are broken down further or imalgimated for a particular year but with the requirement to support the old years data as well; etc.</p> <p>A null value indicates no maximum date restriction for use in the group membership.</p>	NULL	DATE
9	<p>TAXC_BOTANICALLY_IDENTIFIED_BY</p> <p><< 1998-03-26-17:27 sourced from:236464:325446 >></p>	NOT NULL	NUMBER(7,0)
10	TAXC_TAXONOMIC_CD_SKEY	NULL	NUMBER(7,0)

Unique Constraints:

GTO_GTO2_UK
 TAXC_BOTANICALLY_IDENTIFIED_BY
 TAXC_TAXONOMIC_CD_SKEY
 SGDEF_SPP_GROUP_SKEY
 LONG_CD

Foreign Keys:

GTO_SGDEF_FK
 SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY
 GTO_TAXC_FK
 TAXC_BOTANICALLY_IDENTIFIED_BY = TAXONOMIC_NAMES.TAXONOMIC_CD_SKEY

Table: GROUP_TAXON_MEMBERSHIPS (cont'd)*Indexes:*

GTO_SGDEF_FK_I
SGDEF_SPP_GROUP_SKEY
GTO_TAXC_FK_I
TAXC_TAXONOMIC_CD_SKEY
GTO_TAXC_FK_I_1
TAXC_BOTANICALLY_IDENTIFIED_BY

Notes:

<< 1998-03-26-17:14 sourced from:236464:325491 >>

Table: HEIGHT_CLASSES*Description:*

The standard Resouce Inventory Branch height class code and the bounds for its determination. It is expected that this would be the rule table from which a height class is derived, as it is proposed that Tree Layer specific age class data will not be stored.

As analysed, this is a stand-alone rule table and has no relationships.

Populate the values from the FIP Dictionary, p 3-102.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	HEIGHT_CLASS_SKEY The surrogate identifier of a Height Class.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-17:15 sourced from:236464:508536 >>			
2	HEIGHT_CLASS_CD Th business assigned code for a height range.	NOT NULL	NUMBER(2)
<< 1998-03-26-17:15 sourced from:236464:508537 >>			
3	MIN_HEIGHT_BND The minimum bound of the height class.	NOT NULL	NUMBER(3,1)
<< 1998-03-26-17:15 sourced from:236464:508538 >>			
4	MAX_HEIGHT_BND The maximum bound of the height class.	NULL	NUMBER(3,1)
<< 1998-03-26-17:15 sourced from:236464:508539 >>			

Table: HEIGHT_CLASSES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
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Notes:

<< 1998-03-26-17:15 sourced from:236464:508530 >>

Table: HT_ASSMTS*Description:*

Measurement, estimations and derivations of tree height. In the field a sub-sample of trees are selected for measurement and are generally used for two purposes:

- to derive a height-diameter coefficient set for the common species of the sample unit; and
- to provide a statistical estimate of the mean of the main component of the layer.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	HT_ASSMT_SKEY << 1998-03-27-13:10 sourced from:346868:583685 >>	NOT NULL	NUMBER(7,0)
2	POSITION_CD The position on the tree the height is measured to (from the tree's germination point). << 1998-03-27-13:10 sourced from:346868:583680 >>	NOT NULL	VARCHAR2(3)
3	CREATE_USER_ID << 1998-03-27-13:10 sourced from:346868:583681 >>	NOT NULL	VARCHAR2(30)
4	CREATE_DATE << 1998-03-27-13:10 sourced from:346868:583682 >>	NOT NULL	DATE
5	HEIGHT The total tree height, in metres, as measured, estimated, or derived.	NOT NULL	NUMBER(4,2)

A! Can be measured, estimated or fitted.

Estimated: HH: if TM_HEIGHT & DIAM1_3 >= 2.0

SEF: if CT4:30-32 & CT4:33 = "E"

Table: HT_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>Measured: HH: if TM_HEIGHT & DIAM1_3 is BLANK</i>		
	<i>SEF: use CT4:33 HEIGHT SOURCE</i>		
	<< 1998-03-27-13:10 sourced from:346868:583673 >>		
6	REPRES_IND An indicator to denote if the TOTAL TREE HEIGHT is representative of the tree population of the sample or experimental unit. Tree heights that are not representative will not be included in the derivation of the height-diameter regression for the species of the sample. <i>SEF_C Default = "Y"</i> <i>A? Review CT5:33 Height/Diameter</i> << 1998-03-27-13:10 sourced from:346868:583674 >>	NOT NULL	VARCHAR2(1)
7	ASSMT_QUAL_CD A qualifier of the collection method and respective precision of the tree height data. << 1998-03-27-13:10 sourced from:346868:583678 >>	NOT NULL	VARCHAR2(10)
8	MODIFY_USER_ID << 1998-03-27-13:10 sourced from:346868:583683 >>	NULL	VARCHAR2(30)
9	MODIFY_DATE << 1998-03-27-13:10 sourced from:346868:583684 >>	NULL	DATE
11	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

HTASM_TRMEA_FK
 TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

HTASM_TRMEA_FK_I

Table: HT_ASSMTS (cont'd)*Indexes:*

TRMEA_TREE_MEASMT_SKEY

Notes:

03 sep 97 JRT

- this entity was copied from HT ASSMT and modified.

<< 1998-03-27-13:10 sourced from:346868:583672 >>

Table: HT_STATISTICAL_ESTIMATES*Description:*

Statistical estimates of TREE height like minimum, maximum, mean, variance to characterize LAYER SPECIES COMPOSITION based on a HT SELECTION METHOD.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	HT_STATISTICAL_SKEY << 1998-03-27-12:46 sourced from:346868:347378 >>	NOT NULL	NUMBER(7,0)
2	LYSPC_LAYER_SPP_SKEY	NOT NULL	NUMBER(7,0)
3	HT_POPLTN_CD The group (sub-population) and relative preference of tree heights in the sample or experiment plot used in the derivation of mean height (STAT MEAN). This represents both field collection standards and post-processing activities. Examples of tree height subpopulations for calculation of mean height are: - field collected heights only, - both field collected heights and fitted heights; where a field collected height is accorded preference if both exist on the same tree, - fitted heights only.	NOT NULL	VARCHAR2(5)

Also note that the sub-population of tree heights is also subject to a method of selection (HT SELECTION METHOD). Typically all field collected (or fitted) tree heights are not used in the calculation of the mean height. The purpose of deriving mean height, as it is currently practised, is to characterize the main canopy, (usually larger) trees. Therefore, suppressed and intermediate canopy level tree heights, collected for the purpose of obtaining a less variable height-diameter curve fitting, would be excluded in the calculation of mean height as applied by the

Table: HT_STATISTICAL_ESTIMATES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	HT SELECTION METHOD.		
	<< 1998-03-27-12:46 sourced from:346868:347303 >>		
4	STAT_MEAN The average tree height used to characterize the species and the layer to which it belongs.	NOT NULL	NUMBER(4,2)
	<< 1998-03-27-12:46 sourced from:346868:347022 >>		
5	DATE_OF_CALC The date on which the height was calculated.	NOT NULL	DATE
	<< 1998-03-27-12:46 sourced from:346868:347024 >>		
6	SEL_SELECTION_SKEY	NULL	NUMBER(7,0)
7	STAT_MIN The minimum height of the selected trees to characterize a layer and species.	NULL	NUMBER(4,2)
	<< 1998-03-27-12:46 sourced from:346868:347020 >>		
8	STAT_MAX The maximum height of the selected trees to characterize a layer and species.	NULL	NUMBER(4,2)
	<< 1998-03-27-12:46 sourced from:346868:347021 >>		
9	STAT_VARIANCE The variance of tree heights for representative selected trees to characterize the layer and species.	NULL	NUMBER(6,4)

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-12:46 sourced from:346868:347023 >>		
10	HT_MID_POINT_IND An indicator to denote that the average height that characterize the sample are based on class mid points rather than the statistical summary of the individual trees. This is applicable to the now remeasured Inventory standard temporary inventory samples (TSP's) where the aggregation of trees by age and height class was a common processing technique.	NULL	VARCHAR2(1)
	SEF_S CT1:66 AGE HEIGHT MIDPT		
	SEF_C Blank = 'N', 'M' = 'Y'		
	A! Not on HH; default = 'N'		
	<< 1998-03-27-12:46 sourced from:346868:347111 >>		

```

HTSTE_LYSPC_FK
    LYSPC_LAYER_SPP_SKEY = LAYER_SPECIES_COMPOSITIONS.LAYER_SPP_SKEY
HTSTE_SEL_FK
    SEL_SELECTION_SKEY = SELECTION_METHODS.SELECTION_SKEY

```

```
HTSTE_LYSPC_FK_I
  LYSPC_LAYER_SPP_SKEY
HTSTE_SEL_FK_I
  SEL_SELECTION_SKEY
```

<< 1998-03-27-12:46 sourced from:346868:347019 >>

Table: INSTALLATIONS*Description:*

A group of experimental units (plots), belonging to the implementation of an experiment. The plots are usually placed in close geographic proximity within a stand.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INSTN_SKEY The surrogate identifier for an installation.	NOT NULL	NUMBER(7,0)
<< 1998-03-25-16:02 sourced from:346868:347014 >>			
2	MEASMT_STATUS_CD The status with respect to whether a plot, sample, or grouping of them in a project, subproject or installation, will be considered for further measurements.	NOT NULL	VARCHAR2(3)
<< 1998-03-25-16:02 sourced from:346868:347131 >>			
3	INSTN_ID The business identifier for an installation,	NOT NULL	VARCHAR2(3)
<< 1998-03-25-16:02 sourced from:346868:347013 >>			
4	CMT Any textual comments for which no specific data standard has been defined for the installation.	NULL	VARCHAR2(256)
<< 1998-03-25-16:02 sourced from:346868:347012 >>			
5	NAME The name, usually geographic in nature, commonly used to refer to the	NULL	VARCHAR2(25)

Table: INSTALLATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	installation.		

<< 1998-03-25-16:02 sourced from:346868:347015 >>

Notes:

<< 1998-03-25-16:02 sourced from:346868:347011 >>

Table: INTERVAL_CLASSES*Description:*

A discrete range of diameters, heights, site indexes, ages or other tree or stand features that are classified for data aggregation purposes.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INTERVAL_CLASS_SKEY Identifier used to uniquely identify the Interval Class that the particular interval belongs to.	NOT NULL	NUMBER(7,0)
<p>This is to uniquely identify the Interval Class to the system. For example, the Imperial DBH Class is DiamClassCd=1, while the Metric DBH Class is DiamClassCd=2, and the Dead Tree Tally - Metric DBH Class is DiamClassCd=3. The 'Class Interval' attribute cannot be used for this purpose since it may not be unique (i.e. a future Diameter Class may have the same Class Interval); in addition, the so-called 'Class Interval' actually varies from interval to interval (within the same Class).</p> <p><< 1998-03-27-11:10 sourced from:346868:346941 >></p>			
2	CLASS_ID The business identifier of the diameter class. This same identifier may be applied to many differing sets of diameter classes.	NOT NULL	VARCHAR2(5)
<p><< 1998-03-27-11:10 sourced from:346868:346967 >></p>			
3	LO_BND Lower bound for this interval. Note that there is no units associated	NOT NULL	NUMBER(5,2)

Table: INTERVAL_CLASSES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	with this value because the lower bound could be metric or imperial. In addition, the Interval Class may be for a diameter measurement or a height measurement (as indicated by the TREE FEATURE) .		
	<< 1998-03-27-11:10 sourced from:346868:346939 >>		
4	UP_BND Upper bound for this interval. Note that there is no units associated with this value because the lower bound could be metric or imperial. In addition, the Interval Class may be for a diameter measurement or as height measurement.	NOT NULL	NUMBER(5,2)
	<< 1998-03-27-11:10 sourced from:346868:346940 >>		
5	LO_BND_TREE_FEATURE The explicit representation of the tree characteristic to which the class applies. This is to accomodate 'diameter' classes which are based on tree height as a upper or lower class bound, -the only known example is the Growth and Yield so-called 'Metric DBH Classes' which have a height based class id of '0'.	NULL	VARCHAR2(2)
	<< 1998-03-27-11:10 sourced from:346868:346972 >>		
6	UP_BND_TREE_FEATURE The tree characteristic to which the upper bound of the class applies. This is to accomodate 'diameter' classes which are based on tree height as a upper or lower class bound, -the only known example is the Growth and Yield so-called 'Metric DBH Classes' which have a height based class id of '0'.	NULL	VARCHAR2(2)

Table: INTERVAL_CLASSES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
8	CIG_CLASS_INTERVAL_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

INTCL_CIG_FK
CIG_CLASS_INTERVAL_SKEY = CLASS_INTERVAL_GROUPS.CLASS_INTERVAL_SKEY

Indexes:

INTCL_CIG_FK_I
CIG_CLASS_INTERVAL_SKEY

Notes:

<< 1998-03-27-11:10 sourced from:346868:346936 >>

Table: INVENTORY_PATHOLOGIES*Description:*

The assessment of tree using a method common to the Inventory Branch pathology. This system of pathological description divides the tree into equal thirds; combinations of thirds of a given pathological defect are assigned a unique code.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
2	BLIND_CONC_THIRD_CD The code to denote the combination of tree thirds for BLIND CONC.	NOT NULL	VARCHAR2(1)
3	CONC_THIRD_CD The code to denote the combination of tree thirds for CONC.	NOT NULL	VARCHAR2(1)
4	DEAD_BRKN_TOP_THIRD_CD The code to denote the combination of tree thirds for DEAD or BROKEN TOPs.	NOT NULL	VARCHAR2(1)
5	FORK_CROOK_THIRD_CD The code to denote the combination of tree thirds for FORKS AND CROOKS.	NOT NULL	VARCHAR2(1)
6	FROST_CRACK_THIRD_CD The code to denote the combination of tree thirds for FROST CRACKS.	NOT NULL	VARCHAR2(1)
7	MISTLETOE_THIRD_CD The code to denote the combination of tree thirds for MISTLETOE.	NOT NULL	VARCHAR2(1)
8	ROTTEN_BRANCH_THIRD_CD The code to denote the combination of tree thirds for ROTTEN BRANCHs.	NOT NULL	VARCHAR2(1)
9	SCAR_THIRD_CD The code to denote the combination of tree thirds for SCARS.	NOT NULL	VARCHAR2(1)

Table: INVENTORY_PATHOLOGIES (cont'd)*Foreign Keys:*

INVPT_TRMEA_FK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

INVPT_TRMEA_FK_I
TRMEA_TREE_MEASMT_SKEY

Table: INV_TYPE_GROUP_SPECIES_COMP*Description:*

Relationship between Inventory Type Group Number and Species

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	GTO_GROUP_TAXON_SKEY	NOT NULL	NUMBER(7,0)
* 3	INVENTORY_TYPE_GROUP_NUMBER	NOT NULL	NUMBER(3,0)

Foreign Keys:

ITGSC_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

Indexes:

ITGSC_GTO_FK_I
GTO_GROUP_TAXON_SKEY

Table: LAND_COVER_COMPONENT_INTRPRTNS*Description:*

The collected data of the activity of interpretation, usually with the aid of aerial photography, of a land area delineated as a POLYGON.

The following types of interpretations are shown as subtypes;

TREE LAYERS

NON VEGETATION

NON TREE VEGETATION

Land Cover Components

The interpretation and classification of homogenous portions of a polygon. These portions would be uniquely described if a greater spatial resolution were applied.

Definition Source: p.4-2, PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INTERP_SKEY System generated UID for all subtypes.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-11:40 sourced from:236464:421327 >>

2	LAND_COVER_OCCURENCE_SEQ_NUM The supplied sequence of the Land Cover Classification interpretations. The sequence is generated from the order of the supplied non-blank attributes.	NOT NULL	NUMBER(1)
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Definition Source: JH, not a supplied attribute

Table: LAND_COVER_COMPONENT_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>A_S! generate from supplied order of non blank values on VRI Att. (entry) Form</i>		
	<< 1998-03-26-11:41 sourced from:236464:249309 >>		
3	COVER_PCT	NOT NULL	NUMBER(3)
	The estimation of the amount the polygon is occupied by a separable Lanc Cover Component. The sub-division of a polygon by a quantified Land Cover Component allows a higher degree spatial resolution for modelling wildlife habitat capability. Generally, sizes under 10% would not be estimated. Definition Source: p. 4-6, PIP <i>A! rule needed to enure a single polygon adds to 100%</i> <i>A! need a 'OTHER' category as foriegn key from BC LAND CLASSIFICATION</i> <i>CD for LEVEL NUM 4 (to handle the col. 36-37 occurence)</i> <i>A_S! col. 22-24, 28-29, 33-34, 36-37</i> << 1998-03-26-11:41 sourced from:236464:249308 >>		
4	CREATE_DATE	NOT NULL	DATE
	The date the interpretation was made. << 1998-03-26-11:40 sourced from:236464:569090 >>		

Table: LAND_COVER_COMPONENT_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	CREATE_USER_ID The system user id of the person that made the interpretation.	NOT NULL	VARCHAR2(30)
	<< 1998-03-26-11:40 sourced from:236464:569091 >>		
6	DATA_SOURCE_REFERENCE_DATE The date of the source data on which the interpretation is based. Known as the 'Reference Year' in the FIP file.	NULL	DATE
	<< 1998-03-26-11:40 sourced from:236464:508613 >>		
7	DATA_SOURCE_CD The source of the data that contributed to the determination of the classification description as per the specifications of the Photo Intrepretation Procedures, Vegetation Inventory. All values taken from Table 3-1, PIP This list of values is similar, but not identical to the FIP DATA SOURCE which will be used to validate the FIP file prior to loading. Non-conforming FIP DATA SOURCE values will be converted to the VEGETATION DATA SOURCE values on load to the Vegetative Cover database.	NULL	NUMBER(2)
	<< 1998-03-26-11:40 sourced from:236464:507409 >>		
8	SOIL_MOISTURE_REGIME The average amount of soil water annually available for evapotranspiration by vascular plants averaged over many years.	NULL	VARCHAR2(1)

Table: LAND_COVER_COMPONENT_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Soil Moisture Regime is an intrepreative attribute for estimation of site potential and site series classification.		
	Definition Source: p. 4-7, PIP		
	<i>A! use domain HYGROTOPE when made shareable</i>		
	<i>A_S! col. 25, 30, 35 of VRI Att. (entry) Form</i>		
	<i><< 1998-03-26-11:41 sourced from:236464:249310 >></i>		
9	MODIFY_DATE The date the interpretation was modified.	NULL	DATE
	<i><< 1998-03-26-11:40 sourced from:236464:569092 >></i>		
10	MODIFY_USER_ID The system user id of the person who modified the interpretation.	NULL	VARCHAR2(30)
	<i><< 1998-03-26-11:40 sourced from:236464:569094 >></i>		
11	INTERPRETATION_DATE The date when the interpretation was done.	NULL	DATE
	This may be different than the date a FIP file was updated or the date the computer records were actually processed.		
	<i><< 1998-03-26-11:40 sourced from:236464:569165 >></i>		
12	DATA_ENTRY_DATE The date the interpretation was entered into an off-line electronic	NULL	DATE

Table: LAND_COVER_COMPONENT_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
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	storage source file. Sourced from the FIP attribute, INPUT DATE of the Polygon record.		
--	--	--	--

This attribute would be redundant if there was on-line access to the Vegetative Cover database, as the audit field, CREATE DATE, would satisfy this requirement.

The current and planned technical architecture allows for entry into an intermediary local subset data file, either FIP or VIF, using the FCAP or replacement data entry tool. The FCAP application inserts a local (client) system date into the INPUT DATE, though the integrity is suspect because the local date can be modified by the user.

<< 1998-03-26-11:40 sourced from:236464:578391 >>

14	LCC_CLASS_CODE_SKEY	NOT NULL	NUMBER(7,0)
16	PLY_POLYGON_SKEY	NOT NULL	NUMBER(14,0)
18	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

LCCO_LCC_FK
 LCC_CLASS_CODE_SKEY = BC_LAND_COVER_CLASS_CDS.CLASS_CODE_SKEY
 LCCO_PLY_FK
 PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY
 LCCO_SUBP_FK
 SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

LCCO_LCC_FK_I
 LCC_CLASS_CODE_SKEY
 LCCO_PLY_FK_I
 PLY_POLYGON_SKEY
 LCCO_SUBP_FK_I
 SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-26-11:40 sourced from:236464:392874 >>

<< 1998-03-26-11:41 sourced from:236464:243572 >>

Table: LAND_COVER_COMPONENT_INTRPRTNS (cont'd)*Notes:*

Table: LAYER_CLASSFN_DESCRIPTIONS*Description:*

The criteria and description, and by way of relationship in ROLE ASSOCIATION, the owner of the classification of a vertical stratum of a vegetated land unit.

This entity reflects the several methods of classification within the Resource Inventory Branch, and in addition other practises of layer definitions e.g. Silviculture and Research.

This entity is an abstraction of the typical layer identifier which is used by the business. This entity serves to store the attribute name and value of a layer and was found necessary on account of many varying definitions over time. The retention of the layer definitions in FIP is for historic purposes only; it is intended that all FIP based layer identifiers be converted to the Vegetative Cover top down sequential number scheme.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LAYER_CLASS_SKEY	NOT NULL	NUMBER(7,0)
	The system generated surrogate identifier of a Layer Classification Scheme.		

<< 1998-03-26-17:16 sourced from:236464:508250 >>

2	EFFECTIVE_DATE	NOT NULL	DATE
	The date the definition of the layer became effective.		

For FIP, there are two known effective dates:

Table: LAYER_CLASSFN_DESCRIPTIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	1954-01-01		
	1978-01-01		
	For VEG, the known effective date is:		
	1995-01-01		
	<< 1998-03-26-17:16 sourced from:236464:508252 >>		
3	BUSINESS_IDENTIFIER_VALUE	NOT NULL	VARCHAR2(4)
	The business assigned permissible identifier of the interpreted tree layers within an polygon. This varies according to the CLASSIFICATION STANDARD.		
	Examples for FIP based CLASSIFICATION STANDARD would be:		
	1, 2, 3, 4, V, VETS, VOLS, SEED, IMMAT		
	Examples for VEG base CLASSIFICATION STANDARD would be:		
	1,2,3		
	<< 1998-03-26-17:16 sourced from:236464:508254 >>		
4	LAYER_ATTRIBUTE_NAME	NOT NULL	VARCHAR2(25)
	The business assigned name of the layer attribute: the inclusion of this attribute is to explicitly represent the differing implied meaning of 'Layer'. This attribute can be considered to be a short form of the DESCRIPTION.		

Table: LAYER_CLASSFN_DESCRIPTIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	This varies according to the data custodian (relationship to ORG UNIT), the type of resource inventory initiative, and the specification at the time.		
	All known Resource Inventory Branch examples are:		
	LAYER SEQUENCE NUM, applicable to Vegetation Inventory only, where layers are numbered in sequence from the tallest mean height to lowest		
	LAYER ID, applicable to the forest inventory standard, as encased by the FIP file		
	SECONDARY CC LAYER, applicable to the forest inventory, as encased by the FIP file, which included the provision of a layer, though with minimal information, but did not explicitly represent as a layer record		
	SILVICULTURE LAYER, applicable to the forest inventory, as encased by the FIP file, which exists only to reflect a differing (summarized and/or generalized) definition of the vegetated land unit.		
	<< 1998-03-26-17:16 sourced from:236464:508436 >>		
5	EXPIRY_DATE The date the definition of the layer expired.	NULL	DATE
	For FIP, there are two known expiry dates:		
	1978-01-01		
	1995-01-01		

Table: LAYER_CLASSFN_DESCRIPTIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	For VEG (Vegetation Inventory) there has been only one definition that remains in effect, hence no stored value.		
	<< 1998-03-26-17:16 sourced from:236464:508253 >>		
6	DESCRIPTION	NULL	VARCHAR2(75)
	The description, or specification text that prescribes the definition of a layer.		
	For example, in the case of Vegetation Inventory the distinction is based on visual differences, whereas 'Vets' for example have a crown closure maximum, and 'Vols' have a minimum volume per hectare.		
	<< 1998-03-26-17:16 sourced from:236464:508255 >>		
8	LCD_LAYER_CLASS_SKEY	NULL	NUMBER(7,0)
10	DES_DESIGN_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

LCD_DES_FK
DES_DESIGN_SKEY = DESIGN_SPECIFICATIONS.DESIGN_SKEY
LCD_LCD_FK
LCD_LAYER_CLASS_SKEY = LAYER_CLASSFN_DESCRIPTIONS.LAYER_CLASS_SKEY

Indexes:

LCD_DES_FK_I
DES_DESIGN_SKEY
LCD_LCD_FK_I
LCD_LAYER_CLASS_SKEY

Notes:

<< 1998-03-26-17:16 sourced from:236464:508241 >>

Table: LAYER_FOREST_COVER_ASSMTS*Description:*

An assessment of the horizontal stratum or layer of trees in a plant community
(LAYER FOREST COVER) made at the time of measuring the sample or experimental plot (MEASMT VISITATION).

This currently fits with the Inventory Branch classification scheme of forest stands so to reduce the variability as applied to forest stands.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LAYER_F_CVR_SKEY << 1998-03-27-12:47 sourced from:346868:347419 >>	NOT NULL	NUMBER(7,0)
2	CREATE_USER_ID << 1998-03-27-12:47 sourced from:346868:347379 >>	NOT NULL	VARCHAR2(30)
3	CREATE_DATE << 1998-03-27-12:47 sourced from:346868:347380 >>	NOT NULL	DATE
4	PRIMARY_LAYER_IND An indicator that deems the marked LAYER to be the most important from the perspective of the next forest crop. Y indicates that this is the PRIMARY LAYER N indicated that this is NOT the PRIMARY LAYER Only one of the identified layers can be marked as the PRIMARY LAYER. Sucessor to the use of numerically identifying the PRIMARY LAYER as	NOT NULL	VARCHAR2(1)

Table: LAYER_FOREST_COVER_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	done in the source SEF file.		
	<i>HH93_S SP_MEAS_SM_PRI_LYR</i>		
	<i>HH93_C Blank to '1'</i>		
	<i>SEF_S CT1:33 PRIMARY LAYER</i>		
	<i>SEF_C Blank to '1'</i>		
	<i>A! For next iteration, change to INDICATOR type (Y/N), mandatory, and enforce rule that only one of the layers at each measurement is set to</i>		
	<i>'Y'; (J.H. July 22, 1994)</i>		
	<i>Above change made by JRT on 25-apr-96</i>		
	<i><< 1998-03-27-12:47 sourced from:346868:346734 >></i>		
5	MODIFY_USER_ID <i><< 1998-03-27-12:47 sourced from:346868:347381 >></i>	NULL	VARCHAR2(30)
6	MODIFY_DATE <i><< 1998-03-27-12:47 sourced from:346868:347382 >></i>	NULL	DATE
7	SPECIAL_SITE_CLASS_CD A code for the class of stand (or layer) productivity used when the true growing capacity of the stand is masked by external agents or a high degree of variability of heights and ages (typically younger or disturbed stands). <i><< 1998-03-27-12:47 sourced from:346868:347065 >></i>	NULL	VARCHAR2(1)
8	SPECIAL_SITE_INDEX A quantitative measure of site productivity based on mean age and	NULL	NUMBER(4,2)

Table: LAYER_FOREST_COVER_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	height. The 'special' prefix applies to stand growing conditions are masked by external agents or by a high degree of variability of heights and ages (typically young or disturbed stands).		
	<< 1998-03-27-12:47 sourced from:346868:347066 >>		
9	CROWN_CLOSURE_AIR The percentage of ground area covered by the vertically projected tree crown area as estimated from aerial photographs.	NULL	NUMBER(3,0)
	HH93_S SP_MEAS_SM_L1_AIR, ...L2		
	SEF_S CT3:68-70 CROWN CLOSURE AIR %		
	<< 1998-03-27-12:47 sourced from:346868:346735 >>		
10	CROWN_CLOSURE_GROUND The percentage of ground area covered by the vertically projected tree crown areas as estimated in the field.	NULL	NUMBER(3,0)
	HH93_S SP_MEAS_SM_L1_GRND, ...L2		
	SEF_S CT3:45-47 CROWN CLOSURE GROOUND %		
	<< 1998-03-27-12:47 sourced from:346868:346736 >>		
11	STEMS_PER_HA A field estimate of the number of trees contained in the sample or pl ot, converted to a unit per hectare basis as retained on the Standard Edit File, CT3 pos. 48:52. This should be replaced by a derived attri bute determined for each species in LAYER SPECIES COMPOSITION,	NULL	NUMBER(10,4)

Table: LAYER_FOREST_COVER_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-27-12:47 sourced from:346868:347109 >>			
13	MEAVT_MEASMT_VISIT_SKEY	NOT NULL	NUMBER(7,0)
17	LFCAS_LAYER_F_CVR_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

LFCAS_LFCAS_FK
LFCAS_LAYER_F_CVR_SKEY = LAYER_FOREST_COVER_ASSMTS.LAYER_F_CVR_SKEY
LFCAS_MEAVT_FK
MEAVT_MEASMT_VISIT_SKEY = MEASMT_VISITATIONS.MEASMT_VISIT_SKEY

Indexes:

LFCAS_LFCAS_FK_I
LFCAS_LAYER_F_CVR_SKEY
LFCAS_MEAVT_FK_I
MEAVT_MEASMT_VISIT_SKEY

Notes:

<< 1998-03-27-12:47 sourced from:346868:346733 >>

Table: LAYER_SPECIES_COMPOSITIONS*Description:*

A summarization of the measurements and assessments for a real investigation unit for the species associated with a layer at the time of measurement.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LAYER_SPP_SKEY << 1998-03-27-12:47 sourced from:346868:347198 >>	NOT NULL	NUMBER(7,0)
2	LFCAS_LAYER_F_CVR_SKEY	NOT NULL	NUMBER(7,0)
3	GTO_GROUP_TAXON_SKEY	NOT NULL	NUMBER(7,0)
4	LIVE_DEAD_COND_CD The extent condition that applies to the tree selection used for calculating species composition. << 1998-03-27-12:47 sourced from:346868:347005 >>	NULL	VARCHAR2(4)
5	MAX_DBH For the purposes of calculating the layer specied composton, the maximum diameter below which trees were included reflecting potential subplot/main plot separation. This may never be utilized as it would make more sense to calculate the species composition of the entire sample / experimental plot from all individual trees and apply per hectare factor based on the plot the tree belongs to. << 1998-03-27-12:47 sourced from:346868:347122 >>	NULL	NUMBER(4,1)
6	MIN_DBH For the purposes of calculating the layer specied composton, the minimum diameter above which trees were included reflecting potential subp	NULL	NUMBER(4,1)

Table: LAYER_SPECIES_COMPOSITIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	lot/main plot separation. This may never be utilized as it would make more sense to calculate the species composition of the entire sample / experimental plot from all individual trees and apply per hectare factor based on the plot the tree belongs to.		
	<< 1998-03-27-12:47 sourced from:346868:347041 >>		
7	WILSON_SPACING_FTR An index of stand density using Wilson's spacing formulas. A lower number indicates a denser sample. The algorithms are: $((\text{square root of } 10,000 / \text{number stems per ha}) / \text{top height}) * 100$	NULL	NUMBER(7,1)
	Note: That the Wilson's Spacing Factor is a type of quantification of stand density, also known as 'relative density.'		
	<< 1998-03-27-12:47 sourced from:346868:347107 >>		
8	BASAL_AREA The aggregate area total of tree diameters, converted to a square metres basis.	NULL	NUMBER(7,4)
	<< 1998-03-27-12:47 sourced from:346868:347042 >>		
9	BASAL_AREA_PER_HA The aggregate area total of tree diameter, converted to a square metres / unit hectare basis.	NULL	NUMBER(8,4)

Table: LAYER_SPECIES_COMPOSITIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-12:47 sourced from:346868:347043 >>		
10	BASAL_AREA_PCT The relative species percentage based on basal area.	NULL	NUMBER(3,0)
	<< 1998-03-27-12:47 sourced from:346868:347044 >>		
11	QUADRATIC_MEAN_DIAM The mean diameter weighted by stand density.	NULL	NUMBER(4,1)
	<< 1998-03-27-12:47 sourced from:346868:347045 >>		

Foreign Keys:

LYSPC_GTO_FK
 GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
 LYSPC_LFCAS_FK
 LFCAS_LAYER_F_CVR_SKEY = LAYER_FOREST_COVER_ASSMTS.LAYER_F_CVR_SKEY

Indexes:

LYSPC_GTO_FK_I
 GTO_GROUP_TAXON_SKEY
 LYSPC_LFCAS_FK_I
 LFCAS_LAYER_F_CVR_SKEY

Notes:

A? Scope adjustment for required derived values; many of the
 attributes will be kept and possibly derivation routines be
 written. May want to add Variance of mean age and mean height.

<< 1998-03-27-12:47 sourced from:346868:346911 >>

Table: LOG_ASSESSMENTS*Description:*

The assignment of a class of potential wood quality to a portion of a tree used for developing local quality estimates for timber.

The 'logs', or figurative sectioning of the tree, are variable length, and permit the assessment for maximum quality above a minimum length.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	LOG_ASSMT_SKEY System generated UID from Oracle sequence LOG_ASSMT_SEQ.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-15:49 sourced from:7003:568927 >>

2	SEQ_NUM The sequence of the call grades from tree bottom. This is the sequence as supplied on the field sheet, Vegetation Inventory card, TD.	NOT NULL	NUMBER(2,0)
---	--	----------	-------------

<< 1998-03-26-15:49 sourced from:7003:233023 >>

3	LENGTH The estimated length of the log of a specific grade.	NOT NULL	NUMBER(3,1)
---	--	----------	-------------

<< 1998-03-26-15:49 sourced from:7003:233021 >>

4	SOUND_PCT The estimated percentage of sound wood the log contains.	NOT NULL	NUMBER(3,0)
---	---	----------	-------------

Table: LOG_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-15:49 sourced from:7003:233022 >>			
5	LAST_LOG_IND An indicator that shows if this is the last or top log cur from the tree. A 'Y' value indicates it is the last or top log, 'N' indicates it is not.	NOT NULL	VARCHAR2(1)

<< 1998-03-26-15:49 sourced from:7003:539968 >>

7	LGC_LOG_GRADE_SKEY	NULL	NUMBER(7,0)
9	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

LGO_LGC_FK
LGC_LOG_GRADE_SKEY = SPECIES_GRADE_CDS.LOG_GRADE_SKEY
LGO_TRMEA_FK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

LGO_LGC_FK_I
LGC_LOG_GRADE_SKEY
LGO_TRMEA_FK_I
TRMEA_TREE_MEASMT_SKEY

Notes:

<< 1998-03-26-15:49 sourced from:7003:230613 >>

Table: MAPSHEET_COMPONENTS*Description:*

A cartographic coverage with a value, which together with other coverages and their values, make up a BCGS mapsheet identification.

For example, BCGS 6 x 12 mapsheet, '082E098' is made up of the following components:

082, the NTS Number block,
E, the NTS letter block and
098, the BCGS 6' x 12' coverage.

This construct allows for the insertion of other converages as they may occur in the business.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MAP_COMP_SKEY << 1998-03-25-16:59 sourced from:416792:608047 >>	NOT NULL	NUMBER(7,0)
2	COMPONENT_VALUE << 1998-03-25-16:59 sourced from:416792:608081 >>	NOT NULL	VARCHAR2(8)
3	UTM_ZONE_ACTUAL << 1998-03-25-16:59 sourced from:416792:613359 >>	NULL	NUMBER(2,0)
4	UTM_ZONE_USED << 1998-03-25-16:59 sourced from:416792:613496 >>	NULL	NUMBER(2,0)
6	MCTYP_MAP_COMP_TYPE_SKEY	NOT NULL	NUMBER(7,0)
8	MCMP_MAP_COMP_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

MCMP_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY
 MCMP_MCTYP_FK
 MCTYP_MAP_COMP_TYPE_SKEY = MAPSHEET_COMPONENT_TYPES.MAP_COMP_TYPE_SKEY

Table: MAPSHEET_COMPONENTS (cont'd)*Indexes:*

MCMP_MCMP_FK_I
MCMP_MAP_COMP_SKEY
MCMP_MCTYP_FK_I
MCTYP_MAP_COMP_TYPE_SKEY

Notes:

A BCGS mapsheet identification is made up of a UTM Zone, a Number

Block, a Letter Block, and a BCGS Identification Number.

<< 1998-03-25-16:59 sourced from:416792:608024 >>

Table: MAPSHEET_COMPONENT_TYPES*Description:*

a classification of the various components that make up a BCGS
 mapsheet identification.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MAP_COMP_TYPE_SKEY << 1998-03-25-16:43 sourced from:416792:613185 >>	NOT NULL	NUMBER(7,0)
2	DESCRIPTION << 1998-03-25-16:43 sourced from:416792:613187 >>	NOT NULL	VARCHAR2(25)
4	MCTYP_MAP_COMP_TYPE_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

MCTYP_MCTYP_FK
 MCTYP_MAP_COMP_TYPE_SKEY = MAPSHEET_COMPONENT_TYPES.MAP_COMP_TYPE_SKEY

Indexes:

MCTYP_MCTYP_FK_I
 MCTYP_MAP_COMP_TYPE_SKEY

Notes:

A mapsheet component type can be one of the following: a UTM Zone, a
 Number Block, a Letter Block, or a BCGS Identification Number.

A Number Block contains Letter Blocks. A Letter Block contains BCGS
 Identification Numbers.

<< 1998-03-25-16:43 sourced from:416792:613168 >>

Table: MAP_UPDATE_ACTIVITIES*Description:*

The event of an initiative, in the form of a Inventory Contract or a Inventory Project (in house), that updates a selected group of maps, and thereby creates a new (higher) file version.

An associative entity to reflect many mapsheets to many initiatives.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MAP_UPDATE_SKEY System generated UID from ORACLE sequence map update seq.	NOT NULL	NUMBER(7,0)
	<< 1998-03-25-16:58 sourced from:416792:506319 >>		
2	GRFV_GRAPHICS_FILE_SKEY	NOT NULL	NUMBER(7,0)
4	CREATE_DATE << 1998-03-25-16:58 sourced from:416792:492783 >>	NOT NULL	DATE
5	CREATE_USER_ID << 1998-03-25-16:58 sourced from:416792:492785 >>	NOT NULL	VARCHAR2(30)
6	PRJ_PROJECT_SKEY	NULL	NUMBER(7,0)
7	CON_CONTRACT_SKEY	NULL	NUMBER(7,0)
8	MODIFY_DATE << 1998-03-25-16:58 sourced from:416792:492784 >>	NULL	DATE
9	MODIFY_USER_ID << 1998-03-25-16:58 sourced from:416792:492786 >>	NULL	VARCHAR2(30)

Foreign Keys:

MUA_CON_FK
CON_CONTRACT_SKEY = CONTRACTS.CONTRACT_SKEY
MUA_GRFV_FK
GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_FILE_VERSIONS.GRAPHICS_FILE_SKEY
MUA_PRJ_FK
PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY

Table: MAP_UPDATE_ACTIVITIES (cont'd)*Indexes:*

MUA_CON_FK_I
CON_CONTRACT_SKEY
MUA_GRFV_FK_I
GRFV_GRAPHICS_FILE_SKEY
MUA_PRJ_FK_I
PRJ_PROJECT_SKEY

Notes:

<< 1998-03-25-16:58 sourced from:416792:418248 >>

Table: MEAN_DIAMETER_ASSESSMENTS*Description:*

The mean diameter applied to either a species of the layer or the whole stand.

Normally this is an attribute that is difficult to interpret or estimate from aerial photography, though it may be collected from field visitations. Tree volume derivation routines such as VDYP may calculate a quadratic mean diameter based on a coefficient set determined from sample data.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MEAN_DIAM_SKEY The system generated identifier. Populated from MEAN_DIAM_SEQ. << 1998-03-26-17:18 sourced from:236464:679899 >>	NOT NULL	NUMBER(7,0)
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who created the record. <<1997-12-09-14:26 sourced from:236464:422006>> << 1998-03-26-17:18 sourced from:236464:681658 >>	NOT NULL	VARCHAR2(30)
4	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE

Table: MEAN_DIAMETER_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<<1997-12-09-14:26 sourced from:236464:422005>> << 1998-03-26-17:18 sourced from:236464:681657 >>		
5	QUADRATIC_MEAN_DIAM The mean diameter weighted by stand density. <<1997-11-18-15:19 sourced from:236464:427624>> <<1997-12-08-14:44 sourced from:236464:670136>> << 1998-03-26-17:18 sourced from:236464:681002 >>	NOT NULL	NUMBER(4,1)
6	SOURCE_TYPE The basic source type; either Collected or Derived. Expected to be used for FIP sourced data only; all within-database derivations will have a DERIVATION TRANSACTION occurrence to identify derived data. << 1998-03-26-17:18 sourced from:236464:786460 >>	NOT NULL	VARCHAR2(5)
7 8	ULA_AREA_ASSN_SKEY MODIFY_USER_ID ORACLE user id of the last user to modify the record. <<1997-12-09-14:26 sourced from:236464:422008>> << 1998-03-26-17:18 sourced from:236464:681660 >>	NULL NULL	NUMBER(7,0) VARCHAR2(30)
9	MODIFY_DATE The date the record was last modified.	NULL	DATE

Table: MEAN_DIAMETER_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<<1997-12-09-14:26 sourced from:236464:422007>>		
	<< 1998-03-26-17:18 sourced from:236464:681659 >>		
10	INTERPRETATION_SOURCE_CD The source of the mean diameter.	NULL	NUMBER(2)
	<< 1998-03-26-17:18 sourced from:236464:786459 >>		

Foreign Keys:

MDA_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY
MDA_ULA_FK
ULA_AREA_ASSN_SKEY = UTILIZATION_LEVEL_AREA_ASSNS.AREA_ASSN_SKEY

Indexes:

MDA_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY
MDA_ULA_FK_I
ULA_AREA_ASSN_SKEY

Notes:

<< 1998-03-26-17:18 sourced from:236464:679890 >>

Table: MEAN_HEIGHT_ASSESSMENTS*Description:*

The mean height, of the dominant and codominant trees with separate associations for the FIP and Vegetation Inventory sources.

The sources are:

1) In the FIP standard, the HEIGHT ESTIMATE applies to TREE LAYER, which is different from

2) the Vegetation Inventory standard, where it applies to a photo-interpreted estimate of the mean height, weighted by basal area, of a tree species.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MEAN_HT_SKEY The system generated surrogate identifier. Populated by sequence, MEAN_HT_SEQ. << 1998-03-26-17:18 sourced from:236464:679896 >>	NOT NULL	NUMBER(14,0)
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who created the record. <<1997-12-09-14:26 sourced from:236464:422006>> << 1998-03-26-17:19 sourced from:236464:681662 >>	NOT NULL	VARCHAR2(30)
4	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE

Table: MEAN_HEIGHT_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p><<1997-12-09-14:26 sourced from:236464:422005>></p> <p><< 1998-03-26-17:19 sourced from:236464:681661 >></p>		
5	<p>HEIGHT</p> <p>The mean height, of the dominant and codominant trees with separate associations for the FIP and Vegetation Inventory sources.</p> <p>The sources are:</p> <p>1) In the FIP standard, the HEIGHT ESTIMATE applies to TREE LAYER, which is different from</p> <p>2) the Vegetation Inventory standard, where it applies to a photo-interpreted estimate of the mean age, weighted by basal area, of a tree species.</p> <p><<1997-12-08-14:43 sourced from:236464:508444>></p> <p><< 1998-03-26-17:19 sourced from:236464:680996 >></p>	NOT NULL	NUMBER(4,2)
6	<p>SOURCE_TYPE</p> <p>The basic source type; either Collected or Derived.</p> <p>Expected to be used for FIP sourced data only; all within-database derivations will have a DERIVATION TRANSACTION occurrence to identify derived data.</p> <p><< 1998-03-26-17:19 sourced from:236464:786461 >></p>	NOT NULL	VARCHAR2(5)
7	MODIFY_USER_ID	NULL	VARCHAR2(30)

Table: MEAN_HEIGHT_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	ORACLE user id of the last user to modify the record.		
	<<1997-12-09-14:26 sourced from:236464:422008>>		
	<< 1998-03-26-17:19 sourced from:236464:681664 >>		
8	MODIFY_DATE The date the record was last modified.	NULL	DATE
	<<1997-12-09-14:26 sourced from:236464:422007>>		
	<< 1998-03-26-17:19 sourced from:236464:681663 >>		
9	HEIGHT_MINIMUM The minimum height of the dominant and codominant canopy.	NULL	NUMBER(4,2)
	<<1997-12-08-14:43 sourced from:236464:508445>>		
	<< 1998-03-26-17:19 sourced from:236464:681000 >>		
10	HEIGHT_MAXIMUM The maximum height of the dominant and codominant canopy.	NULL	NUMBER(4,2)
	<<1997-12-08-14:43 sourced from:236464:508446>>		
	<< 1998-03-26-17:19 sourced from:236464:680999 >>		
11	REVISION_DATE The date the HEIGHT was revised after it was originally interpreted as part of the Vegetation Inventory classification.	NULL	DATE
	<<1997-12-08-14:43 sourced from:236464:670181>>		
	<< 1998-03-26-17:19 sourced from:236464:681001 >>		

Table: MEAN_HEIGHT_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
12	CONFIDENCE_INDEX_NUM A subjective discrete assignment from 1 to 9 which reflects the photo interpreter's confidence in the estimation of the tree Height Estimate. The higher the number, the greater the confidence in the interpretation of tree age. The confidence index should not reflect the individual interpreter's abilities, but an estimate of the difficulty of making the interpretation due to polygon complexity and reliability of data sources. Definition Source: p. 6-20, PIP <<1997-12-08-14:43 sourced from:236464:508615>> << 1998-03-26-17:19 sourced from:236464:680997 >>	NULL	NUMBER(1)
13	INTERPRETATION_SOURCE_CD The source of data used for the interpretation of height. <<1997-12-08-14:43 sourced from:236464:670113>> << 1998-03-26-17:19 sourced from:236464:680998 >>	NULL	NUMBER(2)

Foreign Keys:

MHA_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY

Indexes:

MHA_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY

Notes:

<< 1998-03-26-17:18 sourced from:236464:679884 >>

Table: MEAN_HEIGHT_ASSESSMENTS (cont'd)*Notes:*

Table: MEASMT_VISITATIONS*Description:*

The activity of collecting tree growth measurement data in the field from a sample or experimental unit. This does not apply to visitations for other purposes such as ecological assessment or affirmation of specific measurements.

The measurement visitation applies to the event of assessing individual trees, the layer and the stand.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	MEASMT_VISIT_SKEY << 1998-03-27-10:56 sourced from:346868:347698 >>	NOT NULL	NUMBER(7,0)
2	PCLTR_PLOT_CLUSTER_SKEY	NOT NULL	NUMBER(7,0)
3	CREATE_DATE << 1998-03-27-10:56 sourced from:346868:347689 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-27-10:56 sourced from:346868:347691 >>	NOT NULL	VARCHAR2(30)
5	MEASMT_DATE The date of completion of all tree measurements on the sample or experimental unit. << 1998-03-27-10:56 sourced from:346868:347696 >>	NOT NULL	DATE
6	MEASMT_VISITN_NUM A number used within the business that is sequentially assigned from zero (the establishment) to denote the relative order of repeated measurements of a sample or experimental unit. << 1998-03-27-10:56 sourced from:346868:347697 >>	NOT NULL	NUMBER(3,1)

Table: MEASMT_VISITATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
7	PSTAT_PROCESS_STATE_CD	NULL	VARCHAR2(5)
8	SMPGR_SMPLE_PROC_GRP_SKEY	NULL	NUMBER(7,0)
9	GROWTH_SEASON_END_DATE	NULL	DATE
	<p>The end date of the growing season, considered to be the period during which measurable tree dimensions increase. The specific physiologic sequence is bud flushing, terminal and secondary leader elongation, diameter increase which ends with buds hardening. This is not meant to include lammas growth (new growth after bud hardening in a warm fall).</p> <p>The default is August 31.</p> <p><< 1998-03-27-10:56 sourced from:346868:347692 >></p>		
10	GROWTH_SEASON_START_DATE	NULL	DATE
	<p>The start date of the growing season, considered to be the period during which measurable tree dimensions increase. The specific physiologic sequence is bud flushing, terminal and secondary leader elongation, diameter increase which ends with buds hardening. This is not meant to include lammas growth (new growth after bud hardening in a warm fall).</p> <p>The default is May 1.</p> <p><< 1998-03-27-10:56 sourced from:346868:347693 >></p>		
11	GROWTH_YEAR	NULL	NUMBER(4,0)
	<p>The year that represents the portion of growing season, if the sample or experimental unit was measured during the growing season, May 1 through August 31 (123 days).</p>		

Table: MEASMT_VISITATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>The year the tree is considered to have grown vis a vis the year the tree was measured. The growing season is considered to begin at a specified start date (eg. May 1) and end at a later date (eg. August 31). Measurements taken in the next calendar year, but before the Growing Season start date would have a Growing Season year of the calendar year minus one. Where measurements are taken after the Growing Season start date but within the same calendar year, the Growing Season year equals the Measurement year.</p> <p><< 1998-03-27-10:56 sourced from:346868:347694 >></p>		
12	GROWTH_YEAR_FRACTION	NULL	NUMBER(2,2)
	<p>The decimal fraction of the growing season year calculated as a portion of: the number of days from May 1 to August 31 (123 days). The decimal fraction is applied when the investigation unit is measured during the growing season.</p> <p><< 1998-03-27-10:56 sourced from:346868:347695 >></p>		
14	POLYGON_IDENTIFIER	NULL	VARCHAR2(14)
15	CMT	NULL	VARCHAR2(256)
	<p>Textual description pertaining to the measurement visitation.</p> <p><< 1998-03-27-10:56 sourced from:346868:347699 >></p>		
16	COLLTN_SOFTWARE	NULL	VARCHAR2(25)
	<p>The name of the software, that was used to collect the tree data at the occasion of the measurement.</p> <p><< 1998-03-27-10:56 sourced from:346868:347700 >></p>		

Table: MEASMT_VISITATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
17	COLLTN_SOFTWARE_VER The version of the collection software that was used to collect the tree data at the occasion of the measurement. << 1998-03-27-10:56 sourced from:346868:347701 >>	NULL	NUMBER(3,0)
18	FIELD_CREW_MBR_1_NAME The name of the senior member of the field crew. Use full surname followed by initials (no punctuation). << 1998-03-27-10:56 sourced from:346868:347702 >>	NULL	VARCHAR2(25)
19	FIELD_CREW_MBR_2_NAME The name of the junior member of the field crew. << 1998-03-27-10:56 sourced from:346868:347703 >>	NULL	VARCHAR2(25)
20	MODIFY_DATE << 1998-03-27-10:56 sourced from:346868:347704 >>	NULL	DATE
21	MODIFY_USER_ID << 1998-03-27-10:56 sourced from:346868:347705 >>	NULL	VARCHAR2(30)
22	TYPICAL_TREES_IND A subjective evaluation that indicates whether or not the trees measured are typical of the polygon sampled. For example, a plot or sub-plot may be located in a wetland microsite within an upland forest and not typical of the polygon being sampled. << 1998-03-27-10:56 sourced from:346868:563562 >>	NULL	VARCHAR2(1)

Table: MEASMT_VISITATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
23	TYPICAL_ECOLOGY_IND A subjective evaluation that indicates whether or not the ecology of the area measured is typical of the polygon sampled. For example, a plot or sub-plot may be located in a wetland microsite within an upland forest and not typical of the polygon being sampled.	NULL	VARCHAR2(1)

<< 1998-03-27-10:56 sourced from:346868:563563 >>

25	SAMPLE_INTENT	NULL	VARCHAR2(3)
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Unique Constraints:

MEAVT_MEAVT2_UK
PCLTR_PLOT_CLUSTER_SKEY
MEASMT_VISITN_NUM

Foreign Keys:

MEAVT_PCLTR_FK
PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY
MEAVT_PSTAT_FK
PSTAT_PROCESS_STATE_CD = PROCESS_STATES.PROCESS_STATE_CD
MEAVT_SMPGR_FK
SMPGR_SMPLE_PROC_GRP_SKEY = SAMPLE_PROCESSING_GROUPS.SMPLE_PROC_GRP_SKEY

Indexes:

MEAVT_PCLTR_FK_I
PCLTR_PLOT_CLUSTER_SKEY
MEAVT_PSTAT_FK_I
PSTAT_PROCESS_STATE_CD
MEAVT_SMPGR_FK_I
SMPGR_SMPLE_PROC_GRP_SKEY

Notes:

<< 1998-03-27-10:56 sourced from:346868:347677 >>

Table: NON_STANDARD_VALUES*Description:*

The collected value of the NON STANDARD ATTRIBUTE DEFINITION.

Reserved for ad-hoc additions to the Vegetation Inventory program

especially where there are local conditions that warrant inclusion.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	NON_STANDARD_VALUE A generic field to contain non standard values.	NULL	VARCHAR2(75)

<< 1998-03-26-13:16 sourced from:236464:687710 >>

* 4	NSAT_ATTRIBUTE_SKEY	NOT NULL	NUMBER(7,0)
* 6	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)

Foreign Keys:

NSDV_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY
NSDV_NSAT_FK
NSAT_ATTRIBUTE_SKEY = NON_STD_ATTRIBUTE_DEFNS.ATTRIBUTE_SKEY

Indexes:

NSDV_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY
NSDV_NSAT_FK_I
NSAT_ATTRIBUTE_SKEY

Notes:

<< 1998-03-26-13:16 sourced from:236464:687702 >>

Table: NON_STD_ATTRIBUTE_DEFNS*Description:*

The definition, both in descriptive form and technical form, of a non standard Vegetation Inventory attribute.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ATTRIBUTE_SKEY The UID generated from ORACLE sequence ns_attribute_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-27-13:07 sourced from:236464:515225 >>			
2	ATTRIBUTE_NAME The assigned name of Vegetation Inventory non-standard data attribute.	NOT NULL	VARCHAR2(25)
<< 1998-03-27-13:07 sourced from:236464:508512 >>			
3	DESCRIPTION Business description that defines the attribute and its derivation and/or validation.	NULL	VARCHAR2(256)
<< 1998-03-27-13:07 sourced from:236464:515226 >>			
4	VALID_VALUE_RULE_SKEY The surrogate key of the rule that will procedurally enforce the valid values of the non standard Vegetation Inventory attribute.	NULL	NUMBER(7,0)
<< 1998-03-27-13:07 sourced from:236464:508513 >>			

Notes:

Table: NON_STD_ATTRIBUTE_DEFNS (cont'd)*Notes:*

<< 1998-03-27-13:07 sourced from:236464:501086 >>

Table: NON_TREED_VEG_INTRPRTNS*Description:*

The collected data of the activity of interpretation, usually with the aid of aerial photography, of a land area delineated as a POLYGON.

The following types of interpretations are shown as subtypes;

TREE LAYERS

NON VEGETATION

NON TREE VEGETATION

Land Cover Components

The specialized interpretation applied to an entire polygon that applies to the non-treed vegetation of shrubs, herbs and bryoids.

This interpretation applies to all aggregated non-treed areas in a polygon.

Discrimination of shrub, herb or bryoid is by generating the TYPE attribute from the respective short names of the subtypes. The attribute NON TREE VEGETATION TYPE was removed to avoid redundancy.

Definition Source: combined from Sec. 7, 8, 9, PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INTERP_SKEY	NOT NULL	NUMBER(7,0)
	System generated UID for all subtypes.		

Table: NON_TREEED_VEG_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-11:40 sourced from:236464:421327 >>			
2	NON_TREE_VEGETATION_TYPE Subtyping attribute for HERB, SHRUB and BRYOID.	NOT NULL	VARCHAR2(10)

3	COVER_PATTERN_NUM The assigned identifying number of a visual pattern chart that best compares to the spatial distribution and prevalence of the shrubs, and herbs. Not collected for bryoids.	NOT NULL	NUMBER(1)
---	---	----------	-----------

Definition Source: pp. 7-4 (fig. 7-2), 8-5 (fig. 8-2)

A! use a domain for multiple use

A! rule to enforce null for Vegetation Type = 'BRYOID'

A_S! col. 114, 120 of VRI Att. (Entry) form

<< 1998-03-26-11:46 sourced from:236464:286625 >>

4	COVER_PCT The area the non-tree vegetated portion covers expressed as a percentage of the entire polygons area.	NOT NULL	NUMBER(3)
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There is a slight definitional difference between shrubs and the
remaining types of this group, herbs and bryoids:

-shrubs, crown cover of ground area

-herbs and bryoids, ground cover.

Table: NON_TREED_VEG_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The difference is thought to relate more to the physical nature of the vegetation and not separately attributable.		
	Definition Source; pp. 7-3, 8-3, 9-2, PIP		
	<i>A_S! col. 111-113, 117-119, 121-123 of VRI Attribute (Entry) Form</i>		
	<< 1998-03-26-11:46 sourced from:236464:286627 >>		
5	CREATE_DATE The date the interpretation was made.	NOT NULL	DATE
	<< 1998-03-26-11:40 sourced from:236464:569090 >>		
6	CREATE_USER_ID The system user id of the person that made the interpretation.	NOT NULL	VARCHAR2(30)
	<< 1998-03-26-11:40 sourced from:236464:569091 >>		
7	DATA_SOURCE_REFERENCE_DATE The date of the source data on which the interpretation is based. Known as the 'Reference Year' in the FIP file.	NULL	DATE
	<< 1998-03-26-11:40 sourced from:236464:508613 >>		
8	SHRUB_HT The average height of the shrubs contained in the polygon as interpreted from medium scale phototgraphy.	NULL	NUMBER
	Note that this attribute only applies to the Shrub component.		
	Definition Source: p. 7-2, PIP		

Table: NON_TREED_VEG_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>A_S! col. 108-110.</i>		
	<i>A! need rule to enforce only not null for Vegetation Type='SHRUB'</i>		
	<i><< 1998-03-26-11:46 sourced from:236464:286626 >></i>		
9	DATA_SOURCE_CD The source of the data that contributed to the determination of the classification description as per the specifications of the Photo Intrepretation Procedures, Vegetation Inventory. All values taken from Table 3-1, PIP This list of values is similar, but not identical to the FIP DATA SOURCE which will be used to validate the FIP file prior to loading. Non-conforming FIP DATA SOURCE values will be converted to the VEGETATION DATA SOURCE values on load to the Vegetative Cover database. <i><< 1998-03-26-11:40 sourced from:236464:507409 >></i>	NULL	NUMBER(2)
10	MODIFY_DATE The date the interpretation was modified. <i><< 1998-03-26-11:40 sourced from:236464:569092 >></i>	NULL	DATE
11	MODIFY_USER_ID The system user id of the person who modified the interpretation.	NULL	VARCHAR2(30)

Table: NON_TREED_VEG_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-11:40 sourced from:236464:569094 >>		
12	INTERPRETATION_DATE The date when the interpretation was done.	NULL	DATE
	This may be different than the date a FIP file was updated or the date the computer records were actually processed.		
	<< 1998-03-26-11:40 sourced from:236464:569165 >>		
13	DATA_ENTRY_DATE The date the interpretation was entered into an off-line electronic storage source file. Sourced from the FIP attribute, INPUT DATE of the Polygon record.	NULL	DATE
	This attribute would be redundant if there was on-line access to the Vegetative Cover database, as the audit field, CREATE DATE, would satisfy this requirement.		
	The current and planned technical architecture allows for entry into an intermediary local subset data file, either FIP or VIF, using the FCAP or replacement data entry tool. The FCAP application inserts a local (client) system date into the INPUT DATE, though the integrity is suspect because the local date can be modified by the user.		
	<< 1998-03-26-11:40 sourced from:236464:578391 >>		
15	PLY_POLYGON_SKEY	NOT NULL	NUMBER(14,0)
17	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)

Table: NON_TREED_VEG_INTRPRTNS (cont'd)*Foreign Keys:*

NTVI_PLY_FK
PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY
NTVI_SUBP_FK
SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

NTVI_PLY_FK_I
PLY_POLYGON_SKEY
NTVI_SUBP_FK_I
SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-26-11:40 sourced from:236464:392874 >>

A! key by shrub, herb, bryoid

<< 1998-03-26-11:46 sourced from:236464:244075 >>

Table: NON_VEGETATION_INTRPRTNS*Description:*

The collected data of the activity of interpretation, usually with the aid of aerial photography, of a land area delineated as a POLYGON.

The following types of interpretations are shown as subtypes;

TREE LAYERS

NON VEGETATION

NON TREE VEGETATION

Land Cover Components

The aggregate portion of a polygon interpreted as non vegetated to which specialized estimates are applied.

The portions maybe one of two categories:

-an identifiable, distinct and sufficiently large portion that is assigned a Land Cover Classification, or

-a dispersed, indistinct and/or small portion that is applied as a percentage of the entire polygon.

In the event of one or both, they are interpreted in the aggregate (as one) and the relationship to the appropriate Land Cover Component

Code procedural references to validate reasonableness for appropriate Land Cover Component Interpretations.

Definition Source: p 10-1, PIP and discussions with J Aleman to clarify analysis,- JH 96-06

Table: NON_VEGETATION_INTRPRTNS (cont'd)*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INTERP_SKEY System generated UID for all subtypes.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-11:40 sourced from:236464:421327 >>			
2	PLY_POLYGON_SKEY	NOT NULL	NUMBER(14,0)
3	COVER_PCT The area the non-vegetated portion covers expressed as a percentage of the entire polygons area.	NOT NULL	NUMBER(3)
Definition Source: p. 10-5, PIP			
<i>A_S! col. 126-128 VRI Att. (entry) form</i>			
<< 1998-03-26-11:46 sourced from:236464:286628 >>			
4	COVER_PATTERN_NUM The assigned identifying number of a visual pattern chart that best compares to the spatial distribution and prevalence of the shrubs, and herbs.	NOT NULL	NUMBER(1)
Definition Source: pp. 7-4 (fig. 7-2), 8-5 (fig. 8-2), same as pp. 10-7, fig. 10-2, PIP			
<i>A_S! col. 129 VRI Att. (entry) form</i>			
<< 1998-03-26-11:46 sourced from:236464:286629 >>			
5	DATA_SOURCE_REFERENCE_DATE The date of the source data on which the interpretation is based.	NULL	DATE

Table: NON_VEGETATION_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Known as the 'Reference Year' in the FIP file.		
	<< 1998-03-26-11:40 sourced from:236464:508613 >>		
6	CREATE_DATE The date the interpretation was made.	NOT NULL	DATE
	<< 1998-03-26-11:40 sourced from:236464:569090 >>		
7	CREATE_USER_ID The system user id of the person that made the interpretation.	NOT NULL	VARCHAR2(30)
	<< 1998-03-26-11:40 sourced from:236464:569091 >>		
8	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)
9	DATA_SOURCE_CD The source of the data that contributed to the determination of the classification description as per the specifications of the Photo Intrepretation Procedures, Vegetation Inventory.	NULL	NUMBER(2)
	All values taken from Table 3-1, PIP		
	This list of values is similar, but not identical to the FIP DATA SOURCE which will be used to validate the FIP file prior to loading.		
	Non-conforming FIP DATA SOURCE values will be converted to the VEGETATION DATA SOURCE values on load to the Vegetative Cover database.		
	<< 1998-03-26-11:40 sourced from:236464:507409 >>		

Table: NON_VEGETATION_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
10	MODIFY_DATE The date the interpretation was modified.	NULL	DATE
	<< 1998-03-26-11:40 sourced from:236464:569092 >>		
11	MODIFY_USER_ID The system user id of the person who modified the interpretation.	NULL	VARCHAR2(30)
	<< 1998-03-26-11:40 sourced from:236464:569094 >>		
12	INTERPRETATION_DATE The date when the interpretation was done.	NULL	DATE
	This may be different than the date a FIP file was updated or the date the computer records were actually processed.		
	<< 1998-03-26-11:40 sourced from:236464:569165 >>		
13	DATA_ENTRY_DATE The date the interpretation was entered into an off-line electronic storage source file. Sourced from the FIP attribute, INPUT DATE of the Polygon record.	NULL	DATE
	This attribute would be redundant if there was on-line access to the Vegetative Cover database, as the audit field, CREATE DATE, would satisfy this requirement.		
	The current and planned technical architecture allows for entry into an intermediary local subset data file, either FIP or VIF, using the FCAP or replacement data entry tool. The FCAP application		

Table: NON_VEGETATION_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	inserts a local (client) system date into the INPUT DATE, though the integrity is suspect because the local date can be modified by the user.		

<< 1998-03-26-11:40 sourced from:236464:578391 >>

Foreign Keys:

NVI_PLY_FK
PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY
NVI_SUBP_FK
SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

NVI_PLY_FK_I
PLY_POLYGON_SKEY
NVI_SUBP_FK_I
SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-26-11:40 sourced from:236464:392874 >>

A! additional description added from discussions with J Aleman

<< 1998-03-26-11:46 sourced from:236464:244069 >>

Table: OPERABLE_AREA_CDS*Description:*

The codes to denote the determination of economically viable areas for timber extraction. This determination is based on local knowledge applied prior to the submission for TSA analysis.

There are also additional qualifying harvest equipment codes where an area is deemed operable with a Helicopter for example.

This entity has been denormalized on account of the few occurrences of the combinations of 'Operable' and the respective qualifying equipment.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	OPERABILITY_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(7,0)

Populated by OPERABLE_SEQ

<< 1998-03-26-17:20 sourced from:236464:778706 >>

2	OPERABILITY_CD The assessment of economic viability of timber extraction based on a single point-in-time classification.	NOT NULL	VARCHAR2(1)
---	---	----------	-------------

This assessment, particular to the FIP classification only, is applied at two possible levels of resolution:

-at the polygon, where the need arose from ESA classification originally, and

Table: OPERABLE_AREA_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	-at the Operability theme (or level) which becomes a 'resultant'.		
	These are independently assessed and may not agree.		
	This attribution is retained for transition purposes only, no expected update or inclusion in Vegetation Inventory classification is planned. The retention need for this attribution should be reviewed once Vegetation Inventory database receives wide use.		
	A! removed from BUSINESS OBJECT ASSESSMENT 98-02-10/JH		
	<< 1998-03-26-17:20 sourced from:236464:778707 >>		
3	OPERABILITY_EQUIPMT_QUAL_CD	NULL	VARCHAR2(2)
	The equipment type which qualifies the accessibility (operability) of an operable area.		
	This attribution is split out from the resultant based Operability Code. The Operability Code identifies operability, though recent (97-06) data discoveries indicated a further qualifying attribution of what equipment was considered in the determination of accessible.		
	<< 1998-03-26-17:20 sourced from:236464:778724 >>		

Notes:

<< 1998-03-26-17:20 sourced from:236464:778698 >>

Table: OWNERSHIP_CDS*Description:*

A code indicating the ownership and administrative responsibility for the land contained within a polygon. The major classes of ownership and administrative responsibility include:

- Crown Grants - Private Administration (Codes in the 40's series)
- Federal Lands - Federal Administration (Codes in the 50's series)
- Crown Lands - Provincial Administration (Codes in the 60's series)
- Crown and Private Lands - Private and/or Provincial Administration (Codes in the 70's series)
- Crown and Private Lands - Local Administration (Codes in the 80's series)
- Crown Lands - Provincial Administration under active lease or permit (Codes in the 90's series)

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	OWNERSHIP_CD_SKEY System generated UID from ORACLE sequence ownership_cd_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-17:20 sourced from:236464:547041 >>			
2	OWNERSHIP_NUM_CD A code indicating the ownership and administrative responsibility for the land contained within a polygon.	NOT NULL	NUMBER(3,0)
<< 1998-03-26-17:20 sourced from:236464:547422 >>			
3	OWNERSHIP_LTR_CD A code indicating whether or not a given area is available	NULL	VARCHAR2(1)

Table: OWNERSHIP_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	for long-term integrated resource management. For example, land in a National Park, Ecological Reserve, etc. is not available for long-term integrated resource management. No attempt has been made to unravel the meanings of this attribute; it appears that there are two meanings: -Tree Farm Licence schedule letter ('A' or 'B') -a determination as to the availibility of the land area for long term forest management, presumably derived from elsewhere. JH << 1998-03-26-17:20 sourced from:236464:547423 >>		
4	DESCRIPTION A description of the code indicating ownership and administrative responsibility for the land contained within a polygon. << 1998-03-26-17:20 sourced from:236464:547934 >>	NULL	VARCHAR2(256)

Unique Constraints:

OC_OC2_UK
 OWNERSHIP_NUM_CD
 OWNERSHIP_LTR_CD

Notes:

<< 1998-03-26-17:20 sourced from:236464:547035 >>

Table: PEOPLE*Description:*

A person, who in some capacity, actively plays a part in the creation, modification of electronic graphics and text data.

This could be expanded beyond the MUMS application to include the personnel involved in data collection for example, currently modelled in the SPD version 5 model for Vegetation Inventory samples.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PERSON_SKEY The surrogate identifier of a person.	NOT NULL	NUMBER(7,0)
	Assigned by a system generated Oracle sequence, PERSON SKEY SEQ.		
	<< 1998-03-25-16:59 sourced from:416792:422503 >>		
2	LAST_NAME The last name, or surname of a person.	NOT NULL	VARCHAR2(30)
	<< 1998-03-25-16:59 sourced from:416792:422500 >>		
3	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492787 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492789 >>	NOT NULL	VARCHAR2(30)
5	USER_ID The system user id for the person that may either be the sole source of identifying a person, or augment their first and last name.	NULL	VARCHAR2(30)

Table: PEOPLE (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-25-16:59 sourced from:416792:437821 >>		
6	FIRST_NAME The first, or given name, of a person	NULL	VARCHAR2(30)
	<< 1998-03-25-16:59 sourced from:416792:422501 >>		
7	PER_INITIAL A commonly used initial for a person.	NULL	VARCHAR2(4)
	<< 1998-03-25-16:59 sourced from:416792:422502 >>		
8	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492788 >>	NULL	DATE
9	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492790 >>	NULL	VARCHAR2(30)
11	EMAIL_ID	NULL	VARCHAR2(256)

Notes:

<< 1998-03-25-16:59 sourced from:416792:422494 >>

Table: PLANTATION_TREE_SPP_COMPS*Description:*

The record of planted tree species as retained in the Resource Inventory Branch Silvicultural History attributes.

Will not likely correlate to Silvicultural data, as the spatial resolution of the data will differ.

This entity has been determined from the Vegetation Inventory History Form where the only reference is to the planted tree species (which are modelled as foreign keys to the Tree Species Cd entity -hence no attribution).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PLANTN_SPECIES_SKEY A system generated unique identifier.	NOT NULL	NUMBER(7,0)

Populated by sequence PLTN_SPP_SEQ.

<< 1998-03-26-17:22 sourced from:236464:686494 >>

2	COMPOSITION_ESTIMATE_PCT An estimate of the relative percentage of tree species in the interpreted tree layer.	NULL	NUMBER(3,0)
---	---	------	-------------

The estimate is based on living trees according to the following specification:

-basal area, if codominant and dominant trees > 2 m,

-density, if codominant and dominant trees < 2 m.

Table: PLANTATION_TREE_SPP_COMPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

Definition Source: p. 6-9, Photo Interpretation Procedures, Phase 1,
May 14, 1996.

<< 1998-03-26-17:22 sourced from:236464:688123 >>

4	SH_SILV_HISTORY_SKEY	NOT NULL	NUMBER(7,0)
6	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

PTSC_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
PTSC_SH_FK
SH_SILV_HISTORY_SKEY = SILVICULTURAL_HISTORIES.SILV_HISTORY_SKEY

Indexes:

PTSC_GTO_FK_I
GTO_GROUP_TAXON_SKEY
PTSC_SH_FK_I
SH_SILV_HISTORY_SKEY

Notes:

<< 1998-03-26-17:22 sourced from:236464:309300 >>

Table: PLOT_CLUSTERS*Description:*

The generic name for both experimental and sample units; the collective unit which contains sufficient elements to provide estimates to meet the required statistical precision level. In either case, it has an independent change of selection (or treatment assignment if applicable).

Physically, a PLOT CLUSTER is in the form of a single plot, a number of plots nested at a single location, or a number of plots at separated locations within a stand. A PLOT CLUSTER also reflects the situation where changing specifications to a plot, effectively creating a new cluster element (a biometric definition of a plot).

A PLOT CLUSTER is a form of an Investigation unit; which itself may be one of a number of different forms - a forest stand, a plot cluster, or an individual tree. In this database application, only the plot cluster form is considered.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PLOT_CLUSTER_SKEY An system generated surrogate identifier for Investigation Unit.	NOT NULL	NUMBER(7,0)
<i>A! System generated</i>			
<< 1998-03-27-10:23 sourced from:346868:346809 >>			
2	SELECTION_METHOD_CD The biometric practise (or method) used to locate a sample or experimental plot in the field. Typically, samples and experimental plots may have been located subjectively, that is a candidate stand is	NOT NULL	VARCHAR2(5)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	identified in advance. Some measure of randomness may be applied for the actual location. Increasingly, there is more emphasis on random selection of the stand, and a successive random selection of a location in the stand (a PHASE).		
	<< 1998-03-27-10:23 sourced from:346868:347312 >>		
3	MEASMT_STATUS_CD The status of the sample or experimental plot as it relates to remeasurement, active (ACT) or inactive (INA) or that the number has been reserved for the purpose of expected establishments. (In the latter case, to avoid the re-use of the same number).	NOT NULL	VARCHAR2(3)
	<< 1998-03-27-10:24 sourced from:346868:347167 >>		
4	SAMPLE_EXP_PLOT_NUM The business assigned identifying number for a sample or experiment plot as applied in the field and retained on all paper and electronic records. Note that there is differing uses of term 'plot' between the inventory (sampling) and research (experiments) businesses. Both can be considered to be 'units of investigation', a sample is the biometric equivalent of an experimental plot.	NOT NULL	VARCHAR2(4)
	<< 1998-03-27-10:24 sourced from:346868:347168 >>		
5	SOIL_PIT_IND An indication of a soil pit being located in the vicinity or the vicinity of a sample or experimental plot. (Usually experimental	NOT NULL	VARCHAR2(1)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	plots). This serves as a note that such data exists and may be found in paper files.		
	<< 1998-03-27-10:24 sourced from:346868:347170 >>		
6	STEM_MAP_IND An indication of whether the sample or experimental plot was stem mapped. That is, the individual tree coordinates (locations) are collected. In this way, the inter-tree distances are known and tree growth models can reflect individual tree competition. Any new trees from later re-measurements should have coordinates collected.	NOT NULL	VARCHAR2(1)
	<< 1998-03-27-10:24 sourced from:346868:347171 >>		
7	WEATHER_STN_IND An indication of a weather station being located fro some period of time in the vicinity of a sample or experimental plot. (Usually to experimental plots). The station may not be currently active; this serves as a note that such data exists and may be found in paper files.	NOT NULL	VARCHAR2(1)
	<< 1998-03-27-10:24 sourced from:346868:347172 >>		
8	BH_REF_POINT The point on the tree from which breast height is considered to be measured from. Up to 1989 it was considered to be germination point, the point the tree was considered to have germinated from. On a incline, it would be the centre of the tree (unless other mitigating factors are deteminined in the field), and that the tree would have	NOT NULL	VARCHAR2(1)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	grown equally in girth both upslope and downslope.		
	Since 1990, the 'high side' point was adopted, meaning the highest up slope ground position,		
	Other samples or experimental plots from other agencies may have differing locations.		
	<< 1998-03-27-10:23 sourced from:346868:347161 >>		
9	BH_STANDARD	NOT NULL	NUMBER(4,2)
	The standard height breast height applied to the entire sample or experimental plot over all measurements. Prior to 1978, samples were measured in imperial units and the associated breast height was 4.5 ft. or 1.37 m.). These samples, if remeasured, are considered to have a breast height standard of 1.30 m. owing to later conversion.		
	Basal area will be calculated for a consistent breast height standard for all trees for all measurements.		
	<< 1998-03-27-10:23 sourced from:346868:347162 >>		
10	BUFFER_IND	NOT NULL	VARCHAR2(1)
	An indication of a buffer surrounding a sample or plot. A buffer is treated in the same manner as the plot to avoid edge-effects.		
	Normally used in on experimental plots only.		
	<< 1998-03-27-10:23 sourced from:346868:347163 >>		
11	CREATE_DATE	NOT NULL	DATE
	<< 1998-03-27-10:23 sourced from:346868:347388 >>		

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
12	CONDITION_STATUS_CD The condition of the sample or experimental plot as determined from sources in the field. This does not necessarily reflect the determination as to whether the sample/ exp. plot is remeasured or not; they may be remeasured if partially damaged or conversely, there may be a surplus in some stands which would not be remeasured.	NOT NULL	VARCHAR2(3)
	<< 1998-03-27-10:23 sourced from:346868:347164 >>		
13	CREATE_USER_ID << 1998-03-27-10:23 sourced from:346868:347387 >>	NOT NULL	VARCHAR2(30)
14	RCLVC_RCL_AREA_VALIDN_SKEY	NULL	NUMBER(7,0)
15	INSTN_INSTN_SKEY	NULL	NUMBER(7,0)
16	MCMP_MAP_COMP_SKEY	NULL	NUMBER(7,0)
17	TSA_TSA_NUM	NULL	VARCHAR2(3)
18	TSB_BLOCK	NULL	VARCHAR2(1)
19	TSB_TSA_TSA_NUM	NULL	VARCHAR2(3)
20	RFA_RFA_SKEY	NULL	NUMBER(7,0)
21	AGNCY_AGENCY_SKEY	NULL	NUMBER(7,0)
22	ER_ECO_REGION_SKEY	NULL	NUMBER(7,0)
24	LEGAL_MAP_NOTATION A formal gazetted status identified on legal status (atlas) maps. This only confers legal recognition on such maps, no protection is implied, though by such a designation, other land use would be known in advance of any potentially destructive activities. A! a late (95-4-24) thought; some plots are protected with a mineral reserve; should, when the demand builds, have an attribute for the type of legal status and its id. currently it assumed that only the Legal Notation is used. A! the source for the data will be the Regions/Districts who are directly responsible for Ministry land status maintenance << 1998-03-27-10:24 sourced from:346868:347179 >>	NULL	VARCHAR2(25)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
25	LOCN_NAME A location name given to the sample or experimental plot. May refer to a geographic location, could be an informal working name before the identifying number is assigned. <i><< 1998-03-27-10:24 sourced from:346868:347180 >></i>	NULL	VARCHAR2(50)
26	MODIFY_USER_ID <i><< 1998-03-27-10:23 sourced from:346868:347389 >></i>	NULL	VARCHAR2(30)
27	MODIFY_DATE <i><< 1998-03-27-10:23 sourced from:346868:347390 >></i>	NULL	DATE
28	PHOTO_X_COORD The sample/plot coordinate position obtained from a medium scale aerial photograph. <i>The medium scale aerial photograph coordinate position.</i> <i><< 1998-03-27-10:23 sourced from:346868:347391 >></i>	NULL	NUMBER(3,0)
29	PHOTO_Y_COORD The sample/plot coordinate position obtained from a medium scale aerial photograph. <i>The medium scale aerial photograph coordinate position.</i> <i><< 1998-03-27-10:23 sourced from:346868:347392 >></i>	NULL	NUMBER(3,0)
30	UTM_EASTING_CENTROID The X (easting) geographic coordinate of the geographic centre of the sample/plot configuration. Where there is a single location (i.e. one plot centre) of the sample/plot, the centroid would be the	NULL	NUMBER(9,3)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	same as the UTM EASTING in CLUSTER ELEMENT LOCN.		
	<p>Where there are multiple plot locations of a given sample/plot, this attribute would be derived as the geometric centroid of all the locations. It is expected that this will be of utility in GIS mapping locations.</p> <p><i>The X coordinate of the sample/plot geometric centre.</i></p> <p><< 1998-03-27-10:23 sourced from:346868:347384 >></p>		
31	UTM_NORTHING_CENTROID	NULL	NUMBER(10,3)
	<p>The Y (northing) geographic coordinate of the geographic centre of the sample/plot configuration. Where there is a single location (i.e. one plot centre) of the sample/plot, the centroid would be the same as the UTM EASTING in CLUSTER ELEMENT LOCN.</p> <p>Where there are multiple plot locations of a given sample/plot, this attribute would be derived as the geometric centroid of all the locations. It is expected that this will be of utility in GIS mapping locations.</p> <p><i>The Y coordinate of the sample/plot geometric centre.</i></p> <p><< 1998-03-27-10:23 sourced from:346868:347385 >></p>		
32	AERIAL_PHOTO_ID	NULL	VARCHAR2(25)
	<p>A free form text identifier for the aerial photograph in which the sample or experimental plot lies. There are many numbering schemes of aerial photographs owing to differing standards of the time and various sources.</p>		

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-10:24 sourced from:346868:347174 >>		
33	ALT_INVESTIGATION_UNIT_ID An alternative identifier of the sample or experimental plot. This may be the number by which it was identified by the non-Inventory Branch or non-Ministry owner. If in time, it becomes widely used, and the owner wishes that their data is not identified by their identifier, this attribute value should be masked for public reports. << 1998-03-27-10:24 sourced from:346868:347175 >>	NULL	VARCHAR2(25)
34	ACCESS_MAP_IMAGE A future provision for a BLOB; a binary large object or graphics file displaying the a sketch of the access (usually accompanies ACCESS NOTE, the description). << 1998-03-27-10:24 sourced from:346868:347173 >>	NULL	VARCHAR2(1)
35	BUFFER_RADIUS The radius of the buffer applicable to circular plots or proximate cluster elements. A buffer is an area surrounding the plot perimeter which has been treated the same to avoid treatment edge-effects at the plot boundary. Usually applied to experimental plots only. << 1998-03-27-10:24 sourced from:346868:347176 >>	NULL	NUMBER(5,2)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
36	PROVINCE_STATE_CD The province or state in which the sample or experimental plot resides. The applicable list of provinces or states is to be updated on an as needed basis. << 1998-03-27-10:24 sourced from:346868:347169 >>	NULL	VARCHAR2(2)
37	BUFFER_X_LENGTH The length of the buffer side applicable to square or rectangular plots. A buffer is an area surrounding the plot perimeter which has been treated the same to avoid treatment edge-effects at the plot boundary. Usually applied to experimental plots only. << 1998-03-27-10:23 sourced from:346868:347177 >>	NULL	NUMBER(5,2)
38	BUFFER_Y_LENGTH The length of the buffer side applicable to square or rectangular plots. A buffer is a an area surrounding the plot perimeter which has been treated the same to avoid treatment edge-effects at the plot boundary. Usually applied to experimental plots only. << 1998-03-27-10:23 sourced from:346868:347178 >>	NULL	NUMBER(5,2)
39	COUNTRY_CD The country in which the sample/plot resides. << 1998-03-27-10:23 sourced from:346868:347165 >>	NULL	VARCHAR2(3)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
40	MEASMT_INTERVAL The time period, in years, between re-measurement of (permanent) samples or experimental plots. This is normally prescribed by the agency responsible for remeasurement, and reflects only the current value. (Original designed measurement intervals have sometimes been lengthened to reduce expense; e.g. EP. 703 was 3 years, and is now 6 years).	NULL	NUMBER(2)
	<< 1998-03-27-10:23 sourced from:346868:347166 >>		
41	NON_BCGS_MAP_SYSTEM_CD The map projection system if different from the BCGS UTM standard. A map projection system converts the earth convex surface to a flat map surface. The Datum (NAD) is the model of the earth's surface from which the projection is made.	NULL	VARCHAR2(8)
	<< 1998-03-27-10:24 sourced from:346868:347183 >>		
42	NON_BCGS_MAPSHEET_ID A non-BCGS mapsheet identifier which would typically apply to samples or experimental plots residing outside of BC.	NULL	VARCHAR2(25)
	<< 1998-03-27-10:24 sourced from:346868:347184 >>		
43	NEXT_MEASMT_YR The year in which the next remeasurement is planned. This would normally be derived algorithmically based on the measurement interval (MEASMT INTERVAL) and the date the sample was established. However, there may be exigencies such as imminent destruction from	NULL	NUMBER(4,0)

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	timber harvesting operations that would override the derived year of ne xt measurement.		
	In such cases, it is expectable that this be entered manually in a data maintenance screen.		
	This attribute will be the basis for reporting on remeasurement plans for future years.		
	<< 1998-03-27-10:24 sourced from:346868:347182 >>		
44	NUMBER_OF_PLOTS_AS_DESIGNED The number of plots at sample design time. Due to damage (or other reasons) to plots within a sample, the actual number of plots may differ.	NULL	NUMBER(2,0)
	<< 1998-03-27-10:24 sourced from:346868:409403 >>		
45	DESIGNATED_CONTROL_IND The explicit designation of a plot cluster as a control within an experiment or hybrid design. These two designs imply that treatments are conducted on some or all of the associated plot clusters.	NULL	VARCHAR2(1)
	Controls are defined as no further treatments after establishment of the experiment or hybrid design.		
	An association of plot clusters would be by experiment under Investigation Initiative and/or an Installation and/or pairing by way of recursive association.		

Table: PLOT_CLUSTERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-27-10:24 sourced from:346868:416731 >>			
47	DES_DESIGN_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

PCLTR_AGENCY_FK
 AGENCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY
 PCLTR_DES_FK
 DES_DESIGN_SKEY = DESIGN_SPECIFICATIONS.DESIGN_SKEY
 PCLTR_ER_FK
 ER_ECO_REGION_SKEY = ECO_REGIONS.ECO_REGION_SKEY
 PCLTR_INSTN_FK
 INSTN_INSTN_SKEY = INSTALLATIONS.INSTN_SKEY
 PCLTR_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY
 PCLTR_RCLVC_FK
 RCLVC_RCL_AREA_VALIDN_SKEY = VGIS_RCL_AREA_VALIDN_CODES.RCL_AREA_VALIDN_SKEY
 PCLTR_RFA_FK
 RFA_RFA_SKEY = REGULATED_FOREST_AREAS.RFA_SKEY
 PCLTR_TSA_FK
 TSA_TSA_NUM = TSA_NUMBER_CODES.TSA_NUM
 PCLTR_TSB_FK
 TSB_BLOCK = TSB_NUMBER_CODES.BLOCK
 TSB_TSA_TSA_NUM = TSB_NUMBER_CODES.TSA_TSA_NUM

Indexes:

PCLTR_AGENCY_FK_I
 AGENCY_AGENCY_SKEY
 PCLTR_DES_FK_I
 DES_DESIGN_SKEY
 PCLTR_ER_FK_I
 ER_ECO_REGION_SKEY
 PCLTR_INSTN_FK_I
 INSTN_INSTN_SKEY
 PCLTR_MCMP_FK_I
 MCMP_MAP_COMP_SKEY
 PCLTR_RCLVC_FK_I
 RCLVC_RCL_AREA_VALIDN_SKEY
 PCLTR_RFA_FK_I
 RFA_RFA_SKEY
 PCLTR_TSA_FK_I
 TSA_TSA_NUM
 PCLTR_TSB_FK_I
 TSB_BLOCK
 TSB_TSA_TSA_NUM

Notes:

A! The way this is modelled, a PLOT CLUSTER is created if a TREE is
 the investigation unit; not modelling TREE as an investigation unit
 as part of this project owing to difficult object-oriented type of
 relations.

Table: PLOT_CLUSTERS (cont'd)*Notes:*

<< 1998-03-27-10:23 sourced from:346868:346808 >>

Table: PLOT_CLUSTER_ASSOCIATIONS

Description:

The identification of a plot cluster being related to another plot cluster. All known circumstances would apply to a plot cluster type of a 'sample' (not an experiment).

This is expected to be one of two kinds; a sample is re-sampled, or a sample is associated with another as part of the design.

In the case of the former type, a sample is considered to be re-sampled rather than remeasured when there is no tree-tree correspondence between the two measurement visitations. An example would be auditing, or re-visits to samples that were never intended to be remeasured and lack permanent tree identifiers (numbered tags).

In the case of the latter, there are some designs that 'pair' or associate samples on account of their proximity in differing stands but where the growing conditions are considered to be similar for comparative purposes. The Old Growth Site Index samples are an example.

This entity replaces a single recursive relationship in the GYD model to allow for relationships other than resampling. Another recursive relationship could be added to accomodate 'associated' samples, however the choice has been made to genericise this relationship in the form of this entitiy should any other recursive situations unfold.

Table: PLOT_CLUSTER_ASSOCIATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PCLTR_PLOT_CLUSTER_SKEY1	NOT NULL	NUMBER(7,0)
* 2	PCLTR_PLOT_CLUSTER_SKEY2	NOT NULL	NUMBER(7,0)
* 3	ASSOCIATION_TYPE	NOT NULL	VARCHAR2(10)
	The reason a sample is associated with another another sample.		

To date; the known reasons for a sample to sample association are:

-re-sampling of a sample (different from a re-measurement in that no tree to tree association is known between Measurement Visitations)

code value = REMEASMT

-the designed pairing of proximate samples usually in differing stands

code value = PAIRING

<< 1998-03-27-10:28 sourced from:346868:516335 >>

4	PCA_DESC	NULL	VARCHAR2(75)
	A description of the sample association; additional qualifying conditions may be attached given the business volatility.		

<< 1998-03-27-10:28 sourced from:346868:516338 >>

Foreign Keys:

PCA_PCLTR_1_FK
PCLTR_PLOT_CLUSTER_SKEY1 = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY
PCA_PCLTR_2_FK
PCLTR_PLOT_CLUSTER_SKEY2 = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY

Indexes:

PCA_PCLTR_1_FK_I
PCLTR_PLOT_CLUSTER_SKEY1
PCA_PCLTR_2_FK_I
PCLTR_PLOT_CLUSTER_SKEY2

Notes:

Table: PLOT_CLUSTER_ASSOCIATIONS (cont'd)*Notes:*

<< 1998-03-27-10:28 sourced from:346868:516329 >>

Table: POINT_LOCATIONS*Description:*

A point in space used to identify a cluster element location or tree
that is being sampled by a plot cluster visitation.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	POINT_LOCN_SKEY << 1998-03-27-10:29 sourced from:346868:347775 >>	NOT NULL	NUMBER(7,0)
2	PCLTR_PLOT_CLUSTER_SKEY	NOT NULL	NUMBER(7,0)
3	POINT_TYPE The business purpose for establishing the plot center.	NOT NULL	VARCHAR2(10)

The known purposes are for a: plot center, a non-center point within a
plot (e.g. soil pit, ecological assessment) and out of plot (e.g a
proximate location selected for the pupose of being representative).

The auxillary plot, POINT TYPE domain value of 'AUX PLT CR' identifies
an auxillary plot center which is really the same as any other plot
center, domain value of 'PLOT CTR'. This semantic overloading is
allowed for the purposes of transition from the development to the
production environment. As a complete fix, a name attribute should be
added to the POINT LOCATION VISITATION entity, so to identify the
business data collection intent. E.g. BUSINESS PLOT NAME with values
and meaning of:

AUX, auxillay,

MAIN, main

INT, integrated

SUB, subplot

Table: POINT_LOCATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-10:29 sourced from:346868:555434 >>		
4	MCMP_MAP_COMP_SKEY	NULL	NUMBER(7,0)
5	ORIGIN_BRG	NULL	NUMBER(3,0)
	The bearing in azimuth degrees from the previous (next lower plot number) plot origin to the origin of this plot. If this is plot number 1 then the bearing is from the sample tie point. The origin for a circular plot is the centre.		
	<i>A! Not in HH or SEF; provision made for later entry</i>		
	<< 1998-03-27-10:29 sourced from:346868:346787 >>		
6	ORIGIN_DIST	NULL	NUMBER(6,2)
	The distance, in metres, from the lower numbered CLUSTER ELEMENT LOCATION centre to the centre of the cluster.		
	<i>A! Not in HH or SEF; provision made for later entry</i>		
	<< 1998-03-27-10:29 sourced from:346868:346786 >>		
7	OFFSET_BEARING_TO_POINT	NULL	NUMBER(3,0)
	<< 1998-03-27-10:29 sourced from:346868:555439 >>		
8	OFFSET_HOR_DIST_TO_POINT	NULL	NUMBER(5,2)
	<< 1998-03-27-10:29 sourced from:346868:555440 >>		
9	PLOT_NUM	NULL	NUMBER(4,0)
	The business identifier for the location.		
	Ideally, this would be re-named to LOCATION ID and changed to a VARCHAR2 10 long datatype. The typical identification of 'plots' is numeric, though there is increasing use of character based identification such as 'N' for north etc.		

Table: POINT_LOCATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
10	REFERENCE_TREE_BRG_TO_POINT << 1998-03-27-10:29 sourced from:346868:555443 >>	NULL	NUMBER(3,0)
11	REFERENCE_TREE_DBH << 1998-03-27-10:29 sourced from:346868:555444 >>	NULL	NUMBER(4,2)
12	REF_TREE_HOR_DIST_TO_POINT << 1998-03-27-10:29 sourced from:346868:555445 >>	NULL	NUMBER(5,2)
13	REF_TYPE	NULL	VARCHAR2(10)
14	REF_NUM	NULL	NUMBER(6)
15	SLOPE_PCT The gradient, in percent, of the terrain at the site location. <i>HH93_S PLOT_PL_SLOPE</i> <i>SEF_S CT0:51-53 SLOPE PCT</i> <i>SEF_C apply to CLUSTER_LOCATION '1' only</i> << 1998-03-27-10:29 sourced from:346868:346792 >>	NULL	NUMBER(3,0)
16	LOCATION_TYPE_CD << 1998-03-27-10:29 sourced from:346868:555417 >>	NULL	VARCHAR2(20)
17	LOCATION_FILE_ID	NULL	VARCHAR2(10)
18	MESO_SLOPE_POS_CD A code denoting the relative position of the sampling site within a catchment area with the intent to be consistent within the scale of topography affecting surface water flow. The vertical difference is usually between 3 and 300m, and the surface area generally exceeds 0.5 has in size. Also known as slope position, and meso site position.	NULL	VARCHAR2(3)

Table: POINT_LOCATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Definition Source: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p. 31.		
	<i>HH93_S PLOT_PL_SL_POS</i>		
	<i>HH93_C C=CRS, U=UP, M=MID, L=LOW, T=TOE, D=DEP, L=LVL</i>		
	<i>SEF_S CT2:77 SLOPE POSITION</i>		
	<i>A! No reply from Parminter/Lea of MOE</i>		
	<< 1998-03-27-10:29 sourced from:346868:346793 >>		
19	MACRO_SLOPE_POS_CD	NULL	VARCHAR2(3)
	A code denoting the relative position of the sampling site within the topographic scale perspective from mountain top to valley floor. The vertical distance is usually greater than 300m in most mountain regions. Also known as Macro Site Position.		
	Reference: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C., 1990, p. 31. FLMP		
	<i>A! Uncollected for G&Y samples; anticipated for Pest Multi-level survey</i>		
	<< 1998-03-27-10:29 sourced from:346868:346794 >>		
20	MAGNETIC_DECLINATION	NULL	NUMBER(3,1)
	The magnetic declination recorded on Card 2 Rec 2 per Appendix E in the Vegetation Ground Sample manual.		
	<< 1998-03-27-10:29 sourced from:346868:562002 >>		
21	AERIAL_FLIGHT_LINE_ID	NULL	VARCHAR2(20)

Table: POINT_LOCATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-10:29 sourced from:346868:555441 >>		
22	AERIAL_PHOTO_NUM << 1998-03-27-10:29 sourced from:346868:555442 >>	NULL	VARCHAR2(3)
23	TO_NEXT_POINT_BRG << 1998-03-27-10:29 sourced from:346868:555446 >>	NULL	NUMBER(3,0)
24	TO_NEXT_POINT_HOR_DIST << 1998-03-27-10:29 sourced from:346868:555447 >>	NULL	NUMBER(5,2)
25	ASPECT_BRG The measure, to the nearest azimuth degree, of the topographic orientation of the site location. HH93_S PLOT_PL_ASPECT SEF_S CT0:48-50 ASPECT DEGREE SEF_C apply to CLUSTER_LOCATION '1' only If 'N' then = 0; 'NE' then = 45; 'E' then = 90; 'SE' then = 135; 'S' then = 180; 'SW' then = 225; 'W' then = 270; 'NW' then = 315 << 1998-03-27-10:29 sourced from:346868:346791 >>	NULL	NUMBER(3)
26	POINT_SEQ_NUM << 1998-03-27-10:29 sourced from:346868:555438 >>	NULL	NUMBER(2,0)
27	DESCRIPTION	NULL	VARCHAR2(80)
28	ELEVATION	NULL	NUMBER(4,0)
29	UTM_ZONE	NULL	NUMBER(2,0)
30	UTM_EASTING	NULL	NUMBER(9,3)
31	UTM_NORTHING	NULL	NUMBER(10,3)
32	POLYGON_NUMBER	NULL	VARCHAR2(14)
33	PLOC_REF_TYPE	NULL	VARCHAR2(10)
34	PLOC_REF_NUM	NULL	NUMBER(6)
35	UTM_OFFSET_BEARING	NULL	NUMBER(3,0)
36	UTM_OFFSET_DISTANCE	NULL	NUMBER(5,2)

Table: POINT_LOCATIONS (cont'd)*Foreign Keys:*

PLOC_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY
PLOC_PCLTR_FK
 PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY

Indexes:

PLOC_MCMP_FK_I
 MCMP_MAP_COMP_SKEY
PLOC_PCLTR_FK_I
 PCLTR_PLOT_CLUSTER_SKEY

Notes:

<< 1998-03-27-10:29 sourced from:346868:346784 >>

Table: POINT_LOCATION_VISITATIONS*Description:*

A measurement event at the location where the plots (cluster elements) are located. There is an optional assesement of the plot stake, although it has only been a recent requirement of some permanent samples.

By explicitly representing this event, an association with changing specifications can be made. For example, if upon re-measurement, a new minimum tree diameter is utilized, in accordance with a prescribed standard determined since the last re-measurement, then the standard (specifications) becomes operative for a specific sample or plot at the time (event) it is actually measured.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CE_VISIT_SKEY << 1998-03-27-10:30 sourced from:346868:347423 >>	NOT NULL	NUMBER(7,0)
2	PLOT_STAKE_COND_IND Flags the condition of the plot stake at the time of the visitation. Y(es) means the plot was centre stake was undisturbed (OK), N(o) means the plot centre stake was removed or otherwise disturbed. << 1998-03-27-10:30 sourced from:346868:347007 >>	NULL	VARCHAR2(1)
3	PLOT_TYPE_CD << 1998-03-27-10:30 sourced from:346868:555524 >>	NULL	VARCHAR2(2)
4	LENGTH_OBSERVED The portion of the Total Line Length from which data is gathered. There are discrete segments from which	NULL	NUMBER(5,2)

Table: POINT_LOCATION_VISITATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	the data is gathered which are governed by field procedures (rules).		
	Maybe the sum or two or more discontinuous segments of the Total Line Length.		
	From the replication perspective, the segments should be recorded, and this has been noted to Verne Sundstrom, responsible for the field sheet design. (96-05-01).		
	<< 1998-03-27-10:30 sourced from:346868:555484 >>		
5	PARTIAL_PLOT_START_BRG << 1998-03-27-10:30 sourced from:346868:561052 >>	NULL	NUMBER(3,0)
6	PARTIAL_PLOT_END_BRG << 1998-03-27-10:30 sourced from:346868:561053 >>	NULL	NUMBER(3,0)
7	CMT Decriptive text associated with the assessment of the condition of the centre stake and any repairs to it.	NULL	VARCHAR2(256)
	<< 1998-03-27-10:30 sourced from:346868:347197 >>		
8	AZIMUTH_BEARING << 1998-03-27-10:30 sourced from:346868:562011 >>	NULL	NUMBER(3,0)
9	PLOT_QUALIFIER_CD << 1998-03-27-10:30 sourced from:346868:555534 >>	NULL	VARCHAR2(2)
11	MEAVT_MEASMT_VISIT_SKEY	NOT NULL	NUMBER(7,0)
13	PLOC_POINT_LOCN_SKEY	NOT NULL	NUMBER(7,0)

Table: POINT_LOCATION_VISITATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
15	CELMT_CLUSTER_ELEMENT_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

CEV_CELMT_FK
CELMT_CLUSTER_ELEMENT_SKEY = CLUSTER_ELEMENTS.CLUSTER_ELEMENT_SKEY
CEV_MEAVT_FK
MEAVT_MEASMT_VISIT_SKEY = MEASMT_VISITATIONS.MEASMT_VISIT_SKEY
CEV_PLOC_FK
PLOC_POINT_LOCN_SKEY = POINT_LOCATIONS.POINT_LOCN_SKEY

Indexes:

CEV_CELMT_FK_I
CELMT_CLUSTER_ELEMENT_SKEY
CEV_MEAVT_FK_I
MEAVT_MEASMT_VISIT_SKEY
CEV_PLOC_FK_I
PLOC_POINT_LOCN_SKEY

Notes:

<< 1998-03-27-10:30 sourced from:346868:347006 >>

Table: POLYGONS*Description:*

In the vegetation inventory business context , the delineation of an areal geometric feature (polygon) interpreted from medium scale aerial photography using a number of criteria based on appearance such as texture, grayness, color, forest stand density, stand height etc.

Data is collected by interpretation, observation and classification of homogenous units of land cover (including inland water bodies) with an emphasis on the vegetative component areas.

The classification of homogenous areas is typically applied to medium scale photography (1:10,000 to 1:20,000 scale).

There are differing standards and sources which are reflected in the DESIGN SPECIFICATION.

Definition source: p 4-2, VI Phase 1, Photo Interpretation

Procedures

NB: this generic 'polygon' as opposed to 'vegetative cover polygon' permits the re-use for other themes

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	POLYGON_SKEY System generated UID from ORACLE sequence polygon_seq.	NOT NULL	NUMBER(14,0)

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	VAM_SOURCE_SKEY	NOT NULL	NUMBER(14,0)
3	LCC_CLASS_CODE_SKEY	NOT NULL	NUMBER(7,0)
4	POLYGON_ID	NOT NULL	NUMBER(6,0)
	The business assigned unique identifier for a polygon. Typically this		
	has been uniquely assigned within a BCGS 6 X 12 Mapsheet.		
	<< 1998-03-26-17:21 sourced from:236464:506342 >>		
5	CREATE_DATE	NOT NULL	DATE
	The date of creation of the polygon record.		
	<< 1998-03-26-17:21 sourced from:236464:506731 >>		
6	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
	The user id that created the polygon record.		
	<< 1998-03-26-17:21 sourced from:236464:506733 >>		
7	AREA	NOT NULL	NUMBER(10,3)
	The area of a polygon; usually derived from geographic information		
	system processing software.		
	<< 1998-03-26-17:21 sourced from:236464:506343 >>		
8	DES_DESIGN_SKEY	NOT NULL	NUMBER(7,0)
9	FCDE_FEATURE_CODE_NUMBER	NULL	NUMBER(14,0)
10	OAC_OPERABILITY_SKEY	NULL	NUMBER(7,0)
11	CIA_COAST_INTERIOR_CD	NULL	VARCHAR2(1)
12	SILVICULTURAL_OPENING_NUM	NULL	NUMBER(4,0)
	A unique number (by BCGS mapsheet) assigned to each 'opening' in the		
	forest caused by a disturbance.		

Also note that the term 'opening' is not necessarily an opening of the forest canopy that would be visible from aerial photography, but refers to the opening of a record keeping file on the activity related

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u> to the polygon.	<u>Nulls?</u>	<u>Type</u>
	Definition Source; p.3-142 of the FIP Data Dictionary		
	<< 1998-03-26-17:21 sourced from:236464:508899 >>		
13	FEATURE_ID_ORG_UNIT The province wide unique identifier for the occurrence of a spatial object described by a Feature Code. This number is generated from the control entries in the Feature Id Number Control entity.	NULL	NUMBER(20,0)
	There are two pieces concatenated to form this identifier:		
	- Org Unit Id		
	- Sequence number for this Feature Code in this Org Unit.		
	<< 1998-03-26-17:21 sourced from:236464:498258 >>		
15	FIP_NON_PRODUCTIVE_DESC_CD Land that is incapable of supporting commercial forests. This maps directly to the FIP attribute, NON PRODUCTIVE DESCRIPTOR and is also utilized for the determination of the BC Land Cover Classification.	NULL	VARCHAR2(5)
	This is a FIP classification based attribute only, and is retained for the purposes of business transition from FIP to Vegetation Inventory.		
	The current growth projection model, 'VDYP', requires this attribute		

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	as a key input variable, and will continue to be utilized for Vegetative Cover for the next two years. There is no expectation that this attribute would be updated or created under Vegetation Inventory classification practise. (97-06, JH)		
16	FEATURE_ID_SEQUENCE The province wide unique identifier for the occurrence of a spatial object described by a Feature Code. This number is generated from the control entries in the Feautre Id Number Control entity. There are two pieces concatenated to form this identifier: - Org Unit Id - Sequence number for this Feature Code in this Org Unit. << 1998-03-26-17:21 sourced from:236464:498259 >>	NULL	NUMBER(20,0)
17	MODIFY_DATE The date of modification of the polygon record. << 1998-03-26-17:21 sourced from:236464:506732 >>	NULL	DATE
18	MODIFY_USER_ID The user id that last modified the polygon record. << 1998-03-26-17:21 sourced from:236464:506734 >>	NULL	VARCHAR2(30)
19	BUSINESS_CREATE_DATE The date the business created the polygon record. This is separate from CREATE DATE which is the system assigned date retained for audit purposes. The BUSINESS CREATE DATE may differ in that it may be	NULL	DATE

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	assigned off-line using a local platform which has no administrative control on the date field.		
	Equivalent to the FIP INPUT DATE.		
	<< 1998-03-26-17:21 sourced from:236464:603386 >>		
20	SURFACE_EXPRESSION_CD	NULL	VARCHAR2(1)
	The form of surficial material apparent on the medium scale photography. A simplified attribution is used owing to the likelihood that the trees will mask surficial features.		
	Description Source: p. 3-5, Photo Interpretation Procedures, Phase 1, May 14, 1996.		
	Data Value Source: Table 3-2, from Description Source		
	<i>A_S! col. 15 VRI Att. (entry) form</i>		
	<< 1998-03-26-17:21 sourced from:236464:592643 >>		
21	MODIFYING_NATURAL_PROCESS_CD	NULL	VARCHAR2(1)
	A natural mechanism of weathering, erosion and soil material deposition that result in the modification of surficial materials and landforms.		
	Used for terrain classification, site classification, soil condition and identification of potential hazards such as avalanches, slope instability and flooding.		

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Data Definition Source: p.3-7, Photo Interpretation Procedures, Phase 1, May 14, 1996		
	Data Value Source: Table 3-3, from Data Definition Source.		
	<i>A_S! col.16 VRI Att. (entry) form</i>		
	<< 1998-03-26-17:22 sourced from:236464:592644 >>		
22	MESO_SLOPE_POSITION_CD	NULL	VARCHAR2(3)
	A code denoting the relative position of the sampling site within a catchment area with the intent to be consistent within the scale of topography affecting surface water flow. The vertical difference is usually between 3 and 300m, and the surface area generally exceeds 0.5 has in size.		
	Also known as slope position, and meso site position.		
	Definition Source: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p. 31.		
	<i>A_S! col. 17 VRI Att. (entry form)</i>		
	<i>A! change domain to reflect the single letter version, C, M etc.</i>		
	<< 1998-03-26-17:22 sourced from:236464:592645 >>		
23	ALPINE_DESIGNATION_CD	NULL	VARCHAR2(1)
	The location of the land unit with respect to location and elevation.		

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	An interpretation is applied as to whether the tree unit is above or below the tree line, that is, the upper elevation limit of continuous tree, or potential tree if cut-over, cover.		
	If the land unit is above the the elevation line, a code of 'A' is applied, otherwise 'N', the default.		
	Description Source: p. 3-11, Photo Interpretation Procedures, Phase 1, May 14, 1996.		
	Data Value Source: Table 3-5, from Description Source		
	<i>A_S! col.18 VRI Att. (entry) form</i>		
	<< 1998-03-26-17:22 sourced from:236464:592646 >>		
24	SOIL_NUTRIENT_REGIME_CD	NULL	VARCHAR2(1)
	A code to denote, on a relative scale, the available nutrient supply for plant growth. The soil's nutrient regime (trophotope) integrates many environmental and biotic parameters which, in combination, determine the actual amounts of available nutrients.		
	Definition Source: Reference: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p37-40		
	<i>A_S! col. 19 VRI Att. (entry) form</i>		
	<< 1998-03-26-17:22 sourced from:236464:592647 >>		
25	LAYER_SPP_OCCUR_CNT	NULL	NUMBER(6,0)
	A count of the number of LAYER SPECIES records received when the file was forwarded and processed into the database.		

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>It is expected that this would only be populated from the source VIFF file as no such attribute exists in the FIP file.</p> <p>(Formerly in the VERSION AUDIT METADATA entity).</p>		
26	<p>QUADRANT_NUM</p> <p>A 3' by 6' quarter portion of a 6' by 12' (nominally 1:20000) mapsheet. Numbered from left to right bottom row, right ot left top row.</p> <p><< 1998-03-26-17:22 sourced from:236464:508897 >></p>	NULL	NUMBER(1)
27	<p>SUBQUADRANT_NUM</p> <p>A 1.5' by 3' quarter portion of a 3' by 6' (nominally 1:10000) mapsheet. Numbered from left to right bottom row, right ot left top row, nominally 1:5000 scale.</p> <p><< 1998-03-26-17:22 sourced from:236464:508898 >></p>	NULL	NUMBER(1)
28	<p>DATA_SOURCE_CD</p> <p>The source of the data that describes the polygon. This attribute has been termed 'Ecology Data Source' in the VIFF file , though it is a misnomer as this applies to the entire polygon.</p> <p><< 1998-03-26-17:22 sourced from:236464:786467 >></p>	NULL	NUMBER(2)
29	<p>COAST_INTERIOR_SOURCE_CD</p> <p>The source of the assigned Coast Interior Cd for the polygon. There are two possible sources:</p>	NULL	VARCHAR2(3)

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	-a direct assignment from the Region Compartment Letter association with the Coast/Interior Cd where the polygon is wholly within a Coastal or Interior area (RCL)		
	-an addition of resultant areas where the polygon, or the Region Compartment Letter area in which it resides, bisects the Coast/Interior 'boundary'.		
	It is expected that determining the Coast/Interior code would become redundant on implementation of ecologically based tree volume derivations.		
	<< 1998-03-26-17:22 sourced from:236464:786468 >>		
30	DATA_ENTRY_SOURCE_TYPE_CD	NULL	VARCHAR2(2)
	The historic codified record of the data source of FIP file data. Retained as supplied from the FIP file. Valid values are: CC, CF, CB, FA. (Formerly in the Version Audit Metadata entity)		
31	RESULTANT_OCCUR_CNT	NULL	NUMBER(6,0)
	A count of the number of RESULTANT records received when the file was forwarded and processed into the database. (Formerly in VERSION AUDIT METADATA entity).		
32	LAYER_OCCUR_CNT	NULL	NUMBER(6,0)
	A count of the number of LAYER records received when the file was forwarded and processed into the database.		

Table: POLYGONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Formerly in entity VERSION AUDIT METADATA.		
33	HISTORY_OCCUR_CNT A count of the number of HISTORY records received when the file was forwarded and processed into the database.	NULL	NUMBER(6,0)
	(Formerly in the VERSION AUDIT METADATA entity).		
35	PRJ_PROJECT_SKEY	NULL	NUMBER(7,0)

Unique Constraints:

PLY_PLY2_UK
VAM_SOURCE_SKEY
POLYGON_ID

Foreign Keys:

PLY_CIA_FK
CIA_COAST_INTERIOR_CD = VGIS_COAST_INTERIOR_AREAS.COAST_INTERIOR_CD
PLY_DES_FK
DES_DESIGN_SKEY = DESIGN_SPECIFICATIONS.DESIGN_SKEY
PLY_FCDE_FK
FCDE_FEATURE_CODE_NUMBER = FEATURE_CLASS_CODES.FEATURE_CODE_NUMBER
PLY_LCC_FK
LCC_CLASS_CODE_SKEY = BC_LAND_COVER_CLASS_CDS.CLASS_CODE_SKEY
PLY_OAC_FK
OAC_OPERABILITY_SKEY = OPERABLE_AREA_CDS.OPERABILITY_SKEY
PLY_PRJ_FK
PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY
PLY_VAM_FK
VAM_SOURCE_SKEY = VERSION_AUDIT_METADATA.SOURCE_SKEY

Indexes:

PLY_CIA_FK_I
CIA_COAST_INTERIOR_CD
PLY_DES_FK_I
DES_DESIGN_SKEY
PLY_FCDE_FK_I
FCDE_FEATURE_CODE_NUMBER
PLY_LCC_FK_I
LCC_CLASS_CODE_SKEY
PLY_OAC_FK_I
OAC_OPERABILITY_SKEY
PLY_PRJ_FK_I
PRJ_PROJECT_SKEY
PLY_VAM_FK_I
VAM_SOURCE_SKEY

Notes:

<< 1998-03-26-17:21 sourced from:236464:498250 >>

Table: POLYGONS (cont'd)*Notes:*

Table: PRODUCTIVITY_PATHOLOGIES*Description:*

A specialized assessment of scars and mistletoe on trees of Productivity (E.P. 703) installations. Productivity tree measurement may have additional pathology information recorded using the Growth Pathology sub type.

Scars are assessed for each unequal tree portion as follows: the base, from germination point to breast height (1.3m); the middle, from breast height to one half total tree height; the top, from one half total tree height to the top.

For each tree portion scars are categorized as open or closed.

For each category, scars are then further assessed for multiple or single occurrences.

The Mistletoe code is assigned by totalling the assessment of individual thirds (of equal size).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
2	FROST_CRACK_THIRD_CD	NOT NULL	VARCHAR2(1)
	The code to denote the combination of tree thirds for FROST CRACKS.		
3	PROD_DEAD_BRKN_TOP_CD	NOT NULL	VARCHAR2(1)
	The code to denote the combination of tree top.		
4	FORK_CROOK_THIRD_CD	NOT NULL	VARCHAR2(1)
	The code to denote the combination of tree thirds for FORKS or CROOKS.		
5	TOP_SCAR_CD	NULL	VARCHAR2(1)
	A code denoting the presence of scars in the top portion of the tree.		
	The code also denotes the category of closure (open or closed) and the		

Table: PRODUCTIVITY_PATHOLOGIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	category of occurrences (single or multiple). The base portion of the tree is from one half total tree height to the tree top.		
	<i>HH93_S TR_MEAS_TM_S_TOP</i>		
	<i>SEF_S CT4:73 TOP</i>		
6	MID_SCAR_CD A code denoting the presence of scars in the middle portion of the tree. The code also denotes the category of closure (open or closed) and an the category of occurrences (single or multiple). The base portion of the tree is from germination point to breast height (1.3m) to one half total tree height.	NULL	VARCHAR2(1)
	<i>HH93_S TR_MEAS_TM_S_MID</i>		
	<i>SEF_S CT4:72 MID</i>		
7	PROD_MISTLETOE_CD For trees measured on Productivity installations (E.P. 703) only, each third is individually assessed for mistletoe as follows: 0 no infection, one half or less of the branches are infected, or greater than one half of the branches are infected. The code represents the sum of the assessment of mistletoe by thirds.	NULL	NUMBER(1,0)
	<i>HH93_S TR_MEAS_TM_MISTLE</i>		
	<i>HH93_C Load only if SAMPLE_TYPE_CD = 'M'</i>		
	<i>SEF_S CT4:43 MISTLETOE</i>		
	<i>SEF_S Load only if SAMPLE_TYPE_CD = 'M'</i>		
8	BASE_SCAR_CD	NULL	VARCHAR2(1)

Table: PRODUCTIVITY_PATHOLOGIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	A code denoting the presence of scars in the base portion of the tree.		
	The code also denotes the category of closure (open or closed) and the category of occurrences (single or multiple). The base portion of the tree is from germination point to breast height (1.3m).		
	<i>HH93_S TR_MEAS_TM_S_BASE</i>		
	<i>SEF_S CT4:71 BASE</i>		
9	CONC_THIRD_CD	NOT NULL	VARCHAR2(1)
	The code to denote the combination of tree thirds for CONC.		

Foreign Keys:

PRDPT_TRMEA_FK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

PRDPT_TRMEA_FK_I
TRMEA_TREE_MEASMT_SKEY

Table: PROGRAM_INITIATIVES*Description:*

This parent business activity which initiates the implementation of
 a Forest/Vegetation Inventory or other mensurational practice.

Four examples of known initiatives at this level are:

- Forest Inventory program, 1950-1995
- Vegetation Inventory program,1993 -on,
- Research Branch Experimental Plots, 1920 -on, and
- Research Branch acquisitions from external sources

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PROGRAM_INITIATIVE_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(7,0)
	Populated from the sequence, PRO_INIT_SEQ.		
	<< 1998-04-13-09:08 sourced from:236464:785618 >>		
2	IDENTIFIER_CD A unique identifier code used by the business to describe a program initiative.	NOT NULL	VARCHAR2(10)

Expectable examples are:

Table: PROGRAM_INITIATIVES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	-FIP (also a file format, but used to denote the period of forest inventory, 1950-1994, which includes processing and activities by FCAP, VDYP, IGDS (*.FC1) files etc.,		
	-VEG INV for all Vegetation Inventory practises		
	-RES EP, Research Branch Experimental Plots		
	<< 1998-04-13-09:08 sourced from:236464:612250 >>		
3	NAME A non-abbreviated name used to describe a PROGRAM INITIATIVE.	NOT NULL	VARCHAR2(50)
	<< 1998-04-13-09:08 sourced from:236464:612251 >>		
4	EFFECTIVE_DATE The date when the Program Initiatives became effective and data collection was initiated.	NOT NULL	DATE
	<< 1998-04-13-09:08 sourced from:236464:612253 >>		
5	DESCRIPTION A text description of the PROGRAM INITIATIVE.	NULL	VARCHAR2(256)
	<< 1998-04-13-09:08 sourced from:236464:612252 >>		

Table: PROGRAM_INITIATIVES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
6	EXPIRY_DATE << 1998-04-13-09:08 sourced from:236464:612254 >>	NULL	DATE

Notes:

<< 1998-04-13-09:08 sourced from:236464:612244 >>

Table: PROJECT_ASSOCIATIONS*Description:*

The association of a project and the various data

collecting initiatives (DESIGN SPECIFICATION)

or primary collected data objects (POLYGON or PLOT CLUSTER).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	PRJ_PROJECT_SKEY	NOT NULL	NUMBER(7,0)
* 2	PROJECT_ASSOC_SKEY	NOT NULL	NUMBER(14,0)
3	PCLTR_PLOT_CLUSTER_SKEY	NULL	NUMBER(7,0)
4	DES_DESIGN_SKEY	NULL	NUMBER(7,0)

Unique Constraints:

PA_PA2_UK
 PRJ_PROJECT_SKEY
 PCLTR_PLOT_CLUSTER_SKEY
 DES_DESIGN_SKEY

Foreign Keys:

PA_DES_FK
 DES_DESIGN_SKEY = DESIGN_SPECIFICATIONS.DESIGN_SKEY
 PA_PCLTR_FK
 PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY
 PA_PRJ_FK
 PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY

Indexes:

PA_DES_FK_I
 DES_DESIGN_SKEY
 PA_PCLTR_FK_I
 PCLTR_PLOT_CLUSTER_SKEY
 PA_PRJ_FK_I
 PRJ_PROJECT_SKEY

Table: PROVINCIAL_FOREST_CDS*Description:*

A code used to identify a Provincial Forest as designated under
Section 5 of the Forest Act.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PROVINCIAL_FOREST_SKEY System generated UID from ORACLE sequence prov_forest_cd_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-17:23 sourced from:236464:549497 >>			
2	PROVINCIAL_FOREST_NUM_CD A numeric code designating the Provincial Forest.	NOT NULL	NUMBER(5,0)
<< 1998-03-26-17:23 sourced from:236464:549500 >>			
3	DESCRIPTION A description, usually name, of the Provincial Forest.	NULL	VARCHAR2(75)
<< 1998-03-26-17:23 sourced from:236464:549501 >>			

Unique Constraints:

PFC_PFC2_UK
PROVINCIAL_FOREST_NUM_CD

Notes:

<< 1998-03-26-17:23 sourced from:236464:549491 >>

Table: QUALITY_ASSURANCE_ACTIVITIES*Description:*

A data quality assurance activity performed against a plot cluster.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	QA_ACTIVITY_SKEY System Gnerated UID from ORACLE sequence qa_activity_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-16:04 sourced from:7003:537203 >>			
2	PCLTR_PLOT_CLUSTER_SKEY	NULL	NUMBER(7,0)
3	MEAVT_MEASMT_VISIT_SKEY	NULL	NUMBER(7,0)
4	DATE_PERFORMED << 1998-03-26-16:04 sourced from:7003:537204 >>	NULL	DATE
5	ACTIVITY_TYPE A code indicatiing the type of Quality Assurance activity performed.	NULL	VARCHAR2(20)
<< 1998-03-26-16:04 sourced from:7003:561982 >>			
6	CMT << 1998-03-26-16:05 sourced from:7003:537205 >>	NULL	VARCHAR2(256)
7	DATA_CATEGORY The general category of data to which the Role applies. The Vegetation Inventory business has loosely defined two categories of data collection, office checking and responsibilty roles: the tree based data (tree measurements) and the 'ecology' based data, a euphanism for everything else, e.g. forage, succession, interpretation, ecosystem details, range vegetation etc.	NULL	VARCHAR2(15)

Table: QUALITY_ASSURANCE_ACTIVITIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

This categorization is ad hoc, and this attributive implementation is also just as temporary. If the business decides not to categorize the field data collection so loosely, then there is no need for this attribute.

Foreign Keys:

QAA_MEAVT_FK
MEAVT_MEASMT_VISIT_SKEY = MEASMT_VISITATIONS.MEASMT_VISIT_SKEY
QAA_PCLTR_FK
PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY

Indexes:

QAA_MEAVT_FK_I
MEAVT_MEASMT_VISIT_SKEY
QAA_PCLTR_FK_I
PCLTR_PLOT_CLUSTER_SKEY

Notes:

<< 1998-03-26-16:04 sourced from:7003:537197 >>

Table: QUALITY_ASSURANCE_ASSNS**Description:**

The association of quality assurance comments to business objects.

Quality assurance scope would apply to a mapsheet, a version, a text file or a graphics text file pair. Attribution of status, STATUS CD has been added.

The comments may be persistent over many versions, as the quality assurance items may or may not be dealt with on subsequent update and processing.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	QA_ASSN_SKEY	NOT NULL	NUMBER(14,0)
2	QACMT_QA_COMMENT_SKEY	NOT NULL	NUMBER(7,0)
3	CREATE_DATE	NOT NULL	DATE
<p>The date the quality assurance comments were associated with a version of a graphics file or text file. This may be the date that comments were created anew (in Quality Assurance Comment), or the date that persistent comments of a past version were re-attributed to a new version.</p> <p><< 1998-03-25-16:59 sourced from:416792:432470 >></p>			
4	TV_THEME_VERSION_SKEY	NULL	NUMBER(7,0)
5	TFV_TEXT_FILE_SKEY	NULL	NUMBER(7,0)
7	MCMP_MAP_COMP_SKEY	NULL	NUMBER(7,0)
11	MODIFY_DATE	NULL	DATE
<p><< 1998-03-25-16:59 sourced from:416792:492795 >></p>			
12	CREATE_USER_ID	NULL	VARCHAR2(30)
<p>The user id of that created the quality assurance comments.</p> <p><< 1998-03-25-16:59 sourced from:416792:432471 >></p>			

Table: QUALITY_ASSURANCE_ASSNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
13	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492796 >>	NULL	VARCHAR2(30)
14	QA_STATUS_CD The staus of a quality assurance comment; expected values are: ACT meaning active, INA meaning inactive. << 1998-03-25-16:59 sourced from:416792:711164 >>	NULL	VARCHAR2(3)
15	GRFV_GRAPHICS_FILE_SKEY	NULL	NUMBER(7,0)
16	GTP_GRFV_GRAPHICS_FILE_SKEY	NULL	NUMBER(7,0)
17	GTP_TFV_TEXT_FILE_SKEY	NULL	NUMBER(7,0)
19	ROLA_ROLE_ASSN_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

QAN_GRFV_FK
GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_FILE_VERSIONS.GRAPHICS_FILE_SKEY

QAN_GTP_FK
GTP_GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_TEXT_FILE_PAIRS.GRFV_GRAPHICS_FILE_SKEY
GTP_TFV_TEXT_FILE_SKEY = GRAPHICS_TEXT_FILE_PAIRS.TFV_TEXT_FILE_SKEY

QAN_MCMP_FK
MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY

QAN_QACMT_FK
QACMT_QA_COMMENT_SKEY = QUALITY_ASSURANCE_COMMENTS.QA_COMMENT_SKEY

QAN_ROLA_FK
ROLA_ROLE_ASSN_SKEY = ROLE_ASSOCIATIONS.ROLE_ASSN_SKEY

QAN_TFV_FK
TFV_TEXT_FILE_SKEY = TEXT_FILE_VERSIONS.TEXT_FILE_SKEY

QAN_TV_FK
TV_THEME_VERSION_SKEY = THEME_VERSIONS.THEME_VERSION_SKEY

Indexes:

QAN_GRFV_FK_I
GRFV_GRAPHICS_FILE_SKEY

QAN_GTP_FK_I
GTP_GRFV_GRAPHICS_FILE_SKEY
GTP_TFV_TEXT_FILE_SKEY

QAN_MCMP_FK_I
MCMP_MAP_COMP_SKEY

QAN_QACMT_FK_I
QACMT_QA_COMMENT_SKEY

QAN_ROLA_FK_I
ROLA_ROLE_ASSN_SKEY

QAN_TFV_FK_I
TFV_TEXT_FILE_SKEY

QAN_TV_FK_I

Table: QUALITY_ASSURANCE_ASSNS (cont'd)*Indexes:*

TV_THEME_VERSION_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418284 >>

Table: QUALITY_ASSURANCE_COMMENTS*Description:*

The comments noted during quality assurance processes.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	QA_COMMENT_SKEY The surrogate identifier of a quality assurance comment.	NOT NULL	NUMBER(7,0)
	<< 1998-03-25-16:59 sourced from:416792:432472 >>		
2	QA_ANNOTATION Quality assurance comments and queries that are meant to retained as encountered during processing of the FIP and graphics file.	NOT NULL	VARCHAR2(256)
	<< 1998-03-25-16:59 sourced from:416792:421431 >>		
3	CREATE_DATE The date the quality assurance annotation was made.	NOT NULL	DATE
	<< 1998-03-25-16:59 sourced from:416792:421314 >>		
4	CREATE_USER_ID The author of the quality assurance notes/comments.	NOT NULL	VARCHAR2(30)
	<< 1998-03-25-16:59 sourced from:416792:421313 >>		
5	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492797 >>	NULL	DATE
6	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492798 >>	NULL	VARCHAR2(30)
7	ROLA_ROLE_ASSN_SKEY	NULL	NUMBER(7,0)

Table: QUALITY_ASSURANCE_COMMENTS (cont'd)*Foreign Keys:*

QACMT_ROLA_FK
ROLA_ROLE_ASSN_SKEY = ROLE_ASSOCIATIONS.ROLE_ASSN_SKEY

Indexes:

QACMT_ROLA_FK_I
ROLA_ROLE_ASSN_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418278 >>

Table: RANGE_UNIT_CDS*Description:*

Stock Range, Range Unit, and Range Pasture are used to summarize general range management activities, forage activity. range utilization, invader/weed species inventory, etc.

The designation of these administrative units is a hierarchy of associated range administration units as follows:

- Stock Range, a gazetted area that is the highest administrative level containing,
- Range Unit, a management area used to prescribe the numbers and kinds of livestock that the land can support, containing,
- Range Pasture, the smallest range management area authorized for livestock grazing.

At initial system implementation, this entity will contains the latter two units as the source data has been organized to support the hierarchy. The Stock Range Units will be retained in a separate entity, STOCK RANGE CD, because the source data has not been structured.

This table is structured such that other units, by other names including the Stock Units, if and when associated, can be added to represent the hierarchial structure.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	RANGE_UNIT_CD_SKEY System genereated UID from ORACLE sequence range_cd_seq.	NOT NULL	NUMBER(7,0)

Table: RANGE_UNIT_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-17:23 sourced from:236464:435067 >>		
2	UNIT_NAME The name of the Range Unit (e.g. Range, Stock, Pasture). <i>July 3, 1997</i> <i>This attribute addresses the hierarchical nature of administrative RANGE UNITS.</i> << 1998-03-26-17:23 sourced from:236464:435071 >>	NOT NULL	VARCHAR2(10)
3	UNIT_BUSINESS_ID The numeric "code" used to identify a Business Unit. e.g. For the Business Unit "Stock Range", a value of "605" represents "Barker". << 1998-03-26-17:23 sourced from:236464:435072 >>	NOT NULL	NUMBER(8,0)
4	DESCRIPTION A description of the Range Unit Business Id. << 1998-03-26-17:23 sourced from:236464:547032 >>	NULL	VARCHAR2(75)
6	RUC_RANGE_UNIT_CD_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

RUC_RUC_FK
RUC_RANGE_UNIT_CD_SKEY = RANGE_UNIT_CDS.RANGE_UNIT_CD_SKEY

Indexes:

RUC_RUC_FK_I
RUC_RANGE_UNIT_CD_SKEY

Notes:

<< 1998-03-26-17:23 sourced from:236464:434389 >>

Table: RANGE_VEGETATION_MEASMTS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

The collection of the abundance of forage shrubs. These are often assessed by their occurence along a transect.

This is a near total associative entity; this relates to multiple occurrences of horizontal distances, with repect to Phenology, Shrub Layer and Shrub Species (all code table foreign key references).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

Table: RANGE_VEGETATION_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	RANGE_MEASMT_SKEY System generated UID from ORACLE sequence FORAGE_SHRUB_MEASMT_SEQ.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-16:08 sourced from:7003:537262 >>

2	ITEM_NUM The field collection assigned number of the occurrence of the abundance of a shrub.	NOT NULL	NUMBER(2,0)
---	--	----------	-------------

<< 1998-03-26-16:08 sourced from:7003:400035 >>

3	PHENOLOGY_IDENTIFIER The phenology observed for the species identified.	NULL	VARCHAR2(2)
---	--	------	-------------

This identifier must be procedurally verified against the Pehnology codes as the specific species recorded will inherit the set of valid phenologies from the Phylum were the definitions were made.

<< 1998-03-26-16:08 sourced from:7003:564373 >>

5	VLC_VEGETATION_LAYER_CD	NOT NULL	VARCHAR2(3)
7	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
9	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

VRM_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY

VRM_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

VRM_VLC_FK
VLC_VEGETATION_LAYER_CD = VEGETATION_LAYER_CDS.VEGETATION_LAYER_CD

Indexes:

VRM_CEV_FK_I
CEV_CE_VISIT_SKEY

Table: RANGE_VEGETATION_MEASMTS (cont'd)*Indexes:*

VRM_GTO_FK_I
GTO_GROUP_TAXON_SKEY
VRM_VLC_FK_I
VLC_VEGETATION_LAYER_CD

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-16:08 sourced from:7003:400026 >>

Table: REGULATED_FOREST_AREAS*Description:*

A code set table of identifiers originally assigned to a regulated area of forestry practice, Tree Farms, Tree Farm Licences and Public Sustained Yield Units. The use of the identifier has since been expanded to identify wood lots, parks, recreation areas, conservancies, and ecological reserves. Source for the codes is the document 'Standards and Procedures for the Acquisition of Forestry Inventory Data', 1990 Inventory Branch.

Data Custodian, Data Administrator, Inventory Branch

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	RFA_SKEY	NOT NULL	NUMBER(7,0)
	A system-generated number used to uniquely identify the row.		
	In the past, this number has been created by taking:		
	special cruise number * 10 + special cruise sub code		
	but it should not be assumed that this will ALWAYS be the case:		
	i.e. this skey should not be interpreted as an 'intelligent key'.		
	<< 1998-03-25-16:00 sourced from:346868:349017 >>		
2	SPECIAL_CRUISE_NUMBER	NOT NULL	NUMBER(4,0)
	An identifier originally assigned to a regulated area of forestry		
	practise (ie. Tree Farms, Tree Farm Licences and Public Sustained		
	Yield Units). The use of the identifier has since been expanded to		
	identify WoodLots, Parks, Recreation areas, Conservancies and		
	Ecological reserves.		
	<< 1998-03-25-16:00 sourced from:346868:346848 >>		

Table: REGULATED_FOREST_AREAS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	DESCRIPTION A name and/or associated tenure type and licence number of the special cruise area. << 1998-03-25-16:00 sourced from:346868:346849 >>	NOT NULL	VARCHAR2(50)
4	SPECIAL_CRUISE_SUB_CODE << 1998-03-25-16:00 sourced from:346868:349016 >>	NULL	NUMBER(1,0)

Unique Constraints:

RFA_RFA2_UK
SPECIAL_CRUISE_NUMBER
SPECIAL_CRUISE_SUB_CODE

Notes:

<< 1998-03-25-16:00 sourced from:346868:346847 >>

Table: ROLES*Description:*

A part that a person or agency exercises in a specific business activity.

It is recognized that this is a subjective area, but the intent is to retain a unequivocal and a single Code and Description for a given role.

Prudence in the form of good data administration practise is in order to retain a meaningful subset of business applicable verbs.

Examples of Roles, (that can be used to populate Role Description) are;

- valid values source ?? same as custodian??
- custodian
- originator
- initiator
- releasor (if this is separate from originator)
- author
- contact
- a contract administrator
- forestry management
- updater
- aerial photography interpreter

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ROLE_SKEY The system generated unique identifier.	NOT NULL	NUMBER(7,0)

Table: ROLES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	ROLE_CD A codified form of a description of a role. << 1998-03-25-16:59 sourced from:416792:422516 >>	NOT NULL	VARCHAR2(10)
3	ROLE_DESC The verb, or qualified verb, that best describes the role. << 1998-03-25-16:59 sourced from:416792:422517 >>	NOT NULL	VARCHAR2(50)
4	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492799 >>	NOT NULL	DATE
5	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492801 >>	NOT NULL	VARCHAR2(30)
6	ROLE_COMMENT Any comments, typically for data administration purposes, that are relevant to providing further description of the role, when or how to use a particular role, or any distinctions that should be made between other roles. << 1998-03-25-16:59 sourced from:416792:422518 >>	NULL	VARCHAR2(75)
7	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492800 >>	NULL	DATE
8	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492802 >>	NULL	VARCHAR2(30)

Unique Constraints:

Table: ROLES (cont'd)*Unique Constraints:*

ROLE_ROLE2_UK
ROLE_CD

Notes:

<< 1998-03-25-16:59 sourced from:416792:422510 >>

Table: ROLE_ASSOCIATIONS*Description:*

The relationship of a person, agency who has a defined part, activity or responsibility.

The initial intent is that this would apply to projects, custodial responsibilities but could be utilized to enforce security on a geographic basis. That is, although there may be update priveledge for users, it could be limited to a geographic extent, such as Forest District.

This was formerly named OBJECT ASSOCIATIONS, but was changed to retain a narrower scope. Geographic associations have been separated into their own entity.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	ROLE_ASSN_SKEY The surrogate identifier of an Agency with a Role.	NOT NULL	NUMBER(7,0)

System generated from an Oracle sequence, ROLE_SEQ

<< 1998-03-25-16:59 sourced from:416792:432486 >>

2	AGENCY_AGENCY_SKEY	NULL	NUMBER(7,0)
3	BRULE_BUSINESS_RULE_SKEY	NULL	NUMBER(7,0)
4	CON_CONTRACT_SKEY	NULL	NUMBER(7,0)
5	ROLE_ROLE_SKEY	NULL	NUMBER(7,0)
6	SFEA_SITE_FEATURE_SKEY	NULL	NUMBER(7,0)
7	SGDEF_SPP_GROUP_SKEY	NULL	NUMBER(7,0)
8	SI_SUCCESSION_INT_SKEY	NULL	NUMBER(7,0)
9	TV_THEME_VERSION_SKEY	NULL	NUMBER(7,0)
10	THE_THEME_SKEY	NULL	NUMBER(7,0)
11	PER_PERSON_SKEY	NULL	NUMBER(7,0)
12	APA_AGENCY_PERSON_SKEY	NULL	NUMBER(7,0)
13	FPM_FORAGE_MEASMT_SKEY	NULL	NUMBER(7,0)
14	FRQCNT_FREQ_CNT_SKEY	NULL	NUMBER(7,0)
15	GRFV_GRAPHICS_FILE_SKEY	NULL	NUMBER(7,0)
16	PRJ_PROJECT_SKEY	NULL	NUMBER(7,0)

Table: ROLE_ASSOCIATIONS (cont'd)**Columns:**

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
17	MCMP_MAP_COMP_SKEY	NULL	NUMBER(7,0)
18	CWDM_CWD_SKEY	NULL	NUMBER(7,0)
19	CEV_CE_VISIT_SKEY	NULL	NUMBER(7,0)
20	DTFMT_DATA_FORMAT_SKEY	NULL	NUMBER(7,0)
21	PCLTR_PLOT_CLUSTER_SKEY	NULL	NUMBER(7,0)
22	MEAVT_MEASMT_VISIT_SKEY	NULL	NUMBER(7,0)
23	PROG_PROGRAM_INITIATIVE_SKEY	NULL	NUMBER(7,0)
24	QAA_QA_ACTIVITY_SKEY	NULL	NUMBER(7,0)
25	VLOC_VLC_VEGETATION_LAYER_CD	NULL	VARCHAR2(3)
26	VLOC_CEV_CE_VISIT_SKEY	NULL	NUMBER(7,0)
27	ESDD_ECOSYS_DESCR_SKEY	NULL	NUMBER(7,0)
28	VRM_RANGE_MEASMT_SKEY	NULL	NUMBER(7,0)
29	TRMEA_TREE_MEASMT_SKEY	NULL	NUMBER(7,0)
30	VCA_VEG_LAYER_COV_SKEY	NULL	NUMBER(7,0)
31	TSS_SEQUENCE_NUM	NULL	NUMBER(1,0)
32	TSS_SI_SUCCESSION_INT_SKEY	NULL	NUMBER(7,0)
33	TSS_TREE_SPP_SUCCN_CURRENCY_CD	NULL	VARCHAR2(2)
34	EFFECTIVE_DATE	NULL	DATE
	The effective date of association of a business objects and their purpose.		
	<< 1998-03-25-16:59 sourced from:416792:422525 >>		
35	END_DATE	NULL	DATE
	The end date of association of a business objects and their purpose.		
	<< 1998-03-25-16:59 sourced from:416792:422526 >>		
36	CREATE_DATE	NULL	DATE
	The system create date for audit purposes.		
	<< 1998-03-25-16:59 sourced from:416792:492763 >>		
37	MODIFY_DATE	NULL	DATE
	The system modify date for audit purposes.		
	<< 1998-03-25-16:59 sourced from:416792:492764 >>		
38	MODIFY_USER_ID	NULL	VARCHAR2(30)

Table: ROLE_ASSOCIATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The system modify user id for audit purposes.		
	<< 1998-03-25-16:59 sourced from:416792:492766 >>		
39	CREATE_USER_ID The system create user id for audit purposes.	NULL	VARCHAR2(30)
	<< 1998-03-25-16:59 sourced from:416792:492765 >>		
40	SDCFQ_SPP_DI_CLS_FRQ_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

ROLA_AGENCY_FK
 AGENCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY
 ROLA_APA_FK
 APA_AGENCY_PERSON_SKEY = AGENCY_PERSON_ASSOCIATIONS.AGENCY_PERSON_SKEY
 ROLA_BRULE_FK
 BRULE_BUSINESS_RULE_SKEY = BUSINESS_RULES.BUSINESS_RULE_SKEY
 ROLA_CEV_FK
 CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
 ROLA_CON_FK
 CON_CONTRACT_SKEY = CONTRACTS.CONTRACT_SKEY
 ROLA_CWDM_FK
 CWDM_CWD_SKEY = COARSE_WOODY_DEBRIS_MEASMTS.CWD_SKEY
 ROLA_DTFMT_FK
 DTFMT_DATA_FORMAT_SKEY = DATA_FORMATS.DATA_FORMAT_SKEY
 ROLA_ESDD_FK
 ESDD_ECOSYS_DESCR_SKEY = ECOSYSTEM_DESC_DETAILS.ECOSYS_DESCR_SKEY
 ROLA_FPM_FK
 FPM_FORAGE_MEASMT_SKEY = FORAGE_PRODUCTION_MEASMTS.FORAGE_MEASMT_SKEY
 ROLA_FRQCNT_FK
 FRQCNT_FREQ_CNT_SKEY = FREQUENCY_COUNTS.FREQ_CNT_SKEY
 ROLA_GRFV_FK
 GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_FILE_VERSIONS.GRAPHICS_FILE_SKEY
 ROLA_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY
 ROLA_MEAVT_FK
 MEAVT_MEASMT_VISIT_SKEY = MEASMT_VISITATIONS.MEASMT_VISIT_SKEY
 ROLA_PCLTR_FK
 PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY
 ROLA_PER_FK
 PER_PERSON_SKEY = PEOPLE.PERSON_SKEY
 ROLA_PRJ_FK
 PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY
 ROLA_PROG_FK
 PROG_PROGRAM_INITIATIVE_SKEY = PROGRAM_INITIATIVES.PROGRAM_INITIATIVE_SKEY
 ROLA_QAA_FK
 QAA_QA_ACTIVITY_SKEY = QUALITY_ASSURANCE_ACTIVITIES.QA_ACTIVITY_SKEY
 ROLA_ROLE_FK

Table: ROLE_ASSOCIATIONS (cont'd)*Foreign Keys:*

ROLE_ROLE_SKEY = ROLES.ROLE_SKEY
 ROLA_SFEA_FK
 SFEA_SITE_FEATURE_SKEY = SITE_FEATURE_ASSMTS.SITE_FEATURE_SKEY
 ROLA_SGDEF_FK
 SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY
 ROLA_SI_FK
 SI_SUCCESSION_INT_SKEY = SUCCESSION_INTERPRETATIONS.SUCCESSION_INT_SKEY
 ROLA_THE_FK
 THE_THEME_SKEY = THEMES.THEME_SKEY
 ROLA_TRMEA_FK
 TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY
 ROLA_TSS_FK
 TSS_SI_SUCCESSION_INT_SKEY = TREE_SPECIES_SUCCESSIONS.SI_SUCCESSION_INT_SKEY
 TSS_TREE_SPP_SUCCN_CURRENCY_CD =
 TREE_SPECIES_SUCCESSIONS.TREE_SPP_SUCCN_CURRENCY_CD
 TSS_SEQUENCE_NUM = TREE_SPECIES_SUCCESSIONS.SEQUENCE_NUM
 ROLA_TV_FK
 TV_THEME_VERSION_SKEY = THEME_VERSIONS.THEME_VERSION_SKEY
 ROLA_VCA_FK
 VCA_VEG_LAYER_COV_SKEY = VEGETATION_LYR_COVER_ASSMTS.VEG_LAYER_COV_SKEY
 ROLA_VLOC_FK
 VLOC_CEV_CE_VISIT_SKEY = VEGETATION_LAYER_OVERALL_COVER.CEV_CE_VISIT_SKEY
 VLOC_VLC_VEGETATION_LAYER_CD =
 VEGETATION_LAYER_OVERALL_COVER.VLC_VEGETATION_LAYER_CD
 ROLA_VRM_FK
 VRM_RANGE_MEASMT_SKEY = RANGE_VEGETATION_MEASMTS.RANGE_MEASMT_SKEY

Indexes:

ROLA_AGENCY_FK_I
 AGENCY_AGENCY_SKEY
 ROLA_APA_FK_I
 APA_AGENCY_PERSON_SKEY
 ROLA_BRULE_FK_I
 BRULE_BUSINESS_RULE_SKEY
 ROLA_CEV_FK_I
 CEV_CE_VISIT_SKEY
 ROLA_CON_FK_I
 CON_CONTRACT_SKEY
 ROLA_CWDM_FK_I
 CWDM_CWD_SKEY
 ROLA_DTFMT_FK_I
 DTFMT_DATA_FORMAT_SKEY
 ROLA_ESDD_FK_I
 ESDD_ECOSYS_DESCR_SKEY
 ROLA_FPM_FK_I
 FPM_FORAGE_MEASMT_SKEY
 ROLA_FRQCNT_FK_I
 FRQCNT_FREQ_CNT_SKEY
 ROLA_GRFV_FK_I
 GRFV_GRAPHICS_FILE_SKEY
 ROLA_MCMP_FK_I
 MCMP_MAP_COMP_SKEY
 ROLA_MEAVT_FK_I
 MEAVT_MEASMT_VISIT_SKEY
 ROLA_PCLTR_FK_I
 PCLTR_PLOT_CLUSTER_SKEY
 ROLA_PER_FK_I
 PER_PERSON_SKEY
 ROLA_PRJ_FK_I

Table: ROLE_ASSOCIATIONS (cont'd)*Indexes:*

PRJ_PROJECT_SKEY
ROLA_PROG_FK_I
PROG_PROGRAM_INITIATIVE_SKEY
ROLA_QAA_FK_I
QAA_QA_ACTIVITY_SKEY
ROLA_ROLE_FK_I
ROLE_ROLE_SKEY
ROLA_SFEA_FK_I
SFEA_SITE_FEATURE_SKEY
ROLA_SGDEF_FK_I
SGDEF_SPP_GROUP_SKEY
ROLA_SI_FK_I
SI_SUCCESSION_INT_SKEY
ROLA_THE_FK_I
THE_THEME_SKEY
ROLA_TRMEA_FK_I
TRMEA_TREE_MEASMT_SKEY
ROLA_TSS_FK_I
TSS_SI_SUCCESSION_INT_SKEY
TSS_TREE_SPP_SUCCN_CURRENCY_CD
TSS_SEQUENCE_NUM
ROLA_TV_FK_I
TV_THEME_VERSION_SKEY
ROLA_VCA_FK_I
VCA_VEG_LAYER_COV_SKEY
ROLA_VLOC_FK_I
VLOC_CEV_CE_VISIT_SKEY
VLOC_VLC_VEGETATION_LAYER_CD
ROLA_VRM_FK_I
VRM_RANGE_MEASMT_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:422519 >>

Table: SAMPLE_PHOTOS*Description:*

A photograph taken of an area of a sample during the plot measurement.

Currently the types of photographs taken within VRI Ground

Sampling are are:

PLOT PIN for the Plot Centre PIN;

RANDOM AZIMUTH for the direction from the IPC randomly chosen for

CWD and Range sampling;

REPRESENTATIVE for a representative photograph of the sample

ADDITIONAL for additional photographs of the sample.

The attribution of the entity could be expanded to included the actual photograph in a GIF or JPEG format, but that has not been done since the photograph itself is not stored in the database currently.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PHOTO_SKEY	NOT NULL	NUMBER(10,0)
2	MEAVT_MEASMT_VISIT_SKEY	NOT NULL	NUMBER(7,0)
3	SUBJECT	NOT NULL	VARCHAR2(14)
	The Subject of the Sample Photograph.		
4	COLLECTION_IND	NOT NULL	VARCHAR2(1)
5	DESCRIPTION	NULL	VARCHAR2(256)

Foreign Keys:

PHTO_MEAVT_FK
 MEAVT_MEASMT_VISIT_SKEY = MEASMT_VISITATIONS.MEASMT_VISIT_SKEY

Indexes:

PHTO_MEAVT_FK_I
 MEAVT_MEASMT_VISIT_SKEY

Table: SAMPLING_CERTIFICATIONS*Description:*

A recording of the sampling specialties that a person assigned to a

A recording of the sampling specialties that a person assigned to a

Veg Sample crew has been certified in.

Veg Sample crew has been certified in.

eg soil sampling, entomology.....

eg soil sampling, entomology.....

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CERTIFICATION_DATE <i><< 1998-03-26-16:09 sourced from:7003:561342 >></i> <i><< 1998-03-26-16:09 sourced from:7003:561342 >></i>	NOT NULL	DATE
2	CERTIFICATION_MODULES A list of the certification modules acquired. A description of the certification procedure used. <i><< 1998-03-26-16:09 sourced from:7003:561343 >></i> <i><< 1998-03-26-16:09 sourced from:7003:561343 >></i>	NULL	VARCHAR2(50)
* 3	CERTIFICATION_TYPE A code descibing the type of certification received. A person may be A code descibing the type of certification received. A person may be certified to perform many types of Vegetative sample procedures. certified to perform many types of Vegetative sample procedures.	NOT NULL	VARCHAR2(10)

Table: SAMPLING_CERTIFICATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-16:09 sourced from:7003:561344 >>		
	<< 1998-03-26-16:09 sourced from:7003:561344 >>		
4	CREATE_DATE << 1998-03-26-16:09 sourced from:7003:561338 >> << 1998-03-26-16:09 sourced from:7003:561338 >>	NOT NULL	DATE
5	CREATE_USER_ID << 1998-03-26-16:09 sourced from:7003:561339 >> << 1998-03-26-16:09 sourced from:7003:561339 >>	NOT NULL	VARCHAR2(30)
6	MODIFY_DATE << 1998-03-26-16:09 sourced from:7003:561340 >> << 1998-03-26-16:09 sourced from:7003:561340 >>	NULL	DATE
7	MODIFY_USER_ID << 1998-03-26-16:09 sourced from:7003:561341 >> << 1998-03-26-16:09 sourced from:7003:561341 >>	NULL	VARCHAR2(30)
* 8	PER_PERSON_SKEY The surrogate identifier of a person. Assigned by a system generated Oracle sequence, PERSON SKEY SEQ. << 1998-03-25-16:59 sourced from:416792:422503 >>	NOT NULL	NUMBER(7,0)

Foreign Keys:

CERT_PER_FK
PER_PERSON_SKEY = PEOPLE.PERSON_SKEY

Indexes:

CERT_PER_FK_I
PER_PERSON_SKEY

Notes:

Table: SAMPLING_CERTIFICATIONS (cont'd)*Notes:*

<< 1998-03-26-16:09 sourced from:7003:561332 >>

<< 1998-03-26-16:09 sourced from:7003:561332 >>

Table: SEF_INITIATIVE_LOAD_RULES*Description:*

A cross reference that maps a set of determinant values to a single occurrence of an INVESTIGATION INITIATIVE.

The determinants are either SEF data items or database table columns generated at UPLOAD time.

The table implemented from this entity will be used by the BUSINESS RULE that generates the INVESTIGATION INITIATIVE skey before insertion of a record into PLOT CLUSTERS.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SEF_INIT_LOAD_SKEY System generated UID.	NOT NULL	NUMBER(7,0)
	<< 1998-03-27-12:55 sourced from:346868:362400 >>		
2	REGION << 1998-03-27-12:55 sourced from:346868:362389 >>	NULL	VARCHAR2(2)
3	COMPARTMENT << 1998-03-27-12:55 sourced from:346868:362392 >>	NULL	VARCHAR2(3)
4	COMPARTMENT_LETTER << 1998-03-27-12:55 sourced from:346868:362393 >>	NULL	VARCHAR2(1)
5	INSTALLATION << 1998-03-27-12:55 sourced from:346868:362394 >>	NULL	VARCHAR2(3)
6	SAMPLE_NO << 1998-03-27-12:55 sourced from:346868:362395 >>	NULL	VARCHAR2(4)

Table: SEF_INITIATIVE_LOAD_RULES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
7	SAMPLE_TYPE SEF Sample Type data element. << 1998-03-27-12:55 sourced from:346868:362324 >>	NULL	VARCHAR2(1)
8	MEASUREMENT_NO << 1998-03-27-12:55 sourced from:346868:362397 >>	NULL	VARCHAR2(3)
9	SAMPLE_STATUS << 1998-03-27-12:55 sourced from:346868:362398 >>	NULL	VARCHAR2(1)
10	AGENCY << 1998-03-27-12:55 sourced from:346868:362399 >>	NULL	VARCHAR2(1)
11	DATA_OWNER SEF Data Owner data element. CT1 76-78. << 1998-03-27-12:55 sourced from:346868:362325 >>	NULL	VARCHAR2(4)
13	PROG_PROGRAM_INITIATIVE_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

SILR_PROG_FK
 PROG_PROGRAM_INITIATIVE_SKEY = PROGRAM_INITIATIVES.PROGRAM_INITIATIVE_SKEY

Indexes:

SILR_PROG_FK_I
 PROG_PROGRAM_INITIATIVE_SKEY

Notes:

<< 1998-03-27-12:55 sourced from:346868:362301 >>

Table: SEF_RECTANGULAR_PLOT_LOAD_RULE*Description:*

A cross reference that maps a set of determinat values to a SPATIAL DELIMITER with the required length and width.

The determinant values may be SEF data elements directly coded

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SEF_PLOT_LOAD_SKEY System generated UID.	NOT NULL	NUMBER(7,0)
<< 1998-03-27-12:55 sourced from:346868:362321 >>			
2	REGION SEF REGION data element	NULL	VARCHAR2(2)
<< 1998-03-27-12:55 sourced from:346868:362313 >>			
3	COMPARTMENT SEF Compartment Data Element.	NULL	VARCHAR2(3)
<< 1998-03-27-12:55 sourced from:346868:362314 >>			
4	COMPARTMENT_LETTER SEF Compartment Letter data element.	NULL	VARCHAR2(1)
<< 1998-03-27-12:55 sourced from:346868:362315 >>			
5	INSTALLATION SEF Installation data element.	NULL	VARCHAR2(3)

Table: SEF_RECTANGULAR_PLOT_LOAD_RULE (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-12:55 sourced from:346868:362316 >>		
6	SAMPLE_NO SEF Sample No. data element.	NULL	VARCHAR2(4)
	<< 1998-03-27-12:55 sourced from:346868:362317 >>		
7	SAMPLE_TYPE SEF Sample Type data element.	NULL	VARCHAR2(1)
	<< 1998-03-27-12:55 sourced from:346868:362318 >>		
8	MEASUREMENT_NO SEF Measurement No. data element.	NULL	VARCHAR2(3)
	<< 1998-03-27-12:55 sourced from:346868:362323 >>		
9	DATA_OWNER The SEF representation taken from CT1:Col 76 - Data Owner.	NULL	VARCHAR2(4)
	<< 1998-03-27-12:55 sourced from:346868:383550 >>		
11	SPTLD_SPATIAL_DELIM_SKEY	NULL	NUMBER(7,0)
13	DES_DESIGN_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

SRPLR_DES_FK
 DES_DESIGN_SKEY = DESIGN_SPECIFICATIONS.DESIGN_SKEY
 SRPLR_SPTLD_FK
 SPTLD_SPATIAL_DELIM_SKEY = SPATIAL_DELIMITERS.SPATIAL_DELIM_SKEY

Indexes:

Table: SEF_RECTANGULAR_PLOT_LOAD_RULE (cont'd)*Indexes:*

SRPLR_DES_FK_I
DES_DESIGN_SKEY
SRPLR_SPTLD_FK_I
SPTLD_SPATIAL_DELIM_SKEY

Notes:

<< 1998-03-27-12:55 sourced from:346868:362307 >>

Table: SEF_SUBPOP_LOAD_RULES*Description:*

A collection of data values, obtained from SEF cards, that uniquely identifies a subpopulation of trees or tree diameter classes.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SEF_SUBPOP_LOAD_RULE_SKEY << 1998-03-27-12:56 sourced from:346868:348793 >>	NOT NULL	NUMBER(7,0)
2	SEFSLR_TYPE	NOT NULL	VARCHAR2(10)
3	FROM_YEAR The first inclusive year the rule for determining the subpopulation. <i>The first year the rule for determining the subpopulation was effective.</i> << 1998-03-27-12:56 sourced from:346868:348782 >>	NOT NULL	NUMBER(4,0)
4	TO_YEAR The last inclusive year in which a rule for the determining the subpopulation or trees or tree diameter classes was in effect. <i>The last year in which a rule for the subpopulation was in effect.</i> << 1998-03-27-12:56 sourced from:346868:348783 >>	NOT NULL	NUMBER(4,0)
5	SAMPLE_TYPE_CD A category of program or initiative that sponsored the establishment of the sample. Equivalent to the Standard Edit File (SEF) sample type , all card records, position 14. << 1998-03-27-12:56 sourced from:346868:348784 >>	NOT NULL	VARCHAR2(1)

Table: SEF_SUBPOP_LOAD_RULES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
6	FROM_MEASMT_NO The lower inclusive value to identify a range of measurement visitations to which the subpopulation rules apply. Equivalent to all card types, pos. 15. << 1998-03-27-12:56 sourced from:346868:348785 >>	NOT NULL	NUMBER(2,0)
7	TO_MEASMT_NO The upper inclusive value to identify a range of measurement visitations to which the subpopulation rules apply. Equivalent to all card types, pos. 15. The upper inclusive value to identify a range of measurement numbers. << 1998-03-27-12:56 sourced from:346868:348786 >>	NOT NULL	NUMBER(2,0)
8	AGENCY_TYPE_CD	NULL	VARCHAR2(1)
9	DIAM_BREAK_PT	NULL	NUMBER(4,1)
10	HT_SOURCE_CD	NULL	VARCHAR2(1)
11	HT_TAG_LIMIT	NULL	NUMBER(4,2)
12	MAX_DBH	NULL	NUMBER(4,1)
13	MAX_TREE_HT	NULL	NUMBER(4,2)
14	MIN_DBH	NULL	NUMBER(4,1)
15	MIN_TREE_HT	NULL	NUMBER(4,2)
17	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)
19	SUBP_SUB_POP_SKEY_DEFINES_DEAD	NULL	NUMBER(7,0)
21	SUBP_SUB_POP_SKEY_DEFINES_METR	NULL	NUMBER(7,0)
23	SUBP_SUB_POP_SKEY_DEFINES_IMPE	NULL	NUMBER(7,0)

Unique Constraints:

SEFSLR_SEFSLR2_UK
 FROM_YEAR
 TO_YEAR
 SAMPLE_TYPE_CD
 FROM_MEASMT_NO
 TO_MEASMT_NO
 AGENCY_TYPE_CD
 DIAM_BREAK_PT
 HT_SOURCE_CD
 HT_TAG_LIMIT
 MAX_DBH
 MAX_TREE_HT

Table: SEF_SUBPOP_LOAD_RULES (cont'd)*Unique Constraints:*

MIN_DBH
MIN_TREE_HT

Foreign Keys:

SEFSLR_SUBP_DEFINES_DEAD_METRI
SUBP_SUB_POP_SKEY_DEFINES_DEAD = SUBPOPULATIONS.SUB_POP_SKEY
SEFSLR_SUBP_DEFINES_IMPERIAL_D
SUBP_SUB_POP_SKEY_DEFINES_IMPE = SUBPOPULATIONS.SUB_POP_SKEY
SEFSLR_SUBP_DEFINES_METRIC_DBH
SUBP_SUB_POP_SKEY_DEFINES_METR = SUBPOPULATIONS.SUB_POP_SKEY
SEFSLR_SUBP_FK
SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

SEFSLR_SUBP_DEFINES_DEAD_MET_1
SUBP_SUB_POP_SKEY_DEFINES_DEAD
SEFSLR_SUBP_DEFINES_IMPERIAL_1
SUBP_SUB_POP_SKEY_DEFINES_IMPE
SEFSLR_SUBP_DEFINES_METRIC_D_1
SUBP_SUB_POP_SKEY_DEFINES_METR
SEFSLR_SUBP_FK_I
SUBP_SUB_POP_SKEY

Notes:

A business key has been defined at the physical
level for the following attributes:

FROM YEAR

TO YEAR

SAMPLE TYPE CD

FROM MEASMT NO

TO MEASMT NO

DIAM BREAK PT

MIN DBH

MAX DBH

HT TAG LIMIT

HT SOURCE CD

MIN TREE HT

MAX TREE HT

AGENCY TYPE CD

Table: SEF_SUBPOP_LOAD_RULES (cont'd)*Notes:*

<< 1998-03-27-12:56 sourced from:346868:348771 >>

Table: SELECTION_METHODS*Description:*

The selection method and purpose of either individual elements, such as trees, tree heights, tree ages etc. or groups of elements for the determination of mean height and age.

Examples of methods would be :

- subjective, with 1 dominant, 2 co-dominant ratio
- Top Height 1985
- Top Height 1992
- Random
- Unknown
- Subjective

Examples of methods would be:

- characterization of stand/layer height
- characterization of height/diameter relationship.

NB: this entity has been denormalized; there is a dependency of the method and purpose attribution. The frequency of total occurrences is considered not worth subtyping, which would amount to the same table structure in any event.

The method and purpose of selecting elements for further data collection (e.g. heights, ages) has not been heretofore recorded as explicit data, though it does exist in manual instructions and is implied in the sampling process.

Tree heights are particularly problematic in that one or more selection purposes may occur at a given sample measurement, e.g.

characterization of mean stand height,

Table: SELECTION_METHODS (cont'd)*Description:*

characterization of a complete height/diameter relationship.

Later, in the determination of mean height, these subjectively selected heights (ie. METHOD) may be included in a more rigorous round of selction (e.g. METHOD= Top Height).

It is anticipated that the corresponding REPRES IND (Representative Indicator) on the detailed AGE ASSESSMENTS and HEIGHT ASSESSMENTS to winnow, post-data collection, which individual age and height values are to be included in calculating means and/or calibrating curves.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SELECTION_SKEY System generated surrogate identifier.	NOT NULL	NUMBER(7,0)
2	METHOD_CD A code used to represent the selection method.	NOT NULL	VARCHAR2(8)

Expected values as of 09/97 are:

1DOM2COD - 1 dominant, 2 co-dominant

TOP85 - Top Height 1985

TOP92 - Top Height 1992

RANDOM - Random

UNKN - Unknown

SUBJ -Subjective

Table: SELECTION_METHODS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-04-13-09:10 sourced from:346868:586630 >>		
3	METHOD_DESC A description of the selection method.	NOT NULL	VARCHAR2(50)
	<< 1998-04-13-09:10 sourced from:346868:586634 >>		
4	CREATE_DATE << 1998-04-13-09:10 sourced from:346868:586635 >>	NOT NULL	DATE
5	CREATE_USER_ID << 1998-04-13-09:10 sourced from:346868:586636 >>	NOT NULL	VARCHAR2(30)
8	MODIFY_DATE << 1998-04-13-09:10 sourced from:346868:586637 >>	NULL	DATE
9	MODIFY_USER_ID << 1998-04-13-09:10 sourced from:346868:586639 >>	NULL	VARCHAR2(30)

Notes:

04-sep-97 JRT

- this entity consolidates a domain (SELECTION_CD) and some attributes used to describe the method of selecting a tree for age and height measurement.

<< 1998-04-13-09:10 sourced from:346868:586624 >>

Table: SERAL_STAGE_CLASS_CDS*Description:*

The successional stage of a forest ecosystem as it grows from initial establishment to stable climax state.

The codes, definitions and age criteria are meant to be ported from Table 7-23 of the Vegetation Inventory Sampling Standards.

Defined as a code table rather than an attribute on account of potential relationships to BGC Zonal Classification CD and the extra attribution afforded.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SERAL_STAGE_CD << 1998-03-26-16:10 sourced from:7003:235468 >>	NOT NULL	VARCHAR2(2)
2	SERAL_STAGE_DEFINITION Textual definition of the seral stage. << 1998-03-26-16:10 sourced from:7003:235469 >>	NOT NULL	VARCHAR2(256)
3	STAGE_CLASS_NAME Short name ore description used to describe and/or identify a stage class cd. << 1998-03-26-16:10 sourced from:7003:547897 >>	NULL	VARCHAR2(30)
4	AGE_CRITERIA The age range and conditions which contribute to the definition of a seral stage	NULL	VARCHAR2(75)

Table: SERAL_STAGE_CLASS_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-16:10 sourced from:7003:235470 >>		
5	AGE_CRITERIA_FOOTNOTE Textual footnotes for the further qualification of age criteria. Could be partially implemented as a relationship to BGC Zonal Classfn CD, however, it is not known that the degree of rigor it would impose would be useful. << 1998-03-26-16:10 sourced from:7003:235471 >>	NULL	VARCHAR2(256)

Notes:

<< 1998-03-26-16:10 sourced from:7003:235462 >>

Table: SEVERITY_ATTRIBUTE_VALUES*Description:*

A list of valid values for a Severity Raing Attribute. These values are expressed in the same fashion as case domains.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SRA_SEVERITY_ATTR_SKEY	NOT NULL	NUMBER(7,0)
* 2	LOW_VALUE << 1998-03-26-15:21 sourced from:7003:547436 >>	NOT NULL	VARCHAR2(30)
3	HIGH_VALUE << 1998-03-26-15:21 sourced from:7003:547437 >>	NULL	VARCHAR2(30)
4	MEANING << 1998-03-26-15:21 sourced from:7003:547438 >>	NULL	VARCHAR2(50)

Foreign Keys:

SAV_SRA_FK
SRA_SEVERITY_ATTR_SKEY = SEVERITY_RATING_ATTRIBUTES.SEVERITY_ATTR_SKEY

Indexes:

SAV_SRA_FK_I
SRA_SEVERITY_ATTR_SKEY

Notes:

<< 1998-03-26-15:21 sourced from:7003:547058 >>

Table: SEVERITY_RATING_ATTRIBUTES*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SEVERITY_ATTR_SKEY System generated UID from ORACLE sequence Ver_Cover_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-15:21 sourced from:7003:547431 >>			
2	ATTRIBUTE_NAME Name of the attribute to be collected. eg. Severity Code Hawesworth Rating Code	NOT NULL	VARCHAR2(25)

<< 1998-03-26-15:21 sourced from:7003:547432 >>

4	SRD_RATING_CD	NOT NULL	VARCHAR2(8)
---	---------------	----------	-------------

Foreign Keys:

SRA_SRD_FK
SRD_RATING_CD = SEVERITY_RATING_DEFINITIONS.RATING_CD

Indexes:

SRA_SRD_FK_I
SRD_RATING_CD

Notes:

<< 1998-03-26-15:21 sourced from:7003:547050 >>

Table: SEVERITY_RATING_DEFINITIONS*Description:*

A grouping of the attributes that are recorded as damage Severity for
a tree during a tree measurement visit.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	RATING_CD A code to represent the Severity Rating Definition. Examples would be 'SEVCODE' to represent Severity Codes as describes in the Vegetation Ground Sample Procedures Appendix C. << 1998-03-26-15:21 sourced from:7003:547424 >>	NOT NULL	VARCHAR2(8)
2	DESCRIPTION Business defiend text that describes the source and use of a Severity Rating Definition. << 1998-03-26-15:21 sourced from:7003:547425 >>	NULL	VARCHAR2(256)

Notes:

<< 1998-03-26-15:21 sourced from:7003:547044 >>

Table: SILVICULTURAL_HISTORIES

Description:

The history of the stand as it pertains to recorded silvicultural activities and natural biological agents (e.g. damage agents).

Also termed 'silvicultural' history which implies human activities which is not always the case.

Applicable to both the FIP and Vegetation Inventory data collection practises.

This entity, its attributes and the data contained within it are subject to review as to whether it should be retained as a Resource Inventory Branch data collection activity under the Vegetation Invenotry initiative. It should be noted that this may in time, belong to the Silviculture practise and captured under another theme. However, the transition and the disposition of the legacy (FIP) data may take a considerable period, and therefore requires accomodation in this application.

Columns:

Seq.	Column	Nulls?	Type
* 1	SILV_HISTORY_SKEY A surrogate key identifier of SILVICULTURAL HISTORY.	NOT NULL	NUMBER(7,0)
A! a surrogate key was choosen as the unique identifier to ease the proprogation of the UID through foreign key relationships FROM this entity as almost all the attributes and the relationship top VEGETATION COVER CLASSIFICATON would be require to uniquely identify an occurance.			

Table: SILVICULTURAL_HISTORIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-17:25 sourced from:236464:309800 >>		

2	ACTIVITY_START_YEAR The year the silvicultural activity began.	NULL	DATE
---	---	------	------

If the Activity End Year is the same, the occurrence transpired in the same year.

A_S! the supplied occurrence of a comma between years means a discontinuous occurrence (that is two separate occurrences. The supply of a dash between years means a range and separate and larger value for Activity End Year

A! also need a rule to default Start Year and End Year the same for an single year occurrence.

A! also need a rule to enforce End Year is = or > Start Year.

<< 1998-03-26-17:25 sourced from:236464:309123 >>

3	STC_TECHNIQUE_CD	NULL	VARCHAR2(2)
4	SOC_OBJECTIVE_CD	NULL	VARCHAR2(10)
5	SMC_METHOD_CD	NULL	VARCHAR2(8)
6	SBC_BASE_CD	NULL	VARCHAR2(2)
7	PLY_POLYGON_SKEY	NULL	NUMBER(14,0)
8	DAFV_DAFV_SKEY	NULL	NUMBER(7,0)
10	ACTIVITY_END_YEAR The year the silvicultural activity ended.	NULL	DATE

A_S! the supplied occurrence of a comma between years means a discontinuous occurrence (that is two separate occurrences. The supply of a dash between years means a range and separate and larger value for Activity End Year

Table: SILVICULTURAL_HISTORIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>A! also need a rule to default Start Year and End Year the same for an single year occurence.</i>		
	<i>A! also need a rule to enforce End Year is = or > Start Year.</i>		
	<< 1998-03-26-17:25 sourced from:236464:309124 >>		
11	SEVERITY_LEVEL_CD The severity level of the damage agent (insect and diseases mainly).	NULL	NUMBER(3)
	1 light 2 moderate 3 heavy 4 past occurence		
	<< 1998-03-26-17:25 sourced from:236464:309125 >>		
12	DISTURBANCE_PCT The percentage of the area of a stand layer or stand that has been disturbed. Represents the unit values where the practise has been to codify the midpoint of a 10% range to a single value representing units of 10, e.g.	NULL	NUMBER(3,0)
	1 is the midpoint in 10's of 1 to 15, 2 is the midpoint in 10's of 16 to 25 etc.		
	<i>A_S! convert the 10's mid point value to a percent</i> <i>e.g. 1 to 10, 2 to 20 etc.</i>		
	<< 1998-03-26-17:25 sourced from:236464:309126 >>		

Table: SILVICULTURAL_HISTORIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
13	ADJOINING_MAP_NUM The adjoining or adjacent NTS or BCGS map number by which the history component is identified.	NULL	VARCHAR2(8)

<< 1998-03-26-17:25 sourced from:236464:432555 >>

14	OPENING_NUM A business identifier of the silvicultural opening number. Uniquely assigned for a 6 x 12 BCGS mapsheet.	NULL	NUMBER(4,0)
----	--	------	-------------

<< 1998-03-26-17:25 sourced from:236464:433878 >>

16	TL_INTERP_SKEY	NULL	NUMBER(7,0)
----	----------------	------	-------------

Foreign Keys:

SH_DAFV_FK
DAFV_DAFV_SKEY = DAMAGE_AGENT_CDS_FCAP_VERSION.DAFV_SKEY

SH_PLY_FK
PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY

SH_SBC_FK
SBC_BASE_CD = SILV_BASE_CODES.BASE_CD

SH_SMC_FK
SMC_METHOD_CD = SILV_METHOD_CODES.METHOD_CD

SH_SOC_FK
SOC_OBJECTIVE_CD = SILV_OBJECTIVE_CODES.OBJECTIVE_CD

SH_STC_FK
STC_TECHNIQUE_CD = SILV_TECHNIQUE_CODES.TECHNIQUE_CD

SH_TL_FK
TL_INTERP_SKEY = TREE_LAYER_INTRPRTNS.INTERP_SKEY

Indexes:

SH_DAFV_FK_I
DAFV_DAFV_SKEY

SH_PLY_FK_I
PLY_POLYGON_SKEY

SH_SBC_FK_I
SBC_BASE_CD

SH_SMC_FK_I
SMC_METHOD_CD

SH_SOC_FK_I
SOC_OBJECTIVE_CD

SH_STC_FK_I
STC_TECHNIQUE_CD

SH_TL_FK_I
TL_INTERP_SKEY

Notes:

<< 1998-03-26-17:25 sourced from:236464:309115 >>

Table: SILVICULTURAL_HISTORIES (cont'd)*Notes:*

Table: SILV_BASE_CODES*Description:*

A 3 level code defined and maintained by Silviculture Branch that defines their activities;

component parts are:

base cd

technique cd

method

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BASE_CD Silviculture base code per FIP History record attribute attribute cd.	NOT NULL	VARCHAR2(2)
<< 1998-03-26-11:52 sourced from:236464:436122 >>			
2	DESCRIPTION << 1998-03-26-11:50 sourced from:236464:433880 >>	NULL	VARCHAR2(50)

Notes:

!A 17 jan 97 JRT - further definition is required to determine if the 3 component codes should be normalized into appropriate tables or processed as a denormalized compound key!!

!A 27 JAN 97 JRT - subtypes for each of the 4 codes were added to the model. These subtypes should be attributed and driven into separate tables as that is how Silviculture, who own the definitions, will present the data.

Table: SILV_BASE_CODES (cont'd)*Notes:*

<< 1998-03-26-11:50 sourced from:236464:427306 >>

<< 1998-03-26-11:52 sourced from:236464:435905 >>

Table: SILV_METHOD_CODES*Description:*

A 3 level code defined and maintained by Silviculture Branch that defines their activities;

component parts are:

base cd

technique cd

method

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	METHOD_CD From FIP History record attribute Activity Cd.	NOT NULL	VARCHAR2(8)
<< 1998-03-26-11:52 sourced from:236464:436124 >>			
2	DESCRIPTION << 1998-03-26-11:50 sourced from:236464:433880 >>	NULL	VARCHAR2(50)

Notes:

!A 17 jan 97 JRT - further definition is required to determine if the 3 component codes should be normalized into appropriate tables or processed as a denormalized compound key!!

!A 27 JAN 97 JRT - subtypes for each of the 4 codes were added to the model. These subtypes should be attributed and driven into separate tables as that is how Silviculture, who own the definitions, will present the data.

Table: SILV_METHOD_CODES (cont'd)*Notes:*

<< 1998-03-26-11:50 sourced from:236464:427306 >>

<< 1998-03-26-11:52 sourced from:236464:435917 >>

Table: SILV_OBJECTIVE_CODES*Description:*

A 3 level code defined and maintained by Silviculture Branch that defines their activities;

component parts are:

base cd

technique cd

method

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	OBJECTIVE_CD << 1998-03-26-11:52 sourced from:236464:436126 >>	NOT NULL	VARCHAR2(10)
2	DESCRIPTION << 1998-03-26-11:50 sourced from:236464:433880 >>	NULL	VARCHAR2(50)

Notes:

!A 17 jan 97 JRT - further definition is required to determine if the 3 component codes should be normalized into appropriate tables or processed as a denormalized compound key!!

!A 27 JAN 97 JRT - subtypes for each of the 4 codes were added to the model. These subtypes should be attributed and driven into separate tables as that is how Silviculture, who own the definitions, will present the data.

<< 1998-03-26-11:50 sourced from:236464:427306 >>

Table: SILV_OBJECTIVE_CODES (cont'd)*Notes:*

<< 1998-03-26-11:52 sourced from:236464:435923 >>

Table: SILV_TECHNIQUE_CODES*Description:*

A 3 level code defined and maintained by Silviculture Branch that defines their activities;

component parts are:

base cd

technique cd

method

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TECHNIQUE_CD << 1998-03-26-11:52 sourced from:236464:436128 >>	NOT NULL	VARCHAR2(2)
2	DESCRIPTION << 1998-03-26-11:50 sourced from:236464:433880 >>	NULL	VARCHAR2(50)

Notes:

!A 17 jan 97 JRT - further definition is required to determine if the 3 component codes should be normalized into appropriate tables or processed as a denormalized compound key!!

!A 27 JAN 97 JRT - subtypes for each of the 4 codes were added to the model. These subtypes should be attributed and driven into separate tables as that is how Silviculture, who own the definitions, will present the data.

<< 1998-03-26-11:50 sourced from:236464:427306 >>

Table: SILV_TECHNIQUE_CODES (cont'd)*Notes:*

<< 1998-03-26-11:52 sourced from:236464:435911 >>

Table: SITE_DISTURBANCE_CDS*Description:*

A coded description of the major observable factors that are relevant to development of the current vegetation and soil characteristics of a plot. Up to four categories of disturbance can be observed.

See Vegetation Resources Inventory - Ground Sampling Procedures March 31, 1997. Card type EO - Succession Interpretations - Page 7-24.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SITE_DISTR_CD_SKEY System generated UID from ORACLE sequence site dist cd seq	NOT NULL	NUMBER(7,0)
	<< 1998-03-26-16:13 sourced from:7003:537282 >>		
2	SITE_DIST_CD Site disturbance code per table 7.16 in Graound Sample Procedures March 31, 1997 Page 7-26.	NOT NULL	VARCHAR2(4)
	<< 1998-03-26-16:13 sourced from:7003:537283 >>		
3	DESCRIPTION << 1998-03-26-16:13 sourced from:7003:537284 >>	NULL	VARCHAR2(75)
5	SDC_SITE_DISTR_CD_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

SDC_SDC_FK
SDC_SITE_DISTR_CD_SKEY = SITE_DISTURBANCE_CDS.SITE_DISTR_CD_SKEY

Indexes:

SDC_SDC_FK_I
SDC_SITE_DISTR_CD_SKEY

Notes:

Table: SITE_DISTURBANCE_CDS (cont'd)*Notes:*

<< 1998-03-26-16:13 sourced from:7003:521882 >>

Table: SITE_FEATURE_ASSMTS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

Interpreted and measured landscape, soil, and vegetative characteristics of a site. The assessment of generalized features that apply to the plot in total.

'Site', a common business term in this context, refers to the plot or for some measurements, e.g. mesoslope, the vicinity.

Stores the single field occurrences from the Ecological Description Card EP from the Vegetation Cover Sample data.

Table: SITE_FEATURE_ASSMTS (cont'd)*Description:*

The site landform characteristics that are observed at a vistration to a location and are considered to characterize the location its proximate out of plot environs.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SITE_FEATURE_SKEY System generated UID from ORACLE sequence site_desc_spd_Seq.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-16:13 sourced from:7003:537100 >>

2	ECOSYSTEM_UNIFORMITY_CD A class of observed homogeneity of the the ecosystem.	NULL	NUMBER(1)
---	--	------	-----------

There maybe differing site series, successional stages, or landscape features that would contribute to the generalized assessment of the ecosystem.

<< 1998-03-26-16:13 sourced from:7003:537307 >>

3	SLOPE_PCT The gradient, in percent, of the terrain at the site location.	NULL	NUMBER(3,0)
---	---	------	-------------

<< 1998-03-26-16:13 sourced from:7003:344006 >>

4	ASPECT_BRG The measure, to the nearest azimuth degree, of the topographic orientation of the site location.	NULL	NUMBER(3)
---	--	------	-----------

<< 1998-03-26-16:13 sourced from:7003:344005 >>

Table: SITE_FEATURE_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	ASPECT_LEVEL_IND Indicates whether or not the land area is determined to be level. 'Y' means level (having no aspect, or a minimal slope(<2%) under the current Vegetation Inventory standard. 'N' means not level with an expected accompanying azimuth bearing to denote the slope (>2%). << 1998-03-26-16:13 sourced from:7003:569114 >>	NULL	VARCHAR2(1)
6	ELEVATION << 1998-03-26-16:14 sourced from:7003:537311 >>	NULL	NUMBER(4,0)
7	SURFACE_SHAPE_CD The general profile of the surface as applied to the site within the categorization of Meso Slope. Reference: Ecosystems in the Field, ch.2, p32. << 1998-03-26-16:14 sourced from:7003:220921 >>	NULL	VARCHAR2(2)
8	MESO_SLOPE_POS_CD A code denoting the relative position of the site within a catchment area with the intent to be consistent within the scale of photographic affecting surface water flow. The vertical difference is usually between 3 and 300m, and the surface area generally exceeds 0.5 has in size. It falls within, or is coincident, with one macro slope position. Also known as slope position, and meso site position.	NULL	VARCHAR2(1)

Table: SITE_FEATURE_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Reference: "Describing Ecosystems in the Field", MOE Manual 11, Province of B.C. 1990, p. 31.		
	<< 1998-03-26-16:14 sourced from:7003:220912 >>		
9	MICROTOPOGRAPHY_CD The variability of the surface configuration of the site.	NULL	VARCHAR2(2)
	<< 1998-03-26-16:14 sourced from:7003:220913 >>		
10	ROCK_FRAGMENT_SUBSTRATE_PCT An estimate of the site surface covered by exposed rock fragments (cobbles and stones) greater than 7.5 cm diameter.	NULL	NUMBER(3,0)
	<< 1998-03-26-16:14 sourced from:7003:220920 >>		
11	BEDROCK_SUBSTRATE_PCT An estimate of the ground surface covered by bedrock. This may include bedrock covered by mosses and lichens.	NULL	NUMBER(3,0)
	<< 1998-03-26-16:14 sourced from:7003:220831 >>		
12	SLOPE_FAILURE_INTEGERATED_IND << 1998-03-26-16:14 sourced from:7003:537314 >>	NULL	VARCHAR2(1)
13	SOIL_FEATURE_APPLICABILITY_IND Indicates whether or not is it applicable to have soil features at the location that the site feature data relates to i.e. if the point is located over: soil, water, rock, etc.	NULL	VARCHAR2(1)
	<< 1998-03-26-16:14 sourced from:7003:578415 >>		

Table: SITE_FEATURE_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
14	SLOPE_FAILURE_BETWEEN_IND << 1998-03-26-16:14 sourced from:7003:537315 >>	NULL	VARCHAR2(1)
15	MAIN_PLOT_GULLIES_IND The presence of linear depressions incised into the landscape where the channel is confined in a narrow ravine with banks usually higher than 3 m. Their long profile may range from gentle to steep, and uniform to irregular (benched). Presence is noted to be within a plot if related to a CLUSTER ELEMENT, between plots if not. << 1998-03-26-16:14 sourced from:7003:537309 >>	NULL	VARCHAR2(1)
16	BETWEEN_PLOT_GULLIES_IND << 1998-03-26-16:14 sourced from:7003:537310 >>	NULL	VARCHAR2(1)
17	FLOOD_HAZARD_CD An estimate of the relative frequency of flooding of the site by rivers, creeks and streams. << 1998-03-26-16:14 sourced from:7003:220835 >>	NULL	VARCHAR2(2)
18	FLOWING_WATER_PCT An estimate of the site covered by flowing water. << 1998-03-26-16:14 sourced from:7003:220840 >>	NULL	NUMBER(3,0)
19	STANDING_WATER_PCT An estimate of the site covered by standing water.	NULL	NUMBER(3,0)

Table: SITE_FEATURE_ASSMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-16:14 sourced from:7003:220919 >>		
20	SURFICIAL_MATERIAL_1_CD The most predominant soil parent materials classified according to their mode of formation.	NULL	VARCHAR2(2)
	<< 1998-03-26-16:14 sourced from:7003:220922 >>		
21	SURFICIAL_MATERIAL_2_CD The secondary soil parent materials classified according to their mode of formation.	NULL	VARCHAR2(2)
	<< 1998-03-26-16:14 sourced from:7003:220923 >>		
22	HUMUS_FORM_CD The group of soil horizons at the surface which have formed primarily from organic materials, and which may include mineral soil intermixed with organic material.	NULL	VARCHAR2(2)
	<< 1998-03-26-16:14 sourced from:7003:220843 >>		
23	ROOT_ZONE_SOIL_COLOR_CD The general tone range of soil color.	NULL	VARCHAR2(2)
	<< 1998-03-26-16:14 sourced from:7003:220918 >>		
25	ESDD_ECOSYS_DESCR_SKEY	NULL	NUMBER(7,0)
27	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
31	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
35	BGZC_BGC_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

SFEA_BGZC_FK
 BGZC_BGC_SKEY = BGC_ZONAL_CLASSFN_CDS.BGC_SKEY
 SFEA_CEV_FK
 CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CEV_VISIT_SKEY

Table: SITE_FEATURE_ASSMTS (cont'd)*Foreign Keys:*

SFEA_ESDD_FK
ESDD_ECOSYS_DESCR_SKEY = ECOSYSTEM_DESC_DETAILS.ECOSYS_DESCR_SKEY
SFEA_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

Indexes:

SFEA_BGZC_FK_I
BGZC_BGC_SKEY
SFEA_CEV_FK_I
CEV_CE_VISIT_SKEY
SFEA_ESDD_FK_I
ESDD_ECOSYS_DESCR_SKEY
SFEA_GTO_FK_I
GTO_GROUP_TAXON_SKEY

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-16:13 sourced from:7003:218982 >>

Table: SITE_INDEX_ASSESSMENTS*Description:*

The mean height of the dominant and codominant trees will attain at a base index age used for the purposes of estimating forest site growth capability.

The site index is based on a normalized set of coefficients calibrated to reflect the range of heights for a given tree species.

Site Index is manually entered where stand growing conditions are masked by external agents or by a large variability of heights and ages (typically young or disturbed stands).

Definition Source: p. 5-2, PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SITE_INDEX_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(14,0)
	Generated from sequence, SI_SEQ.		
	<< 1998-03-26-17:25 sourced from:236464:670220 >>		
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	CREATE_USER_ID ORACLE user id of the person who craeted the record.	NOT NULL	VARCHAR2(30)
	<<1997-12-09-14:26 sourced from:236464:422006>>		
	<< 1998-03-26-17:25 sourced from:236464:681666 >>		
4	CREATE_DATE	NOT NULL	DATE

Table: SITE_INDEX_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.		
	<<1997-12-09-14:26 sourced from:236464:422005>>		
	<< 1998-03-26-17:25 sourced from:236464:681665 >>		
5	SOURCE_TYPE	NOT NULL	VARCHAR2(5)
	The basic source type of the data; either Collected or Derived. This is utilized to distinguish occurrences of attributes that can come from either source.		
	Expected to be used for FIP sourced data only; all within-database derivations will have a DERIVATION TRANSACTION occurrence to identify derived data.		
	<< 1998-03-26-17:25 sourced from:236464:786447 >>		
6	MODIFY_USER_ID	NULL	VARCHAR2(30)
	ORACLE user id of the last user to modify the record.		
	<<1997-12-09-14:26 sourced from:236464:422008>>		
	<< 1998-03-26-17:25 sourced from:236464:681668 >>		
7	MODIFY_DATE	NULL	DATE
	The date the record was last modified.		
	<<1997-12-09-14:26 sourced from:236464:422007>>		

Table: SITE_INDEX_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-17:25 sourced from:236464:681667 >>		
8	HISTORIC_SPECIAL_SITE_CLASS_CD The values of Site Index class (HISTORIC SITE CLASS) applied where the interpreter/classifier has determined that the site growing potential is masked by identifiable external factors not reflected by the age and/or height of the tree species in the layer. (Hence the business term 'Special Site Index'). This attribute is being retained for FIP based processing only; it is not collected or assigned under the Vegetation Inventory. <<1997-11-18-15:24 sourced from:236464:508548>> <<1997-12-05-16:14 sourced from:236464:670147>> << 1998-03-26-17:25 sourced from:236464:679745 >>	NULL	VARCHAR2(1)
9	HISTORIC_SITE_CLASS_CD The values of Site Index class based on historic Ministry site index values for the range bounds of the tree species. The site index is a measure of site productivity based on age and height relationships for a given species. This attribute is being retained for FIP based processing only; it is not collected or assigned under the Vegetation Inventory. <<1997-11-18-15:24 sourced from:236464:508547>> <<1997-12-05-16:14 sourced from:236464:670148>> << 1998-03-26-17:25 sourced from:236464:679744 >>	NULL	VARCHAR2(1)
10	SITE_INDEX	NULL	NUMBER(3,1)

Table: SITE_INDEX_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The mean height of the dominant and codominant trees will attain at a base index age used for the purposes of estimating forest site growth capability.		
	The site index is based on a normalized set of coefficients calibrated to reflect the range of heights for a given tree species.		
	Site Index is manually entered where stand growing conditions are masked by external agents or by a large variability of heights and ages (typically young or disturbed stands).		
	Definition Source: p. 5-2, PIP		
	<<1997-12-05-16:14 sourced from:236464:508453>>		
	<< 1998-03-26-17:25 sourced from:236464:679746 >>		
11	REFERENCE_AGE	NULL	NUMBER(3,0)
	The selected standardized age from which a normalized curves are generated for tree height and age coefficients. The business default is 50 years.		
	<<1997-12-05-16:14 sourced from:236464:569095>>		
	<< 1998-03-26-17:25 sourced from:236464:679747 >>		
12	INTERPRETATION_SOURCE_CD	NULL	VARCHAR2(1)
	The source from which site index was assigned/estimated (that is, interpreted).		
	Definition and values from p. 5-5, PIP		

Table: SITE_INDEX_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<<1997-12-05-16:14 sourced from:236464:508454>>		
	<< 1998-03-26-17:25 sourced from:236464:679748 >>		

Foreign Keys:

SIA_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY

Indexes:

SIA_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY

Notes:

<< 1998-03-26-17:25 sourced from:236464:670212 >>

Table: SITE_INDEX_CLASSES*Description:*

The standard Resouce Inventory Branch site class code and the bounds
for its determination.

As analysed, this is a stand-alone rule table and has no
relationships.

Populate the values from the FIP Dictionary, p 3-96.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SITE_INDEX_CLASS_SKEY The system generated identifier for site index skey. Value generated by SITE_INX_CL_SEQ. << 1998-03-26-17:25 sourced from:236464:569102 >>	NOT NULL	NUMBER(7,0)
2	CLASS_CD The business identifier of the site index class. Typically this is a number, 5, 10, 15 etc. Populate values from FIP attribute 5 m SITE CLASS, p. 3-125. << 1998-03-26-17:25 sourced from:236464:569104 >>	NOT NULL	VARCHAR2(3)
3	REFERENCE_AGE The reference age to which the Site Index is determined. << 1998-03-26-17:25 sourced from:236464:569107 >>	NOT NULL	NUMBER(3,0)
4	MIN_SITE_INDEX_BOUND	NOT NULL	NUMBER(3,1)

Table: SITE_INDEX_CLASSES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The minimum value of the site index class.		
	<< 1998-03-26-17:25 sourced from:236464:569105 >>		
5	MAX_SITE_INDEX_BOUND The maximum value of the site index class.	NOT NULL	NUMBER(3,1)

<< 1998-03-26-17:25 sourced from:236464:569106 >>

*Unique Constraints:*SIC_SIC2_UK
CLASS_CD*Notes:*

<< 1998-03-26-17:25 sourced from:236464:569096 >>

Table: SITE_INDEX_STATISTICAL_EST*Description:*

The mean site index of individual trees of a selected tree species.

Site index is a measure of site productivity expressed as a height of the tree at a defined base index age.

A! A site index algorithm code table is required. Keys are name, year of release, and tree-species-to-which-it-applies. See the Permanent Sample Plot Header Database Report of January 1994. To be incorporated at prototype stage.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SITE_INDEX_SKEY A surrogate identifier of the calculation of Site Index, as no business identifiers have been kept previously. The date and time would become the future business key.	NOT NULL	NUMBER(7,0)
	<< 1998-03-27-13:01 sourced from:346868:347106 >>		
2	REFERENCE_AGE The selected standardized age from which a normalized curves are generated for tree height and age coefficients.	NOT NULL	NUMBER(3,0)
	<< 1998-03-27-13:01 sourced from:346868:347034 >>		
3	REFERENCE_AGE_HT The height on the tree, to which the site index, using the specified reference age, applies. Typically, this is either the breast height (1.30 m.) or the germination point (0.00 m.).	NOT NULL	NUMBER(3,2)
	<< 1998-03-27-13:01 sourced from:346868:347304 >>		

Table: SITE_INDEX_STATISTICAL_EST (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
4	STAT_MEAN The mean site index using the breast height (BH) age applied to the site index equations based on the reference age. << 1998-03-27-13:01 sourced from:346868:347123 >>	NOT NULL	NUMBER(4,2)
5	DATE_OF_CALC The date the Site Index was calculated. If unknown, then the default is the date of data load. << 1998-03-27-13:01 sourced from:346868:347033 >>	NOT NULL	DATE
6	STAT_MIN The minimum range value of the site index as determined from the deriv ation of the mean. << 1998-03-27-13:01 sourced from:346868:347124 >>	NULL	NUMBER(4,2)
7	STAT_MAX The maximum range value of the site index as determined from the deriv ation of the mean. << 1998-03-27-13:01 sourced from:346868:347125 >>	NULL	NUMBER(4,2)
8	STAT_VARIANCE The variance, or measure of dispersion about the mean, of the site ind ex as determined from the calculation of the mean. << 1998-03-27-13:01 sourced from:346868:347126 >>	NULL	NUMBER(4,2)
10	LYSPC_LAYER_SPP_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

Table: SITE_INDEX_STATISTICAL_EST (cont'd)*Foreign Keys:*

SISES_LYSPC_FK

LYSPC_LAYER_SPP_SKEY = LAYER_SPECIES_COMPOSITIONS.LAYER_SPP_SKEY

Indexes:

SISES_LYSPC_FK_I

LYSPC_LAYER_SPP_SKEY

Notes:

<< 1998-03-27-13:01 sourced from:346868:347032 >>

Table: SITE_SERIES_CDS*Description:*

Groups of ecosystems, that regardless of present vegetation, have the same, or equivalent environmental properties and potential vegetation for a given climatic regime.

The parent concept of site series, site associations, is all ecosystems capable of producing vegetation belonging to the same plant association at climax.

A site association is divided into site series by identification with climatic (or zonal) features of Zone, Subzone, Variant, and Climatic Phase.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	SITE_SERIES_DESCRIPTION The descriptive name of the Site Series. As supplied from Research Branch. << 1998-03-26-16:16 sourced from:7003:235449 >>	NULL	VARCHAR2(75)
2	SITE_SERIES_CD << 1998-03-26-16:16 sourced from:7003:220970 >>	NOT NULL	VARCHAR2(8)
* 3	SITE_SERIES_SKEY System generated UID from Oracle sequence VEG_CODE_SEQ << 1998-03-26-16:16 sourced from:7003:563522 >>	NOT NULL	NUMBER(7,0)
4	BGZC_BGC_SKEY	NOT NULL	NUMBER(7,0)

Table: SITE_SERIES_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	FREG_FOR_REGION_SKEY	NULL	NUMBER(1,0)

Foreign Keys:

SS_BGZC_FK
BGZC_BGC_SKEY = BGC_ZONAL_CLASSFN_CDS.BGC_SKEY
SS_FREG_FK
FREG_FOR_REGION_SKEY = VGIS_FOREST_REGIONS.FOR_REGION_SKEY

Indexes:

SS_BGZC_FK_I
BGZC_BGC_SKEY
SS_FREG_FK_I
FREG_FOR_REGION_SKEY

Notes:

<< 1998-03-26-16:16 sourced from:7003:219003 >>

Table: SMC_PATHOLOGIES*Description:*

Pathology indicators as prescribed for collection in the Stand

Management Cooperative (SMC) program. The pathological indicators are collected as binary (Y/N) entries.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
2	BROKEN_TOP_IND An indicator for the occurrence of a broken tree top.	NULL	VARCHAR2(1)
3	CROOKED_TOP_IND An indicator for the occurrence of a crooked top.	NULL	VARCHAR2(1)
4	DEAD_TOP_IND An indicator for the occurrence of a dead top.	NULL	VARCHAR2(1)
5	FORK_ABOVE_BH_IND An indicator for the occurrence of a fork above breast height.	NULL	VARCHAR2(1)
6	FORK_BELOW_BH_IND An indicator for the occurrence of a fork below breast height.	NULL	VARCHAR2(1)
7	LEAN_IND An indicator of the occurrence of tree lean.	NULL	VARCHAR2(1)
8	SCAR_IND An indicator of the occurrence of a scar.	NULL	VARCHAR2(1)
9	SWEEP_IND An indicator of sweep of the tree. Sweep is the pronounced bowing of the tree stem.	NULL	VARCHAR2(1)

Foreign Keys:

SMCPT_TRMEA_FK

Table: SMC_PATHOLOGIES (cont'd)*Foreign Keys:*

TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

Indexes:

SMCPT_TRMEA_FK_I

TRMEA_TREE_MEASMT_SKEY

Table: SOIL_FEATURE_DEPTHS*Description:*

Observations of natural soil features, with two exceptions, at a depth in the soil pit.

The natural features that are assessed in Vegetation Inventory practise are: water table, mottles, root restriction pan, bedrock, frozen layer and carbonates. Other features can be added in this data design by adding to the feature list (domain).

The first exception to natural soil features is the artifact of the Depth of Pit. It is retained here, like the natural features, as an soil pit depth related attribute.

The second exception is the explicit occurrence of an attempted observation that was precluded by field conditions, e.g. rock. This is recorded as 'Not Applicable' on the field sheets and is handled as a feature with a value of 'NA'.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SOIL_FEATURE_NAME Specified soil features for which depth from the top of the mineral soil is required if the feature is present. Requirement from Vegetation Inventory, cards ED and EP. Not meant to include soil horizon references. << 1998-03-26-16:17 sourced from:7003:235110 >>	NOT NULL	VARCHAR2(10)
2	DEPTH	NOT NULL	NUMBER(4,1)

Table: SOIL_FEATURE_DEPTHS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The measured depth in centimetres from the top of the mineral soil.		

<< 1998-03-26-16:17 sourced from:7003:235126 >>

* 4	SFEA_SITE_FEATURE_SKEY	NOT NULL	NUMBER(7,0)
-----	------------------------	----------	-------------

Foreign Keys:

SFD_SFEA_FK
SFEA_SITE_FEATURE_SKEY = SITE_FEATURE_ASSMTS.SITE_FEATURE_SKEY

Indexes:

SFD_SFEA_FK_I
SFEA_SITE_FEATURE_SKEY

Notes:

<< 1998-03-26-16:17 sourced from:7003:235104 >>

Table: SOIL_HORIZONS*Description:*

A layer of mineral or organic soil, or soil material, approximately parallel to the land surface that has characteristics determined by processes of soil formation.

A horizon is distinctive on account of unique properties of color, structure, texture and consistence and in chemical, biological and mineralogical composition.

(from 'Describing Ecosystems in the Field', p71)

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SFEA_SITE_FEATURE_SKEY	NOT NULL	NUMBER(7,0)
* 2	SEQUENCE_NUM	NOT NULL	NUMBER(2,0)
	The numeric sequence of soil horizons from the very top of the soil, i.e. organic horizon.		
	The sequencing is necessary as the depth of the soil horizons is measured from a lower horizon, the interface of the organic and mineral soil.		
	The sequencing is implied from the supplied order of the data on Veg. Inv. sample card ED.		
	<< 1998-03-26-16:17 sourced from:7003:220946 >>		
3	HORIZON_CD	NULL	VARCHAR2(3)
	A code for a soil horizon. A soil horizon is a layer of mineral or organic soil or soil material, approximately parallel to the land surface that has characteristics determined by processes of soil formation.		

Table: SOIL_HORIZONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>A horizon differs from adjacent horizons in properties such as color, structure, texture, and consistence, and in chemical, biological and mineralogical composition.</p> <p><< 1998-03-26-16:17 sourced from:7003:219278 >></p>		
5	COARSE_FRAGMENTS_TOTAL_PCT An estimate of the proportion of total soil volume material by mineral soil horizon occupied by materials >2 mm in diameter. A! is this the sum of stones/cobbles and gravel? << 1998-03-26-16:17 sourced from:7003:219276 >>	NULL	NUMBER(3,0)
6	COBBLES_STONES_PCT An estimate of the proportion of the total soil volume material by soil horizon occupied by materials >= 7.5 cm in diameter. << 1998-03-26-16:17 sourced from:7003:219280 >>	NULL	NUMBER(3,0)
7	DEPTH The depth of the soil horizon from zero depth. In the convention of soil description practise, the zero depth is the top of the mineral soil horizon, the same as the bottom of the organic soil horizon. The use of SEQUENCE NUM ensures the correct sequence of horizon order from the very top through the organic layers to zero	NULL	NUMBER(4,1)

Table: SOIL_HORIZONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	and deeper through the mineral soil horizons.		
	<< 1998-03-26-16:17 sourced from:7003:219279 >>		
8	TEXTURE_CD The size distribution of primary mineral particles (= < 2mm diameter) as determined from field estimation. No known valid codes (96-4).	NULL	VARCHAR2(4)
	<< 1998-03-26-16:17 sourced from:7003:219281 >>		
9	GRAVEL_PCT An estimate of total volume of soil material by mineral soil horizon of coarse fragments that are <7.5cm in diameter.	NULL	NUMBER(3,0)
	<< 1998-03-26-16:17 sourced from:7003:219277 >>		

Foreign Keys:

SHOR_SFEA_FK
SFEA_SITE_FEATURE_SKEY = SITE_FEATURE_ASSMTS.SITE_FEATURE_SKEY

Indexes:

SHOR_SFEA_FK_I
SFEA_SITE_FEATURE_SKEY

Notes:

<< 1998-03-26-16:17 sourced from:7003:218996 >>

Table: SPATIAL_BUSINESS_OBJECTS*Description:*

The source table column reference used to procedurally enforce the validation of attribution associated with a THEME ATTRIBUTE SUMMARY.

Each unique attribute of a theme is validated from a multiplicity of sources. These sources, could be relationally enforced, however, given their volatility, other application uses and the unknown number of them, it was decided that validation would be procedurally enforced by way of the identified source in this table.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SPATIAL_BUS_SKEY The surrogate identifier of an attribute (table-column) reference used to validate the values for the Theme Attribute Summary table.	NOT NULL	NUMBER(7,0)
<< 1998-03-25-16:59 sourced from:416792:437856 >>			
2	TABLE_NAME The name of the table which contains the column that is the source of the object that is the source of summary in the THEME ATTRIBUTE SUMMARY.	NOT NULL	VARCHAR2(30)
<< 1998-03-25-16:59 sourced from:416792:435292 >>			
3	UID_COLUMN_NAME The name of the unique identifier column that is the object of summary for a portion of a map area in the THEME ATTRIBUTE SUMMARY.	NOT NULL	VARCHAR2(30)

Table: SPATIAL_BUSINESS_OBJECTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	By this procedural enforcement, administration of valid data values from a single source is expedited.		
	<< 1998-03-25-16:59 sourced from:416792:435397 >>		
4	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492819 >>	NOT NULL	DATE
5	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492821 >>	NOT NULL	VARCHAR2(30)
6	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492820 >>	NULL	DATE
7	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492822 >>	NULL	VARCHAR2(30)

Notes:

<< 1998-03-25-16:59 sourced from:416792:435286 >>

Table: SPATIAL_DELIMITERS*Description:*

The physical bounds (i.e. area and shape) of the plot. This covers both variable area and fixed area plots, while normally distinct in their attribution, share the common requirement that partial coverage may occur for either.

Note that the concept of a plot is separated in two elements, the spatial delimiter and the subpopulation of trees to which it applies.

A type of plot area that occurs multiple times within an experimental design but against which measurements are made in total. For example in Vegetation Ground Samples, 4 'micro-plots' of .5m² area are created along the 2 transects to measure forage production. Total gramminoid and forbs dried weight are measured for all 4 plots.

A! On second thought, this subtype should be eliminated and the NUM OF OCCURENCES attribute should be moved to the POINT LOCATION VISITATIONS entity which represents the temporal and locational (i.e. as implemented) occurrence of a 'plot'. In this way, all situational attribution related to a plot. e.g. partial coverage (START and END BEARING, OBSERVED LINE LENGTH, INSTRUMENT TYPE CD, and NUM OF OCCURENCES would all be located in the same place.

A forest sampling technique which selects those trees larger than a predefined angle of projection from a plot centre location. Thus, the probability of tree selection is proportional to tree diameter and its distance from the sampling point. There is no fixed plot boundary. The area, established from the individual trees and their diameters,

Table: SPATIAL_DELIMITERS (cont'd)*Description:*

would change at each MEASUREMENT VISITATION.

A plot bounded by prescribed dimensions, either a radius for circular plot or a length and width for a quadrangular plot. The plot dimensions are corrected in the field to a horizontal basis.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SPATIAL_DELIM_SKEY	NOT NULL	NUMBER(7,0)
2	SPTLD_TYPE	NOT NULL	VARCHAR2(10)
3	NUM_OF_OCCURRENCES	NULL	NUMBER(2,0)

The number of occurrences of the plot dimensions that comprise the Spatial Delimiter. For example, there a 4 micro-plots with radius .399m., .5m2 area created for Vegetation Ground Samples.

Thus total area for the Delimiter would be $4 \times .5 = 2.0 \text{ m}^2$.

<< 1998-03-26-10:29 sourced from:346868:560703 >>

4	RADIUS	NULL	NUMBER(6,3)
	The plot radius, in metres, from plot centre to the boundary.		

HH93_S PLOT_PL_RADIUS, PLOT_PL_SUB_RAD

SEF_S CT2:35-38, 57-60, 72-74 PLOT RADIUS

<< 1998-03-27-09:38 sourced from:346868:346800 >>

5	SHAPE_CD	NULL	VARCHAR2(2)
	A code representing the basic shape of a fixed area plot. This code applies to the fixed area plot being implement in full; that is to say this code signifies the shape of the plot in a full implementation		
	A partial circular implementation where half the available area was		

Table: SPATIAL_DELIMITERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	used 'swept' as a practical limitation to the number of trees would confer a different shape. The tree shape of a partial circular plot would be deduced from the start and end 'sweep' positions.		
	SEF_C Default = "C", if CT2:35-38 MAIN PLOT RADIUS is BLANK or zero and CT2:25 is BLANK, then = "R"		
	<< 1998-03-27-09:38 sourced from:346868:346796 >>		
6	AREA The area, in hectares, of the fixed area plot.	NULL	NUMBER(7,6)
	HH93_S PLOT_PL_AREA, PLOT_PL_SUBAREA		
	SEF_S CT2:39-41,61-64 PLOT AREA		
	<< 1998-03-27-09:38 sourced from:346868:346797 >>		
7	WIDTH The length, in metres, of the shortest side of a rectangular plot. If the plot is square this will be equal to the PLOT LENGTH.	NULL	NUMBER(6,3)
	HH93_S PLOT_PL_WIDTH		
	OT_S Paper files		
	<< 1998-03-27-09:38 sourced from:346868:346798 >>		
8	LENGTH The length, in metres, of the longest side of the rectangular plot. If the plot is square then this can be equal to the PLOT WIDTH.	NULL	NUMBER(6,3)
	HH93 PLOT_PL_LENGTH		

Table: SPATIAL_DELIMITERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>OT_S Paper files</i>		
	<< 1998-03-27-09:38 sourced from:346868:346799 >>		
9	BASAL_AREA_FTR The cross sectional area in square metres (derived from tree diameter at breast height) per unit stand area in hectares corresponding to the angle of projection of the prism or relascope. Applies to variable radius plots only.	NULL	NUMBER(5,3)
	<i>HH93_S PLOT_PL_BA_FACTOR, PLOT_SUB_BA</i>		
	<i>SEF_S CT2:30-34, 52-56 BASAL AREA FACTOR</i>		
	<< 1998-03-27-09:37 sourced from:346868:346802 >>		
10	INSTRUMENT_TYPE_CD A code to indicate what instrument was used to select trees in the sam ple.	NULL	VARCHAR2(1)
	<i>HH93_S SAMPLE_SA_METHOD</i>		
	<i>SEF_S CT2:25 SAMPLING METHOD</i>		
	<< 1998-03-27-09:37 sourced from:346868:346803 >>		
12	INSERT_ON_LOAD_IND	NOT NULL	VARCHAR2(1)
13	AZIMUTH_BRG	NULL	NUMBER(3,0)
14	TOTAL_LINE_LENGTH	NULL	NUMBER(5,2)

Unique Constraints:

SPTLD_SPTLD1_UK
 SPTLD_TYPE
 SHAPE_CD
 RADIUS
 WIDTH
 LENGTH
 BASAL_AREA_FTR
 AREA
 INSTRUMENT_TYPE_CD

Notes:

A business key has been defined at the physical

Table: SPATIAL_DELIMITERS (cont'd)*Notes:*

level for the following attributes:

PARTIAL AREA START BRG

PARTIAL AREA END BRG

RADIUS

LENGTH

WIDTH

BASAL AREA FTR

<< 1998-03-27-09:35 sourced from:236464:612320 >>

<< 1998-03-26-10:29 sourced from:346868:560005 >>

<< 1998-03-27-09:37 sourced from:346868:346801 >>

<< 1998-03-27-09:38 sourced from:346868:346795 >>

Table: SPECIES_GRADE_CDS*Description:*

The code for a specific species or species group representing the highest best commercial use of a portion of the tree, applied to standing and fallen trees in the field by ocular estimate.

These are based on the MOF statutory log grades, though these codes and their descriptions have been taken from the Vegetation Inventory Sampling Manual, p. 6-1, Nov. 15,1996 version.

This is a rule based system, based on Tree Species, Minimum diameters, knot diameters, etc., No attempt has been made to model the rule set (96-12), though it could be done. (It may have already been undertaken for scaling requirements and should be 'borrowed'). The purpose of this entity, in its current form, is to supply a list of valid values and a brief description. It is given a surrogate key, as the definition of values and their meaning is supplied by external data custodians and may be changed at any time.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	SGDEF_SPP_GROUP_SKEY	NULL	NUMBER(7,0)
* 2	LOG_GRADE_SKEY A surrogate key to identify the Tree Grade CD.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-16:28 sourced from:7003:407362 >>			
3	LOG_GRADE_CD The codified grade of a portion of a tree. The grade includes various species, minimum size, knot number etc. considerations in arriving at	NOT NULL	VARCHAR2(8)

Table: SPECIES_GRADE_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	a single representative value.		
	<< 1998-03-26-16:28 sourced from:7003:407363 >>		
4	LGC_DESC A brief description of the log grade.	NULL	VARCHAR2(50)
	<< 1998-03-26-16:28 sourced from:7003:407365 >>		
5	MIN_LOG_LENGTH << 1998-03-26-16:28 sourced from:7003:539963 >>	NULL	NUMBER(3,1)
6	TAXC_TAXONOMIC_CD_SKEY	NULL	NUMBER(7,0)
7	TAXC_TAXONOMDEFINE_WOOD_GRADES << 1998-03-26-17:27 sourced from:236464:325446 >>	NULL	NUMBER(7,0)

Foreign Keys:

LGC_SGDEF_FK
 SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY
 LGC_TAXC_FK
 TAXC_TAXONOMDEFINE_WOOD_GRADES = TAXONOMIC_NAMES.TAXONOMIC_CD_SKEY

Indexes:

LGC_SGDEF_FK_I
 SGDEF_SPP_GROUP_SKEY
 LGC_TAXC_FK_I
 TAXC_TAXONOMIC_CD_SKEY
 LGC_TAXC_FK_I_1
 TAXC_TAXONOMDEFINE_WOOD_GRADES

Notes:

Further attribution is required to support
 the informational content found in the Log Grade
 Class tables, Section 6 Call Grading in the
 Ground Sampling Procedures manual.
 << 1998-03-26-16:28 sourced from:7003:407356 >>

Table: SPECIES_GROUP_ASSOCIATIONS*Description:*

An association of SPECIES GROUP CODEs for the purpose of grouping the
a set of taxonomic codes for some business purpose.

An example is the Life Form Codes which are groups of taxonomic names
used for Vegetative Cover sampling.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SGDEF_SPP_GROUP_SKEY	NOT NULL	NUMBER(7,0)
* 2	SGDEF_SPP_GROUP_SKEY_PARENT	NOT NULL	NUMBER(7,0)

Foreign Keys:

SGA_SGDEF_FK
SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY
SGA_SGDEF_PARENT_FK
SGDEF_SPP_GROUP_SKEY_PARENT = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY

Indexes:

SGA_SGDEF_FK_I
SGDEF_SPP_GROUP_SKEY
SGA_SGDEF_PARENT_FK_I
SGDEF_SPP_GROUP_SKEY_PARENT

Notes:

<< 1998-05-01-11:28 sourced from:236464:540747 >>

Table: SPECIES_GROUP_DEFINITIONS*Description:*

A code used to identify a culturally defined group of TAXONOMIC OCCURRENCES. Although referred to as a species group, the actual group can be composed of any entries from TAXONOMY. Inclusion of a TAXONOMIC code implies any/all codes below the selected code in the TAXONOMIC classification are included.

Some examples would be:

- Life Form Codes which are used in Vegetation Samples to group tree and shrub species together for analysis purposes.
- Tree Species Group Codes used in Growth and Yield Samples.

Thus, at least 2 entries would be required to define a set of codes:

- one to describe the set of codes (with no parent).
- one to describe each code entry in the set (with the set as the parent).

Using the SPECIES GROUP ASSOCIATIONS entity, a heirarchy of code relationships can be established.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SPP_GROUP_SKEY << 1998-05-01-11:28 sourced from:236464:540762 >>	NOT NULL	NUMBER(7,0)
2	GROUP_CD << 1998-05-01-11:28 sourced from:236464:540763 >>	NOT NULL	VARCHAR2(8)

Table: SPECIES_GROUP_DEFINITIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	DESCRIPTION << 1998-05-01-11:28 sourced from:236464:540764 >>	NOT NULL	VARCHAR2(75)
4	CREATE_DATE << 1998-05-01-11:28 sourced from:236464:540765 >>	NOT NULL	DATE
5	CREATE_USER_ID << 1998-05-01-11:28 sourced from:236464:540766 >>	NOT NULL	VARCHAR2(30)
6	LONG_CD The long code which identifies the species group. This is attribute is created for consistency with TAXONOMY and GROUP TAXONOMIC OCCURENCES, and its use is expected to be rare. However, the insertion of the 'UNKNOWN' value by the Data Administration group represents a minor level kludge. A group of 'TREE' for example, does not have a sanctioned long code, and nor does 'UNKNOWN' describe the group. However, the business does have a requirement for recording unknown TREES, HERBS etc, and records a long code. << 1998-05-01-11:28 sourced from:236464:817337 >>	NULL	VARCHAR2(8)
7	SHORT_CD The short code, often refered to as the 'field code', which identifies the species. Usually applies to tree species, though 'X', th only known instance of a short code, is used by the business to identify the group 'TREE'. The codes are from the Research Branch, 1997 Tree List.	NULL	VARCHAR2(4)

Table: SPECIES_GROUP_DEFINITIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-05-01-11:28 sourced from:236464:817340 >>		
8	MODIFY_DATE << 1998-05-01-11:28 sourced from:236464:540767 >>	NULL	DATE
9	MODIFY_USER_ID << 1998-05-01-11:28 sourced from:236464:540768 >>	NULL	VARCHAR2(30)

Notes:

<< 1998-05-01-11:27 sourced from:236464:540741 >>

Table: STANDS*Description:*

Also known as a polygon, a name derived from the mapping context. A homogeneous area of forest cover usually determined by classification of medium scale aerial photographs. Homogeneous is defined in terms of density, species, composition, mean age and mean height (Standards form quantifying homogeneity are maintained in "Inventory Classification Standards"). In the business of Growth & Yield, a stand is of interest only as selected as part of the process for sampling (experiments to a lesser extent). It is intended that this stand information represents the stand at the time of plot cluster (sample or experiment plot) establishment.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PCLTR_PLOT_CLUSTER_SKEY	NOT NULL	NUMBER(7,0)
3	SEF_THIN_IND	NULL	VARCHAR2(1)
As supplied by the Standard Edit File (SEF), an indicator of thinning treatment. This indicator (Y/N) is not normally sufficient to describe the more rigorous treatment scheme and record keeping applied to plots (experimental units) of an experiment. This attribute should only be used to retain the legacy Inventory Branch data. Later enhancements to this database application will reflect a relationship to a TREATMENT (Ver. 1 LDM). A TREATMENT would apply to a STAND or a PLOT CLUSTER and would be keyed by a date (unavailable in the SEF legacy data).			
<< 1998-03-27-13:04 sourced from:346868:347305 >>			
4	SEF_FERT_IND	NULL	VARCHAR2(1)
As supplied by the Standard Edit File (SEF), an indicator of fertilization treatment. This indicator (Y/N) is not normally sufficient to describe the more rigorous treatment scheme and record keeping applied to plots (experimental units) of an experiment. This attribute should			

Table: STANDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	d only be used to retain the legacy Inventory Branch data. Later enhancements to this database application will reflect a relationship to a TREATMENT (Ver. 1 LDM). A TREATMENT would apply to a STAND or a PLOT CLUSTER and would be keyed by a date (unavailable in the SEF legacy data).		
	<< 1998-03-27-13:04 sourced from:346868:347306 >>		
5	SEF_OTHER_IND As supplied by the Standard Edit File (SEF), an indicator of an unknown (other) treatment. This indicator (Y/N) is not normally sufficient to describe the more rigorous treatment scheme and record keeping applied to plots (experimental units) of an experiment. This attribute should only be used to retain the legacy Inventory Branch data. Later enhancements to this database application will reflect a relationship to a TREATMENT (Ver. 1 LDM). A TREATMENT would apply to a STAND or a PLOT CLUSTER and would be keyed by a date (unavailable in the SEF legacy data).	NULL	VARCHAR2(1)
	<< 1998-03-27-13:04 sourced from:346868:347308 >>		
6	SEF_PRUNE_IND As supplied by the Standard Edit File (SEF), an indicator of pruning treatment. This indicator (Y/N) is not normally sufficient to describe the more rigorous treatment scheme and record keeping applied to plots (experimental units) of an experiment. This attribute should only be used to retain the legacy Inventory Branch data. Later enhancements to this database application will reflect a relationship to a TREATMENT (Ver. 1 LDM). A TREATMENT would apply to a STAND or a PLOT CLUSTER and would be keyed by a date (unavailable in the SEF legacy data).	NULL	VARCHAR2(1)

Table: STANDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-13:04 sourced from:346868:347307 >>		
7	TREE_SPECIES_CD A code for the tree genus; often genus and species codes are used together. The MOF Tree Species in code table can be subsetted for this purpose. Applicable to Volume and Decay samples only. <i>OT_S Not on HH or SEF, Used on Volume & Decay samples; only known source is Volume & Decay</i> << 1998-03-27-13:04 sourced from:346868:346820 >>	NULL	VARCHAR2(4)
8	TREE_SPECIES_COMPSTN The percentage, rounded to the nearest 10, of the major tree species. Applicable to Volume and Decay samples only. <i>OT_S Not on HH or SEF, only known source is Volume & Decay</i> << 1998-03-27-13:04 sourced from:346868:346821 >>	NULL	NUMBER(2,0)
9	NON_MOF_OWNED_STAND_ID A free-form textual tag used to identify stands for which data has been imported from outside the BC Ministry of Forests and does not conform to Ministry data standards. <i>A! Later use if acquired from other agencies</i> << 1998-03-27-13:04 sourced from:346868:346815 >>	NULL	VARCHAR2(10)
10	FOREST_COVER_POLYGON_ID The forest cover polygon number that, together with a mapsheet identifier, uniquely identifies a particular stand in the forest inventory.	NULL	NUMBER(5,0)

Table: STANDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	HH93_S SAMPLE_SA_POLY_NO		
	SEF_S CT1:54-57 POLYGON NO.		
	<< 1998-03-27-13:04 sourced from:346868:346816 >>		
11	ORIGIN_CD	NULL	VARCHAR2(1)
	A code to denote the predominant environmental or silvicultural factor		
	s which contributed to the establishment of the forest stand in which		
	the sample resides. Codes and their descriptions are from the "Minimu		
	m Standards for the Establishment and Remeasurement of Permanent Sampl		
	e Plots in BC", Forest Productivity Committee, Sept. 1990 publication.		
	HH93_S SAMPLE_SA_ORIGIN		
	SEF_S CT1:54-57 STAND ORIGIN		
	A! May later revieww SILV codes		
	<< 1998-03-27-13:04 sourced from:346868:346817 >>		
12	PHOTO_70_MM_IND	NULL	VARCHAR2(1)
	A code to denote if a stand was photographed using low level 70 mm. ae		
	rial photography.		
	HH93_S SAMPLE_SA_PHOTO70		
	SEF_S CT1:70		
	SEF_C 1 = 'Y', Blank = 'N'		
	A! If 'Y' also occurrence of PHASE = 1		
	<< 1998-03-27-13:04 sourced from:346868:346822 >>		
13	PLANTN_YR	NULL	NUMBER(4,0)
	The year the forest stand (in which the sample resides)was planted (if		
	planting is the stand origin).		

Table: STANDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	HH93_S SAMPLE_SA_PLNT_YR		
	SEF_S CT0:57-58 PLANTATION YEAR		
	A! Will also store (and display) century		
	<< 1998-03-27-13:04 sourced from:346868:346818 >>		
14	PLANTN_STOCK_AGE For the trees in the layer, the age of the planting stock in years at PLANTATION YEAR at stand establishment.	NULL	NUMBER(1,0)
	HH93_S SAMPLE_SA_AGE_STK		
	SEF_S CT0:59 AGE OF STOCK		
	<< 1998-03-27-13:04 sourced from:346868:346819 >>		

Foreign Keys:

STAND_PCLTR_FK
PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY

Indexes:

STAND_PCLTR_FK_I
PCLTR_PLOT_CLUSTER_SKEY

Notes:

OT_S Paper files

<< 1998-03-27-13:04 sourced from:346868:346814 >>

Table: STOCK_RANGE_UNITS*Description:*

Stock Range, a gazetted area that is the highest administrative level containing Range Unit, and Range Pasture are used to summarize general range management activities, forage activity. range utilization, invader/weed species inventory, etc.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	STOCK_SKEY The system identifier for the Stock Range Unit	NOT NULL	NUMBER(7,0)
<< 1998-03-26-17:26 sourced from:236464:605852 >>			
2	STOCK_RANGE_UNIT_ID Reverse Engineered from column STOCK_RANGE_UNIT_ID of table STOCK_RANGE_UNITS	NOT NULL	NUMBER(7,0)

<< 1998-03-26-17:26 sourced from:236464:605853 >>

3	NAME The name of the STOCK RANGE UNIT.	NULL	VARCHAR2(50)
---	---	------	--------------

<< 1998-03-26-17:26 sourced from:236464:605854 >>

Notes:

<< 1998-03-26-17:26 sourced from:236464:605844 >>

Table: SUBPOPULATIONS*Description:*

A set of tree, biomass or flora characteristics and their associated minimum and maximum values used to define a subpopulation of a sample or experimental unit.

NB: multiple relationships of the same cardinality to the entity SEF SUBPOP LOAD RULE are retained for the purposes of keeping existing Business Rule functionality. After load of all SEF data, appropriate attribution to SEF SUBPOP LOAD RULE should be added and redundant relationships eliminated. JH, 98-11

Subpopulations of flora or other ecosystem/site features which are assessed and are predominantly qualified by description, rather than quantified declaratively such as tree size range (e.g. TREE SUBPOPULATION).

There may be some overlap however; Coarse Woody Debris is considered as a description based subpopulation, though it has a specified minimum log diameter of 7.5 cm.

The description is expected to be relatively simple, e.g. all flora, or all coarse woody debris; the operative word is 'predominant'. Should quantifiable subpopulation range bounds evolve, they would be reflected attributively with attendant maintenance enhancements.

A set of tree, biomass or flora characteristics and their associated minimum and maximum values used to define a subpopulation of a sample or experimental unit.

Table: SUBPOPULATIONS (cont'd)*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SUB_POP_SKEY << 1998-03-27-10:11 sourced from:346868:524119 >>	NOT NULL	NUMBER(7,0)
2	SUBP_TYPE	NOT NULL	VARCHAR2(10)
3	SGDEF_SPP_GROUP_SKEY	NULL	NUMBER(7,0)
4	DEFINITION_DATE The date the definition of the subpopulation was established or modified. << 1998-03-27-10:12 sourced from:346868:524166 >>	NULL	DATE
5	DEFINITION_SOURCE The business source of the definition; very often the data collection standards manual from which field sheet, training and business practise emanate. << 1998-03-27-10:12 sourced from:346868:524167 >>	NULL	VARCHAR2(50)
6	DEFINTION_SUMMARY A summary of the description from the DEFINITION SOURCE. Retained for on-line documentation and help system purposes. << 1998-03-27-10:12 sourced from:346868:524168 >>	NULL	VARCHAR2(256)
7	BUSINESS_ID A code value used in the source data to uniquely identify a SUBPOPULATION. For example, SEF uses a series of up to 9 data elements defined in the SEF_SUBPOPULATION_LOAD_RULES to resolve to a single SUBPOPULATION.	NULL	VARCHAR2(8)

Table: SUBPOPULATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Some data sources , such as the FIP/VIFF specification, use a data element referencing this identifier to resolve to a single SUBPOPULATION.		
	If a business id is defined for a subpopulation, it MUST be unique.		
	<< 1998-03-27-10:11 sourced from:346868:597918 >>		
8	TREE_EXTANT_CD A description of the state of existence of the population element (the item which is being observed or measured). In the case of defining a subpopulation of living items such as trees, the three possibilities are Live, Dead and both Live and Dead.	NULL	VARCHAR2(4)
	<< 1998-03-27-10:15 sourced from:346868:347320 >>		
9	MIN_DBH The minimum diameter, at the standard breast height (BH STANDARD), which defines a bound of the subpopulation of individual trees or tree classes.	NULL	NUMBER(4,1)
	<< 1998-03-27-10:15 sourced from:346868:347395 >>		
10	MAX_DBH The maximum diameter, at the standard breast height (BH STANDARD), which defines a bound of the subpopulation of individual trees or tree classes.	NULL	NUMBER(4,1)

Table: SUBPOPULATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-10:15 sourced from:346868:347396 >>		
11	MIN_TREE_HT The minimum tree height, which defines a bound of the subpopulation of individual trees or tree classes. It is typically used for small trees.	NULL	NUMBER(4,2)
	<< 1998-03-27-10:15 sourced from:346868:347397 >>		
12	MAX_TREE_HT The maximum tree height, which defines a bound of the subpopulation of individual trees or tree classes. It is typically used for small trees.	NULL	NUMBER(4,2)
	<< 1998-03-27-10:15 sourced from:346868:347398 >>		
13	POPLTN_ELMNT_CD The item that is being observed or measured; in biometric terms, the population element of the investigation. The investigation can be considered to be either by sampling or experimenting.	NULL	VARCHAR2(5)
	<< 1998-03-27-10:15 sourced from:346868:347399 >>		
14	DYNAMIC_CD The sample or experiment design characteristic reflecting how changes to the subpopulation of individual trees usually, over time, are to be handled. Applicable to remeasured or permanent samples and experimental plots only, The most common example is 'ingrowth', where trees become larger than	NULL	VARCHAR2(2)

Table: SUBPOPULATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

	the minimum diameter on later re-measurements following establishment.		
--	--	--	--

If such 'ingrowth' is typically permitted, that is, the 'new' tree is identified and measured as any other, the DYNAMIC CD is 'DY', i.e. the subpopulation of trees is considered to be dynamic over the life of the permanent sample or experimental plot.

A second example is where 'ingrowth' is not permitted, i.e. the trees identified at establishment represent the only ones which are remeasured. In this circumstance, the DYNAMIC CD is 'ST' for static, to reflect an unchanging tree subpopulation.

A third example, which has not been fully explored, but may be reflected by simply adding another code value are 'espacement' trials. Only known to experiments where a stand has been spaced, the subpopulation can change at each re-measurement to obtain the prescribed number of live trees determined at establishment. If mortality occurs, the number of live trees is made up to the prescribed number. How the plot size is varied to accommodate this is unknown, perhaps there isn't a bounded plot per se. Analysis to continue when Research Branch data is analysed for inclusion into the database.

<< 1998-03-27-10:15 sourced from:346868:347394 >>

15	TREE_SPP_GRP_CD_LEGACY	NULL	VARCHAR2(10)
	The legacy data for the earlier version of a foreign key reference to a now-obsolete table, TREE SPP GROUP CODEs.		

The above foreign key relationship is replaced by the same relationship to SPECIES GROUP DEFINITION in the DRM model.

Table: SUBPOPULATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The inclusion of this legacy foreign key column is to aid in the transition of the production data.		

Unique Constraints:

SUBP_TSUBP2_UK
MIN_DBH
MAX_DBH
TREE_EXTANT_CD
MIN_TREE_HT
MAX_TREE_HT
POPLTN_ELMNT_CD
DYNAMIC_CD
BUSINESS_ID
SGDEF_SPP_GROUP_SKEY

Foreign Keys:

SUBP_SGDEF_FK
SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY

Indexes:

SUBP_SGDEF_FK_I
SGDEF_SPP_GROUP_SKEY

Notes:

<< 1998-03-27-10:11 sourced from:346868:524118 >>

<< 1998-03-27-10:12 sourced from:346868:524165 >>

<< 1998-03-27-10:15 sourced from:346868:347316 >>

Table: SUCCESSION_INTERPRETATIONS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SUCCESSION_INT_SKEY System generate UID from ORACLE sequence SUCCESSION_INT_SEQ.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-16:28 sourced from:7003:537123 >>

2	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
3	SSCC_SERIAL_STAGE_CD	NULL	VARCHAR2(2)
4	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)

Table: SUCCESSION_INTERPRETATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	TREE_HARVESTING_CD A generalized observation of the presence of tree harvesting activity. << 1998-03-26-16:28 sourced from:7003:221039 >>	NULL	VARCHAR2(1)
6	SNAGS_CD The classification of snags greater than 25 cm dbh. Meant to apply to a 25m radius plot size; if the plot size is later modified, the relative terms may require re-naming or be quantified. << 1998-03-26-16:28 sourced from:7003:221040 >>	NULL	VARCHAR2(1)
7	CWD_IN_ALL_DECAY_STAGES_CD The observation where coarse woody debris and/or snags are a continuous process. << 1998-03-26-16:28 sourced from:7003:221042 >>	NULL	VARCHAR2(1)
8	CANOPY_GAPS_FROM_TREE_MORTALIT The assessment of tree canopy gaps in from tree mortality. << 1998-03-26-16:28 sourced from:7003:221043 >>	NULL	VARCHAR2(1)
9	VERTICAL_STRUCTURE_CD A generalized estimation of the distribution of shrub and tree layer strata. << 1998-03-26-16:28 sourced from:7003:221044 >>	NULL	VARCHAR2(1)

Table: SUCCESSION_INTERPRETATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
10	SUCCESSIONAL_STABILITY_CD An observation of the stability of succession of tree species composition. << 1998-03-26-16:28 sourced from:7003:221045 >>	NULL	VARCHAR2(1)
11	TREE_AGE_FOR_SPECIES_SITE_CD The generalized observation that the trees are old for the site conditions and species. << 1998-03-26-16:28 sourced from:7003:221046 >>	NULL	VARCHAR2(1)
12	TREE_SIZE_FOR_SPECIES_SITE_CD The generalized comparative observation of the trees' age in to the site conditions and seral stage. << 1998-03-26-16:28 sourced from:7003:221047 >>	NULL	VARCHAR2(1)
13	OLD_GROWTH_FOREST_CD An evaluation as to whether the stand conditions constitute 'old growth'. This is a subjective determination based on the aggregate of the evaluation of all other seral stage features. << 1998-03-26-16:28 sourced from:7003:221049 >>	NULL	VARCHAR2(1)
14	LIVE_OLD_TREES_PCT The percentage of live, old trees remaining. << 1998-03-26-16:28 sourced from:7003:221050 >>	NULL	NUMBER(3,0)

Foreign Keys:

Table: SUCCESSION_INTERPRETATIONS (cont'd)*Foreign Keys:*

SI_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
SI_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
SI_SSCC_FK
SSCC_SERAL_STAGE_CD = SERAL_STAGE_CLASS_CDS.SERAL_STAGE_CD

Indexes:

SI_CEV_FK_I
CEV_CE_VISIT_SKEY
SI_GTO_FK_I
GTO_GROUP_TAXON_SKEY
SI_SSCC_FK_I
SSCC_SERAL_STAGE_CD

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-16:28 sourced from:7003:218989 >>

Table: TAXONOMIC_ASSOCIATIONS*Description:*

The association of a TAXONOMIC code to its parent (one or more)
and its children (one or more).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TAXC_TAXONOMIC_CD_SKEY << 1998-03-26-17:27 sourced from:236464:325446 >>	NOT NULL	NUMBER(7,0)
* 2	TAXC_TAXONA_CHILD_OCCURENCE_OF << 1998-03-26-17:27 sourced from:236464:325446 >>	NOT NULL	NUMBER(7,0)

Foreign Keys:

TASS_TAXC_A_CHILD_OCCURENCE_FK
TAXC_TAXONA_CHILD_OCCURENCE_OF = TAXONOMIC_NAMES.TAXONOMIC_CD_SKEY
TASS_TAXC_FK
TAXC_TAXONOMIC_CD_SKEY = TAXONOMIC_NAMES.TAXONOMIC_CD_SKEY

Indexes:

TASS_TAXC_A_CHILD_OCCURENCE__I
TAXC_TAXONA_CHILD_OCCURENCE_OF
TASS_TAXC_FK_I
TAXC_TAXONOMIC_CD_SKEY

Notes:

<< 1998-03-26-17:27 sourced from:236464:540731 >>

Table: TAXONOMIC_LEVELS*Description:*

The groups used in taxonomic classification. Examples would be:

Kingdom,
 Phylum,
 Subphylum,
 Class,
 Subclass,
 Order,
 Family,
 Genus,
 Species,
 Subspecies,
 Variation.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TAXA_LEVEL_SKEY << 1998-03-26-17:27 sourced from:236464:544119 >>	NOT NULL	NUMBER(7,0)
2	LEVEL_CD A code used to represent the Taxonomic classification level fully described/named in the Description attribute. << 1998-03-26-17:27 sourced from:236464:544127 >>	NOT NULL	VARCHAR2(25)
3	DESCRIPTION Full descriptive name of the classification level. << 1998-03-26-17:27 sourced from:236464:382101 >>	NOT NULL	VARCHAR2(50)
4	LEVEL_SEQ_NUM The numeric code used to sequence the level cds when sorting for report purposes. << 1998-03-26-17:27 sourced from:236464:382100 >>	NULL	NUMBER(3,0)
5	TXLVL_TAXA_LEVEL_SKEY << 1998-03-26-17:27 sourced from:236464:544119 >>	NULL	NUMBER(7,0)

Table: TAXONOMIC_LEVELS (cont'd)*Foreign Keys:*

TXLVL_TXLVL_FK

TXLVL_TAXA_LEVEL_SKEY = TAXONOMIC_LEVELS.TAXA_LEVEL_SKEY

Indexes:

TXLVL_TXLVL_FK_I

TXLVL_TAXA_LEVEL_SKEY

Notes:

<< 1998-03-26-17:27 sourced from:236464:381486 >>

Table: TAXONOMIC_NAMES*Description:*

Tree species, vegetation species and the botanical order to which they belong; species are identified by their botanical name and common name.

There is a generally accepted botanical definition of native 'trees' (as opposed to shrubs).

The biggest issue is that the MOF code list contains multiple codes for the same tree species and will, in time require rationalization.

A! In hindsight a better name would be better TAXONOMIC MEMBER

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TAXONOMIC_CD_SKEY << 1998-03-26-17:27 sourced from:236464:325446 >>	NOT NULL	NUMBER(7,0)
2	LATIN_NAME The Latin name that describes the taxa. << 1998-03-26-17:27 sourced from:236464:436105 >>	NOT NULL	VARCHAR2(65)
3	COMMON_NAME The common name of the plant species. << 1998-03-26-17:27 sourced from:236464:325443 >>	NOT NULL	VARCHAR2(50)
4	LONG_CD The long code which identifies the species. Applies to all plant species and is usually formed by the concatenation of the first four letters of the genus name and the first four letters of the species name.	NULL	VARCHAR2(8)

The codes are from the Research Branch, 1997 Plant Species List.

Table: TAXONOMIC_NAMES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-17:27 sourced from:236464:374963 >>		
5	NEW_LONG_CD Researches updated new codes..	NULL	VARCHAR2(8)
6	LONG_CODE_TYPE Signifies whether the derived code is a Synonym for the actual latin name of the scientific name, the actual latin name or a excluded species <i>Input june 19th, 2001... RGH update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
7	SHORT_CD The short code, often refered to as the 'field code', which identifies the species. Usually applies to tree species. The codes are from the Research Branch, 1997 Tree List. << 1998-03-26-17:27 sourced from:236464:328171 >>	NULL	VARCHAR2(4)
8	NATIVE_TO_BC_CD The designation of native plant species in British Columbia. It appears that some codes contain common meaning; no effort was made to unravel or normalize the values. Code values from the Research Branch, 1997 Plant Species List. Denotes that the species, to the VARIETY level, is indigenous to B.C. << 1998-03-26-17:27 sourced from:236464:374964 >>	NULL	VARCHAR2(1)
9	AUTHORITY_SITED The authority, cited in a professional journal, that is the source of the determination of species name. Sourced from the 1997 Research Branch Plant Species list. << 1998-03-26-17:27 sourced from:236464:541260 >>	NULL	VARCHAR2(60)
10	MULTI_LIFEFORM Where a species long code is associated with more than one life form <i>Input june 19th, 2001... RGH update to Taxonomic Names table to research</i>	NULL	VARCHAR2(20)

Table: TAXONOMIC_NAMES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
11	LIFEFORM_CD Research Branches growth form of the species... Note we use Species groups that are different code numbers. mapping is as follows Species_Group_Cd match to Lifeform Code Description 2 (Tree) (1) coniferous trees & (2) Broadleave trees 9 (Shrub) (3) evergreen shrubs & (4)Deciduous shrubs 5 (Herb) (5) ferns & (6) grammoids & (7) forbs & (8) Parasite & (12)Dwarf Woody Plants 6 (Moss) (9) Mosses 7 (Lichen) (11) Lichens 8 (Liverworts) (10) Livrwords 13 (Macroalgae)(13) Macroalgae added.. June 11th (2001) Our 3(ShortShrubs)- 4(TallShrubs) codes mapped out of our 9 code (broken down by layer column in Taxonomic Names) - <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(2)
12	LAYER_CD Explanation of Layers (or how to determine tall-shortshrub) Here is the scale from top to bottom (I like to think this in terms of height): A tallest B1 B2 C D (all D layers are equivalent) shortest Notes: Layer A may include only layer A species codes. Layer B1 may include species from layers A and B1, except for cards RS4/RT5 - cards RS4/RT5 may include only B1 species. Layer B2 may include species from layers A, B1 and B2. Layer C may include only layer C species. Layer D may include only layer D species, except for card ET14 which may include layer A species - only on card ET14. Bob Khran.. (June1,2001) <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(240)
13	CLIMATE climate types <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
14	ESTIMATE_SOIL_MOISTURE soil moisture regime <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
15	ESTIMATE_SOIL_NUTRIENT soil nutrient regime <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
16	GROUND_SURFACE_MATERIAL ground surface material <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)

Table: TAXONOMIC_NAMES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
17	WEED_STATUS species considered invasive plants <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
18	WETLAND_INDICATOR wetland and riparian indicator status of species <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
19	RED_BLUE_LIST species included on the Provincial Vascular Plant Tracking List <i>Input june 19th, 2001... RGH</i> <i>update to Taxonomic Names table to research</i>	NULL	VARCHAR2(1)
20	TXLVL_TAXA_LEVEL_SKEY <i><< 1998-03-26-17:27 sourced from:236464:544119 >></i>	NOT NULL	NUMBER(7,0)

Foreign Keys:

TAXC_TXLVL_FK
TXLVL_TAXA_LEVEL_SKEY = TAXONOMIC_LEVELS.TAXA_LEVEL_SKEY

Indexes:

TAXC_TXLVL_FK_I
TXLVL_TAXA_LEVEL_SKEY

Notes:

<< 1998-03-26-17:27 sourced from:236464:325427 >>

Table: TEXT_FILE_VERSIONS*Description:*

The electronic file version of the main text file that contains forest inventory data. Typically, this would be the FIP file that contains the forest cover data and also a static overlay of the themes that may bisect a forest cover polygon.

It should be noted that the forest cover (FIP) file does not necessarily contain all the text data associated with each theme (level), but has sufficient content to serve a variety of users and summary applications.

Note: (98-03) Future consideration should be given to amalgamating the TEXT FILE VERSION with the VEG COVER application entity, VERSION AUDIT METADATA. These describe the same business object, metadata of a version release, but from differing perspectives. No amalgamation undertaken at this writing on account of time constraints of implementation.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TEXT_FILE_SKEY The surrogate identifier for a text file (FIP).	NOT NULL	NUMBER(7,0)
	System generated UID from sequence number, TEXT_FILE_SEQ.		
	<< 1998-03-25-16:59 sourced from:416792:432461 >>		
2	SERIAL_NUM_DATE The date simultaneously assigned to a graphics file and its associated text file for the purpose of uniquely identifying a version.	NOT NULL	DATE

Table: TEXT_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>This attribute is one of three components of the compound business key, file 'Serial Number'. The three components in their commonly used order are:</p> <p>Mapsheet Id (BCGS 6x12 MAPSHEET ID)</p> <p>SERIAL NUM DATE</p> <p>SERIAL VERSION NUM.</p> <p>The SERIAL NUM DATE is assigned at the time of creation of the 'resultants', (forest cover polygons bisected by multiple themes in the '.EDI file) and their integration with the text file. Assignment is made by a controlled process on a secure, multiuser system, and therefore, the date retains integrity unlike those sourced from the stand-alone PC systems.</p> <p>Also known as GRAPHICS CREATION DATE in the FIP file, though a misnomer.</p> <p><< 1998-03-25-16:59 sourced from:416792:435540 >></p>		
3	SERIAL_VERSION_NUM	NOT NULL	NUMBER(4,0)
	<p>The number simultaneously assigned to a graphics file and its associated text file for the purpose of uniquely identifying a version.</p> <p>This attribute is one of three components of the compound business key, file 'Serial Number'. The three components in their commonly used order are:</p> <p>Mapsheet Id (BCGS 6x12 MAPSHEET ID)</p> <p>SERIAL NUM DATE</p>		

Table: TEXT_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	SERIAL VERSION NUM.		

The SERIAL VERSION NUM is assigned at the time of creation of the 'resultants', (forest cover polygons bisected by multiple themes in the '.EDI file) and their integration with the text file.

It should be noted that despite the intention of this attribute contributing to the business key identifier, SERIAL VERSION NUM appears to be of limited usefulness. Firstly, the Mapsheet Id and the SERIAL NUM DATE (above) provide all the unique identification required, and secondly, the Object Distribution Management system (ODM) creates a version number based on checking in/out for data maintenance that is independently assigned. This confusion, borne of a disconnected activities, causes loss of integrity for business use.

No other business meaning such as release, revision date, processing date is inferred.

<< 1998-03-25-16:59 sourced from:416792:426748 >>

4	NA_PRESENCE_IND	NOT NULL	VARCHAR2(1)
	<p>The indication of the presence of any polygons attributed as ' Not Applicable'. This typically applies only to forest cover. 'NA' represents areas where forest cover classification is not expected. Such areas would be saltwater, another provinces or state etc.</p>		

<< 1998-03-25-16:59 sourced from:416792:464828 >>

Table: TEXT_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
5	FOREST_COVER_PRESENCE_IND << 1998-03-25-16:59 sourced from:416792:464830 >>	NOT NULL	VARCHAR2(1)
6	NTA_PRESENCE_IND The indication of the presence of any polygons attributed as ' No Typing Available'. This typically applies only to forest cover. 'NTA' represents areas where forest cover classification is expected, but was not provided. Such areas would be parks, Tree Farm Licences (on an interim basis), etc. << 1998-03-25-16:59 sourced from:416792:464829 >>	NOT NULL	VARCHAR2(1)
7	ODM_OBJECT_STATE_CD The status of the electronic file with respect to update and revision as supplied from the Object Distribution Management system. << 1998-03-25-16:59 sourced from:416792:437804 >>	NOT NULL	VARCHAR2(3)
8	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492803 >>	NOT NULL	DATE
9	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492805 >>	NOT NULL	VARCHAR2(30)
10	RELEASE_DATE The date the FIP file was last updated as part of the 'completion' process. The 'completion' process derives stand tree species volumes and projects them to a specified date). Also termed the 'Last Update Date' in the lexicon of the FIP Data Dictionary.	NULL	DATE

Table: TEXT_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	Not currently supplied in the MUMS 1.0 flat file version.		
	NB; the name could be changed on presentation on forms.		
	<< 1998-03-25-16:59 sourced from:416792:421315 >>		
11	FIP_LATEST_REFERENCE_DATE From the FIP file, the most recent calendar year in which the attribution of the forest cover layer was determined.	NULL	DATE
	A polygon can have many layers, each with a different Reference Year; the MUMS file creation routine extracts the most recent Reference Year of all layer of all polygons in a text (FIP) file. Text files are created for each 6' x 12' mapsheet graphics file.		
	<< 1998-03-25-16:59 sourced from:416792:464823 >>		
12	DISK_FARM_CREATE_DATE The date the file was created on the disk farm which may be different from either the Release Date and the Serial Num Date.	NULL	DATE
	<< 1998-03-25-16:59 sourced from:416792:444970 >>		
13	INVENTORY_STANDARD_CD The standard to which the inventory data was collected. The two known 'standards' are the FIP, Forest Inventory Planning (file), which embraces many standards, and the Vegetation Inventory (VEG).	NULL	VARCHAR2(5)
	May not be implemented until there is a definitive code set and source to obtain this information. May also be linked to a more complete		

Table: TEXT_FILE_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	documentation of the procedure manuals being on-line.		
	<< 1998-03-25-16:59 sourced from:416792:421316 >>		
14	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492804 >>	NULL	DATE
15	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492806 >>	NULL	VARCHAR2(30)
17	MCMP_MAP_COMP_SKEY	NOT NULL	NUMBER(7,0)

Unique Constraints:

TFV_TFV2_UK
 MCMP_MAP_COMP_SKEY
 SERIAL_NUM_DATE
 SERIAL_VERSION_NUM

Foreign Keys:

TFV_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY

Indexes:

TFV_MCMP_FK_I
 MCMP_MAP_COMP_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418266 >>

Table: TFL_BLOCK_MAPSHEET_ASSNS*Description:*

The association of Tree Farm Licence Blocks with a mapsheet. This association of areal features is a rough approximation which is used for assignment of the appropriate waste, decay and breakage factors that are applied on a TFL block specific basis by the Variable Density Yield Prediction (VDYP) model.

There is no inherent attribution.

Populated from Appendix G of the Mapsheet/TFL Block Associations of the VDYP Batch Application User Guide.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TFLC_TFL_SKEY	NOT NULL	NUMBER(7,0)
* 2	MCMP_MAP_COMP_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

TBMA_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY
 TBMA_TFLC_FK
 TFLC_TFL_SKEY = TFL_CODES.TFL_SKEY

Indexes:

TBMA_MCMP_FK_I
 MCMP_MAP_COMP_SKEY
 TBMA_TFLC_FK_I
 TFLC_TFL_SKEY

Notes:

<< 1998-04-29-17:43 sourced from:236464:779638 >>

Table: TFL_CODES*Description:*

Tree Farm License code.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TFL_SKEY The system generated surrogate identifier. Generated by the sequence TFL_SEQ << 1998-04-29-17:43 sourced from:236464:779645 >>	NOT NULL	NUMBER(7,0)
2	TFL_NUM The Ministry assigned numeric identifier of TreeFarm License. << 1998-04-29-17:43 sourced from:236464:440349 >>	NOT NULL	NUMBER(4,0)
3	TFL_NAME Full name for the TFL. << 1998-04-29-17:43 sourced from:236464:440350 >>	NOT NULL	VARCHAR2(50)
4	TFL_BLOCK_NUM An areal subdivision of a Tree Farm Licence. << 1998-04-29-17:43 sourced from:236464:779647 >>	NULL	NUMBER(4,0)
6	TFLC_TFL_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

TFLC_TFLC_FK

Table: TFL_CODES (cont'd)*Foreign Keys:*

TFLC_TFL_SKEY = TFL_CODES.TFL_SKEY

Indexes:

TFLC_TFLC_FK_I
TFLC_TFL_SKEY

Notes:

<< 1998-04-29-17:43 sourced from:236464:440343 >>

Table: THEMES*Description:*

A single objective for the collection of data, with an implied geographic context. For example, forest cover has areal coverage and text data, and is considered a separate objective from the field based activity of collecting data from samples in the same location.

Also termed Feature Code, though this needs to be rationalized as the geographic information users tend to use Theme.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	THEME_SKEY The surrogate identifier of a theme.	NOT NULL	NUMBER(7,0)
	System generated from the Oracle sequence, THEME SEQ.		
	<< 1998-03-25-16:59 sourced from:416792:421319 >>		
2	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492807 >>	NOT NULL	DATE
3	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492809 >>	NOT NULL	VARCHAR2(30)
4	THEME_DESC A description of the theme content; e.g. Forest Cover, Operability, Visual Quality Objectives etc.	NULL	VARCHAR2(150)
	<< 1998-03-25-16:59 sourced from:416792:432476 >>		
5	FC1_LEVEL_NUM The business assigned level number that identifies a theme in the IGDS	NULL	NUMBER(3)

Table: THEMES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u> files.	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-25-16:59 sourced from:416792:421320 >>		
6	MINIMUM_POLYGON_ID The minimum identifying number assigned to polygons of the theme.	NULL	NUMBER(6,0)
	<< 1998-03-25-16:59 sourced from:416792:437835 >>		
7	MAXIMUM_POLYGON_ID The maximum identifying number that would be assigned to polygons of the theme.	NULL	NUMBER(6,0)
	<< 1998-03-25-16:59 sourced from:416792:437836 >>		
8	DEFAULT_VALUE The business defined default value for the theme level (overlay). This can vary according to a number of business practises; for some levels an 'N' is a default, for others, there maybe as series of dashes filling in the places. The presence of a default, that is, to whether occurs on a level, is indicated by the Theme Version.Default Value Presence Ind.	NULL	VARCHAR2(25)
	<< 1998-03-25-16:59 sourced from:416792:438274 >>		
9	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492808 >>	NULL	DATE
10	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492810 >>	NULL	VARCHAR2(30)

Table: THEMES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
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Notes:

<< 1998-03-25-16:59 sourced from:416792:418272 >>

Table: THEME_AREA_SUMMARIES

Description:

Summary level metadata and statistics of selected themes (overlay or level) for each unique attribute value of a given theme. Theme area summaries can be in the form of an area summary or the presence/absence of a spatial business object (e.g. Forest Region, District). Presence/absence is indicated by an association with no business attributes populated.

The attribute value is supplied by a procedural (non-declarative) association with Theme Attribute Validation Rule.

There will be two ways to populate entries:

- determination of default values are by way of business knowledge or
- as a derived statistic representing all polygons of the same attribute value.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	THEME_ATTRIBUTE_SKEY The surrogate indentifier for an occurence of an attribute summary for a theme version. Populated from an Oracle sequence, THEME ATTRIBUTE SEQ. << 1998-03-25-16:59 sourced from:416792:435283 >>	NOT NULL	NUMBER(7,0)
2	SPO_SPATIAL_BUS_SKEY	NOT NULL	NUMBER(7,0)
3	TV_THEME_VERSION_SKEY	NOT NULL	NUMBER(7,0)
5	DATA_CREATION_CATEGORY_CD The category under which an attribute value was assigned to the group	NOT NULL	VARCHAR2(5)

Table: THEME_AREA_SUMMARIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	of summarized polygons. Known examples are;		
	default,		
	business assigned (ie. explicit business meaning) and		
	unknown.		
	<< 1998-03-25-16:59 sourced from:416792:421326 >>		
6	ATTRIBUTE_IDENTIFIER_VALUE	NOT NULL	VARCHAR2(25)
	The value that identifies the specific SPATIAL BUSINESS OBJECT		
	for which values are being recorded.		
	eg. For TSA 39, the attribute identifier value would be 39 and the		
	attribute value coverage percent and/or attribute value coverage area		
	would be set from the incoming source data.		
	<< 1998-03-25-16:59 sourced from:416792:506318 >>		
7	CREATE_DATE	NOT NULL	DATE
8	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
9	ATTRIBUTE_VALUE_COVERAGE_PCT	NULL	NUMBER(3,0)
	The percentage of the mapsheet that is described by the theme		
	attribute value. This would summarize all polygons of the same		
	attribute value.		
	Derived from the quality assurance software and the Map Area.		
	<< 1998-03-25-16:59 sourced from:416792:421328 >>		
10	ATTRIBUTE_VALUE_COVERAGE_AREA	NULL	NUMBER(8,3)
	The area of the mapsheet that is described by the theme		

Table: THEME_AREA_SUMMARIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	attribute value. This would summarize all polygons of the same		
	attribute value.		

Derived from the quality assurance software process.

<< 1998-03-25-16:59 sourced from:416792:421330 >>

11	MODIFY_DATE	NULL	DATE
12	MODIFY_USER_ID	NULL	VARCHAR2(30)
14	ROLA_ROLE_ASSN_SKEY	NOT NULL	NUMBER(7,0)
16	TSA_TSA_NUM	NULL	VARCHAR2(3)
18	RFA_RFA_SKEY	NULL	NUMBER(7,0)
20	TFLC_TFL_SKEY	NULL	NUMBER(7,0)

Unique Constraints:

TAS_TAS2_UK
 TV_THEME_VERSION_SKEY
 SPO_SPATIAL_BUS_SKEY

Foreign Keys:

TAS_RFA_FK
 RFA_RFA_SKEY = REGULATED_FOREST_AREAS.RFA_SKEY
 TAS_ROLA_FK
 ROLA_ROLE_ASSN_SKEY = ROLE_ASSOCIATIONS.ROLE_ASSN_SKEY
 TAS_SPO_FK
 SPO_SPATIAL_BUS_SKEY = SPATIAL_BUSINESS_OBJECTS.SPATIAL_BUS_SKEY
 TAS_TFLC_FK
 TFLC_TFL_SKEY = TFL_CODES.TFL_SKEY
 TAS_TSA_FK
 TSA_TSA_NUM = TSA_NUMBER_CODES.TSA_NUM
 TAS_TV_FK
 TV_THEME_VERSION_SKEY = THEME_VERSIONS.THEME_VERSION_SKEY

Indexes:

TAS_RFA_FK_I
 RFA_RFA_SKEY
 TAS_ROLA_FK_I
 ROLA_ROLE_ASSN_SKEY
 TAS_SPO_FK_I
 SPO_SPATIAL_BUS_SKEY
 TAS_TFLC_FK_I
 TFLC_TFL_SKEY
 TAS_TSA_FK_I
 TSA_TSA_NUM
 TAS_TV_FK_I
 TV_THEME_VERSION_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418212 >>

Table: THEME_AREA_SUMMARIES (cont'd)*Notes:*

Table: THEME_GROUPS*Description:*

A collection of themes as used by the business.

The most predominant example is the so termed 'Base', which in business practice is composed of single line creeks (level 5), double line rivers and lakes (level 6), roads (level 8) and the neatlines (level 62).

This entity is also expected to accomodate the parentage of themes that in time, are split apart into finer categories of business resolution. The use of toponomy may be such an example, where currently it is included in the 'base' for example, but may be later contained on a separate theme. An example of this currently is that there is no way to retrieve 'Vancouver Island' based data.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	THEME_GROUP_SKEY System generated identifier (surrogate key)	NOT NULL	NUMBER(7,0)
<< 1998-03-25-16:59 sourced from:416792:613193 >>			
2	NAME The identifying name or "handle" of the grouping of themes.	NOT NULL	VARCHAR2(20)
<< 1998-03-25-16:59 sourced from:416792:613332 >>			
3	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:506234 >>	NOT NULL	DATE
4	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:506235 >>	NOT NULL	VARCHAR2(30)
5	DESCRIPTION The description of the theme group.	NULL	VARCHAR2(75)

Table: THEME_GROUPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	For example:		
	slope, aspect and elevation are commonly grouped and the source themes would be retained as the description of the Theme Group.		
	<< 1998-03-25-16:59 sourced from:416792:613197 >>		
6	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:506236 >>	NULL	DATE
7	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:506237 >>	NULL	VARCHAR2(30)

Unique Constraints:

TGRP_TGRP2_UK
NAME

Notes:

<< 1998-03-25-16:59 sourced from:416792:505445 >>

Table: THEME_GROUP_MEMBERSHIPS*Description:*

The association of a number of Themes into a single group.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TGRP_THEME_GROUP_SKEY	NOT NULL	NUMBER(7,0)
* 2	THE_THEME_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

TGM_TGRP_FK
TGRP_THEME_GROUP_SKEY = THEME_GROUPS.THEME_GROUP_SKEY
TGM_THE_FK
THE_THEME_SKEY = THEMES.THEME_SKEY

Indexes:

TGM_TGRP_FK_I
TGRP_THEME_GROUP_SKEY
TGM_THE_FK_I
THE_THEME_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:613326 >>

Table: THEME_VERSIONS*Description:*

The occurrence of a theme (or level) for a given electronic version of a map. This represents a temporal event, as not all themes were present on all versions of their parent mapsheet.

Note1: The occurrence of a theme is determined by the presence of the graphic (polygonal) level, which at a minimum, would be only the neatlines. At this minimum, the level would be considered to exist, but with a count of zero polygons. The polygon count (NUMBER OF POLYGONS) is based on the occurrence of text nodes, a graphic element with polygon identifying text and attribution attached to it.

A 'defaulted' level, where the level occurs and has a single test node with a default attribute value would have a count of one polygon (NUMBER OF POLYGONS) and the DEFAULT PRESENCE IND set to 'Y'.

Note 2: it is understood that the source data collecting software will apply inter-theme (level)rules and the outcome may determine a theme is expected to exist, yet does not. Such occurrences are to be retained, as if they were a legitimate theme, with the Expected But Not Present IND set to Y(es).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	THEME_VERSION_SKEY The surrogate identifier of a Theme Version.	NOT NULL	NUMBER(7,0)

System generated from the Oracle sequence, THEME VERSION SEQ.

Table: THEME_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492815 >>	NOT NULL	DATE
4	GRFV_GRAPHICS_FILE_SKEY	NOT NULL	NUMBER(7,0)
5	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492817 >>	NOT NULL	VARCHAR2(30)
6	TFV_TEXT_FILE_SKEY	NULL	NUMBER(7,0)
7	TGRP_THEME_GROUP_SKEY	NULL	NUMBER(7,0)
8	THE_THEME_SKEY	NULL	NUMBER(7,0)
9	CREATION_SPECIFICATION_NAME The name of the specification which applied the standards for the creation of the theme (level) version.	NULL	VARCHAR2(1)

Of particular business interest is the planimetric base; there are TRIM (Terrain Resource Inventory Mapping) bases, now in versions 1.x and 2.x, as well as Ministry of Environment and the Resource Inventory Branch.

Prudence should be exercised to ensure that the specification name is true to definition and is not confused with the Agency that created the specification. Should the latter case arise, then a relationship to Agency Role would be required.

This can be applied to any level, though the standard that is applied would be unknown most of the time. For example, later application may make use of the manual name applicable at the time.

<< 1998-03-25-16:59 sourced from:416792:467449 >>

10	CUSTODIAN_RELEASE_DATE The date the business custodian released the theme, in its current	NULL	DATE
----	--	------	------

Table: THEME_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

	version, for the use of other agencies.		
--	---	--	--

Of particular interest is the date the Cadastre theme version was released, owing to its sensitivity on its impact on determining Crown land area summaries. The Custodian Release Date for the cadastre level is extracted from the title block of the *.FC1 file.

Note that a supplied date may not be interpretable by the load rules.

In this case, the CUSTODIAN RELEASE DATE will be null. The supplied date is stored in the CUSTODIAN RELEAS DATE TEXT FORM attribute.

<< 1998-03-25-16:59 sourced from:416792:421429 >>

11	CUSTODIAN_RELEASE_DATE_TEXT	NULL	VARCHAR2(20)
	The date the business custodian released the theme, in its current version, for the use of other agencies. This is a free form text field of the supplied data.		

This is identical attribution to the CUSTODIAN RELEASE DATE, with the exception that the CUSTODIAN RELEASE DATE is potentially interpreted to be loaded as a Date type.

<< 1998-03-25-16:59 sourced from:416792:670125 >>

12	NUMBER_OF_POLYGONS	NULL	NUMBER(6)
	The number of polygons belonging to a theme (level). A derived attribute supplied from quality assurance processing software.		

The number of polygons is determined from the count of textnodes, that

Table: THEME_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	is the graphic element which textually identifies the polygonal shape. If there is an occurrence of a theme version (level) where there is no text node(s), a zero count of polygons will be recorded. << 1998-03-25-16:59 sourced from:416792:421317 >>		
13	DEFAULT_PRESENCE_IND The indication that the default value, as defined for a Theme, occurs in a given theme (level), for a given version of the graphics file. << 1998-03-25-16:59 sourced from:416792:467208 >>	NULL	VARCHAR2(1)
14	MISSING_TEXT_DATA_IND The indication that a theme (level) is expected to contain business interpretation and/or classification in the text file, when in fact, it does not. This determination of missing business data is based on the source MUMS data collecting software which applies inter-theme (level) rules. An outcome of 'Y' (yes) indicates a theme is expected to contain business data, yet does not. An example would be for the Recreation theme: if there is Crown Land ownership (as per the Cadastre theme), and the Recreation theme is attributed by its particular default value, the rule would interpret this condition as Missing Data (Y). << 1998-03-25-16:59 sourced from:416792:544826 >>	NULL	VARCHAR2(1)
15	MISSING_GRAPHICS_DATA_IND The indication that a theme (level) is expected to contain	NULL	VARCHAR2(1)

Table: THEME_VERSIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	business interpretation and/or classification in the graphics file, when in fact, it does not. What the level would contain is an assigned default value, which does not distinguish the two possible causal business scenarios:		
	-the graphics theme data was inadvertently dropped or otherwise not included when available or		
	-the business has not undertaken classification and interpretation of the mapsheet area.		
	This determination of missing business data is based on the source MUMS data collecting software which applies inter-theme (level) rules. An outcome of 'Y' (yes) indicates a theme is expected to contain business data, yet does not.		
	An example would be for the Recreation theme: if there is Crown Land ownership (as per the Cadastre theme), and the Recreation theme is attributed by its particular default value, the rule would interpret this condition as Missing Data (Y).		
	<< 1998-03-25-16:59 sourced from:416792:438445 >>		
16	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492816 >>	NULL	DATE
17	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492818 >>	NULL	VARCHAR2(30)

Unique Constraints:

TV_TV2_UK
GRFV_GRAPHICS_FILE_SKEY

Table: THEME_VERSIONS (cont'd)*Unique Constraints:*

TGRP_THEME_GROUP_SKEY
THE_THEME_SKEY

Foreign Keys:

TV_GRFV_FK
GRFV_GRAPHICS_FILE_SKEY = GRAPHICS_FILE_VERSIONS.GRAPHICS_FILE_SKEY
TV_TFV_FK
TFV_TEXT_FILE_SKEY = TEXT_FILE_VERSIONS.TEXT_FILE_SKEY
TV_TGRP_FK
TGRP_THEME_GROUP_SKEY = THEME_GROUPS.THEME_GROUP_SKEY
TV_THE_FK
THE_THEME_SKEY = THEMES.THEME_SKEY

Indexes:

TV_GRFV_FK_I
GRFV_GRAPHICS_FILE_SKEY
TV_TFV_FK_I
TFV_TEXT_FILE_SKEY
TV_TGRP_FK_I
TGRP_THEME_GROUP_SKEY
TV_THE_FK_I
THE_THEME_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418254 >>

Table: TOXIC_PLANTS*Description:*

Toxicity of Plants or trees as determined by Ministry of Forest / Research

All values are accumulative .. That is they can be on or more values to species.

Therefore they reside in their own table keyed to the Taxonomic Names table

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TOXIC_CD_SKEY	NOT NULL	NUMBER(14,0)
2	P_ORGANISM	NULL	VARCHAR2(1)
	type of organisms known to be affected by toxin in species		
3	P_DESCRIPTOR	NULL	VARCHAR2(2)
	describes effects on humans, or type of livestock, or wildlife affected by a poisonous species		
4	P_MODE	NULL	VARCHAR2(1)
	mode of action of toxin in plant		
5	P_TOXIN	NULL	VARCHAR2(1)
	chemicals causing toxicity		
6	P_TOXICITY	NULL	VARCHAR2(2)
	degree of toxicity in a poisonous plant		
7	P_SEASON	NULL	VARCHAR2(3)
	most dangerous season of poisonous species		
8	P_PARTS	NULL	VARCHAR2(2)
	plant parts containing toxin		
9	P_COMMENTS	NULL	VARCHAR2(256)
	notes on active toxin, animals affected, toxicity of species		
10	TAXC_TAXONOMIC_CD_SKEY	NOT NULL	NUMBER(7,0)
	<< 1998-03-26-17:27 sourced from:236464:325446 >>		
11	TAXC_TAXONOMIC_CD_SKEDESCRIBES	NOT NULL	NUMBER(7,0)
	<< 1998-03-26-17:27 sourced from:236464:325446 >>		

Foreign Keys:

TP_TAXC_FK
 TAXC_TAXONOMIC_CD_SKEDESCRIBES = TAXONOMIC_NAMES.TAXONOMIC_CD_SKEY

Indexes:

TP_TAXC_FK_I
 TAXC_TAXONOMIC_CD_SKEY
 TP_TAXC_FK_I_1
 TAXC_TAXONOMIC_CD_SKEDESCRIBES

Notes:

Input June 19th, 2001... RGH
 into Taxonomic Names table from research Access Database

Moved to Toxic Plants table Sept 13, 2001 ...RGH

Table: TRANSECT_COVERAGES*Description:*

The measurement of discontinuous segments (occurences) of plant species along a transect. Typically, a plant species will occur at various locations for a given distance.

For Vegetation Inventory samples, this activity has been limited to shrubs for forage assesement purposes, though this is not enforced, and could be used for any transect based meausure.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TRANSECT_COVERAGE_SKEY System generated UID from ORACLE sequence transect_coverage_seq;	NOT NULL	NUMBER(7,0)

<< 1998-03-26-16:32 sourced from:7003:566320 >>

2	HORIZONTAL_DISTANCE << 1998-03-26-16:32 sourced from:7003:400195 >>	NOT NULL	NUMBER(4,2)
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4	RVM_RANGE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)
---	-----------------------	----------	-------------

Foreign Keys:

TCOV_RVM_FK
RVM_RANGE_MEASMT_SKEY = RANGE_VEGETATION_MEASMTS.RANGE_MEASMT_SKEY

Indexes:

TCOV_RVM_FK_I
RVM_RANGE_MEASMT_SKEY

Notes:

<< 1998-03-26-16:32 sourced from:7003:400181 >>

Table: TREES*Description:*

A tall woody perennial plant usually with a single elongated stem and having a crown of branches and foliage. The tree in the context of forest mensuration is further defined by belonging to a sample or experimental unit (and accordingly is individually numbered) and whose species is identified in the MOF codelist table.

A group of trees identified in the same manner as an individual tree for which observed data is aggregated, often owing to the lack of practicality.

The intent is that this apply to groups of trees by species that are defined ad hoc, that is, in the field. For example, the Vegetation Inventory practise, is to aggregate stumps (only, not live trees) based on a mean diameter that is determined in the field.

For frequency count of trees by species where classes aggregate by pre-defined bounds, this would be stored in the Diameter/Height Class Frequency Count entity, not here.

In assessing a group of trees it is implied that any measurements such as diameter and/or height are mean values, not for individual elements (trees).

A tall woody perennial plant usually with a single elongated stem and having a crown of branches and foliage. The tree in the context of forest mensuration is further defined by belonging to a sample or experimental unit (and accordingly is individually numbered) and whose species is identified in the MOF codelist table.

Columns:

Seq.	Column	Nulls?	Type
* 1	TREE_SKEY The surrogate key identifier for the occurrence of a tree. A surrogate key was chosen for - the business need to change tree number as it may be performed in the field; - the business keeps tree number unique for a tree only at a CLUSTER_ELEMENT_LOCATION, where as the tree may 'move' (i.e. by growing) from one cluster element to another over time. << 1998-03-26-10:29 sourced from:346868:524063 >>	NOT NULL	NUMBER(14,0)
2	TREE_TYPE	NOT NULL	VARCHAR2(10)
3	PLOC_POINT_LOCN_SKEY	NOT NULL	NUMBER(7,0)
4	CREATE_USER_ID << 1998-03-26-10:29 sourced from:346868:524071 >>	NOT NULL	VARCHAR2(30)
5	CREATE_DATE << 1998-03-26-10:29 sourced from:346868:524072 >>	NOT NULL	DATE
6	GTO_GROUP_TAXON_SKEY	NOT NULL	NUMBER(7,0)
7	FREQUENCY_COUNT The number of trees that contribute to an observed 'single' aggregate tree.	NULL	NUMBER(3,0)
8	MODIFY_USER_ID << 1998-03-26-10:29 sourced from:346868:524073 >>	NULL	VARCHAR2(30)
9	MODIFY_DATE << 1998-03-26-10:29 sourced from:346868:524074 >>	NULL	DATE
10	REF_TREE_BRG_TO_PLOT_CTR The azimuth bearing from the tree to plot center. For the puposes of relocating plot center at a later visitation.	NULL	NUMBER(3,0)

Table: TREES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
11	REF_TREE_HOR_DIST_TO_PLOT_CTR The horizontal distance from the tree to plot center. Collected for the puposes of relocating plot center at a later visitation.	NULL	NUMBER(5,2)
12	REF_TREE_SLOPE The slope distance from the tree to plot center. Collected for the puposes of relocating plot center at a later visitation.	NULL	NUMBER(3,0)
13	REF_TREE_SLOPE_DIST_TO_PLOT_CT The slope distance from the tree to plot center. Collected for the puposes of relocating plot center at a later visitation.	NULL	NUMBER(5,2)
15	REF_TREE_LAST_DIAMETER he most recent diameter taken for re-identification purposes to assist in relocating a POINT LOCATION. This diameter is not intended to capture sampling data, but is instead the most recent diameter, probably roughly measured and at an unspecified height, on a reference tree. It is expected that this diameter will be replaced at each succeeding re-measurement, if the tree is sucessfully re-located.	NULL	NUMBER(4,1)
16	SECTOR_NUM A physical subdivision of the cluster element (plot) in which the tree resides. Sections are usually equal-sized subdivisions of a plot, defined to assist field crews in relocating the tree for remeasurement << 1998-03-27-10:18 sourced from:346868:346765 >>	NULL	NUMBER(2,0)
17	TREE_NUM The identifying number of the tree as assigned in the field, and for p ermanent sample plots, it is embossed on an identifying tag affixed to the tree. Inventory Branch has uniquely identified the tree for each	NULL	NUMBER(6)

Table: TREES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	cluster location (plot).		

For 'Aggregate' Trees, this is generated at load time to facilitate retrieval and later processing. Obviously, there can be no physical identification of an aggregation.

HH93_S TREE_TR_TREE_NO

SEF_S CT4,5,6,9:19-22 TREE NO

16 JUL 97 JRT

- changed the optionality of TREE NUM to optional to support Aggregate trees which do not have a tree num identifier. A trigger rule needs to be created that checks optionality of this field based on tree type -
- if type 'INDIVIDUAL' then tree num is required.
- if type 'AGGREGATE' then tree num is optional.

<< 1998-03-27-10:18 sourced from:346868:346764 >>

18	NEAR_TREE_NUM	NULL	NUMBER(6)
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The number of the nearest tree that was originally present when the sample or experimental plot was established. This is to facilitate finding the tree in the field when its identifying number is out of sequence with the proximate trees. On establishment, the tree number also represents the convenient order in which the trees are measured in the field. Additions of new trees in later measurements, often not using the same number sequence, means that the convenient sequence must be known for the field crew of the next measurement.

A! on later data maintenance initiatives, this attribute will be conveyed

Table: TREES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	rted to a value in MEASMT SEQ ID. C Wong wrote up the analysis/algorithm in either GYD, Ver. 1 or DERIVED.		
	<< 1998-03-27-10:18 sourced from:346868:347140 >>		
19	FIELD_MEASMT_SEQ_NUM A number which identifies the sequence of convenient remeasurement in the field. Initially, this value is equal to the tree number as it is assumed that the trees are tagged in the optimum order (by section usually) for remeasurement. The order is adjusted when trees are missed or ingrowth occurs. The order is modified by input from the electronic hand-held data collector. If trees are not required for the next measurement, the sequence number is dropped.	NULL	NUMBER(8,0)
	A! will replace NEAR TREE NUM in a later data maintenance initiative		
	HH93_S TREE_TR_SEQ_NO		
	SEF_S CT4,5,6,9:19-22 TREE ID		
	A? Default is TREE_ID; require load algorithm to apply value of Near Tree No. (CT:67-70)		
	<< 1998-03-27-10:18 sourced from:346868:346766 >>		
20	X_COORD The stem map X coordinate of the tree location in the cluster location	NULL	NUMBER(7,4)
	HH93_C Convert TREE_TR_BEAR, ...DIST, ...SLOPE & TREE_TR_TR1...DIST, ...TR2_NO to x, y coords.		
	SEF_S CT6:58-61 X-COORDINATE		

Table: TREES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>SEF_C Based on CT6:26-28 BRG IN DEGREE and CT6:36-39 HORI. DISTANCE</i>		
	<i>A! LDM rationalization requires utility to convert offset polar and triangular coords (not in LDM) to Cartesian coords; plot centre to be (0,0). For initial load, take coords as they are. NB. approx. 100 samples are stem-mapped in database</i>		
	<< 1998-03-27-10:18 sourced from:346868:346767 >>		
21	Y_COORD The stem map Y coordinate of the tree location in the cluster location	NULL	NUMBER(7,4)
	<i>SEF_S CT6:62-65 Y-COORDINATE</i>		
	<i>A> Same as for TREE_X_COORD</i>		
	<< 1998-03-27-10:18 sourced from:346868:346768 >>		
22	ORIGIN_CD Indicates whether the tree germinated naturally or was planted. This attribute was introduced for Inventory Branch Silviculturally treated samples (sample type 'T') and is not collected for any other sampling program.	NULL	VARCHAR2(1)
	<i>HH93_S TREE_TR_NAT</i>		
	<i>HH93_C Blank to null</i>		
	<i>SEF_S CT4:66 NAT/PLANTED</i>		
	<i>SEF_C Blank to null</i>		
	<i>A! Change (or affirm) default='N' (natural regeneratiion), other valid values='P' (planted); delete 'U' as valid values</i>		
	<< 1998-03-27-10:18 sourced from:346868:346769 >>		
23	PRUNING_TREAT_IND	NULL	VARCHAR2(1)

Table: TREES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	An indicator to denote if a pruning treatment has been applied.		
	The associated pruning data for this tree is included with the		
	experiment files currently on paper.		

<< 1998-03-27-10:18 sourced from:346868:346770 >>

Unique Constraints:

TREE_TREE2_UK
PLOC_POINT_LOCN_SKEY
GTO_GROUP_TAXON_SKEY
TREE_NUM
TREE_TYPE

Foreign Keys:

TREE_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
TREE_PLOC_FK
PLOC_POINT_LOCN_SKEY = POINT_LOCATIONS.POINT_LOCN_SKEY

Indexes:

TREE_GTO_FK_I
GTO_GROUP_TAXON_SKEY
TREE_PLOC_FK_I
PLOC_POINT_LOCN_SKEY

Notes:

<< 1998-03-26-10:29 sourced from:346868:524052 >>

<< 1998-03-26-10:29 sourced from:346868:524096 >>

<< 1998-03-27-10:18 sourced from:346868:346763 >>

Table: TREE_LAYER_INTRPRTNS*Description:*

The collected data of the activity of interpretation, usually with the aid of aerial photography, of a land area delineated as a POLYGON.

The following types of interpretations are shown as subtypes;

TREE LAYERS

NON VEGETATION

NON TREE VEGETATION

Land Cover Components

An observed vertical stratum in a plant community characterized by a common structure with a similar age and height. In vegetation inventory classification, layers are identified from medium scale photography, though other classification schemes, such as a Silviculture would be based on summarized and/or generalized ground collected data.

It is intended that FIP based layers would be converted to a Vegetation Inventory identification scheme. The LAYER CLASSIFICATION DESCRIPTION serves to indentify the parentage, name and valid business identifier of any layer.

Definition Source: GYD5 1.1 logical data model, entity:Layer Forest

Cover and p. 6.3 of PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INTERP_SKEY System generated UID for all subtypes.	NOT NULL	NUMBER(7,0)

Table: TREE_LAYER_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-11:40 sourced from:236464:421327 >>		
2	PLY_POLYGON_SKEY	NOT NULL	NUMBER(14,0)
3	LCD_LAYER_CLASS_SKEY	NOT NULL	NUMBER(7,0)
4	DATA_SOURCE_REFERENCE_DATE	NOT NULL	DATE
	The date of the source data on which the interpretation is based.		
	Known as the 'Reference Year' in the FIP file.		
	<< 1998-03-26-11:40 sourced from:236464:508613 >>		
5	CREATE_DATE	NOT NULL	DATE
	The date the interpretation was made.		
	<< 1998-03-26-11:40 sourced from:236464:569090 >>		
6	CREATE_USER_ID	NOT NULL	VARCHAR2(30)
	The system user id of the person that made the interpretation.		
	<< 1998-03-26-11:40 sourced from:236464:569091 >>		
7	SUBP_SUB_POP_SKEY	NULL	NUMBER(7,0)
8	SGDEF_SPP_GROUP_SKEY	NULL	NUMBER(7,0)
9	COVER_PATTERN_NUM	NULL	NUMBER(1)
	The assigned number, based on a supplied visual template, of the spatial distribution of trees in a layer (vertical stratum).		

The distribution pattern represents combinations of average coverage, clumpiness, and shape of clumps.

Definition Source: p 6-2, PIP

Data Value Source: Figure 6-1

Table: TREE_LAYER_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>A! for fun, if not a hassle, load the graphic image up too</i>		
	<i>A_S! col.. 44</i>		
	<i><< 1998-03-26-11:46 sourced from:236464:262090 >></i>		
10	CROWN_CLOSURE_PCT The ground covered by the vertical projection of the tree crowns within the polygon. Definition Source: p. 6-4 PIP <i>A_S! col. 45-47, VRI Att. (entry) form</i> <i><< 1998-03-26-11:46 sourced from:236464:262091 >></i>	NULL	NUMBER(3)
11	DATA_SOURCE_CD The source of the data that contributed to the determination of the classification description as per the specifications of the Photo Intrepretation Procedures, Vegetation Inventory. All values taken from Table 3-1, PIP This list of values is similar, but not identical to the FIP DATA SOURCE which will be used to validate the FIP file prior to loading. Non-conforming FIP DATA SOURCE values will be converted to the VEGETATION DATA SOURCE values on load to the Vegetative Cover database.	NULL	NUMBER(2)

Table: TREE_LAYER_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-11:40 sourced from:236464:507409 >>		
12	CROWN_CLOSURE_SOURCE_CD	NULL	VARCHAR2(3)
	<p>The source of the crown closure assessment. Normally this would be interpreted (INT) as are the related crown appearance attributes of COVER PATTERN NUM, and VERTICAL COMPLEXITY CD.</p> <p>However, the values or lack thereof found in the FIP file indicate a large number of occurrences where no crown closure exists where tree species exist. The current (98-01) resolution is:</p> <ul style="list-style-type: none"> -utilize the table assigned by a VDYP lookup (TBL) or -assign an arbitrary low value where age is less than 50 years (ASN). <p>The default is interpretation (INT).</p>		
	<< 1998-03-26-11:46 sourced from:236464:731783 >>		
13	VERTICAL_COMPLEXITY_CD	NULL	VARCHAR2(2)
	<p>The distribution and representation of different stand ages and stand size classes within a polygon. This is an ocular determination that reflects the form of the stand rather than the actual composition by age groups.</p> <p>Definition Source: p.6-7 PIP</p> <p>Data Values Source: p. 6-8, table 6-2</p> <p><i>A! make a domain</i></p>		

Table: TREE_LAYER_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>A_S! col. 49 VRI Att. (entry) form</i>		
	<i><< 1998-03-26-11:46 sourced from:236464:262092 >></i>		
14	MODIFY_DATE The date the interpretation was modified.	NULL	DATE
	<i><< 1998-03-26-11:40 sourced from:236464:569092 >></i>		
15	MODIFY_USER_ID The system user id of the person who modified the interpretation.	NULL	VARCHAR2(30)
	<i><< 1998-03-26-11:40 sourced from:236464:569094 >></i>		
16	INTERPRETATION_DATE The date when the interpretation was done.	NULL	DATE
	This may be different than the date a FIP file was updated or the date the computer records were actually processed.		
	<i><< 1998-03-26-11:40 sourced from:236464:569165 >></i>		
17	DATA_ENTRY_DATE The date the interpretation was entered into an off-line electronic storage source file. Sourced from the FIP attribute, INPUT DATE of the Polygon record.	NULL	DATE
	This attribute would be redundant if there was on-line access to the Vegetative Cover database, as the audit field, CREATE DATE, would satisfy this requirement.		

Table: TREE_LAYER_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<p>The current and planned technical architecture allows for entry into an intermediary local subset data file, either FIP or VIF, using the FCAP or replacement data entry tool. The FCAP application inserts a local (client) system date into the INPUT DATE, though the integrity is suspect because the local date can be modified by the user.</p> <p><< 1998-03-26-11:40 sourced from:236464:578391 >></p>		
18	BUSINESS_LAYER_SEQ_NUM	NULL	NUMBER(1,0)
	<p>A numeric designation of the relative importance of the layer component in the stand as determined by the business.</p> <p>The level of importance decreases the higher the numeric designation.</p> <p>For Vegetation Cover originated data, this value is assigned via business rule based on the supplied order of the layer records as recorded by the interpreter.</p> <p>For FIP originated data, this value is known as the RANK CD, and is explicitly supplied by the interpreter. The RANK CD, or ranking, is based on Regional guidelines at the time of interpretation. This value is retained for FIP transition purposes, as tree volumes are only calculated by VDYP, the current software/mathematical model in production. The RANK CD will be superseded in time when Vegetation Inventory projection tools are developed.</p> <p><< 1998-03-26-11:46 sourced from:236464:508462 >></p>		
19	ITG_SOURCE_CD	NULL	VARCHAR2(1)

Table: TREE_LAYER_INTRPRTNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	The data source of the value of the Inventory Type Group (a grouping of the leading species and their relative composition percent).		

This has been renamed from the FIP attribute, INVENTORY TYPE GROUP ORIGIN. An additional value of 'TBL' has been added on conversion to the Vegetative Cover Database to explicitly represent the occurrence of a blank.

<< 1998-03-26-11:46 sourced from:236464:508468 >>

20	ITG_NUMBER_AS_SUPPLIED	NULL	NUMBER(2)
----	------------------------	------	-----------

Foreign Keys:

TL_LCD_FK
 LCD_LAYER_CLASS_SKEY = LAYER_CLASSFN_DESCRIPTIONS.LAYER_CLASS_SKEY
 TL_PLY_FK
 PLY_POLYGON_SKEY = POLYGONS.POLYGON_SKEY
 TL_SGDEF_FK
 SGDEF_SPP_GROUP_SKEY = SPECIES_GROUP_DEFINITIONS.SPP_GROUP_SKEY
 TL_SUBP_FK
 SUBP_SUB_POP_SKEY = SUBPOPULATIONS.SUB_POP_SKEY

Indexes:

TL_LCD_FK_I
 LCD_LAYER_CLASS_SKEY
 TL_PLY_FK_I
 PLY_POLYGON_SKEY
 TL_SGDEF_FK_I
 SGDEF_SPP_GROUP_SKEY
 TL_SUBP_FK_I
 SUBP_SUB_POP_SKEY

Notes:

<< 1998-03-26-11:40 sourced from:236464:392874 >>

A! NOTE:

The valid values are 1, 2, 3 which serve as identifiers only. This differs from the FIP definition in that there is no embedded/derived meaning such as layer V or S.

<< 1998-03-26-11:46 sourced from:236464:236550 >>

Table: TREE_LAYER_INTRPRTNS (cont'd)

Notes:

Table: TREE_LAYER_SPP_COMPS*Description:*

temporary copy if same as LAYER SPECIES COMPOSITION;

should be renamed to LAYER TREE SPECIES (SPP if shorter name needed)

COMPOSITION if impact on GYD production can be minimized.

Definition Source: p. 6-6, PIP

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TREE_LAYER_SPP_KEY System generated UID from ORACLE sequence TL_SPP_SEQ.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-17:29 sourced from:236464:425730 >>

3	TREE_SPP_SEQ_NUM The business supplied sequence of tree species.	NOT NULL	NUMBER(2,0)
---	---	----------	-------------

Normally, tree species are ordered by the COMPOSITION ESTIMATE PCT, however, this attribute represents the apparent requirement of the implied distinction of where the percent is the same. For example, where COMPOSITION ESTIMATE PCT is equal for two tree species, their supplied sequence implies an order of business preference.

What the preference implies beyond 'importance' is not certain, and remains unrecorded.

<< 1998-03-26-17:29 sourced from:236464:508443 >>

Table: TREE_LAYER_SPP_COMPS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
4	COMPOSITION_ESTIMATE_PCT	NULL	NUMBER(3,0)
	An estimate of the relative percentage of tree species in the interpreted tree layer.		

The estimate is based on living trees according to the following specification:

-basal area, if codominant and dominant trees > 2 m,

-density, if codominant and dominant trees < 2 m.

Definition Source: p. 6-9, Photo Interpretation Procedures, Phase 1, May 14, 1996.

A_S! col. 53-55, 59-60, 64-65, 69-70, 74-75, 79-80 of VRI Att. (entry)
form

A! require a rule to ensure al Species Composition percents for a given Tree Layer add to 100%

<< 1998-03-26-17:29 sourced from:236464:285607 >>

5	TL_INTERP_SKEY	NOT NULL	NUMBER(7,0)
7	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

TSC_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
TSC_TL_FK
TL_INTERP_SKEY = TREE_LAYER_INTRPRTNS.INTERP_SKEY

Indexes:

TSC_GTO_FK_I
GTO_GROUP_TAXON_SKEY
TSC_TL_FK_I
TL_INTERP_SKEY

Notes:

<< 1998-03-26-17:29 sourced from:236464:236556 >>

Table: TREE_LAYER_SPP_COMPS (cont'd)*Notes:*

Table: TREE_MEASMTS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

A set of measurements taken on Tree at a given time (visitation). The tree may have a single set of measurements (temporary samples) or multiple measurements at specified target intervals (permanent samples).

A further expansion of the definition includes the situation of multiple measurements for differing purposes at a single visitation.

Each Tree Measurement is collected for a Cluster Element (a Subpopulation-Spatial Delimiter pair, often referred to as a

Table: TREE_MEASMTS (cont'd)*Description:*

'plot'). Most sampling and experimental designs measure the tree once for a visitation, as the tree belongs to a single Cluster Element.

However, in Vegetation Inventory samples, a tree may belong to more than one Cluster Element at a visitation depending on the purpose, and therefore have more than one measurement.

For example, In Vegetation Inventory samples, a tree, belonging to a 'plot' (cluster element) is measured/assessed for diameter and log grades. The same tree may be re-selected in another Cluster Element for the purpose of collecting Top Height data.

However, the Top Height tree selection practise is not wholly definable by a Subpopulation (and by extension, a Cluster Element); e.g. the largest diameter trees of a second species, random trees, and substitutes. To distinguish each Tree Measurement, a selection purpose is retained, identified in Selection Intent.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TREE_MEASMT_SKEY << 1998-03-27-11:01 sourced from:346868:586591 >>	NOT NULL	NUMBER(7,0)
4	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
5	TREE_TREE_SKEY	NOT NULL	NUMBER(14,0)
6	CREATE_USER_ID << 1998-03-27-11:01 sourced from:346868:586587 >>	NOT NULL	VARCHAR2(30)
7	CREATE_DATE << 1998-03-27-11:01 sourced from:346868:586588 >>	NOT NULL	DATE

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
8	STUMP_IND Indication that the tree is in the form of a stump.	NOT NULL	VARCHAR2(1)

Trees and stumps are treated as the same entity; this is the single attribute that differentiates between a tree and a stump.

<< 1998-03-27-11:01 sourced from:346868:586573 >>

10	OUT_OF_PLOT_IND An indicator to denote if the tree is outside of the plot. Used when a suitable height or age measurement tree cannot be found inside the plot or if the measurement would damage the tree.	NOT NULL	VARCHAR2(1)
----	--	----------	-------------

HH93_S TREE_TR_IN_PLOT

HH93_C Default="N"; "Y"converts to null; "N" converts to "Y"

<< 1998-03-27-11:01 sourced from:346868:586551 >>

11	TAG_MISSING_IND An indicator to denote if the identifying tree number tag was missing.	NULL	VARCHAR2(1)
----	---	------	-------------

<< 1998-03-27-11:01 sourced from:346868:586558 >>

12	TREE_EXTANT_CD The basic tree condition or extancy; either dead or alive.	NOT NULL	VARCHAR2(4)
----	--	----------	-------------

A! Default = "LIVE", if TREE CLASS =3 OR 4, then = "DEAD"

<< 1998-03-27-11:01 sourced from:346868:586555 >>

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
13	SMCPT_TRMEA_TREE_MEASMT_SKEY	NULL	NUMBER(7,0)
14	PRDPT_TRMEA_TREE_MEASMT_SKEY	NULL	NUMBER(7,0)
15	SEL_SELECTION_INTENT_CD	NULL	VARCHAR2(8)
17	BARK_THICKNESS	NULL	NUMBER(6,4)
	Bark thickness measurement converted to meters.		
18	BORED_QUALIFIER_CD	NULL	VARCHAR2(3)
	A code describing the results of the age boring process.		
19	REMAINING_BARK_PCT	NULL	NUMBER(3,0)
	The percentage of tree circumference at DBH covered by bark.		
	The value recorded is used in determining actual wood volume.		

<< 1998-03-27-11:01 sourced from:346868:586594 >>

20	SITE_TREE_IDENTIFIER_CD	NULL	VARCHAR2(3)
	An identifier as to additional site growing measurements were obtained for the tree measurements. (Site growing measurements are those that characterize the the growing capability of the site as expressed typically in age and height.)		

Examples would be for Top Height (first and second choices), a Random tree and an Other tree. All are prescribed purposes by Vegetation Inventory.

07 jun 97 JRT

- copied from TRE MEASMT entity in VEG_SAMPLE(5).

<< 1998-03-27-11:01 sourced from:346868:586593 >>

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
21	KNOTS_AT_1ST_5_M The first 5 m. log is divided in four longitudinal quarters. The attribute denotes the number of quarters with knots or the presence of an open knot flush with the bark surface in the first log. <i>HH93_S TR_MEAS-TM_1KNOT5M</i> <i>SEF_S CT4:52 KNOTS 1ST 5M</i> <i><< 1998-03-27-11:01 sourced from:346868:586563 >></i>	NULL	NUMBER(1,0)
22	LIVE_CROWN_PCT An ocular estimate, to the nearest 5%, of the total tree height covered by live crown. <i>HH93_S TR_MEAS_TM_LC_LEN</i> <i>SEF_S CT4:59-61 LIVE CROWN %</i> <i><< 1998-03-27-11:01 sourced from:346868:586554 >></i>	NULL	NUMBER(3,0)
23	LEAN_CD A numerical code to denote the presence and category of degree of tree stem deviation from the vertical. <i>HH93_S TR_MEAS_TM_LEAN</i> <i>SEF_S CT4:49 LEAN</i> <i><< 1998-03-27-11:01 sourced from:346868:586553 >></i>	NULL	VARCHAR2(1)
24	MODIFY_USER_ID <i><< 1998-03-27-11:01 sourced from:346868:586589 >></i>	NULL	VARCHAR2(30)
25	SWEEP_CD A numerical code to denote the presence and category of degree of bowing of one half of the merchantable stem of the tree.	NULL	VARCHAR2(1)

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	HH93_S TR_MEAS_TM_SWEEP		
	SEF_S CT4:48 SWEEP		
	<< 1998-03-27-11:01 sourced from:346868:586552 >>		
26	SOUND_WOOD_PERCENT For Stump measurements, the observed % sound wood.	NULL	NUMBER(3,0)
	<< 1998-03-27-11:01 sourced from:346868:586613 >>		
27	SPIRAL_GRAIN_IND An indicator to denote the presence of spiral grain, (longitudinal twist) in the tree trunk.	NULL	VARCHAR2(1)
	HH93_S TR_MEAS_TM_SPIRAL		
	SEF_S CT4:47 SPIRAL GRAIN		
	<< 1998-03-27-11:01 sourced from:346868:586560 >>		
28	TREE_SELECTION_CD The reason that the tree was selected for further measurement (Top Height, Random, ...).	NULL	VARCHAR2(2)
29	FREQUENCY_COUNT The count of the number of trees (frequency) aggregated into a single occurrence of a tree record at this measurement.	NULL	NUMBER(3,0)
	<< 1998-03-27-11:01 sourced from:346868:586612 >>		

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
30	TREE_STANDING_IND A code indicating if the tree was standing whrn measured. 'Y' indicates the tree was standing, 'N'; means not standing. << 1998-03-27-11:01 sourced from:346868:586609 >>	NULL	VARCHAR2(1)
31	COMPILATION_LYR_CD A representation of combinations of Tree Class (also a derived attribute) and LAYER FOREST COVER. This attribute is being retained on a 'as-is' basis; the conversion logic for normalizing (unraveling) the embedded meanings is too difficult to attempt on load. In time, further analysis is warranted, unless this attribute becomes obsolete on account of disuse by new sample compiler (95-3). << 1998-03-27-11:01 sourced from:346868:586586 >>	NULL	VARCHAR2(1)
32	CMT Any free format text comments pertaining to the tree measurement. HH93_S TR_MEAS_TM_MEMO << 1998-03-27-11:01 sourced from:346868:586574 >>	NULL	VARCHAR2(256)
33	MODIFY_DATE << 1998-03-27-11:01 sourced from:346868:586590 >>	NULL	DATE
34	MISSED_OR_DROPPED_TREE_CD A code to denote if a tree has not been numbered and recorded in the p	NULL	VARCHAR2(1)

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	previous measurement owing to an oversight of the field crew. Or conversely, the code denotes a tree which should not have been numbered and recorded for the same reason.		
	<i>HH93_S TR_MEAS_TM_MISSED</i>		
	<i>SEF_S CT4:76 MISSED/DROP TREE</i>		
	<i>A! Later intent to recreate an instance of a "Missed" tree.</i>		
	<i>"Dropped" trees may want to be marked for non-use;</i>		
	<i>values: D, M, null</i>		
	<i><< 1998-03-27-11:01 sourced from:346868:586557 >></i>		
35	NEW_STUMP_IND An indicator to denote the stump is new; i.e. appears to be less than 10 years old. Usually collected at establishment and is intended to apply to plots in selectively harvested stands.	NULL	VARCHAR2(1)
	<i><< 1998-03-27-11:01 sourced from:346868:586575 >></i>		
36	KNOTS_AT_2ND_5_M The number of quarters of the second 5 m. with knots, or the presence of an open knot flush with the bark surface.	NULL	NUMBER(1,0)
	<i>HH93_S TR_MEAS_TM_2KNOT5M</i>		
	<i>SEF_S CT4:52 KNOTS 2ND 5M</i>		
	<i><< 1998-03-27-11:01 sourced from:346868:586564 >></i>		
37	CROWN_CLASS_CD A numerical ranking of the relative height position of the tree crown with respect to the stand canopy.	NULL	VARCHAR2(2)

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	HH93_S TR_MEAS_TM_CROWN		
	HH93_C If = 5, TREE LAYER ID = 'V'		
	SEF_S CT4-5:35 CROWN CLASS		
	SEF_C If = 5, TREE LAYER ID = 'V'		
	A! Tree Class 5, (Vet) is redundant; stored as a LAYER		
	<< 1998-03-27-11:01 sourced from:346868:586550 >>		
38	HT_DIAM_CD A code used only by the G & Y section of the Inventory Branch to qualify a tree diameter and/or height together for inclusion in later processes of heigh-diameter curves. This code is only being retained for the purpose of serving the interim business needs of providing the Standard Edit File as an output to these same processes. In later database development projects, such processes would be built to directly interface with the database. These codes have unclear meaning and furthermore, the suitability of height and diameter are bundled into one attribute. This code is being replaced by REPRES_IND (Representative Indicator) and VALIDITY IND (Validity Indicator) in both AGE ASSMT (Age Assessment) and HT ASSMT (Height Assessment). Valid values are: blank suitable for ht/diam curve processing X not for use in ht/diam curve processing S suppress for ht/diam curve processing W check ht/diam at next measurement	NULL	VARCHAR2(1)

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

SEF value converts to:

REPRES_IND VALIDITY_IND (in both AGE ASSMT & HT ASSMT)

===== =====

blank Y Y

X N Y

S N Y

W Y N

<< 1998-03-27-11:01 sourced from:346868:586582 >>

39	TREE_CLASS	NULL	VARCHAR2(1)
----	------------	------	-------------

A derived code that denotes a number of conditions about the tree.

This attribute is entirely embedded meaning and would have not been included if not to facilitate ready export to the Standard Edit file.

Normalizing this field results in the following attributes:

TREE COND CD (Live/Dead)

LAYER FOR COV = 'V'

POTENTIAL VOLUME CLASS CD = 3,4

DAMAGE AGENT CD

<< 1998-03-27-11:01 sourced from:346868:586583 >>

40	DEAD_POTENTIAL_VOL_CLASS_CD	NULL	VARCHAR2(1)
----	-----------------------------	------	-------------

A code to denote an estimation of the amount of remaining sound wood.

This attribute is used in conjunction with DEAD TREE IND to TreeClass; a historical code with a number of meanings.

DEAD POTENTIAL VOL CLASS CD = 3 where Tree Class = 3

DEAD POTENTIAL VOL CLASS CD = 4 where Tree Class = 4

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>A! If Tree Class = 3, then = 3; if Tree Class = 4, then = 4</i>		
	<i><< 1998-03-27-11:01 sourced from:346868:586556 >></i>		
41	FALLING_HAZARD_IND An assessment of the risk associated with falling the tree. Applicabl e to plots established for the Volume and Decay program.	NULL	VARCHAR2(1)
	<i>A! Later yse in Volume and Decay temporary sample</i>		
	<i><< 1998-03-27-11:01 sourced from:346868:586559 >></i>		
42	FIRST_LIVE_LIMB_LOG_NUM The number of the tree log in which the first live limb belonging to the tree crown originates. The tree log number is created by dividing the tree ocularly into 5 metre log lengths numbered sequentially from one, beginning at the base.	NULL	NUMBER(1,0)
	<i>HH93_S TR_MEAS_TM_LIMB</i>		
	<i>SEF_S CT4:50 FIRST LIVE LIMB</i>		
	<i><< 1998-03-27-11:01 sourced from:346868:586561 >></i>		
43	FIRST_STUB_LOG_NUM The tree log number of the first branch stub or dead branch. The tree log number is created by dividing the tree ocularly into 5 metre log l engths numbered sequentially from one, beginning at the base.	NULL	NUMBER(1,0)
	<i>HH93_S TR_MEAS_TM_STUB</i>		
	<i>SEF_S CT4:51 FIRST STUB</i>		
	<i><< 1998-03-27-11:01 sourced from:346868:586562 >></i>		
45	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)

Table: TREE_MEASMTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
47	LCD_LAYER_CLASS_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

TRMEA_CEV_FK
 CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
 TRMEA_GTO_FK
 GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
 TRMEA_LCD_FK
 LCD_LAYER_CLASS_SKEY = LAYER_CLASSFN_DESCRIPTIONS.LAYER_CLASS_SKEY
 TRMEA_PRDPT_FK
 PRDPT_TRMEA_TREE_MEASMT_SKEY = PRODUCTIVITY_PATHOLOGIES.TRMEA_TREE_MEASMT_SKEY
 TRMEA_SMCPT_FK
 SMCPT_TRMEA_TREE_MEASMT_SKEY = SMC_PATHOLOGIES.TRMEA_TREE_MEASMT_SKEY
 TRMEA_TREE_FK
 TREE_TREE_SKEY = TREES.TREE_SKEY

Indexes:

TRMEA_CEV_FK_I
 CEV_CE_VISIT_SKEY
 TRMEA_GTO_FK_I
 GTO_GROUP_TAXON_SKEY
 TRMEA_LCD_FK_I
 LCD_LAYER_CLASS_SKEY
 TRMEA_PRDPT_FK_I
 PRDPT_TRMEA_TREE_MEASMT_SKEY
 TRMEA_SMCPT_FK_I
 SMCPT_TRMEA_TREE_MEASMT_SKEY
 TRMEA_TREE_FK_I
 TREE_TREE_SKEY

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

Dead trees are to be treated as TREE with TREE CONDITION = 'DEAD'

Using midpoint of DBH class as the estimated diameter; set

DIAMETER QUALIFIER CD = 'MID 5' for SET CT8.

Table: TREE_SPECIES_SUCCESSIONS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

The observation of the predominance of tree species that occurred on the sample previously and currently. Quantified by an estimation of Basal Area.

NB; it seem superflous to estimate this for the current stand when the derivation of the tree sample data will provide this data. Should only the previous tree species composition be recorded, then this entity should be collapsed and be attributed in the Sucession Interpretation entity only.

Table: TREE_SPECIES_SUCCESSIONS (cont'd)*Description:**Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SI_SUCCESSION_INT_SKEY	NOT NULL	NUMBER(7,0)
* 2	TREE_SPP_SUCCN_CURRENCY_CD	NOT NULL	VARCHAR2(2)
	A code for the generalized timeframe the observation		
	of tree species predominance applies; Previous and		
	Current.		
	<< 1998-03-26-16:33 sourced from:7003:221055 >>		
* 3	SEQUENCE_NUM	NOT NULL	NUMBER(1,0)
	The number representing the supplied sequence of the		
	species on the field sheet in the estimation of basal		
	area.		
	<< 1998-03-26-16:33 sourced from:7003:221056 >>		
5	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

TSS_GTO_FK
 GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
 TSS_SI_FK
 SI_SUCCESSION_INT_SKEY = SUCCESSION_INTERPRETATIONS.SUCCESSION_INT_SKEY

Indexes:

TSS_GTO_FK_I
 GTO_GROUP_TAXON_SKEY
 TSS_SI_FK_I
 SI_SUCCESSION_INT_SKEY

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-16:33 sourced from:7003:219026 >>

Table: TREE_VOLUME_LOSS_CDS*Description:*

The visible external indicators that are associated with volume loss on the tree. This variation of assessing wood volume loss is particular to the Vegetation Inventory program.

In many cases these are the same as the so-called Damage Agents, though in fact this includes damage symptoms (e.g. frost cracks).

For example, the occurrence of a 'conk', an external bracket shaped fruiting body indicative of internal wood decay, is a specified Tree Loss Indicator. It is also a subset of specific Damage Agents species.

That both the Tree Loss Indicator and the Damage Agents use the same code is a source of potential confusion. In the above example, the Tree Loss Indicator for conks (a subset of Damage Agent species) is 'D' and yet it also codifies the Damage Agent category of diseases. (96-05-02).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TREE_LOSS_CD The code for the tree loss indicator as defined for the Vegetation Inventory program.	NOT NULL	VARCHAR2(3)
<< 1998-03-26-16:34 sourced from:7003:231856 >>			
2	DESCRIPTION A description of the Tree Volume loss indicator.	NOT NULL	VARCHAR2(50)

Table: TREE_VOLUME_LOSS_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
-------------	---------------	---------------	-------------

Conversion logic with Damage Agents would be useful.

<< 1998-03-26-16:34 sourced from:7003:231859 >>

Notes:

<< 1998-03-26-16:34 sourced from:7003:230030 >>

Table: TREE_VOLUME_LOSS_INDICATORS*Description:*

The estimation of loss of tree volume in the field
as identified by the presence of a specified indicator (Tree
Volume Loss CD) that is associated with wood decay.

Particular to Vegetation Inventory.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	VOL_LOSS_SKEY System generated UID from ORACLE sequence vol_loss_SEQ.	NOT NULL	NUMBER(7,0)

<< 1998-03-26-16:34 sourced from:7003:537240 >>

2	SEQUENCE_NUM The sequence of the number occurrence of the tree loss indicator in the supplied order on the field sheet.	NOT NULL	NUMBER(2,0)
---	---	----------	-------------

<< 1998-03-26-16:34 sourced from:7003:231860 >>

3	FROM_POSITION The lowest position above or below the DBH Reference Ht where an tree volume loss indicator occurs.	NULL	NUMBER(4,2)
---	---	------	-------------

<< 1998-03-26-16:34 sourced from:7003:231861 >>

4	TO_POSITION The highest position above or below the DBH Reference Ht where an tree volume loss indicator occurs.	NULL	NUMBER(4,2)
---	--	------	-------------

Table: TREE_VOLUME_LOSS_INDICATORS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-16:34 sourced from:7003:231862 >>		
5	FREQUENCY The number of occurrences of a tree volume loss indicator within a given hieght position range. The field crew has the discretion to record multiple separate occurences with a single frequency or a single occurence with a frequency greater than one.	NOT NULL	NUMBER(1,0)
	<< 1998-03-26-16:34 sourced from:7003:231863 >>		
6	TO_POSITION_QUALIFIER_CD << 1998-03-26-16:34 sourced from:7003:555538 >>	NULL	VARCHAR2(2)
7	FROM_POSITION_QUALIFIER_CD << 1998-03-26-16:34 sourced from:7003:568943 >>	NULL	VARCHAR2(2)
9	TVLC_TREE_LOSS_CD	NOT NULL	VARCHAR2(3)
11	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

TVLI_TRMEA_FK
 TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY
 TVLI_TVLC_FK
 TVLC_TREE_LOSS_CD = TREE_VOLUME_LOSS_CDS.TREE_LOSS_CD

Indexes:

TVLI_TRMEA_FK_I
 TRMEA_TREE_MEASMT_SKEY
 TVLI_TVLC_FK_I
 TVLC_TREE_LOSS_CD

Notes:

<< 1998-03-26-16:34 sourced from:7003:229470 >>

Table: TREE_VOL_UTLZN_LEVELS*Description:*

The set of parameters that define constraints for the calculation of tree species volume. The utilization standards emulate economic commercial extraction conditions, eg. a minimum stump, top diameter and a breast height diameter.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	UTILIZATION_SKEY The system generated unique identifier.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-17:32 sourced from:236464:506735 >>			
2	TREE_VOLUME_UTLZN_NUM The business identifier of the utilization level.	NOT NULL	NUMBER(2,0)
Commonly, the minimum DBH is used for this purpose.			
<< 1998-03-26-17:32 sourced from:236464:429448 >>			
3	STUMP_HT The height of the stump, which represents the prescribed condition for timber extraction purposes. The portion of the tree below this height is excluded from the determination of volume at the specified level of utilization.	NULL	NUMBER(4,2)
<< 1998-03-26-17:32 sourced from:236464:429450 >>			
4	TOP_DIAMETER_IB The diameter at the top of the tree, inside bark, which represents the minimum size for timber extraction purposes. The remainder of the	NULL	NUMBER(4,1)

Table: TREE_VOL_UTLZN_LEVELS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	tree, the top, is excluded from the determination of volume at the specified level of utilization.		
	<< 1998-03-26-17:32 sourced from:236464:429451 >>		
5	STUMP_DIAMETER_IB The diameter, inside bark, at the specified height, which represents the minimum size for timber extraction purposes. Trees of lesser BH diameter are excluded from the determination of volume at the specified level of utilization.	NULL	NUMBER(4,1)
	<< 1998-03-26-17:32 sourced from:236464:429452 >>		

Notes:

<< 1998-03-26-17:32 sourced from:236464:426898 >>

Table: TREE_WILDLIFE_FEATURE_CDS*Description:*

Tree features that potentially provide habitat to wildlife. For example, nest cavities and platforms, nurseries, dens, roosts, perches, foraging sites and display stations. Birds, mammals, amphibians and various invertebrates make use of certain tree features.

Implemented as a code table rather than as a domain on account of external definition by the Research Branch.

Definition Source; p. 9-1 of VI Sampling Procedures

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FEATURE_CATEGORY_CD A codified name of the tree feature that is specific to potential wildlife use. Examples are Visual Appearance, Crown Condition, Bark Retention, Wood Condition and Lichen Loading. <i>A! determine a short name for each, possibly using the field sheet</i> <i><< 1998-03-26-16:36 sourced from:7003:307462 >></i>	NOT NULL	VARCHAR2(10)
* 2	FEATURE_STATE_NUM The numeric classification assigned to a state of the Tree Wildlife Feature. The classification is based on degrees of deterioration appropriate for each feature. For example, the value of the codes vary from 1 to 9 for Visual Appearance, from 1 to 7 for Crown Condition etc. (As per p. 9-2 of the VI Sampling Procedures manual.)	NOT NULL	NUMBER(1,0)

Table: TREE_WILDLIFE_FEATURE_CDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-26-16:36 sourced from:7003:307463 >>		
3	FEATURE_DESC The full text description of the Tree Wildlife Feature as defined in the VR Sampling Procedures manual.	NULL	VARCHAR2(75)
	<< 1998-03-26-16:36 sourced from:7003:307464 >>		

Notes:

A_S! codes on p. 9-2 to 9-4 of VI Sampling Procedures

A! denormalized; each Tree Wildlife Feature has a different range
associated with it

<< 1998-03-26-16:36 sourced from:7003:307453 >>

Table: TREE_WILDLIFE_FTR_OCCURRENCES*Description:*

The association of an observation of Tree Wildlife Feature with a valid Tree Wildlife Feature.

Resolves a many observations to many Tree Wildlife Features.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TWFC_FEATURE_CATEGORY_CD	NOT NULL	VARCHAR2(10)
* 2	TWFC_FEATURE_STATE_NUM	NOT NULL	NUMBER(1,0)
* 3	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

TWFO_TRMEA_FK
TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY
TWFO_TWFC_FK
TWFC_FEATURE_CATEGORY_CD = TREE_WILDLIFE_FEATURE_CDS.FEATURE_CATEGORY_CD
TWFC_FEATURE_STATE_NUM = TREE_WILDLIFE_FEATURE_CDS.FEATURE_STATE_NUM

Indexes:

TWFO_TRMEA_FK_I
TRMEA_TREE_MEASMT_SKEY
TWFO_TWFC_FK_I
TWFC_FEATURE_CATEGORY_CD
TWFC_FEATURE_STATE_NUM

Notes:

<< 1998-03-26-16:36 sourced from:7003:308216 >>

Table: TREE_WILDLIFE_USE_CDS*Description:*

The codes to denote wildlife use of trees. Examples are feeding (by birds), nesting, marking (by mammals), denning and perching.

Retained as a separate code table to reflect the external (to Resource Inventory Branch) custodian responsibilities.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	WILDLIFE_USE_CD The code for the wildlife use.	NOT NULL	VARCHAR2(4)
Definition Source: p. 9-4, Vegetation Inventory Sampling Procedures.			
<< 1998-03-26-16:36 sourced from:7003:308746 >>			
2	WILDLIFE_USE_DESC The description of the use. Copy from p. 9-3-5, Vegetation Inventory Sampling Procedures.	NULL	VARCHAR2(256)

<< 1998-03-26-16:36 sourced from:7003:308747 >>

Notes:

<< 1998-03-26-16:36 sourced from:7003:308740 >>

Table: TREE_WILDLIFE_USE_OCCURRENCES*Description:*

Tree Wildlife USe occurrence observations recorded from Vegetation

COver Samples Card 8 (TD) Tree Details - Wildlife User Codes col

47-48.

See manual Ground Sampling PRocedures March 31, 1997 Page 4-17.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TWUC_WILDLIFE_USE_CD	NOT NULL	VARCHAR2(4)
* 2	TRMEA_TREE_MEASMT_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

TWUO_TRMEA_FK

TRMEA_TREE_MEASMT_SKEY = TREE_MEASMTS.TREE_MEASMT_SKEY

TWUO_TWUC_FK

TWUC_WILDLIFE_USE_CD = TREE_WILDLIFE_USE_CDS.WILDLIFE_USE_CD

Indexes:

TWUO_TRMEA_FK_I

TRMEA_TREE_MEASMT_SKEY

TWUO_TWUC_FK_I

TWUC_WILDLIFE_USE_CD

Notes:

<< 1998-03-26-16:36 sourced from:7003:537248 >>

Table: TSA_NUMBER_CODES*Description:*

A code table to identify an administrative forest management area in
British Columbia.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TSA_NUM The number assigned to an administrative forest management area in BC.	NOT NULL	VARCHAR2(3)
<< 1998-03-25-16:05 sourced from:346868:346963 >>			
2	DESCRIPTION The name of the Timber Supply Area.	NOT NULL	VARCHAR2(50)

<< 1998-03-25-16:05 sourced from:346868:346964 >>

Notes:

OT_S VAX tables

A? Check BD

<< 1998-03-25-16:05 sourced from:346868:346962 >>

Table: TSB_NUMBER_CODES*Description:*

A subdivision of the Timber Supply Area (TSA).

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	BLOCK	NOT NULL	VARCHAR2(1)
	A subdivision of Timber Supply Area usually for more localized		
	localized planning purposes.		

<< 1998-03-25-16:06 sourced from:346868:346966 >>

* 3	TSA_TSA_NUM	NOT NULL	VARCHAR2(3)
-----	-------------	----------	-------------

Foreign Keys:

TSB_TSA_FK
TSA_TSA_NUM = TSA_NUMBER_CODES.TSA_NUM

Indexes:

TSB_TSA_FK_I
TSA_TSA_NUM

Notes:

<< 1998-03-25-16:06 sourced from:346868:346965 >>

Table: USERS*Description:*

A person with a database userid.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	DATABASE_USERNAME The database username assigned to the user.	NOT NULL	VARCHAR2(30)
<< 1998-03-27-11:03 sourced from:346868:348902 >>			
2	FULL_USERNAME The full user name associated with the DATABASE USERNAME.	NOT NULL	VARCHAR2(50)
<< 1998-03-27-11:04 sourced from:346868:348909 >>			
3	CREATE_DATE The date on which the row was inserted into the database.	NOT NULL	DATE
<< 1998-03-27-11:04 sourced from:346868:348903 >>			
5	AGNCY_AGENCY_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

USER_AGENCY_FK
AGNCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY

Indexes:

USER_AGENCY_FK_I
AGNCY_AGENCY_SKEY

Notes:

<< 1998-03-27-11:03 sourced from:346868:348881 >>

Table: USER_AUTHORITY_GROUPS*Description:*

A representation of database authorities (capabilities). Oracle authorities are; select (read), insert, update and delete.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AUTHORITY_GROUP_NAME The name of the user authority group. This name is also the name of the database role used to implement the database authorities.	NOT NULL	VARCHAR2(30)
<< 1998-03-27-11:04 sourced from:346868:348905 >>			
2	DESCRIPTION A description of the user authority group.	NOT NULL	VARCHAR2(256)
<< 1998-03-27-11:04 sourced from:346868:348906 >>			

Notes:

<< 1998-03-27-11:04 sourced from:346868:348887 >>

Table: USER_AUTH_GROUP_MEMBERSHIPS*Description:*

An association of a user and a user authority group to which they have been assigned.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	USER_DATABASE_USERNAME	NOT NULL	VARCHAR2(30)
* 2	ATHGRP_AUTHORITY_GROUP_NAME	NOT NULL	VARCHAR2(30)
3	EFFECTIVE_DATE	NOT NULL	DATE
	The date on which the membership becomes effective.		

<< 1998-03-27-11:04 sourced from:346868:348904 >>

Foreign Keys:

ATHGRPM_ATHGRP_FK
ATHGRP_AUTHORITY_GROUP_NAME = USER_AUTHORITY_GROUPS.AUTHORITY_GROUP_NAME
ATHGRPM_USER_FK
USER_DATABASE_USERNAME = USERS.DATABASE_USERNAME

Indexes:

ATHGRPM_ATHGRP_FK_I
ATHGRP_AUTHORITY_GROUP_NAME
ATHGRPM_USER_FK_I
USER_DATABASE_USERNAME

Notes:

<< 1998-03-27-11:04 sourced from:346868:348884 >>

Table: UTILIZATION_LEVEL_AREA_ASSNS*Description:*

The association of a tree volume utilization level with its assigned area of application. That is, a defined subset of Utilization Levels for the Coastal and Interior portion of BC.

To date, the standard Resource Inventory Branch practise has been to assign two of the current three Tree Volume Utilization Levels to the respective Coast and Interior portions of the province. It is expected that this practise will be improved to apply a subset of Utilization Levels for a Biogeoclimatic Zone/Subzone, and hence the relationship to BGC ZONAL CLASSIFICATION CD.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AREA_ASSN_SKEY << 1998-03-26-17:29 sourced from:236464:506758 >>	NOT NULL	NUMBER(7,0)
2	CREATE_DATE The date the assignment of a utilization level was created. << 1998-03-26-17:29 sourced from:236464:433874 >>	NOT NULL	DATE
3	MODIFY_DATE The date the assignment of a utilization level was modified. << 1998-03-26-17:29 sourced from:236464:506759 >>	NULL	DATE
5	TVL_UTILIZATION_SKEY	NOT NULL	NUMBER(7,0)
7	BGZC_BGC_SKEY	NULL	NUMBER(7,0)
8	BUSINESS_PRECEDENCE_NUM The order of the utilization levels as applied by the business. This accomodates the business practise of identifying utilization levels as	NULL	NUMBER(2,0)

Table: UTILIZATION_LEVEL_AREA_ASSNS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	either 'Primary' and 'Secondary' for the Coast and Interior areas.		

This attribution is included for the purpose of serving the legacy practise of fixed file formats, both FIP and VIFF, as a tree species volume would be uniquely identified by a Utilization Level Num, with ordering a function of the presentation layer (forms or reports). The inclusion of BUSINESS PRECEDENCE NUM also allows for convenient conversion to the VIFF file.

10	CIA_COAST_INTERIOR_CD	NULL	VARCHAR2(1)
12	RCLVC_RCL_AREA_VALIDN_SKEY	NULL	NUMBER(7,0)
13	MODIFY_USER_ID	NULL	VARCHAR2(30)
14	CREATE_USER_ID	NOT NULL	VARCHAR2(30)

Foreign Keys:

ULA_BGZC_FK
 BGZC_BGC_SKEY = BGC_ZONAL_CLASSFN_CDS.BGC_SKEY
 ULA_CIA_FK
 CIA_COAST_INTERIOR_CD = VGIS_COAST_INTERIOR_AREAS.COAST_INTERIOR_CD
 ULA_RCLVC_FK
 RCLVC_RCL_AREA_VALIDN_SKEY = VGIS_RCL_AREA_VALIDN_CODES.RCL_AREA_VALIDN_SKEY
 ULA_TVL_FK
 TVL_UTILIZATION_SKEY = TREE_VOL_UTLZN_LEVELS.UTILIZATION_SKEY

Indexes:

ULA_BGZC_FK_I
 BGZC_BGC_SKEY
 ULA_CIA_FK_I
 CIA_COAST_INTERIOR_CD
 ULA_RCLVC_FK_I
 RCLVC_RCL_AREA_VALIDN_SKEY
 ULA_TVL_FK_I
 TVL_UTILIZATION_SKEY

Notes:

<< 1998-03-26-17:29 sourced from:236464:432729 >>

Table: VDYP_APPLICATION_BOUNDS

Description:

The limits and defaults for the Variable Density Yield Prediction (VDYP) software module. VDYP calculates tree volume and calls site index calculation modules.

These limits and bounds are applied to contain VDYP to the general range of the forest cover data that the VDYP algorithm was developed with.

This entity is retained in the Vegetative Cover application for two purposes:

- determining a default crown closure for a the FIP to BC Land Cover Classification rule and
- in its original intent, facilitation of the within database VDYP operation.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	VDYP_BOUND_SKEY The system generated surrogate identifier. Generated from VDYP_BND_SEQ << 1998-03-27-13:19 sourced from:236464:739656 >>	NOT NULL	NUMBER(7,0)
2	SITE_INDEX_MAXIMUM The maximum, base age 50 years, site index value used by VDYP. << 1998-03-27-13:19 sourced from:236464:738826 >>	NOT NULL	NUMBER(3,1)

Table: VDYP_APPLICATION_BOUNDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
3	AGE_MAXIMUM The maximum tree age value supplied to VDYP.	NOT NULL	NUMBER(3,0)
	<< 1998-03-27-13:19 sourced from:236464:738827 >>		
4	HEIGHT_MAXIMUM The maximum height used by VDYP.	NOT NULL	NUMBER(3,1)
	<< 1998-03-27-13:19 sourced from:236464:739243 >>		
5	CROWN_CLOSURE_MINIMUM The minimum crown closure threshold value for VDYP. Volumes below the minimum are calculated by pro-rating between 0 and the volume at the minimum crown closure.	NOT NULL	NUMBER(3)
	<< 1998-03-27-13:19 sourced from:236464:738828 >>		
6	CROWN_CLOSURE_MAXIMUM The maximum crown closure value for VDYP. Volumes below the minimum are calculated by pro-rating between 0 and the volume at the minimum crown closure.	NOT NULL	NUMBER(3)
	<< 1998-03-27-13:19 sourced from:236464:738831 >>		
7	CROWN_CLOSURE_AGE_MINIMUM The minimum age for which the supplied crown closure is used. Volumes and diameters are calculated using the default crown closure when the supplied age is below this minimum.	NOT NULL	NUMBER(3,0)
	<< 1998-03-27-13:19 sourced from:236464:738833 >>		

Table: VDYP_APPLICATION_BOUNDS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
8	CIA_COAST_INTERIOR_CD	NOT NULL	VARCHAR2(1)
9	DEFAULT_CROWN_CLOSURE	NOT NULL	NUMBER(3)
	The default crown closure value applied where missing in the FIP file for forest cover polygons.		
	<< 1998-03-27-13:19 sourced from:236464:739242 >>		
10	TAXC_TAXONOMIC_CD_SKEY	NOT NULL	NUMBER(7,0)
11	TAXC_TAXONOMIC_CCONSTRICTED_BY	NOT NULL	NUMBER(7,0)
	<< 1998-03-26-17:27 sourced from:236464:325446 >>		

Foreign Keys:

VAB_CIA_FK
 CIA_COAST_INTERIOR_CD = VGIS_COAST_INTERIOR_AREAS.COAST_INTERIOR_CD
 VAB_TAXC_FK
 TAXC_TAXONOMIC_CCONSTRICTED_BY = TAXONOMIC_NAMES.TAXONOMIC_CD_SKEY

Indexes:

VAB_CIA_FK_I
 CIA_COAST_INTERIOR_CD
 VAB_TAXC_FK_I
 TAXC_TAXONOMIC_CD_SKEY
 VAB_TAXC_FK_I_1
 TAXC_TAXONOMIC_CCONSTRICTED_BY

Notes:

<< 1998-03-27-13:19 sourced from:236464:738820 >>

Table: VEGETATION_ESTAB_ASSMTS*Description:*

The major observable factors that are relevant to the development of the existing vegetation and soil characteristics. The development period is generally considered to be the past 500 years.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SI_SUCCESSION_INT_SKEY	NOT NULL	NUMBER(7,0)
* 2	RANK	NOT NULL	NUMBER(2,0)
	The field observed order of importance.		

<< 1998-03-26-16:38 sourced from:7003:569062 >>

* 4	SDC_SITE_DISTR_CD_SKEY	NOT NULL	NUMBER(7,0)
-----	------------------------	----------	-------------

Foreign Keys:

VEA_SDC_FK
SDC_SITE_DISTR_CD_SKEY = SITE_DISTURBANCE_CDS.SITE_DISTR_CD_SKEY
VEA_SI_FK
SI_SUCCESSION_INT_SKEY = SUCCESSION_INTERPRETATIONS.SUCCESSION_INT_SKEY

Indexes:

VEA_SDC_FK_I
SDC_SITE_DISTR_CD_SKEY
VEA_SI_FK_I
SI_SUCCESSION_INT_SKEY

Notes:

<< 1998-03-26-16:38 sourced from:7003:219017 >>

Table: VEGETATION_LAYER_CDS*Description:*

A formally designated layer of vegetation defined by a combination of height and/or substrate and/or lifeform.

Examples are:

A -meaning all trees > 10m, independant of crown class
(including A1, A2, A3)

B1- meanig tall shrubs or short trees

B2- meaning low shrubs

C- meaning herbs

D - meaning mosses, lichens, liverworts, and tree seedlings

Dh - meaning mosses, lichens, liverworts, and tree seedlings
in soil.

Dw - meaning mosses, lichens, liverworts, and tree seedlings
in wood.

Dr - meaning mosses, lichens, liverworts, and tree seedlings
in rock.

Data definition source: P. 7-20, Vegetation Resources Inventory
Sampling Procedures, Mar. 31, 1997 version.

The association of
lifeform to layer is rather tenuous eg. The A layers must be trees
only because of the height restriction (shrubs do not grow to 10m);
the B layers can be trees or shrubs dictated by height; and finally

Table: VEGETATION_LAYER_CDS (cont'd)*Description:*

trees can be found if the D layer if they are seedlings < 2 years old.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	VEGETATION_LAYER_CD << 1998-03-26-16:41 sourced from:7003:235238 >>	NOT NULL	VARCHAR2(3)
2	LAYER_DESC << 1998-03-26-16:41 sourced from:7003:235239 >>	NULL	VARCHAR2(256)
3	MIN_HEIGHT_BOUND The minimum height requirements for a plant to belong to the layer. << 1998-03-26-16:41 sourced from:7003:578393 >>	NULL	NUMBER(4,2)
4	MAX_HEIGHT_BOUND The maximum height requirement for the plant to belong to the layer. << 1998-03-26-16:41 sourced from:7003:578394 >>	NULL	NUMBER(4,2)
5	SUBSTRATE_TYPE_CD The classification for the type of ground that supports an occurence of a plant species. Substrates recognized in Vegetation Inventory are, soil, wood, and rock. << 1998-03-26-16:41 sourced from:7003:578392 >>	NULL	VARCHAR2(1)

Notes:

Table: VEGETATION_LAYER_CDS (cont'd)*Notes:*

<< 1998-03-26-16:41 sourced from:7003:235232 >>

Table: VEGETATION_LAYER_OVERALL_COVER*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

The estimation of a vegetation layer's coverage as a percentage of the areal coverage of the plot. This is an estimate that includes all vegetation species of a layer. Each species in turn is assessed for coverage as an individually under Vegetation Cover Assmts.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	VLC_VEGETATION_LAYER_CD	NOT NULL	VARCHAR2(3)
* 2	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
3	COVER_PCT	NOT NULL	NUMBER(3,0)
	The overall percentage coverage of a vegetation layer (all plant		

Table: VEGETATION_LAYER_OVERALL_COVER (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	species) as estimated in the field.		

<< 1998-03-26-16:45 sourced from:7003:407867 >>

4	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
---	----------------------	------	-------------

Foreign Keys:

VLOC_CEV_FK
 CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY

VLOC_GTO_FK
 GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY

VLOC_VLC_FK
 VLC_VEGETATION_LAYER_CD = VEGETATION_LAYER_CDS.VEGETATION_LAYER_CD

Indexes:

VLOC_CEV_FK_I
 CEV_CE_VISIT_SKEY

VLOC_GTO_FK_I
 GTO_GROUP_TAXON_SKEY

VLOC_VLC_FK_I
 VLC_VEGETATION_LAYER_CD

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-16:45 sourced from:7003:407860 >>

Table: VEGETATION_LYR_COVER_ASSMTS*Description:*

The generic grouping of the event of measuring a population element.

To date (95-11), the grouping includes TREE MEASUREMENTS, the collection of data about trees and tree diameter class counts (SPECIES DIAMETER CLASS FREQUENCY COUNT).

The grouping is made to accomodate future measurements on other population elements, such as Coarse Woody Debris and Forage Production assessments as expected in the Vegetation Inventory program. This grouping simplifies the number of relationships that would be required otherwise. All present and future members of the group share the same relationships to SUBPOPULATION (defines the population element e.g. tree or tree diameter class), SPATIAL DELIMETER (defines the physical plot bounds) the event and collection of data (if any) at a location CLUSTER ELEMENT VISITATION.

In data modelling terms, it is the supertype of more than one subtype entities.

The assessment of the coverage of vegetation layers and/or types over a defined area.

This includes both tree and shrub layers and herb and moss layers.

For vegetation inventory samples, the tree and shrub layers are collected on the ET card, while herbs and mosses cover data is collected on the EH card.

The collected data is similar for both and in the course of analysis,

Table: VEGETATION_LYR_COVER_ASSMTS (cont'd)*Description:*

it was determined that the same entity can serve both classifications
(cards in effect) if the appropriate life form was identified.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	VEG_LAYER_COV_SKEY System generated UID from ORACLE sequence veg_layer_cov_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-16:41 sourced from:7003:537316 >>			
2	COVER_PCT The estimated ground coverage of the vertical projection of the crown/foilation of the plant species.	NOT NULL	NUMBER(6,3)
<< 1998-03-26-16:41 sourced from:7003:235195 >>			
3	STRATA_AVERAGE_HT The estimated average height of the plant species of a vegetation layer. For Vegetation Inventory samples, applied to the B1 and B2 layers.	NULL	NUMBER(4,2)
<< 1998-03-26-16:41 sourced from:7003:235199 >>			
4	FIELD_SEQ_NUM << 1998-03-26-16:41 sourced from:7003:578395 >>	NULL	NUMBER(3,0)
6	VLC_VEGETATION_LAYER_CD	NOT NULL	VARCHAR2(3)
8	GTO_GROUP_TAXON_SKEY	NULL	NUMBER(7,0)
10	CEV_CE_VISIT_SKEY	NOT NULL	NUMBER(7,0)
11	FIELD_CARD_ITEM_NUM	NULL	NUMBER(3,0)

Table: VEGETATION_LYR_COVER_ASSMTS (cont'd)*Foreign Keys:*

VCA_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
VCA_GTO_FK
GTO_GROUP_TAXON_SKEY = GROUP_TAXON_MEMBERSHIPS.GROUP_TAXON_SKEY
VCA_VLC_FK
VLC_VEGETATION_LAYER_CD = VEGETATION_LAYER_CDS.VEGETATION_LAYER_CD

Indexes:

VCA_CEV_FK_I
CEV_CE_VISIT_SKEY
VCA_GTO_FK_I
GTO_GROUP_TAXON_SKEY
VCA_VLC_FK_I
VLC_VEGETATION_LAYER_CD

Notes:

<< 1998-03-26-10:24 sourced from:346868:348631 >>

<< 1998-03-26-16:41 sourced from:7003:222105 >>

Table: VEGETATION_VOLUME_ASSESSMENTS*Description:*

The volume of vegetation, though typically the volume of the woody bole portion of the vegetation.

Primarily used for trees, and often netted down by factors allowing for average decay and expectable waste and breakage in harvesting.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	VOLUME_SKEY The system generated surrogate identifier.	NOT NULL	NUMBER(14,0)
	Generated from VEG_VOL_SEQ.		
	<< 1998-03-26-17:30 sourced from:236464:670210 >>		
2	BOA_BUSINESS_OBJECT_SKEY	NOT NULL	NUMBER(14,0)
3	ULA_AREA_ASSN_SKEY	NOT NULL	NUMBER(7,0)
4	CREATE_USER_ID ORACLE user id of the person who craeted the record.	NOT NULL	VARCHAR2(30)
	<<1997-12-09-14:27 sourced from:236464:422006>>		
	<< 1998-03-26-17:30 sourced from:236464:681670 >>		
5	CREATE_DATE The calendar date (yyyy-mm-dd hh24:mi:ss format) when the record was created.	NOT NULL	DATE
	<<1997-12-09-14:27 sourced from:236464:422005>>		
	<< 1998-03-26-17:30 sourced from:236464:681669 >>		

Table: VEGETATION_VOLUME_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
6	TREE_VOLUME_PER_HA The volume of the woody bole portion of the vegetation. Primarily used for trees, and often netted down by factors allowing for average decay and expectable waste and breakage in harvesting. <<1997-11-18-15:19 sourced from:236464:427609>> <<1997-12-05-16:18 sourced from:236464:670135>> << 1998-03-26-17:30 sourced from:236464:679758 >>	NOT NULL	NUMBER(10,4)
7	SOURCE_TYPE The basic source type of the data; either Collected or Derived. This is utilized to distinguish occurrences of attributes that can come from either source. Expected to be used for FIP sourced data only; all within-database derivations will have a DERIVATION TRANSACTION occurrence to identify derived data. << 1998-03-26-17:30 sourced from:236464:786455 >>	NOT NULL	VARCHAR2(5)
8	MODIFY_USER_ID ORACLE user id of the last user to modify the record. <<1997-12-09-14:27 sourced from:236464:422008>> << 1998-03-26-17:30 sourced from:236464:681672 >>	NULL	VARCHAR2(30)
9	MODIFY_DATE The date the record was last modified.	NULL	DATE

Table: VEGETATION_VOLUME_ASSESSMENTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<<1997-12-09-14:27 sourced from:236464:422007>>		
	<< 1998-03-26-17:30 sourced from:236464:681671 >>		
10	INTERPRETATION_SOURCE_CD The interpretation source.	NULL	NUMBER(2)
	<< 1998-03-26-17:30 sourced from:236464:786454 >>		

Foreign Keys:

VV_BOA_FK
BOA_BUSINESS_OBJECT_SKEY = BUSINESS_OBJECT_ASSESSMENTS.BUSINESS_OBJECT_SKEY
VV_ULA_FK
ULA_AREA_ASSN_SKEY = UTILIZATION_LEVEL_AREA_ASSNS.AREA_ASSN_SKEY

Indexes:

VV_BOA_FK_I
BOA_BUSINESS_OBJECT_SKEY
VV_ULA_FK_I
ULA_AREA_ASSN_SKEY

Notes:

<< 1998-03-26-17:30 sourced from:236464:670204 >>

Table: VEG_HIST_G_A_CALL_SAM_POINTS**Description:**

Contains identification, responsibility and location information for MOF point Historical Air and Ground call samples and also Vegetation Ground Samples. The Historic points have no attribute location information contained in any database and were transformed from Intergraph GIS environment to current ArcGIS environment. They were collected before 1997. All other Sample were collected after 1997 and are part of the VGIS (Vegetation Ground Inventory Samples) application.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AIR_GRND_CALL_SAM_ID This is a system generated value uniquely identifying the Sample Plot.	NOT NULL	NUMBER(10)
6	SAMPLE_NUMBER This is the original data field of the cell- exported as text for the Intergraph Design file. These cells could have up to 3 data fields amxium of 16 characters	NULL	VARCHAR2(4)
11	SAMPLE_YEAR_OF_ESTAB This is the original data field of the cell- exported as text for the Intergraph Design file. These cells could have up to 3 data fields amxium of 16 characters	NULL	VARCHAR2(4)
16	SAMPLE_TYPE_CD Forest Inventory Historical Air and Ground codes found on the sample tile layer and VGIS sample types. Some cell names (formerly symbols) used on the sample tile layer eg. X is for air call and XG is for ground call	NOT NULL	VARCHAR2(6)
17	ORG_UNIT_NO Unique physical identifier for the storage of organizational unit codes for the Ministry of Forests' offices. Values stored here are for the computer's use only, and are not to be used by people as "ministry codes".	NULL	NUMBER(5)
18	FOREST_DISTRICT_CD Unique physical identifier for the storage of organizational unit codes for the Ministry of Forests' offices. Values stored here are for the computer's use only, and are not to be used by people as "ministry codes".	NULL	NUMBER(5)
22	MAP_SHEET_ID The map sheet identifier for a 1:20000 BCGS map Example: 92E008	NOT NULL	VARCHAR2(7)
24	UTM_ZONE Universal Trans Mercator (UTM) Zone. In British Columbia we have 4 Zones 8,9,10,11 and a tiny bit of 7. <i>Zone for Universal Transverse Mercator mapping system.</i> <i>for BC they are 9, 10 and 11.</i>	NOT NULL	NUMBER(2)
25	UTM_EASTING Universal Trans Mercator (UTM) Easting-Westig coordinate.	NOT NULL	NUMBER(6)
30	UTM_NORTHING Universal Trans Mercator (UTM) Northing-Southing coordinate	NOT NULL	NUMBER(7)
35	RCL_AREA_VALIDN_SKEY A surrogate key identifier for the combination of Region, Compartment Number and Compartment Letter. Found in the code tabel VGIS_RCL_AREA_VALIDN_CODES << 1998-03-25-16:00 sourced from:346868:347116 >>	NOT NULL	NUMBER(7,0)
36	OBJECTID This is a required attribute of feature classes and object classes in a geodatabase. This attribute is added to a SDE layer that was not previously created as part of a geodatabase but is now being registered with a geodatabase.	NULL	VARCHAR2(240)

Table: VEG_HIST_G_A_CALL_SAM_POINTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
37	FEATURE_CODE	NULL	VARCHAR2(10)
	A feature code is most importantly a means of linking a feature to its name and definition. For example, the code GB15300120 on a digital geographic feature links it to the name "Lake - Dry" with the definition "A lake bed from which all water has drained or evaporated."		
	The feature code does NOT mark when it was digitized, what dataset it belongs to, how accurate it is, what it should look like when plotted, or who is responsible for updating it. It only says what it represents in the real world.		
	It also doesn't even matter how the lake is represented. If it is a very small lake, it may be stored as a point feature. If it is large enough to have a shape at the scale of data capture, it may be stored as an outline, or a closed polygon. The same feature code still links it to the same definition.		
38	GEOMETRY	NULL	NUMBER(38)
	This is a ArcSDE spatial column.		

Foreign Keys:

VHGASP_MOUTHAS_DATA_MANAGED_FK
 ORG_UNIT_NO = CORP_ORG_UNIT.ORG_UNIT_NO
 VHGASP_MOUT_FK
 FOREST_DISTRICT_CD = CORP_ORG_UNIT.ORG_UNIT_NO
 VHGASP_RCLVC_FK
 RCL_AREA_VALIDN_SKEY = VGIS_RCL_AREA_VALIDN_CODES.RCL_AREA_VALIDN_SKEY
 VHGASP_VSC_FK
 SAMPLE_TYPE_CD = VGIS_SAMPLE_CODES.SAMPLE_TYPE_CD

Indexes:

VHGASP_MOUTHAS_DATA_MANAGED_I
 ORG_UNIT_NO
 VHGASP_MOUT_FK_I
 FOREST_DISTRICT_CD
 VHGASP_RCLVC_FK_I
 RCL_AREA_VALIDN_SKEY
 VHGASP_VSC_FK_I
 SAMPLE_TYPE_CD

Table: VERSION_AUDIT_METADATA*Description:*

The metadata that describe the business processes that are executed against the set of polygons that comprise of a mapsheet.

The attribution related to FIP-based processes, (UPDATE, FIP CHECK, VDYP and PROJECTION) are contained in this entity for legacy retention purposes only. It is expected that all derivation transactions and source module occurring in the Veg. Cover application will be recorded in DERIVATION TRANSACTION.

The record occurrence counts (%CNT) used during the source flat file load are retained here for the purpose of verifying supplied client data has completely transmitted and loaded.

The temporality of polygons is represented as a new version of a new set for an entire 6x12 BCGS mapsheet.

There is no spatial reference of polygons between versions. For example, polygon #6 of version 2.0 has no spatial or descriptive relationship to polygon #6 of version 2.1. This is true under the current architecture where no integration of spatial and text data is implemented.

Note: (98-03) Future consideration should be given to amalgamating the VERSION AUDIT METADATA with the MUMS application entity, TEXT FILE VERSION. These describe the same business object, metadata of a version release, but from differing perspectives. No amalgamation undertaken at this writing on account of time constraints of implementation.

Table: VERSION_AUDIT_METADATA(cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SOURCE_SKEY The system generated unique identifier of an Originating Source. Generated by SOURCE_SEQ. << 1998-04-13-09:08 sourced from:236464:506326 >>	NOT NULL	NUMBER(14,0)
2	MCMP_MAP_COMP_SKEY	NOT NULL	NUMBER(7,0)
3	CREATE_USER_ID The user id for the individual that created the occurrence. << 1998-04-13-09:08 sourced from:236464:506324 >>	NOT NULL	VARCHAR2(30)
6	APA_AGENCY_PERSON_SKEY	NULL	NUMBER(7,0)
7	POLYGON_OCCUR_CNT A count of the number of POLYGON records received when the file was forwarded and processed into the database. << 1998-04-13-09:08 sourced from:236464:595003 >>	NULL	NUMBER(6,0)
8	CREATE_DATE Date:Time stamp when the system created the record. (this is added as an attribute at the supertype to test a problem with the database design wizard). << 1998-04-13-09:08 sourced from:236464:442993 >>	NULL	DATE
9	MODIFY_DATE The date the data was modified.	NULL	DATE

Table: VERSION_AUDIT_METADATA (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-04-13-09:08 sourced from:236464:506323 >>		
10	MODIFY_USER_ID The user id for the individual that modified the occurrence.	NULL	VARCHAR2(30)

<< 1998-04-13-09:08 sourced from:236464:506325 >>

11	SERIAL_NUM_DATE The date simultaneously assigned to a graphics file and its associated text file for the purpose of uniquely identifying a version.	NULL	DATE
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This attribute is one of three components of the compound business key, file 'Serial Number'. The three components in their commonly used order are:

Mapsheet Id (BCGS 6x12 MAPSHEET ID)

SERIAL NUM DATE

SERIAL VERSION NUM.

The SERIAL NUM DATE is assigned at the time of creation of the 'resultants', (forest cover polygons bisected by multiple themes in the '.EDI file) and their integration with the text file. Assignment is made by a controlled process on a secure, multiuser system, and therefore, the date retains its integrity unlike those sourced from stand-alone PC systems, or other disconnected processes that independently assign a value (e.g. SERIAL NUM DATE).

Also known as GRAPHICS DATE and/or GRAPHICS CREATION DATE in the FIP file, though a misnomer.

Table: VERSION_AUDIT_METADATA (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	This definition and attribute name are consistent with MUMS.		
	<< 1998-04-13-09:08 sourced from:236464:594992 >>		
12	SERIAL_VERSION_NUM	NULL	NUMBER(4,0)
	The number simultaneously assigned to a graphics file and its associated text file for the purpose of uniquely identifying a version.		
	This attribute is one of three components of the FIP compound business key, 'Serial Number'. The three components in their commonly used order are:		
	Mapsheet Id (BCGS 6x12 MAPSHEET ID)		
	SERIAL NUM DATE		
	SERIAL VERSION NUM. (aka GRAPHICS VERSION NUMBER)		
	The SERIAL VERSION NUM is assigned at the time of creation of the 'resultants', (forest cover polygons bisected by multiple themes in the '.EDI file) and their integration with the text file.		
	It should be noted that despite the intention of this attribute contributing to the business key identifier, SERIAL VERSION NUM appears to be of limited usefulness. Firstly, the Mapsheet Id and the SERIAL NUM DATE (above) provide all the unique identification required, and secondly, the Object Distribution Management system (ODM) creates a version number based on checking in/out for data maintenance that is independently assigned. This confusion, borne of disconnected activities, causes loss of integrity for business use.		

<< 1998-04-13-09:08 sourced from:236464:594991 >>

Table: VERSION_AUDIT_METADATA (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
13	PROJECTION_DATE The date to which tree volume and growth variables are projected to. This value is sourced from a mapping to the FIP file, or populated on output of the VIFF file. Known as the PROJECTED DATE in the FIP file. Same as the PROJECTION DATE in DERIVATION TRANSACTION and retained redundantly here to accomodate the transaction metadata that occurred in the FIP environment. << 1998-04-13-09:08 sourced from:236464:594999 >>	NULL	DATE
14	PROJECTION_CREATE_DATE The date the source file was updated for derivation of the tree volumes and their projection, i.e. the 'completion' processes. The date is updated by either of the local FCAP application or the Resource Inventory Branch VAX. The 'completion' process, as it is currently understood, performs a number of precursor 'data housekeeping' activities which then support the execution of the Variable Density Yield Prediction (VDYP) application that projects tree volumes to a specified date. This attribute is retained mainly for legacy reasons, as the VDYP application may be executed directly within the Vegetative Cover database in a later development phase.	NULL	DATE

Table: VERSION_AUDIT_METADATA (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	This attribute maps directly to the FIP attribute named, LAST_FIPUPDATE_DATE.		
	<< 1998-04-13-09:08 sourced from:236464:594994 >>		
15	PROJECTION_SOFTWARE_VER_ID	NULL	VARCHAR2(8)
	The version identifier of the Variable Density Yield Prediction (VDYP) used to calculate tree volumes and their projections.		
	The version identifier is updated by either of the local FCAP application or the Resource Inventory Branch VAX.		
	Also known in the FIP file as LAST FIP UPDATE VERSION.		
	<< 1998-04-13-09:08 sourced from:236464:594995 >>		
16	LAST_VALIDN_DATE	NULL	DATE
	The last most date the file was validated using external (to the Vegetative Cover database) application software.		
	The expected application software that would populate this attribute is the FIPCHECK application software. It validates the FIP ASCII file for valid values and combinations of values.		
	The date is updated by either of the local FCAP application ('FIPCHECK') or the Resource Inventory Branch VAX ('FIP_CHECK').		
	Known as LAST ERROR CHECK DATE in the FIP system.		

Table: VERSION_AUDIT_METADATA (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-04-13-09:08 sourced from:236464:594996 >>		
17	LAST_DATA_MODIFN_DATE	NULL	DATE
	<p>The last date the source exchange file was modified in the Forest Cover Attribute Processing (FCAP) application or other external data modification application.</p> <p>The date is programmatically assigned by the FCAP application.</p> <p>The LAST MODIFICATION DATE serves as a business user reminder of when the file was last updated, but the integrity of this date is suspect because the FIP data can be accessed directly in ASCII format, or the PC platform date can be manipulated by the end user.</p> <p>This attribute is retained only for legacy reasons.</p> <p>This attribute maps directly to the FIP attribute named, LAST FIP EDIT DATE.</p> <p><< 1998-04-13-09:08 sourced from:236464:594993 >></p>		
18	LAST_VALIDN_APPN_VER_ID	NULL	VARCHAR2(8)
	<p>The version identifier of the Variable Density Yield Prediction (VDYP) used to calculate tree volumes and their projections.</p> <p>The version identifier is updated by either of the local FCAP application or the Resource Inventory Branch VAX.</p> <p>Also known in the FIP file as LAST FIP UPDATE VERSION.</p>		

Table: VERSION_AUDIT_METADATA (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-04-13-09:08 sourced from:236464:594997 >>		
19	LAST_INDEX_VER_ID The version of the Site Index Tools (INDEX) used to calculate all SITE INDEX variables in the file. A new attribute to Vegetative Cover, introduced to isolate the site index version from the other application software, e.g. VDYP, that may run the site index software.	NULL	VARCHAR2(8)
	<< 1998-04-13-09:08 sourced from:236464:594998 >>		
20	DATA_LOAD_DATE The date the file was loaded to the Vegetative Cover database.	NULL	DATE
	<< 1998-04-13-09:08 sourced from:236464:595000 >>		
22	SOURCE_FILE_NAME The operating system name of the originating file including the file extension.	NULL	VARCHAR2(25)
	<< 1998-04-13-09:08 sourced from:236464:595047 >>		
25	PRJ_PROJECT_SKEY	NULL	NUMBER(7,0)
27	DTFMT_DATA_FORMAT_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

VAM_APA_FK
 APA_AGENCY_PERSON_SKEY = AGENCY_PERSON_ASSOCIATIONS.AGENCY_PERSON_SKEY
 VAM_DTFMT_FK
 DTFMT_DATA_FORMAT_SKEY = DATA_FORMATS.DATA_FORMAT_SKEY
 VAM_MCMP_FK
 MCMP_MAP_COMP_SKEY = MAPSHEET_COMPONENTS.MAP_COMP_SKEY
 VAM_PRJ_FK
 PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY

Table: VERSION_AUDIT_METADATA (cont'd)*Indexes:*

VAM_APA_FK_I
 APA_AGENCY_PERSON_SKEY
VAM_DTFMT_FK_I
 DTFMT_DATA_FORMAT_SKEY
VAM_MCMP_FK_I
 MCMP_MAP_COMP_SKEY
VAM_PRJ_FK_I
 PRJ_PROJECT_SKEY

Notes:

<< 1998-04-13-09:08 sourced from:236464:382240 >>

Table: VGIS_AGENCIES*Description:*

An organization, legal entity or business unit that either has engaged in a business capacity with the Ministry (external, Forest Client). The nature of the business can be fiscal transaction, collaborative or otherwise informal.

This entity amalgamates corporate business areas from two sources and also incorporates (current) inconsistencies found in legacy data.

The two corporate sources are:

- FOREST CLIENT, which are external agencies and
- ORG UNIT, which identify internal Ministry business units.

In theory the above two sub-types are needed and would be refreshed from these two sources only.

However, the AGENCY entity also carries alternate codes to further accomodate legacy business requirements which appear to have no reconcilliation in the above sources. Hence the:

- OTHER CLIENT (e.g. FPC, Forest Productivity Council, codes) and
- MUMS SOURCED (eg. unvalidated title block text strings)

are retained as separate subtypes. With dedicated business forensic work, these latter two sub-types could be deleted.

An individual, group, agency or business that undertakes some form of transaction with the Ministry of Forests. The nature of the transaction maybe either financial (the original intent) or other such as exchange of data where there were no monetary

Table: VGIS_AGENCIES (cont'd)*Description:*

considerations.

This entity is equivalent to the Ministry FOREST CLIENT code table (warts and all).

An organizational unit of the Ministry of Forests. A corporate code table.

Will often identify the location, type of office (region, district) and the nature of the business. Semantically overloaded, though it cannot be unravelled at this point (95-12).

MUMS sourced agencies which cannot be reliably identified in the Ministry standard tables of FOREST CLIENT and ORG UNIT.

The problem, unique to MUMS, is the supply of an a text string from the title block of a mapsheet which may contain anything, including several misspellings of the same contractor (an AGENCY). The storage of these strings is desired, and this subtype serves to identify MUMS related 'agencies' in whatever form they are.

Also known as a Specially Held Information Type; better understood by its acronym.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGENCY_SKEY Sequentially assigned number to identify a Ministry Agency/Client.	NOT NULL	NUMBER(7,0)

Table: VGIS_AGENCIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
2	AGENCY_TYPE	NOT NULL	VARCHAR2(10)
3	AGENCY_NAME The name of the agency. Usually the name will be supplied from either the MOF CLIENT code table or the MOF ORG UNIT table which are deemed to be mutually exclusive. Otherwise, the name would be manually entered. <i>The name of the agency; external client or MoF business unit.</i> << 1998-03-25-16:26 sourced from:346868:348946 >>	NOT NULL	VARCHAR2(100)
4	AGENCY_AGENCY_SKEY	NULL	NUMBER(7,0)
5	AGENCY_TYPE_CD A legal or organizational type of agency particular to this application. This in time, should be rationalized with the MOF CLIENT_TYPE_CODE which is currently incomplete in serving Growth & Yield needs (95-03) and the custodian promises to 'look' at the issue at the next change window. << 1998-03-25-16:26 sourced from:346868:347087 >>	NULL	VARCHAR2(5)
6	FPC_AGENCY_CD The agency, as codified by the Forest Productivity Council, Minimum Standards for PSP's, 1990. This code is useful for field data collection, although it is not a corporate standard. << 1998-03-25-16:26 sourced from:346868:347515 >>	NULL	VARCHAR2(8)
7	VM_AGENCY_SKEY The surrogate identifier as supplied from one of two source corporate	NULL	NUMBER(10,0)

Table: VGIS_AGENCIES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	code tables; FOREST CLIENT or ORG UNIT. Retained for business linkage purposes for later update from the same sources.		
	<i>A supplied non-key Ministry surrogate identifier; not used as a key.</i>		
	<< 1998-03-25-16:26 sourced from:346868:348947 >>		
8	LEGAL_FIRST_NAME The client's legal first name.	NULL	VARCHAR2(30)
	<i>The client's legal first name.</i>		
	<< 1998-03-25-16:28 sourced from:346868:347516 >>		
9	LEGAL_MIDDLE_NAME The client's legal middle name or names if an individual.	NULL	VARCHAR2(30)
	<i>The client's legal middle name or names if an individual.</i>		
	<< 1998-03-25-16:28 sourced from:346868:347517 >>		
10	CLIENT_TYPE_CD The nature of the legal entity that is a client of the Ministry of Forests. For example, corporation, individual, partnership etc.	NULL	VARCHAR2(1)
	<i>The type of legal entity which describes the client (agency etc.).</i>		
	<< 1998-03-25-16:28 sourced from:346868:347518 >>		
11	MOF_ORG_UNIT_CD Org Unit Code.	NULL	VARCHAR2(6)
	<< 1998-03-25-16:28 sourced from:346868:347383 >>		

Table: VGIS_AGENCIES (cont'd)*Foreign Keys:*

AGNCY_AGENCY_FK
AGNCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY

Indexes:

AGNCY_AGENCY_FK_I
AGNCY_AGENCY_SKEY

Notes:

Nov 8, 1995 JRT

- defined mapping of agency_type_cd on initial load

of AGENCIES from the ministry CLIENT sqllda table:

- CLIENT_TYPE_CODE from sqda maps to

out AGENCY, agency type cd (domain agency type) as:

A Associations ==> ASSN

C Corporation ==> CORP

G Government ==> UNGOV

B Indian Band ==> INDN

I Individual ==> INDIV

J Joint Venture ==> JOINV

P Partnership ==> PART

S Society ==> SOCIE

All Org_unit Codes loaded from the ORG_UNIT

ministry table are assigned agency type code

PROVG on insertion into AGENCIES.

April 4, 1996 TMC

Agency has three sub-type entities: Forest Client (FCLNT), Org Unit (ORGUN), and Other Client (OCLNT).

The legal_first_name, legal_middle_name, and client_type_cd are of the Forest Client. the

MOF_org_unit_cd is of the Org Unit.

<< 1998-03-25-16:26 sourced from:346868:346867 >>

Table: VGIS_AGENCIES (cont'd)*Notes:*

<< 1998-03-25-16:28 sourced from:346868:347511 >>

<< 1998-03-25-16:28 sourced from:346868:347154 >>

<< 1998-03-25-16:28 sourced from:346868:349001 >>

<< 1998-03-27-12:48 sourced from:346868:612274 >>

Table: VGIS_CLIENT_LOCATIONS*Description:*

The description and the details of the address(es) at which a CLIENT operates. This may be the head office, or if applicable, additional branch offices.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CLIENT_LOCN_CODE A code to uniquely identify, within each client, the addresses of different divisions or locations at which the client operates. <i>The code for a division, branch office etc. of a client.</i> << 1998-03-25-16:29 sourced from:346868:347328 >>	NOT NULL	VARCHAR2(2)
2	CLIENT_NUMBER A unique identifier of a CLIENT. <i>A unique identifier of a CLIENT.</i> << 1998-03-25-16:29 sourced from:346868:347327 >>	NOT NULL	VARCHAR2(8)
3	POSTAL_CODE The code as designated by the central postal service of the COUNTRY. May include US zip code or other. <i>The code as designated by the central postal service of the COUNTRY.</i> << 1998-03-25-16:29 sourced from:346868:347335 >>	NULL	VARCHAR2(10)
4	CLIENT_LOCN_NAME The name of a division or branch office of a client. Separate from the location. <i>The name of a division or branch office of a client.</i>	NULL	VARCHAR2(40)

Table: VGIS_CLIENT_LOCATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-25-16:29 sourced from:346868:347329 >>		
5	ADDRESS_1 The first line of a client's address.	NULL	VARCHAR2(40)
	<i>The first line of a client's address.</i>		
	<< 1998-03-25-16:29 sourced from:346868:347330 >>		
6	ADDRESS_2 The second line of a client's address.	NULL	VARCHAR2(40)
	<i>The second line of a client's address.</i>		
	<< 1998-03-25-16:29 sourced from:346868:347331 >>		
7	CITY The town or city of the client's address.	NULL	VARCHAR2(30)
	<i>The town or city of the client's address.</i>		
	<< 1998-03-25-16:29 sourced from:346868:347332 >>		
8	PROVINCE The province or state of the CLIENT's address.	NULL	VARCHAR2(5)
	<i>The province or state of the CLIENT's address.</i>		
	<< 1998-03-25-16:29 sourced from:346868:347333 >>		
9	COUNTRY The country in which the client is located.	NULL	VARCHAR2(6)
	<i>The country in which the client is located.</i>		
	<< 1998-03-25-16:29 sourced from:346868:347334 >>		

Table: VGIS_CLIENT_LOCATIONS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 11	AGENCY_AGENCY_SKEY	NOT NULL	NUMBER(7,0)

Foreign Keys:

CLNLN_AGENCY_FK
AGENCY_AGENCY_SKEY = VGIS_AGENCIES.AGENCY_SKEY

Indexes:

CLNLN_AGENCY_FK_I
AGENCY_AGENCY_SKEY

Notes:

<< 1998-03-25-16:29 sourced from:346868:347159 >>

Table: VGIS_COAST_INTERIOR_AREAS*Description:*

The designation of a coastal or interior portion of BC. This designation reflects a primitive delination used to assign different sets of utilization levels.

NB: This attribution is stored at the Region/Compartment/Compartment Letter level; that is, each of these subdivisions has an Coast or Interior designation. However, vegetation cover polygons may in fact bisect the Coast/Interior line, in which case the Coast/Interior is assigned to one (typically on the basis of greatest area) from this entity.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	COAST_INTERIOR_CD A code to denote the designation of interior or coastal portions of BC Used where there are different factors applied to the separate areas. << 1998-03-27-09:57 sourced from:346868:506810 >>	NOT NULL	VARCHAR2(1)
2	DESCRIPTION A text description of the Coast Interior area. << 1998-03-27-09:57 sourced from:346868:514131 >>	NULL	VARCHAR2(75)

Notes:

<< 1998-03-27-09:57 sourced from:346868:506809 >>

Table: VGIS_FOREST_REGIONS*Description:*

Samples are collected primarily in Forest regions. There are 6 regions
Cariboo, Kamloops, Nelson, Prince George, Prince Rupert, and Vancouver.

This entity is needed for Site Series. Since Forest Research defines there codes by Region

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	FOR_REGION_SKEY	NOT NULL	NUMBER(1,0)
2	FOR_REGION_CD	NOT NULL	VARCHAR2(3)
3	DESCRIPTION	NOT NULL	VARCHAR2(50)

Notes:

two relationships are needed

1. to Projects
2. to Site Series Codes.

If at any time a sample crosses two region boundaries a third relationship will be needed too Plot Clusters.

Table: VGIS_PROJECTS*Description:*

A defined initiative that collects, updates, modifies and augments data associated with natural resource inventories.\

Typically, this involves the update of vegetative (aka. forest) cover descriptions and their mapped form, though other initiatives such as conversion of 'forest cover' (in FIP format) to Vegetation Inventory standards would be included.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PROJECT_SKEY The surrogate identifier of a Project.	NOT NULL	NUMBER(7,0)
	Populated from the Oracle sequence PROJECT_SKEY_SEQ.		
	<< 1998-03-25-16:59 sourced from:416792:435091 >>		
2	PROJECT_STATUS The status of a project as it pertains to inventory map and forest cover update or re-inventory.	NOT NULL	VARCHAR2(3)
	<< 1998-03-25-16:59 sourced from:416792:465823 >>		
3	PROJECT_BUSINESS_ID The business assigned identifier of a project.	NULL	VARCHAR2(10)
	<< 1998-03-25-16:59 sourced from:416792:420589 >>		
4	PROJECT_NAME The business assigned name of the project. The name typically reflects a Timber Supply Area, an initiating Agency, or a land area.	NOT NULL	VARCHAR2(50)

Table: VGIS_PROJECTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-25-16:59 sourced from:416792:420599 >>			
5	PROJECT_TYPE_CD The general category of the central objective of the project. A project, particularly the update of digital graphics files, may undertake more than the original intent. Within the forest inventory context, the types of projects expected are: -audits, -Vegetation Inventory Phase 1 or 2, etc. The source of project types is the IPM system, with additions and deletions based on discussion with FRGIS personnel. << 1998-03-25-16:59 sourced from:416792:420600 >>	NULL	VARCHAR2(10)
6	START_DATE The date the project begun. << 1998-03-25-16:59 sourced from:416792:420601 >>	NULL	DATE
7	END_DATE The date the project ended. << 1998-03-25-16:59 sourced from:416792:420602 >>	NULL	DATE
8	FISCAL_YEAR The identifying latter calendar year of a fiscal year. A fiscal	NULL	DATE

Table: VGIS_PROJECTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	year spans two calendar years; April 1 through March 31, and the calendar year of March 31 identifies the fiscal year.		
	<< 1998-03-25-16:59 sourced from:416792:420603 >>		
9	SPATIAL_DATA_CAPTURE_DATE The date of capture of the souce spatial data used for updating or undertaking a forest inventory project.	NULL	DATE
	A fancy name for 'date of photography', though there are indications that there may be sources of forest cover update other than aerial photography, e.g. satellite imagery, GPS coordinate surveys etc.		
	<< 1998-03-25-16:59 sourced from:416792:465824 >>		
10	SPATIAL_DATA_SCALE The scale of photograpy or satelite image. The '1:' portion is implied and not stored.	NULL	NUMBER(8,0)
	<< 1998-03-25-16:59 sourced from:416792:578402 >>		
11	CREATE_DATE << 1998-03-25-16:59 sourced from:416792:492791 >>	NOT NULL	DATE
12	MODIFY_DATE << 1998-03-25-16:59 sourced from:416792:492792 >>	NULL	DATE
13	MODIFY_USER_ID << 1998-03-25-16:59 sourced from:416792:492794 >>	NULL	VARCHAR2(30)
14	CREATE_USER_ID << 1998-03-25-16:59 sourced from:416792:492793 >>	NOT NULL	VARCHAR2(30)

Table: VGIS_PROJECTS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
15	PRJ_PROJECT_SKEY	NULL	NUMBER(7,0)
16	FREG_FOR_REGION_SKEY	NULL	NUMBER(1,0)

Foreign Keys:

PRJ_FREG_FK
FREG_FOR_REGION_SKEY = VGIS_FOREST_REGIONS.FOR_REGION_SKEY
PRJ_PRJ_FK
PRJ_PROJECT_SKEY = VGIS_PROJECTS.PROJECT_SKEY

Indexes:

PRJ_FREG_FK_I
FREG_FOR_REGION_SKEY
PRJ_PRJ_FK_I
PRJ_PROJECT_SKEY

Notes:

<< 1998-03-25-16:59 sourced from:416792:418233 >>

Table: VGIS_RCL_AREA_VALIDN_CODES**Description:**

The list of valid combinations of Region, Compartment and Compartment Letter. These identify areal units by which the forest inventory was traditionally summarized.

Also included is the mapping to the larger, broadly climatic in nature
,
Forest Inventory Zone (FIZ).

The Region, Compartment and Compartment Letter combination also serves as three of the six compound identifiers of the business key of a sample as used by the Growth and Yield Section, Inventory Branch.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	RCL_AREA_VALIDN_SKEY A surrogate key identifier for the combination of Region, Compartment Number and Compartment Letter. << 1998-03-25-16:00 sourced from:346868:347116 >>	NOT NULL	NUMBER(7,0)
6	COMPT_NUM A number assigned to a geographic subdivision of Region. Compartment Number forms an integral component of the Inventory Branch business key used to identify samples. This would also be known as the 'Compartment'. << 1998-03-25-16:00 sourced from:346868:346987 >>	NOT NULL	NUMBER(3,0)
11	FIZ_CD A geographic area of BC delineated to approximate broad climatic and ecological factors. It was developed by the Inventory Branch for grouping samples and its use is expected to be superceded by biogeoclimatic classification. << 1998-03-25-16:00 sourced from:346868:346989 >>	NOT NULL	VARCHAR2(1)
16	INV_REGION_NUM A number assigned to a geographic entity of the province of BC used to reference Inventory Branch samples. It forms part of business key. << 1998-03-25-16:00 sourced from:346868:347137 >>	NOT NULL	NUMBER(2,0)
21	COMPT_LTR A letter code assigned to a geographic subdivision of some compartments (identified by number). Compartment letter forms an integral component of the Inventory Branch business key used to identify samples. Applies to Compartment Numbers in Regions 1,3,5,6,7,9,10,11 and 56 only. << 1998-03-25-16:00 sourced from:346868:346986 >>	NULL	VARCHAR2(1)
22	COAST_INTERIOR_CD A code to denote the designation of interior or coastal portions of BC Used where there are different factors applied to the separate areas.	NOT NULL	VARCHAR2(1)

Table: VGIS_RCL_AREA_VALIDN_CODES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<< 1998-03-27-09:57 sourced from:346868:506810 >>		

Unique Constraints:

RCLVC_RCLVC2_UK
INV_REGION_NUM
COMPT_NUM
COMPT_LTR
FIZ_CD

Foreign Keys:

RCLVC_CIA_FK
COAST_INTERIOR_CD = VGIS_COAST_INTERIOR_AREAS.COAST_INTERIOR_CD

Indexes:

RCLVC_CIA_FK_I
COAST_INTERIOR_CD

Notes:

OT_S VAX tables
A? Check BD
<< 1998-03-25-16:00 sourced from:346868:346985 >>

Table: VGIS_SAMPLE_CODES*Description:*

This entity is a code table of different Forest Information sample types and their descriptions related to the VGIS application. VGIS sample types in this table can be also referenced in DESIGN_SPECIFICATIONS. This object was created to show the samples types and descriptions that are available on the Spatial layer that is being warehoused. Besides VGIS ample types will hold information on Historical Air and Ground calls.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SAMPLE_TYPE_CD Forest Inventory Historical Air and Ground codes found on the sample tile layer and VGIS sample types. Some cell names (formerly symbols) used on the sample tile layer eg. X is for air call and XG is for ground call	NOT NULL	VARCHAR2(6)
2	CODE_DESCRIPTION This is a description of what the Historic Sample point code or VGIS sample means.	NOT NULL	VARCHAR2(50)
3	EFFECTIVE_DATE The date the sample became effective.	NULL	DATE
4	UPDATE_TIMESTAMP The date and time of the last update.	NULL	DATE
5	EXPIRY_DATE The date the Sample is no longer active.	NULL	DATE

Table: VISITATION_NOTES*Description:*

Notes and comments recorded against one of the Sample objects during a measurement visitation.

The temporality of these notes is captured by the relationships to one of Plot Cluster, Measurement Visitation or Point Location Visitations. Thus an individual note is reecorded against only one of these objects.

eg comments recorded during a measurement visit that are recorded on a Vegetation Ground Sample CH 1 Notes.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	NOTE_SKEY System genereated UID form ORACLE sequence visit_cmt_seq.	NOT NULL	NUMBER(7,0)
<< 1998-03-26-16:45 sourced from:7003:563572 >>			
2	NOTE_TYPE A coded that describes the Sample Object or data type that the comments refer to.	NOT NULL	VARCHAR2(10)
<< 1998-03-26-16:45 sourced from:7003:563589 >>			
3	SEQ_NUM Relative sequence that the Notes line was recorded on the Field data sheets.	NOT NULL	NUMBER(2,0)

Table: VISITATION_NOTES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
<< 1998-03-26-16:45 sourced from:7003:563575 >>			
4	NOTE_TEXT A line of text entered form the Field Sheets.	NULL	VARCHAR2(256)
<< 1998-03-26-16:45 sourced from:7003:563576 >>			
6	MEAVT_MEASMT_VISIT_SKEY	NULL	NUMBER(7,0)
8	CEV_CE_VISIT_SKEY	NULL	NUMBER(7,0)
10	PCLTR_PLOT_CLUSTER_SKEY	NULL	NUMBER(7,0)

Foreign Keys:

VNOTE_CEV_FK
CEV_CE_VISIT_SKEY = POINT_LOCATION_VISITATIONS.CE_VISIT_SKEY
VNOTE_MEAVT_FK
MEAVT_MEASMT_VISIT_SKEY = MEASMT_VISITATIONS.MEASMT_VISIT_SKEY
VNOTE_PCLTR_FK
PCLTR_PLOT_CLUSTER_SKEY = PLOT_CLUSTERS.PLOT_CLUSTER_SKEY

Indexes:

VNOTE_CEV_FK_I
CEV_CE_VISIT_SKEY
VNOTE_MEAVT_FK_I
MEAVT_MEASMT_VISIT_SKEY
VNOTE_PCLTR_FK_I
PCLTR_PLOT_CLUSTER_SKEY

Notes:

<< 1998-03-26-16:45 sourced from:7003:563566 >>