

Table and Column Definitions Report

Filename:	H:\tempforests\VSC_TAB_COL.pdf
Run by:	CASEOWNER
Report Date:	January 11, 2011 11:07 AM
Total Pages:	16
Total Tables / Views / Materialized Views:	13

Parameters

Workarea:	GLOBAL SHARED WORKAREA
Container:	VSC
Table / View / Materialized View:	%
Include Tables?	Y
Include Views?	Y
Include Materialized Views?	Y
Data Structure Diagram:	%
Exclude Prefix:	
Include Table / View / MV Descriptions?	Y
Include Table / View / MV Comments?	N
Include Column Descriptions?	Y
Include Column Comments?	N
Include Column Notes?	Y
Include Unique Constraints?	Y
Include Foreign Key Constraints?	Y
Include Check Constraints?	Y
Include Indexes?	Y

Table: VSC_AGE_10YR_CLASS_CODE*Description:*

The average age of the leading species of the stand classed into age ranges of 10 years.
Code 01 signifies an average stand age of 01 to 10, and so on.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_10YR_CLASS_CODE The average age of the leading species of the stand classed into age ranges of 10 years.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of SAMPLE AGE IN TENS CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_AGE_CLASS_CODE*Description:*

A code indicating the age class of the stand at the reference year. Age classes are intervals, or ranges, of ages into which trees, forests, stands, or forest types are divided into for classification and use.

1 1 to 20 years
 2 21 to 40 years
 3 41 to 60 years
 4 61 to 80 years
 5 81 to 100 years
 6 101 to 120 years
 7 121 to 140 years
 8 141 to 250 years
 9 251+ years

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	AGE_CLASS_CODE A code indicating the age class of the stand at the reference year. Age classes are intervals, or ranges, of ages into which trees, forests, stands, or forest types are divided into for classification and use.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of AGE CLASS CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_CROWN_CANOPY_POS_CODE*Description:*

A numerical ranking of the relative position of the tree crown, with respect to the stand canopy.

Crown classes are as follows:

- 1 - dominant, a tree crown extending above the general level of the forest canopy
- 2 - co-dominant, a tree crown forming the general level of the forest canopy
- 3 - intermediate, a tree crown below, but extending into, the general level of the forest canopy
- 4 - overtopped, a tree crown entirely below the general level of the forest canopy

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	CROWN_CANOPY_POS_CODE A numerical ranking of the relative position of the tree crown, with respect to the stand canopy.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of CROWN CLASS CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_HEIGHT_3M_CLASS_CODE*Description:*

The average height of the leading species of the stand coded to the nearest whole metre, in intervals of 3 metres representing the range median.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	HEIGHT_3M_CLASS_CODE The average height of the leading species of the stand coded to the nearest whole metre, in intervals of 3 metres representing the range median.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of SAMPLE HEIGHT IN THREES CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Notes:

For example:

Code

03 - Height class limits of 0 - 4.4 m

06 - Height class limits of 4.5 - 7.4 m

etc, culminating as

66 - Height class limits of 64.5+ m

(HEIGHT_CLASS_CD exists in denominations of 10 --> probably named incorrectly being as it assumes there won't ever be a requirement for height classes with other denominations.)

Table: VSC_HEIGHT_CLASS_CODE*Description:*

A code indicating the height class of the stand at the reference year. Height classes represent (approximately 9 meter) intervals into which the range of tree or stand heights are subdivided for classification and use.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	HEIGHT_CLASS_CODE A code indicating the height class of the stand at the reference year. Height classes represent intervals into which the range of tree or stand heights are subdivided for classification and use.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of HEIGHT CLASS CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_INV_TYPE_GROUP_CODE*Description:*

A numerical code for the species grouping of the stand in which the sample is located, based on the estimate of the stand at the time of sampling.

eg 23 could represent a combination of douglas fir and spruce

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	INV_TYPE_GROUP_CODE A numerical code for the species grouping the stand in which the sample is located, based on the estimate of the stand at the time of sampling.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of INV TYPE GROUP CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_SAMPLE_TYPE_CODE*Description:*

A code indicating the kind of the sample.

O = usual designation

V = Diameter-Limit cutting. Outside the plot. Type group and sample size will be a series of 9s.

Z = non-inventory sampling (eg private company)

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SAMPLE_TYPE_CODE A code indicating the kind of the sample.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of SAMPLE HEIGHT IN THREES CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_SITE_CLASS_CODE*Description:*

A code for the class of stand productivity (site class). A derived field, based on height and age of the leading species, retained for its historical stand information value.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SITE_CLASS_CODE A code for the class of stand productivity (site class). A derived field, based on height and age of the leading species, retained for its historical stand information value.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of SITE CLASS CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Notes:

The site class codes are as follows:

- G - Good site
- M - Medium site
- P - Poor site
- L - Low site

Table: VSC_TREE_SPECIES_CODE*Description:*

A code for the botanical species name of the tree.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TREE_SPECIES_CODE A code for the botanical species name of the tree.	NOT NULL	VARCHAR2(10)
2	DESCRIPTION The description of TREE SPECIES CODE.	NOT NULL	VARCHAR2(500)
3	EFFECTIVE_DATE The date that the code becomes effective.	NOT NULL	DATE
4	EXPIRY_DATE The date that the code expires.	NOT NULL	DATE
5	UPDATE_TIMESTAMP The date that the code was last updated.	NULL	DATE

Table: VSC_VOLUME_SAMPLE_AREA**Description:**

A chosen area utilized for deriving tree volume information.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SAMPLE_ID Artificial number used to uniquely identify a sample. It is a sequential integer assigned by the database.	NOT NULL	NUMBER(10)
2	SAMPLE_NO A number assigned at the point of data collection to identify this sample within a region and compartment.	NOT NULL	NUMBER(4)
3	SAMPLE_DATE The year the sample was collected. The date is arbitrarily set to June 1 of that year.	NOT NULL	DATE
4	ELEVATION The elevation(s), relative to the mean sea level, of the land contained within the polygon.	NULL	NUMBER(5)
5	FOREST_INVENTORY_ZONE The Forest Inventory Zone(s) (FIZ) that fall within the forest cover polygon. FIZ zones are broadly based ecological classification of the forestland in British Columbia. The province of British Columbia is split into 12 FIZ zones. eg A,B,C are coastal zones K,L are North East areas of the province <i>FIZ zones were developed to provide a broadly based ecological classification of the forestland in British Columbia. FIZ zones closely follow the early Biogeoclimatic zones developed by Dr. Drajina. The province of British Columbia is split into 12 FIZ zones.</i>	NOT NULL	VARCHAR2(1)
6	INVENTORY_REGION The Inventory Region(s) that fall within the forest cover polygon. Inventory Regions are an administrative and planning level boundary used to subdivide the Province into 88 units. <i>Inventory Region is also part of the reference key for identifying the geographic location of all Inventory Branch samples. Inventory Region, along with Inventory Compartment and Compartment Letter, form the key to identifying the Inventory samples.</i>	NOT NULL	NUMBER(4)
7	COMPARTMENT_NUMBER The Inventory Compartment(s) that fall within the forest cover polygon. Inventory Compartments are a geographic subdivision of an Inventory Region, usually defining a watershed or part thereof. Inventory compartment is also part of the reference key for identifying the geographic location of all Inventory Branch samples. Inventory Compartment, along with Compartment Letter and Inventory Region form the key to identifying Inventory samples.	NOT NULL	NUMBER(4)
8	COMPARTMENT_LETTER The Compartment Letter(s) that fall within the forest cover polygon. Compartment Letter is a geographic subdivision of an Inventory Compartment. Compartment Letter only applies to some Inventory Compartments (e.g. only in Inventory Regions 1, 3, 5, 6, 7, 9, 10, 11, 56). Compartment Letter is also part of the reference key for identifying the geographic location of all Inventory Branch samples. Compartment Letter, along with Inventory Compartment and Inventory Region form the key to identifying Inventory samples.	NULL	VARCHAR2(2)
9	PSYU	NULL	NUMBER(4)
10	PSYU_BLOCK The numbers of the Public Sustained Yield Unit (PSYU) Block(S) that fall within the forest cover polygon. PSYU Blocks are subdivisions of a PSYU and indicate the presence of a sub-unit survey (i.e.. 1:10,000 scale inventory).	NULL	NUMBER(2)
11	BEC_ZONE The Biogeoclimatic Zone(s) that fall within the forest cover polygon. A Biogeoclimatic Zone is a large geographic area with a broad homogeneous macroclimate that influences the development of vegetation and soil.	NULL	VARCHAR2(4)
12	BEC_SUBZONE The Biogeoclimatic Subzone(s) that fall within the forest cover polygon. A Biogeoclimatic Subzone is a subdivision of the Biogeoclimatic Zone. The subdivision is based on the floristic differences in the zonal ecosystem with sequences influenced primarily by regional climate.	NULL	VARCHAR2(2)
13	BEC_VARIANT The Biogeoclimatic Variant(s) that fall within the polygon. A Biogeoclimatic Variant is a further division of the Biogeoclimatic Zone	NULL	VARCHAR2(2)

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

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	and Subzone. The division reflects the differences in species cover and vigour of the plant species.		
14	AGE_10YR_CLASS_CODE	NULL	VARCHAR2(10)
	The average age of the leading species of the stand classed into age ranges of 10 years.		
15	HEIGHT_3M_CLASS_CODE	NULL	VARCHAR2(10)
	The average height of the leading species of the stand coded to the nearest whole metre, in intervals of 3 metres representing the range median.		
16	SITE_CLASS_CODE	NULL	VARCHAR2(10)
	A code for the class of stand productivity (site class). A derived field, based on height and age of the leading species, retained for its historical stand information value.		
17	HEIGHT_CLASS_CODE	NULL	VARCHAR2(10)
	A code indicating the height class of the stand at the reference year. Height classes represent intervals into which the range of tree or stand heights are subdivided for classification and use.		
18	SAMPLE_TYPE_CODE	NOT NULL	VARCHAR2(10)
	A code indicating the kind of the sample.		
19	INV_TYPE_GROUP_CODE	NULL	VARCHAR2(10)
	A numerical code for the species grouping the stand in which the sample is located, based on the estimate of the stand at the time of sampling.		
20	AGE_CLASS_CODE	NULL	VARCHAR2(10)
	A code indicating the age class of the stand at the reference year. Age classes are intervals, or ranges, of ages into which trees, forests, stands, or forest types are divided into for classification and use.		

Unique Constraints:

VSA_VSA1_UK
 COMPARTMENT_LETTER
 SAMPLE_NO
 COMPARTMENT_NUMBER
 INVENTORY_REGION

Foreign Keys:

VSA_A1CC_FK
 AGE_10YR_CLASS_CODE = VSC_AGE_10YR_CLASS_CODE.AGE_10YR_CLASS_CODE
 VSA_ACC_FK
 AGE_CLASS_CODE = VSC_AGE_CLASS_CODE.AGE_CLASS_CODE
 VSA_H3CC_FK
 HEIGHT_3M_CLASS_CODE = VSC_HEIGHT_3M_CLASS_CODE.HEIGHT_3M_CLASS_CODE
 VSA_HCC_FK
 HEIGHT_CLASS_CODE = VSC_HEIGHT_CLASS_CODE.HEIGHT_CLASS_CODE
 VSA_ITGC_FK
 INV_TYPE_GROUP_CODE = VSC_INV_TYPE_GROUP_CODE.INV_TYPE_GROUP_CODE
 VSA_SCC_FK
 SITE_CLASS_CODE = VSC_SITE_CLASS_CODE.SITE_CLASS_CODE
 VSA_STC_FK
 SAMPLE_TYPE_CODE = VSC_SAMPLE_TYPE_CODE.SAMPLE_TYPE_CODE

Indexes:

VSA_A1CC_FK_I
 AGE_10YR_CLASS_CODE
 VSA_ACC_FK_I
 AGE_CLASS_CODE
 VSA_H3CC_FK_I
 HEIGHT_3M_CLASS_CODE
 VSA_HCC_FK_I
 HEIGHT_CLASS_CODE
 VSA_ITGC_FK_I
 INV_TYPE_GROUP_CODE
 VSA_SCC_FK_I
 SITE_CLASS_CODE

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

VSA_STC_FK_I
SAMPLE_TYPE_CODE

Table: VSC_VOLUME_SAMPLE_TREE**Description:**

A tall woody perennial plant usually with a single elongated stem and having a crown of branches and foliage.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SAMPLE_ID Artificial number used to uniquely identify a sample. It is a sequential integer assigned by the database.	NOT NULL	NUMBER(10)
* 2	TREE_NO Unique arbitrary number assigned to a tree at time of collection.	NOT NULL	NUMBER(10)
3	DBH Diameter (outside bark) of a tree at 1.3 meters.	NULL	NUMBER(5,1)
4	DBH_2CM Diameter of the tree to the nearest 2 centimeters.	NULL	NUMBER(4)
5	DBH_5CM Diameter of the tree to the nearest 5 centimeters.	NULL	NUMBER(4)
6	AGE_MEASMT_EST_IND An indicator of whether an age is estimated.	NULL	VARCHAR2(1)
7	STUMP_AGE Age of the tree at 10 cm from the ground.	NULL	NUMBER(4)
8	HEIGHT_MEASMT_QLTY An indicator of whether a height is estimated.	NULL	VARCHAR2(10)
9	HEIGHT Height of the tree in meters.	NULL	NUMBER(5,2)
10	NO_OF_FORKS The quantity of forks emanating from the main tree stem to a maximum of 3.	NULL	NUMBER(2)
11	NO_OF_SECTIONS The quantity of sections into which the tree has been divided. The main stem is divided into 14 sections except where the tree is less than 11.3 m total height. (Tree is divided into sections at 0.3 m, 0.6 m, 0.9 m, and 1.3 m in height and into 10 equal (decile) lengths thereafter. The minimum decile length is 1.0 m and therefore trees less than 11.3 m have less than 14 sections.)	NULL	NUMBER(3)
12	TREE_SPECIES_CODE A code for the botanical species name of the tree.	NOT NULL	VARCHAR2(10)
13	CROWN_CANOPY_POS_CODE A numerical ranking of the relative position of the tree crown, with respect to the stand canopy.	NULL	VARCHAR2(10)

Foreign Keys:

VST_CCPC_FK
CROWN_CANOPY_POS_CODE = VSC_CROWN_CANOPY_POS_CODE.CROWN_CANOPY_POS_CODE

VST_TSC_FK
TREE_SPECIES_CODE = VSC_TREE_SPECIES_CODE.TREE_SPECIES_CODE

VST_VSA_FK
SAMPLE_ID = VSC_VOLUME_SAMPLE_AREA.SAMPLE_ID

Indexes:

VST_CCPC_FK_I
CROWN_CANOPY_POS_CODE

VST_TSC_FK_I
TREE_SPECIES_CODE

VST_VSA_FK_I
SAMPLE_ID

Notes:

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.

Table: VSC_VOLUME_SAMPLE_TREE_LEADER*Description:*

The length of sample tree stem from the end of the tree down to the first set of branches, representing one year of growth and reflecting the tree's vigor and the site's growing potential.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	TREE_LEADER_ID	NOT NULL	NUMBER(10)
	Primary key for this table as business key may have NULL values for Tree Leader No.		
2	TREE_LEADER_NO	NULL	NUMBER(6)
	Unique arbitrary number assigned to a tree leader at time of collection.		
3	TREE_LEADER_PRIMARY_IND	NOT NULL	VARCHAR2(1)
	Indicates whether the tree leader is of the primary or secondary type.		
4	TREE_NO	NOT NULL	NUMBER(10)
	Unique arbitrary number assigned to a tree at time of collection.		
5	SAMPLE_ID	NOT NULL	NUMBER(10)
	Artificial number used to uniquely identify a sample. It is a sequential integer assigned by the database.		

Foreign Keys:

VSTL_VST_FK
TREE_NO = VSC_VOLUME_SAMPLE_TREE.TREE_NO
SAMPLE_ID = VSC_VOLUME_SAMPLE_TREE.SAMPLE_ID

Indexes:

VSTL_VST_FK_I
TREE_NO
SAMPLE_ID

Table: VSC_VOLUME_SAMPLE_TREE_SECTION*Description:*

A portion of a felled tree created by bucking (sectioning) a log into prescribed intervals. Sections may be created at regular intervals, or where breaks, forks or at other junctions.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SECTION_NO A number assigned to a section of the tree which has been cut or otherwise designated as a log. (A felled tree is bucked into 2.5 or 5.0 m logs or sections which are numbered consecutively from one, the stump, to the tree top. Secondary fork stems, if any, are also sectioned and numbered from the highest main stem section number). Section numbers are unique within a tree.	NOT NULL	NUMBER(3)
2	CUMULATIVE_TREE_LENGTH The cumulative length of the sections in meters above germination point (or highest side since 1990) to the top of the described section. This is the length (or height) of the tree at the top of the section being described. The actual length of the section may be derived by subtracting the previous cl from the current cl. With the first section of a fork, cumulative height is the height above ground at which the leader starts.	NOT NULL	NUMBER(5,2)
3	DIAM_INSIDE_BARK The diameter, inside bark, (DIB) of the section top averaged from two representative measurements.	NULL	NUMBER(5,1)
4	SECTION_VOLUME The gross volume of the tree section in cubic meters particular to the Volume Sampling sectioning methodology. Smalian's formula is used for the volume calculation where: Volume = (1/2 section bottom basal area + 1/2 section top basal area) x Section Length. (A derived field, retained for present data use and later tree compiler testing).	NULL	NUMBER(8,4)
* 5	TREE_LEADER_ID Primary key for this table as business key may have NULL values for Tree Leader No.	NOT NULL	NUMBER(10)

Foreign Keys:

VSTS_VSTL_FK
TREE_LEADER_ID = VSC_VOLUME_SAMPLE_TREE_LEADER.TREE_LEADER_ID

Indexes:

VSTS_VSTL_FK_I
TREE_LEADER_ID