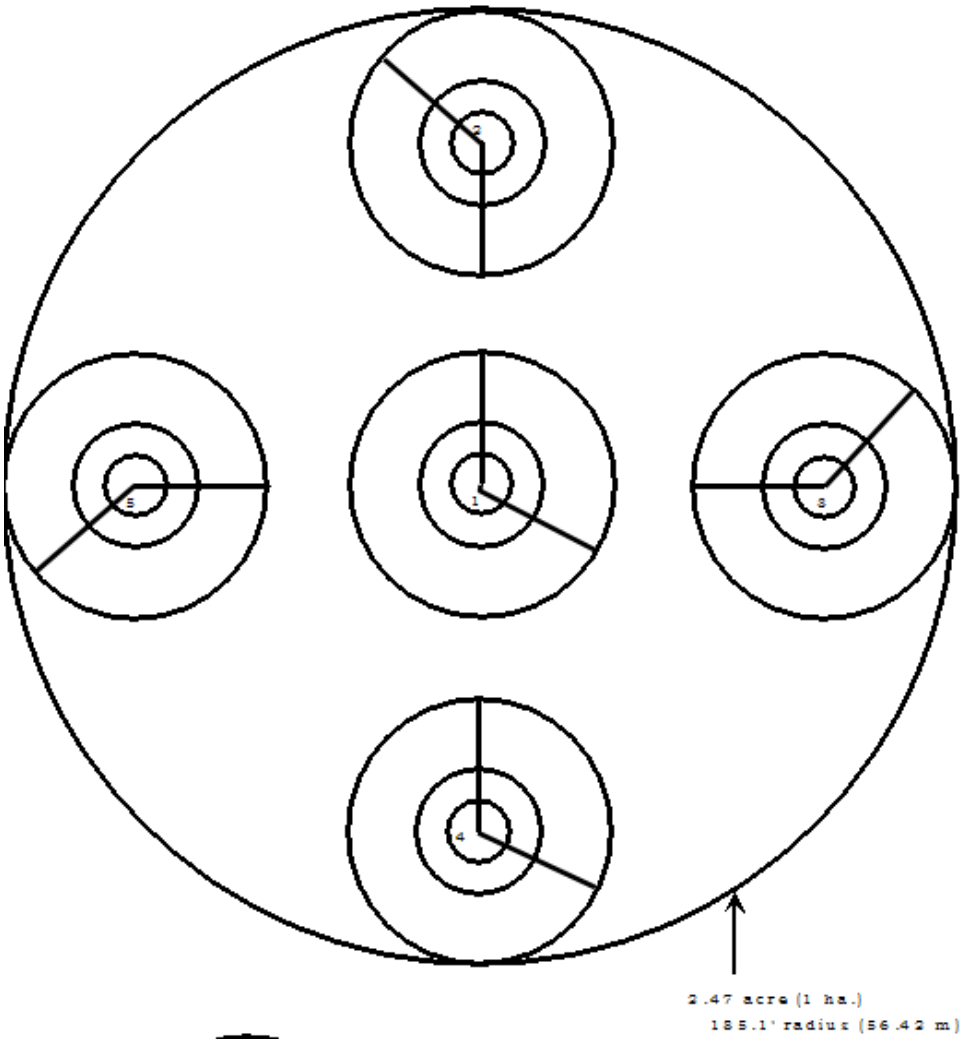
CURRENT VEGETATION SURVEY

SPATIAL DATA STANDARD



DOCUMENT REVISIONS

Revision	Date	Author	Description	Affected Pages
1.0	1/2017	Kevin Ford, Carolina Hooper, Roger Mills, Dana Baker-Allum, Maria Fiorella	1st released version.	All
1.1	3/17/2017	Dana Baker-Allum	Updated the State Records Administrator	7
1.2	3/29/2017	Dana Baker-Allum	Updated records retention schedule and privacy impact assessment.	8

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1. GENERAL INFORMATION

Dataset (Theme) Name: Current Vegetation Survey
Dataset (Feature Class): CVS_RES_DW_PT, CVS_RES_HWCL_PT, CVS_RES_NT_SPREF_PT, CVS_RES_NT_ST_PT, CVS_RES_TREE_PT, CVS_SMP_DWTRAN_ARC, CVS_SMP_PANEL_PT, CVS_SMP_PSUPLT_PT, CVS_SMP_PSUSUBPLT_PT, CVS_SRV_CC_POLY, CVS_SRV_SUBPLT_POLY

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Stewards	The State Data Steward is responsible for approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential privacy issues and ensuring that data is managed as a corporate resource. The state data steward coordinates with field office data stewards, the state data administrator, Geographic Information System (GIS) coordinators, and national data stewards. The state data steward also reviews geospatial metadata for completeness and quality.
GIS Technical Lead	The GIS Technical Lead works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the development of data standards. The GIS technical lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS technical lead works with data editors to make sure data is being input into the enterprise Spatial Database Engine (SDE) geodatabase consistently and in accordance with the established data standard. The GIS technical lead provides technical assistance and advice on GIS analysis, query, and display of the dataset.
State Data Administrator	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The state data administrator ensures that defined processes for development of data standards and metadata are followed, and that they are consistent and complete. The state data administrator is responsible for making data standards and metadata accessible to all users. The state data administrator also coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State Records Administrator	The State Records Administrator assists the state data steward to identify any privacy issues related to spatial data. The state records administrator also provides direction and guidance on data release and fees. The state records administrator also ensures that data has been classified under the proper records retention schedule and determines appropriate Freedom of Information Act category.

Table 1 Role and Responsibilities

1.2 FOIA CATEGORY

Public

1.3 RECORDS RETENTION SCHEDULE

The DRS/GRS/BLM Combined Records Schedule under Schedule 20/52a3 (Electronic Records/Geographic Information Systems) lists this theme as one of the system-centric themes that are significant for Bureau of Land Management (BLM)'s mission that must be permanently retained.

> "PERMANENT. Cutoff at the end of each Fiscal Year (FY), or, when significant changes and additions have been made, before and after the change. Use BLM 20/52a. Transfer to the National Archives every three years after cutoff. Under the instruction in 36 CFR 1235.44-50, or whichever guidance is in place at the time of the transfer. Submissions are full datasets and are in addition to, not replacements, of earlier submissions."

According to the DRS/GRS/BLM Records Schedules, Schedule 20 Item 52a3, the National Operations Center (NOC) is responsible for transfer to National Archives and Records Administration (NARA).

Oregon/Washington (OR/WA) BLM Guidebook for Management of Geospatial Data (v1) Section 15.2 - Corporate Data Online Archives prescribes:

> "Vector annual archives are retained online for 12 years. Each year, data that has reached 12 years old is copied off-line, to be retained until no longer needed (determined by data stewards and program leads), with format and readability maintained in a five (5) year "tech refresh" update cycle."

1.4 SECURITY/ACCESS/SENSITIVITY

The Current Vegetation Survey theme does not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the OR/WA BLM).

This data is not sensitive and there are no restrictions on access to this data either from within the BLM or external to the BLM.

There are no privacy issues or concerns associated with these data themes. A privacy impact assessment was submitted for this dataset on 2/15/2017.

1.5 KEYWORDS

Keywords used to locate this dataset include:

- BLM thesaurus keywords: Forest
- International Organization for Standardization (ISO) thesaurus keywords: Environment and

Conservation (environment), Biology and Ecology (biota)

- Additional Keywords: Forestry, Vegetation, PSU (Primary Sample Unit), CVS (Current Vegetation Survey), Trees, Condition Class, Hard Wood, Downed Wood, Permanent Inventory Plots

1.6 SUBJECT FUNCTION CODES

BLM Subject Function codes used to describe this dataset include:

5210 - Extensive Forest Inventories
5240 - Allowable Cut Planning

2. DATASET OVERVIEW

2.1 DESCRIPTION

The CVS is a set of permanent plots that are located on a fixed grid across all of Western Oregon BLM land. The measurement grid consists of transects with a plot located every 1.7 miles, in areas that are forested, or can be forested. Each plot has 5 sampling points that have nested sub-plots of different sizes. Different measurements are made on sub-plots of different sizes. The majority of the measurements are to record the size and characteristics of the tree species present. Measurements are also taken for dead trees, understory vegetation, down wood, noxious weeds etc.

The Current Vegetation Survey dataset represents spatial location and basic information about survey plots and subplot polygons, containing tree data, stumps, understory vegetation, and non-tally site point data; and downed wood line data for BLM owned lands in the state of Oregon as well as summary statistical tabular data.

The intent of the spatial CVS data is to set a benchmark of the vegetative condition on BLM lands, provide a basis for change estimation (i.e., trend analysis), and accommodate monitoring through remeasurement.

The 11 CVS spatial feature classes are:

1. CVS Resource Downed Wood Point (CVS_RES_DW_PT) Resource point data for downed wood pieces within plot area.
2. CVS Resource Hardwood Clump Point (CVS_RES_HWCL_PT) Resource measured data for stump-sprouting hardwood species sampled on the 1/100th acre fixed radius subplot.
3. CVS Non-tally Subplot Reference Trees Point (CVS_RES_NT_SPREF_PT) The non-tally site tree data contains specific measurements for non-tally trees found on the hectare subplot to serve as site trees when no suitable tally trees are available for this purpose.
4. CVS Resource Non-tally Site Tree Point (CVS_RES_NT_ST_PT) The non-tally subplot reference data contains specific measurements for non-tally trees or objects that are used to relocate established subplots when no suitable tally trees are available for that purpose.
5. CVS Resource Trees Point (CVS_RES_TREE_PT) The tree measurements contains measured data collected for live and dead trees using several different fixed radius subplot types that apply to a range of DBH classes.
6. CVS Sample Downed Wood Transects Line (CVS_SMP_DWTRAN_ARC) Instance of Sampling in the Activities group. The down woody material data contains measured data from the 51.1 foot down fuels linear transects.
7. CVS Sample Panel Point (CVS_SMP_PANEL_PT) Original randomized, non-biased CVS grid locations and ancillary data. Represents the actual location where the PSU was intended to be located.
8. CVS Sample Primary Sample Unit Point (CVS_SMP_PSUPLT_PT) Center points in Primary Sample Unit plots.
9. CVS Sample Primary Sample Unit Subplot Point (CVS_SMP_PSUSUBPLT_PT) Center points in Primary Sample Unit subplots.

10. CVS Survey Condition Class Polygon (CVS_SRV_CC_POLY) Condition Class area polygon.
11. CVS Survey Subplot Polygon (CVS_SRV_SUBPLT_POLY) Subplot area polygon.

The 19 CVS tabular datasets are:

1. CVS Accuracy Table (CVS_ACCURACY_TBL) The accuracy assessment table contains the results of the accuracy assessment of measured data for each district-level project.
2. CVS Condition Class Boundaries Table (CVS_CCBOUNDARIES_TBL) Data that is used to compute the proportion of each subplot that is represented by the condition class definition associated with the boundary data. Only data for Round 2 is in the table at this time.
3. CVS Condition Class Definitions Table (CVS_CCDEFINITIONS_TBL) The condition class definitions table contains the unique sets of delineating attributes that define the individual condition classes recorded for each plot.
4. CVS Condition Class Proportions Table (CVS_CCPROPORTIONS_TBL) The condition class proportions table stores the proportion of the area of a subplot type that is represented by the associated condition class definition. The proportion is calculated from overlays of the spatial data. The proportion record applies only to a single subplot type of a single subplot on a single PSU.
5. CVS Data Errors Table (CVS_DATAERRORS_TBL) The data errors table was where any validation errors or height recalculation utility errors were sent (errors in terms of deviations from the established rules of the data collection procedures or project-specific data limitations). Error records corrected were moved to the ErrorHistory table and any remaining records were removed, including warnings, leaving this table blank.
6. CVS Down Woody Material Course Table (CVS_DWMCOARSE_TBL) The coarse down woody material data table contains measured data from the 51.1 foot down fuels linear transects. Coarse material consists of individual pieces having an intersect diameter of 3.0” or more.
7. CVS Down Woody Material Fine Table (CVS_DWMFINES_TBL) The fine down woody material data table contains measured data from the 10-foot down fuels linear transects. Fine material consists of pieces from .25-0.9 inches, group tallied as diameter class 1 and pieces from 1.0-2.9 inches, group tallied as diameter class 2. This data was collected during the initial installation projects only (Round 1).
8. CVS Error History Table (CVS_ERRORHISTORY_TBL) This table definition is similar to the DataErrors table. The difference is that the error history table contains a record of every known error found in the CVS data (errors in terms of deviations from the established rules of the data collection procedures or project-specific data limitations) for which measurements did not exist as required. The errors identified here no longer exist in the database tables, however. The missing or erroneous data have been corrected or replaced through a local imputation process. Some records over time have been moved to other tables not described in this document. These tables have the same fields as the ErrorHistory table.
9. CVS Ground Cover Table (CVS_GNDCOVER_TBL) The ground cover data table contains vegetative and non-vegetative cover data from a ground layer and an aerial layer, measured along a sample plane consisting of five consecutive 10-foot linear

segments. This data was collected during the initial installation projects only (Round 1).

10. CVS Hard Wood Clumps Table (CVS_HWCLUMPS_TBL) The hardwood clump measurements table contains measured data for stump-sprouting hardwood species sampled on the 1/100th acre fixed radius subplot.
11. CVS Non-Tally Site Tree Data Table (CVS_NTSITEDATA_TBL) The non-tally site tree data table contains specific measurements for non-tally trees found on the hectare subplot to serve as site trees when no suitable tally trees are available for this purpose.
12. CVS Non-Tally Subplot Reference Data Table (CVS_NTSPREFS_TBL) The non-tally subplot reference data table contains specific measurements for non-tally trees or objects that are used to relocate established subplots when no suitable tally trees are available for that purpose.
13. CVS PSU Administration Table (CVS_PSUADMIN_TBL) The PSU administration table contains PSU identification, relocation, referencing and other administrative data.
14. CVS PSU Data Table (CVS_PSUDATA_TBL) The Primary Sample Unit data table contains mainly map location, political/administrative boundary and establishment data. This is the highest order table for CVS data (level 1). It stores a single row of information for each unique combination of project identifier (ProjectID) and PSU number (PSUNr). The subordinate data tables may be logically linked to this table using these two columns.
15. CVS PSU History Table (CVS_PSUHISTORY_TBL) The PSU history & tracking table is intended mainly for use in field project administration. It contains some redundant PSU classification data to assist in selecting or grouping plots for planning field projects. It tracks the land use classification associated with each PSU over time, including status of the plot with regard to any changes in ownership or land use designation. It may also contain records for grid locations that are near but just outside of BLM mapped boundaries.
16. CVS Stumps Table (CVS _STUMPS_TBL) The stump measurements data table contains measured data for stumps that display signs of root rot, sampled on the 0.189 and 1/24th acre fixed radius subplots.
17. CVS Subplot Data Table (CVS_SUBPLOTDATA_TBL) The subplot data table contains topographical, understory cover and classification data observed and reported at the subplot level. This is the only second order table (level 2) for CVS data. It stores five rows of information for each unique combination of project identifier (ProjectID) and PSU number (PSUNr), each with a different subplot number (SubplotNr). The subordinate data tables (level 3 tables, sections 2.3 through 2.11) may be logically linked to this table using these three columns.
18. CVS Tree Data Table (CVS_TREEDATA_TBL) The tree measurements table contains measured data collected for live and dead trees using several different fixed radius subplot types that apply to a range of DBH classes.
19. CVS Understory Vegetation Data Table (CVS_UNDERVEGDATA_TBL) The understory vegetation data table contains measured data for a project-specific list of vegetative indicator, noxious weed and general species sampled on the 1/24th acre fixed radius subplot.

2.2 USAGE

The Current Vegetation Survey is our source for timber volume, growth and yield for our allowable cut calculation, habitat data for the Northern Spotted Owls and Marbled Murrelet, and can be used to track regional changes in vegetation due to issues such as climate change or management activity. We have two complete measurements of the data so we can compute current estimates for a wide range of variables by using only the most recent measurements or we can estimate change by taking the difference between the two measurement periods.

This dataset is used extensively for Resource Management Plan analysis. The tree lists from the sub-plot data are entered into the Growth Model, which is subsequently used for the harvest model calculations, which form the basis of many analyses for the interdisciplinary team. All of the data can be used to generate 'regional change information' from one measurement to the next. The dataset is used to develop a non-biased estimate of gross and net inventory volume in western Oregon BLM. The dataset is used to estimate the growth rate of BLM forests across western Oregon or for a particular District. The dataset is intended for regional strategic analysis and should be used with caution when extrapolating results below the level of a BLM District.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this data set is the Deputy State Director, Resource Planning, Use and Protection. CVS is defined by and specific to BLM. The US Forest Service collected CVS up until 2005 when they switched to the Forest Inventory and Analysis permanent inventory program.

2.4 RELATIONSHIP TO OTHER DATASETS, DATABASES or FILES

The site index information collected from CVS has been entered into the FOIVEG_POLY feature class, for the FOI polygon in which the CVS plot resides.

2.5 DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the Oregon Data Framework (ODF). The ODF utilizes the concept of inheritance to define specific instances of data. All OR/WA resource-related data are divided into three general categories: Activities, Resources, and Boundaries. These general categories are broken into sub-categories that inherit spatial characteristics and attributes from their parent category. These sub-categories may be further broken into more specific groups until the basic data set that cannot be further sub-divided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated (those groups/categories above them do not contain actual data, but set parameters that all data of that type must follow).

See ODF, Figure 2, for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. For additional information about the ODF, contact the State Data Administrator. The State Data Administrator's contact information can be found at the following link: https://www.blm.gov/or/datamanagement/index.php

In the ODF, CVS is considered both a natural resource and an activity and is categorized as follows:

ODF
- Resources
  - Activities
    - Sampling
      - CVS_RES_DW_PT
      - CVS_RES_HWCL_PT
      - CVS_RES_NT_SPREF_PT
      - CVS_RES_NT_ST_PT
      - CVS_RES_TREE_PT
      - CVS_SMP_DWTRAN_ARC
      - CVS_SMP_PANEL_PT
      - CVS_SMP_PSUPLT_PT
      - CVS_SMP_PSUSUBPLT_PT
      - CVS_SRV_CC_POLY
      - CVS_SRV_SUBPLT_POLY

Figure 1 provides a graphic representation of the entities and hierarchical relationships.

2.6 RELATIONSHIP TO THE DEPARTMENT OF THE INTERIOR ENTERPRISE ARCHITECTURE - DATA RESOURCE MODEL

The Department of the Interior (DOI) Enterprise Architecture contains a component called the Data Resource Model. This model addresses the concepts of data sharing, data description, and data context. This data standard provides information needed to address each of those areas. Data sharing is addressed through complete documentation and simple data structures which make sharing easier. Data description is addressed through the section on Attribute Descriptions. Data context is addressed through the data organization and structure portions of this document. In addition, the DOI Data Resource Model categorizes data by use of standardized Data Subject Areas and Information Classes. For this data set, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

2.7 CVS DATA ORGANIZATION / STRUCTURE

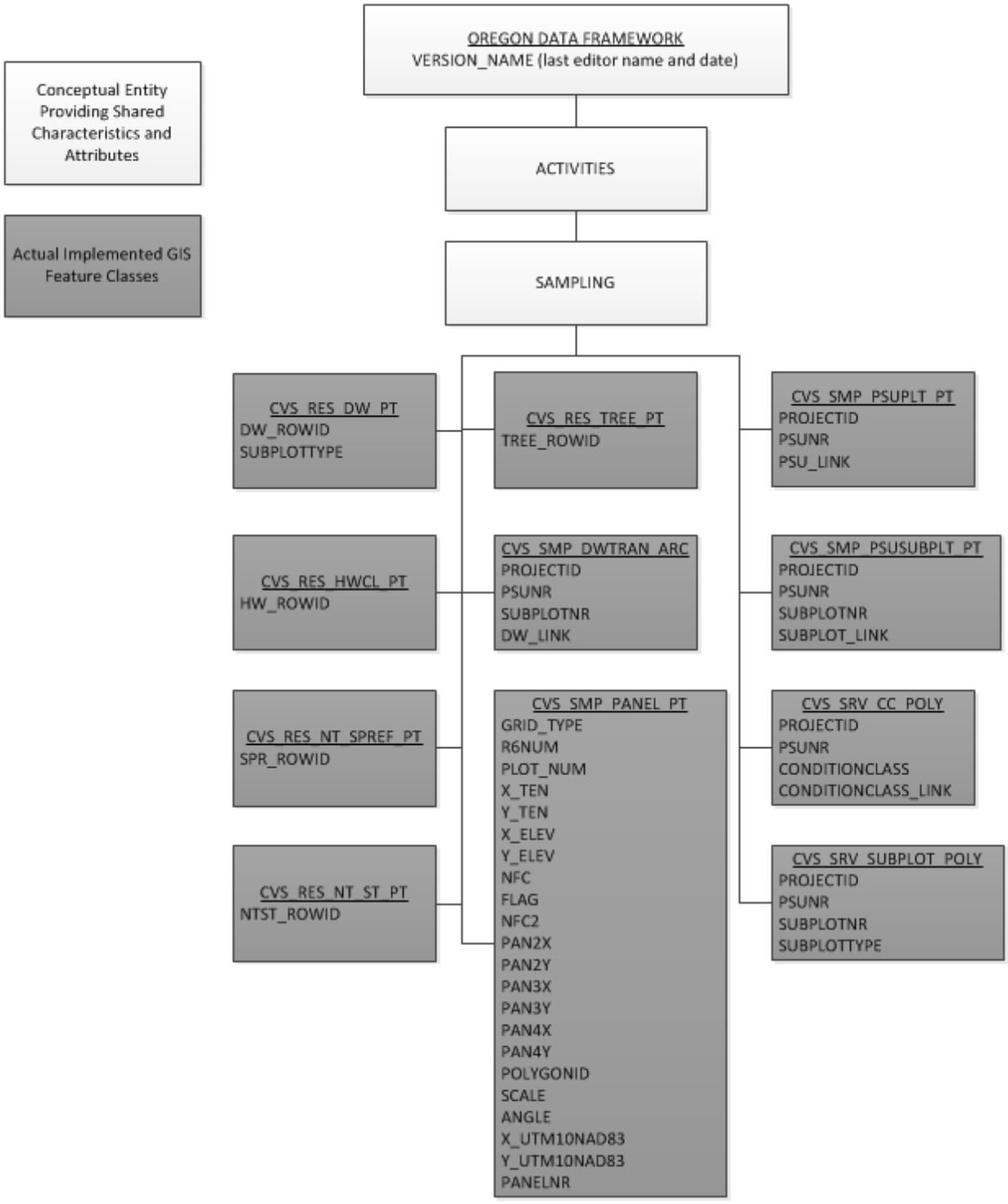

Figure 1 Data Organization Structure

3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

The CVS data is field collected with the highest degree of accuracy possible. As the intent of the inventory is to very exactly estimate change, many tree measurements are made to 1/10" of an inch. The location of the sub-plot centers is recorded with the best available level of Geographic Positioning System (GPS) available at the time of measurement. After the data has been field collected, there is a rigorous error checking, and error reconciliation process done, prior to the data being entered into a geodatabase. The data is not changed once it is entered into the geodatabase.

The accuracy of the CVS data has been documented in two reports: Tolerance Assessment Report Round 1 June 27, 2014 (CVS_Tolerance_Assessment_Report_Round1.pdf) and Tolerance Assessment Report Round 2 July 31, 2014 (CVS_Tolerance_Assessment_Report_Round2.pdf).

As each successive remeasurement is done in exactly the same location, over time the accuracy of the latest measurement should improve.

3.2 COLLECTION, INPUT, AND MAINTENANCE PROTOCOLS

There have been two complete field measurements of the CVS data. Each measurement cycle, known as 'rounds', is divided up into 4 separate measurement efforts. Each of these is called a 'panel'. The first round was installed between 1997 and 2001. The second round was remeasured between 2001 and 2011. There have been no measurements since 2011. After the data has been field collected, there is a rigorous error checking, and error reconciliation process done, prior to the data being entered into a geodatabase. The data is not changed once it is entered into the geodatabase. If errors are found in the data, they will be corrected in the next measurement cycle. A new round needs to go through the entire error checking process and error reconciliation process before it can be entered into the spatial geodatabase.

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

The first and second measurement of the CVS have gone through extensive error checking, reconciliation between measurements, and documentation when changes were made at the time when they were entered in the database. There is not any intent to update the measurement data until a new measurement is completed. When data errors are encountered, a note should be made for the next field crew to be aware of a potential problem.

3.4 STATEWIDE MONITORING

The first and second measurements are expected to remain static, and should not be available for editing in ArcGIS. The State Data Steward, assisted by the Lead GIS Specialist will periodically monitor data quality and integrity.

4. CVS SCHEMA (simplified)

General Information: Attributes are listed in the order they appear in the geodatabase feature class. The order is an indication of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Many (but not all) of the domains used in this data standard are available at the following web site:
http://www.blm.gov/or/datamanagement/index.php

For domains not listed at that site contact the State Data Administrator. The State Data Administrator's contact information can be found at the following link:
https://www.blm.gov/or/datamanagement/index.php

4.1 Current Vegetation Survey Feature Dataset

4.1.1 CVS_RES_DW_PT Edit Feature Class (Resource Down Wood Pieces Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
DW_ROWID	Long Integer	8		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.2 CVS_RES_HWCL_PT Edit Feature Class (Resource Hardwood Clumps Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
HW_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.3 CVS_RES_NT_SPREF_PT Edit Feature Class (Resource Non-Tally Subplot Reference Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
SPR_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.4 CVS_RES_NT_ST_PT Edit Feature Class (Resource Non-Tally Site Tree Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
NTST_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.5 CVS_RES_TREE_PT Feature Class (Resource Tree Data Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
TREE_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.6 CVS_SMP_DWTRAN_ARC Edit Feature Class (Sample Down Wood Arc)

Attribute Name	Data Type	Length	Default	Required?	Domain
PSUNR	Long Integer	8		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
TRNAZIMUTH	Short Integer	3		Yes	
PSU_ROWID	Long Integer	8		Yes	
SUBPLOT_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.7 CVS_SMP_PANEL_PT Feature Class (Sample Panels Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
GRID_TYPE	Short Integer	2		Yes	
R6NUM	Long Integer	8		Yes	
PLOT_NUM	Long Integer	8		Yes	
X_TEN	Float				
Y_TEN	Float				
X_ELEV	Float				
Y_ELEV	Float				
NFC	Text	3		No	dom_CVS_NFC
FLAG	Short Integer	1			
NFC2	Text	3		No	dom_CVS_NFC
PAN2X	Float				
PAN2Y	Float				
PAN3X	Float				
PAN3Y	Float				
PAN4X	Float				
PAN4Y	Float				
POLYGONID	Long				
SCALE	Float				
ANGLE	Float				
X_UTM10NAD83	Double				
Y_UTM10NAD83	Double				
PANELNR	Short Integer	2		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.8 CVS_SMP_PSUPLT_PT Feature Class (Sample Primary Sample Unit Plot Points)

Attribute Name	Data Type	Length	Default	Required?	Domain
PSU_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.9 CVS_SMP_PSUSUBPLT_PT Feature Class (Sample Subplot Point)

Attribute Name	Data Type	Length	Default	Required?	Domain
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOT_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.10 CVS_SRV_CC_POLY Edit Feature Class (Survey Condition Class Polygon)

Attribute Name	Data Type	Length	Default	Required?	Domain
CCDef_ROWID	Long Integer	8		Yes	
CONDITIONCLASS	Short Integer	1		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.1.11 CVS_SRV_SUBPLT_POLY Feature Class (Survey Subplot Polygon)

Attribute Name	Data Type	Length	Default	Required?	Domain
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	2		Yes	
SUBPLOT_ROWID	Long Integer	8		Yes	
VERSION_NAME *	String	50	InitialLoad	Yes	

* Values automatically generated

4.2 CVS Non-Spatial Tables (Publication Dataset Only)

4.2.1 CVS_ACCURACY_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
TABLENAME	String	25		Yes	
COLUMNNAME	String	25		Yes	
MATCHES	Short Integer	6		Yes	
PCTCORRECT	Double	8,4		Yes	

PCTERROR	Double	8,4		Yes	
TOTALOBS	Long Integer	6		Yes	
CLI95LOW	Double	5,4		Yes	
CLI95HIGH	Double	5,4		Yes	
PCTLOW	Short Integer	3		Yes	
PCTHIGH	Short Integer	3		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.2 CVS_CCBOUNDARIES_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
SUBPLOTTYPE	Short Integer	1		Yes	
LEFTAZIMUTH	Short Integer	3		Conditional	
CORNERAZIMUTH	Short Integer	3		Conditional	
CORNERDISTANCE	Short Integer	1		Conditional	
RIGHTAZIMUTH	Short Integer	3		Conditional	
TRNAZIMUTH	Short Integer	3		Conditional	
TRNSLOPEDIST	Short Integer	2		Conditional	
SLOPEPCT	Short Integer	3		Conditional	
CONDCLASS	Short Integer	1		Yes	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.3 CVS_CCDEFINITIONS_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
CONDCLASS	Short Integer	1		Yes	
CONDSTATUS	Short Integer	3		Yes	dom_CVS_CONDSTATUS
NS_REASON	Short Integer	2		Conditional	dom_CVS_NS_REASON
OWNERGROUP	Short Integer	2		Yes	dom_CVS_OWNERGROUP
FORESTTYPE	String	3		Conditional	dom_CVS_FORESTTYPE
STANDSIZE	Short Integer	1		Conditional	dom_CVS_STANDSIZE
PNFLANDUSE	Short Integer	2		Conditional	dom_CVS_PNFLANDUSE
GNDLANDCLASS	Short Integer	3		Conditional	dom_CVS_GNDLANDCLASS
STANDAGE	Short Integer	3		Conditional	
STRUCTURE	Short Integer	1		Conditional	dom_CVS_STRUCTURE

DISTURBANCE1	Short Integer	2		Conditional	dom_CVS_DISTURBANCE
DISTURBANCE2	Short Integer	2		No	dom_CVS_DISTURBANCE
DISTURBANCE3	Short Integer	2		No	dom_CVS_DISTURBANCE
PSUID	Long Integer	8		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.4 CVS_CCPROPORTIONS_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
CONDCLASSCALC	Short Integer	1		Yes	
TRNAZIMUTH	Short Integer	3		Conditional	
CCPROPORTION	Double	5,4		Yes	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.5 CVS_DATAERRORS_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
TABLENAME	String	25		Yes	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
LEVEL3ID	Long Integer	8		Yes	
ERRORNUMBER	Long Integer			Yes	
ERRORMESSAGE	String	255		Yes	
ERRORDETAIL	String	255		Yes	
ERRORDATE	Date			Yes	
REMARKS	String	255		No	
WARNINGFLAG	String	1		Yes	
ROW_ID	Long Integer	8		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
DBH	Double	4,1		Conditional	
OLDTAGNR	Short Integer	3		Conditional	
NEWTAGNR	Short Integer	3		Conditional	
CONDCLASS	Short Integer	1		Yes	

REMSTATUS	Short Integer	1		Conditional	dom_CVS_REMSTATUS
IDENT	String	50			

4.2.6 CVS_DWMCOARSE_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
CONDCLASS	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
TRNAZIMUTH	Short Integer	3		Yes	
TRNSLOPEDIST	Short Integer	2		Conditional	
SLOPEPCT	Short Integer	3		Yes	
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
DWDIAMETER	Double			Conditional	
LEDIAMETER	Short Integer	3		Yes	
SEDIAMETER	Short Integer	3		Yes	
DWLENGTH	Short Integer	3		Yes	
DWDECAYCLS	Short Integer	1		Yes	dom_CVS_DWDECAYCLS
WILDUSAGE	Short Integer	1		Conditional	dom_CVS_WILDUSAGE
REMARKS	String	3		No	dom_CVS_REMARKS
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.7 CVS_DWMFINES_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
TRNAZIMUTH	Short Integer	3		Yes	
DWDCLASS	Short Integer	1		Yes	dom_CVS_DWDCLASS
PIECECOUNT	Short Integer	3		Yes	
REMARKS	String	3		No	dom_CVS_REMARKS
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.8 CVS_ERRORHISTORY_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
TABLENAME	String	25		Yes	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
LEVEL3ID	Long Integer	8		Yes	
ERRORNUMBER	Long Integer			Yes	
ERRORMESSAGE	String	255		Yes	
ERRORDETAIL	String	255		Yes	
ERRORDATE	Date			Yes	
REMARKS	String	255			
WARNINGFLAG	String	1		Yes	
ROW_ID	Long Integer	8		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
RECORD	String	255			
DBH	Double	4,1		Conditional	
OLDTAGNR	Short Integer	3		Conditional	
NEWTAGNR	Short Integer	3		Conditional	
CONDCLASS	Short Integer	1		Yes	
REMSTATUS	Short Integer	1		Conditional	dom_CVS_REMSTATUS

4.2.9 CVS_GNDCOVER_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
COVERCODE	String	6		Yes	dom_CVS_COVERCODE
GCLENGTH	Short Integer	2		Yes	
POS1LENGTH	Short Integer	2		Yes	
POS2LENGTH	Short Integer	2		Yes	
POS3LENGTH	Short Integer	2		Yes	
POS4LENGTH	Short Integer	2		Yes	
POS5LENGTH	Short Integer	2		Yes	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	

ROW_ID	Long Integer	8		Yes	

4.2.10 CVS_HWCLUMPS_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
CONDCLASS	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
AZIMUTH	Short Integer	3		No	
SLOPEDIST	Double	4,1		Conditional	
SLOPEPCT	Short Integer	3		Yes	
OLDTAGNR	Short Integer	3		Conditional	
NEWTAGNR	Short Integer	3		Conditional	
REMSTATUS	Short Integer	1		Conditional	dom_CVS_REMSTATUS
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
HEIGHTAVG	Short Integer	2		Conditional	
CWNRATIO	Short Integer	2		Conditional	
CWNWIDTH	Short Integer	2		Conditional	
STEMCOUNT	Short Integer	3		Yes	
HWCLUMPNR	Short Integer	1		Conditional	
REMARKS1	String	3		No	dom_CVS_REMARKS
REMARKS2	String	3		No	dom_CVS_REMARKS
REMARKS3	String	3		No	dom_CVS_REMARKS
REMARKS4	String	3		No	dom_CVS_REMARKS
REMARKS5	String	3		No	dom_CVS_REMARKS
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.11 CVS_NTSITEDATA_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
CONDCLASS	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
AZIMUTH	Short Integer	3		No	
SLOPEDIST	Double	4,1		Conditional	
SLOPEPCT	Short Integer	3		Yes	

OLDTAGNR	Short Integer	3		Conditional	
NEWTAGNR	Short Integer	3		Conditional	
REMSTATUS	Short Integer	1		Conditional	dom_CVS_REMSTATUS
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
DBH	Double	4,1		Conditional	
HEIGHTAG	Short Integer	3		Conditional	
OFFSETDIST	Short Integer	3		Conditional	
TOTHEIGHT	Short Integer	3		No	
BHAGE	Short Integer	3		Conditional	
CWNRATIO	Short Integer	2		Conditional	
CWNCLASS	Short Integer	1		Yes	dom_CVS_CWNCLASS
REMNANTTREE	Short Integer	1		Conditional	dom_CVS_REMNANTTREE
IDPI1	Short Integer	3		No	
IDPI2	Short Integer	3		No	
IDPI3	Short Integer	3		No	
DEFECT	Short Integer	1		Conditional	dom_CVS_DEFECT
REMARKS1	String	3		No	dom_CVS_REMARKS
REMARKS2	String	3		No	dom_CVS_REMARKS
REMARKS3	String	3		No	dom_CVS_REMARKS
REMARKS4	String	3		No	dom_CVS_REMARKS
REMARKS5	String	3		No	dom_CVS_REMARKS
SITECCNR2	Short Integer	1		Conditional	
SITECCNR3	Short Integer	1		Conditional	
SITECCNR4	Short Integer	1		Conditional	
SITECCNR5	Short Integer	1		Conditional	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.12 CVS_NTSPREFS_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
AZIMUTH	Short Integer	3		No	
SLOPEDIST	Double	4,1		Conditional	
SLOPEPCT	Short Integer	3		Yes	
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
DBH	Double	4,1		Conditional	
REMARKS1	String	3		No	dom_CVS_REMARKS
REMARKS2	String	3		No	dom_CVS_REMARKS
REMARKS3	String	3		No	dom_CVS_REMARKS
REMARKS4	String	3		No	dom_CVS_REMARKS
REMARKS5	String	3		No	dom_CVS_REMARKS

PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.13 CVS_PSUADMIN_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
PHOTONR	String	20		Yes	
PHOTODATE	Date			Conditional	
PHOTOYEAR	Short Integer	4		Conditional	
POR1SPEC	String	6		Conditional	dom_CVS_SPECIES
POR1DBH	Short Integer	3		Conditional	
POR1AZM	Short Integer	3		Conditional	
POR1DIST	Short Integer	4		Conditional	
POR2SPEC	String	6		Conditional	dom_CVS_SPECIES
POR2DBH	Short Integer	3		Conditional	
POR2AZM	Short Integer	3		Conditional	
POR2DIST	Short Integer	4		Conditional	
RPSPREFNO	Short Integer	1		Conditional	
RPSPEC	String	6		Conditional	dom_CVS_SPECIES
RPDBH	Short Integer	3		Conditional	
RPAZM	Short Integer	3		Conditional	
RPDIST	Short Integer	4		Conditional	
SPREF1SPEC	String	6		Conditional	dom_CVS_SPECIES
SPREF1DBH	Double	4,1		Conditional	
SPREF1AZM	Short Integer	3		Conditional	
SPREF1DIST	Double	4,1		Conditional	
SPREF2SPEC	String	6		Conditional	dom_CVS_SPECIES
SPREF2DBH	Double	4,1		Conditional	
SPREF2AZM	Short Integer	3		Conditional	
SPREF2DIST	Double	4,1		Conditional	
SPREF3SPEC	String	6		Conditional	dom_CVS_SPECIES
SPREF3DBH	Double	4,1		Conditional	
SPREF3AZM	Short Integer	3		Conditional	
SPREF3DIST	Double	4,1		Conditional	
CREWTYPE	Short Integer	1		Yes	dom_CVS_CREWTYPE
QATYPE	String	1		Conditional	dom_CVS_QATYPE
CREW1	String	9		Conditional	
CREW2	String	9		No	
CREW3	String	9		No	
CREW4	String	9		No	
FDRPROGVER	String	4		No	
INSPDATE	Date			Conditional	
INSPCREW	String	25		Conditional	
PSUID	Long Integer	8		Yes	

ROW_ID	Long Integer	8		Yes	

4.2.14 CVS_PSUDATA_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SAMPLEKIND	Short Integer	1		Yes	dom_CVS_SAMPLEKIND
CURRDATE	Date			Yes	
PREVDATE	Date			Conditional	
STATE	Short Integer	2		Yes	dom_CVS_STATE
COUNTY	Short Integer	2		Yes	dom_CVS_COUNTY
DISTRICT	Short Integer	3		Yes	dom_CVS_DISTRICT
RESAREA	String	2		Yes	dom_CVS_RESAREA
PROCOWNER	Short Integer	3		Yes	dom_CVS_OWNER
ADMINOWNER	Short Integer	3		Yes	dom_CVS_OWNER
UTMZONE	Short Integer	2		Yes	
GISNORTHING	Long Integer	7		Yes	
GISEASTING	Long Integer	6		Yes	
GISPOINT	Short Integer	1		Yes	
GPSNORTHING	Long Integer	7		Conditional	
GPSEASTING	Long Integer	6		Conditional	
GPSPOINT	Short Integer	1		Conditional	
GPSUNITTYPE	Short Integer	1		Conditional	dom_CVS_GPSUNITTYPE
TOWNSHIP	String	4		Yes	
RANGE	String	4		Yes	
SECTIONNR	Short Integer	2		Yes	
ELEVATION	Long Integer			Yes	
FOI	Long Integer	8		Yes	
MURRELET	String	1			
NRSUBPLOTS	Short Integer	1		No	
SAMPLETYPE	String	8		Yes	
PANELNR	Short Integer	1		Yes	
COMMENTS	String	50		No	
PAGUIDE	String	3		Yes	dom_CVS_PAGUIDE
ROW_ID	Long Integer	8		Yes	

4.2.15 CVS_PSUHISTORY_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
GRIDINTNR	Long Integer	7		Yes	
INSTALLSTAT	Short Integer	1		Yes	dom_CVS_INSTALLSTAT
OCCNR	Short Integer	2		Yes	
OCC1DATE	Date			Conditional	
CURRDATE	Date			Yes	
PROCOWNER	Short Integer	3		Yes	dom_CVS_OWNER

ADMINOWNER	Short Integer	3		Yes	dom_CVS_OWNER
PANELNR	Short Integer	1		Yes	
NRSUBPLOTS	Short Integer	1		No	
DBSTATUS	String	1		Yes	
LUDESIGNATION	String	100		No	
GRIDINFO	String	500		No	
PSUID	Long Integer	8		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.16 CVS_STUMPS_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
IDPI1	Short Integer	3		No	
STEMCOUNT	Short Integer	3		Yes	
REMARKS1	String	3		No	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.17 CVS_SUBPLOTDATA_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
CONDCLASS	Short Integer	1		Yes	
SPSTATUS	Short Integer	1		Yes	dom_CVS_SPSTATUS
ASPECT	Short Integer	3		Conditional	
SLOPEPCT	Short Integer				
TOPOGPOS	Short Integer	1		Conditional	dom_CVS_TOPOGPOS
BLMECOCLASS	String	7		Yes	
PNWECOCLASS	String	6		Conditional	
ROOTDRTG	Short Integer	1		Conditional	dom_CVS_ROOTDRTG
PCTTREES	Short Integer	3		Conditional	
PCTSHRUBS	Short Integer	3		Conditional	
PCTFORBS	Short Integer	3		Conditional	
PCTGRAMS	Short Integer	3		Conditional	
PCTBARE	Short Integer	2		Conditional	
PCTTOTVEG	Short Integer	2		Conditional	

CONDDIST	String	8		Yes	dom_CVS_CONDDIST
COMMENTS	String	50		No	
NORTHING	Long Integer	7		Yes	
EASTING	Long Integer	6		Yes	
GPSFLAG	String	1		Conditional	dom_CVS_GPSFLAG
PSUID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.18 CVS_TREEDATA_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
CONDCLASS	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
AZIMUTH	Short Integer	3		No	
SLOPEDIST	Double	4,1		Conditional	
SLOPEPCT	Short Integer	3		Yes	
OLDTAGNR	Short Integer	3		Conditional	
NEWTAGNR	Short Integer	3		Conditional	
REMSTATUS	Short Integer	1		Conditional	dom_CVS_REMSTATUS
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
DBH	Double	4,1		Conditional	
GROWTHRAD5	Short Integer	3		Conditional	
GROWTHRAD10	Short Integer	3		Conditional	
HEIGHTAG	Short Integer	3		Conditional	
OFFSETDIST	Short Integer	3		Conditional	
TOTHEIGHT	Short Integer	3		No	
GROWTHHT5	Double	4,1		Conditional	
BHAGE	Short Integer	3		Conditional	
CWNRATIO	Short Integer	2		Conditional	
CWNCLASS	Short Integer	1		Yes	dom_CVS_CWNCLASS
REMNANTTREE	Short Integer	1		Conditional	dom_CVS_REMNANTTREE
CWNWIDTH	Short Integer	2		Conditional	
IDPI1	Short Integer	3		No	
IDPI2	Short Integer	3		No	
IDPI3	Short Integer	3		No	
DEFECT	Short Integer	1		Conditional	dom_CVS_DEFECT
SNAGDECAYCLS	Short Integer	1		Conditional	
WILDUSAGE	Short Integer	1		Conditional	dom_CVS_WILDUSAGE
SNAGDISAPPEAR	Short Integer	1		Conditional	dom_CVS_SNAGDISAPPEAR
STEMCOUNT	Short Integer	3		Yes	
MPFA	Short Integer	2		Conditional	
MOSSPCT	Short Integer	2		Conditional	

HWCLUMPNR	Short Integer	1		Conditional	
REMARKS1	String	3		No	dom_CVS_REMARKS
REMARKS2	String	3		No	dom_CVS_REMARKS
REMARKS3	String	3		No	dom_CVS_REMARKS
REMARKS4	String	3		No	dom_CVS_REMARKS
REMARKS5	String	3		No	dom_CVS_REMARKS
SITECCNR2	Short Integer	1		Conditional	
SITECCNR3	Short Integer	1		Conditional	
SITECCNR4	Short Integer	1		Conditional	
SITECCNR5	Short Integer	1		Conditional	
TBA	Double	13,8		No	
TPA	Double	5,2		No	
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
CCDEFID	Long Integer	10		Yes	
ROW_ID	Long Integer	8		Yes	

4.2.19 CVS_UNDERVEGDATA_TBL Table

Attribute Name	Data Type	Length	Default	Required?	Domain
PROJECTID	Long Integer	8		Yes	
PSUNR	Long Integer	8		Yes	
OCCNR	Short Integer	2		Yes	
SUBPLOTNR	Short Integer	1		Yes	
SUBPLOTTYPE	Short Integer	1		Yes	
VEGCODE	Short Integer	2		Yes	dom_CVS_VEGCODE
SPECIESCODE	String	6		Yes	dom_CVS_SPECIES
HEIGHTAVG	Short Integer	2		Conditional	
PCTCOVER	Short Integer	2		Required	
REMARKS1	String	3		No	dom_CVS_REMARKS
PSUID	Long Integer	8		Yes	
SUBPLOTID	Long Integer	8		Yes	
ROW_ID	Long Integer	8		Yes	

5. PROJECTION AND SPATIAL EXTENT

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM OR/WA, bordered on the North by Latitude 49.5, on the South by Latitude 41.5, on the East by Longitude -116 and on the West by Longitude -125.

6. SPATIAL ENTITY CHARACTERISTICS

CVS_RES_DW_PT
Description: Instance of Sampling in the Activities group. Downed wood within plot area.
Geometry: Point; scattered small areas.
Topology: CVS_RES_DW_PT must be properly inside CVS_SRV_CC_POLY.
Integration Requirements: None.

CVS_RES_HWCL_PT
Description: Instance of Sampling in the Activities group. Measured data for stump-sprouting hardwood species sampled on the 1/100th acre fixed radius subplot.
Geometry: Point; scattered small areas.
Topology: Yes. CVS_RES_HWCL_PT must be properly inside CVS_SRV_CC_POLY.
Integration Requirements: None.

CVS_RES_NT_SPREF_PT
Description: Instance of Sampling in the Activities group. The non-tally site tree data contains specific measurements for non-tally trees found on the hectare subplot to serve as site trees when no suitable tally trees are available for this purpose.
Geometry: Point; scattered small areas.
Topology: No
Integration Requirements: None.

CVS_RES_NT_ST_PT
Description: Instance of Sampling in the Activities group. The non-tally subplot reference data contains specific measurements for non-tally trees or objects that are used to relocate established subplots when no suitable tally trees are available for that purpose.
Geometry: Point; scattered small areas.
Topology: No
Integration Requirements: None.

CVS_RES_TREE_PT
Description: Instance of Sampling in the Activities group. The tree measurements contains measured data collected for live and dead trees using several different fixed radius subplot types that apply to a range of DBH classes.
Geometry: Point; scattered small areas.
Topology: Yes. CVS_RES_TREE_PT must be properly inside CVS_SRV_CC_POLY.

Integration Requirements: None.

CVS_SMP_DWTRAN_ARC
Description: Instance of Sampling in the Activities group. The down woody material data contains measured data from the 51.1 foot down fuels linear transects.
Geometry: Line, scattered small areas.
Topology: Yes. CVS_SMP_DWTRAN_ARC must not self- intersect or self-overlap.
Integration Requirements: None.

CVS_SMP_PANEL_PT
Description: Instance of Sampling in the Activities group. Original randomized, non-biased CVS grid locations and ancillary data. Represents the actual location where the PSU was intended to be located.
Geometry: Point, scattered small areas.
Topology: None.
Integration Requirements: None.

CVS_SMP_PSUPLT_PT
Description: Instance of Sampling in the Activities group. Center points in Primary Sample Unit plots.
Geometry: Point, scattered small areas.
Topology: Yes. CVS_SMP_PSUPLT_PT must coincide with CVS_SMP_PSUSUBPLT_PT.
Integration Requirements: None.

CVS_SMP_PSUSUBPLT_PT
Description: Instance of Sampling in the Activities group. Center points in Primary Sample Unit subplots.
Geometry: Point, scattered small areas.
Topology: No.
Integration Requirements: None.

CVS_SRV_CC_POLY
Description: Instance of Sampling in the Activities group. Condition Class area polygon.
Geometry: Polygon, scattered small areas.
Topology: Yes. CVS_SRV_CC_POLY must not overlap.
Integration Requirements: None.

CVS_SRV_SUBPLT_POLY
Description: Instance of Survey in Activities group. Subplot area polygon.
Geometry: Polygon, scattered small areas.
Topology: Yes. CVS_SRV_SUBPLT_POLY must contain one point from CVS_SMP_PSUSUBPLT_PT. In addition, CVS_SRV_SUBPLT_POLY must cover each other (with) CVS_SRV_CC_POLY.
Integration Requirements: None.

7. ATTRIBUTE CHARACTERISTICS AND DEFINITION (In alphabetical order)

7.1 ADMINOWNER

Geodatabase Name	ADMINOWNER
BLM Structured Name	Administrative_Owner_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL, CVS_PSUHISTORY_TBL
Definition	BLM Oregon District code of the administrative owner of the land on which the principal subplot of the PSU falls.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_OWNER
Data Type	Short Integer (3)

7.2 ANGLE

Geodatabase Name	ANGLE
BLM Structured Name	
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	Unknown definition. Value is zero.
Required/Optional	Optional.
Domain (Valid Values)	No Domain
Data Type	Float

7.3 ASPECT

Geodatabase Name	ASPECT
BLM Structured Name	Aspect_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	Predominant direction that a subplot faces. This is a required field for all installed subplots (SpStatus of 1 to 4). It must be left NULL for uninstalled subplots.
Required/Optional	Conditional
Domain (Valid Values)	No Domain Examples: 150, 244, 127
Data Type	Short Integer (3)

7.4 AZIMUTH

Geodatabase Name	AZIMUTH
BLM Structured Name	Azimuth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_TREEDATA_TBL,
Definition	Azimuth in degrees measured from the subplot center to the center of the base of the tree, clump, stump, stake or object being used as a reference. Valid values may range from 1 to 360.
Required/Optional	Optional
Domain (Valid Values)	No Domain Examples: 150, 203, 346
Data Type	Short Integer (3)

7.5 BHAGE

Geodatabase Name	BHAGE
BLM Structured Name	Breast_Height_Age_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL, CVS_NTSITEDATA_TBL
Definition	Breast height age of a tree. This field is required for growth sample trees and for all site trees and age sample trees.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.6 BLMECOCLASS

Geodatabase Name	BLMECOCLASS
BLM Structured Name	BLM_Ecoclass_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	BLM Ecoclass code representative of a single subplot number.
Required/Optional	Required
Domain(Valid Values)	No Domain Examples: “CHS156”, “CHF142”
Data Type	String (7)

7.7 CCDEFID

Geodatabase Name	CCDEFID
BLM Structured Name	Condition_Class_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL, CVS_CCPROPORTIONS, CVS_DWMCOARSE_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_SUBPLOTDATA_TBL, CVS_TREEDATA_TBL
Definition	Unique condition class identifier. System-generated code used to link the vegetative data directly to the condition class definitions table.
Required/Optional	Required
Domain (Valid Values)	No Domain Examples: 8103403, 8103405
Data Type	Long Integer (10)

7.8 CCDEF_ROWID

Geodatabase Name	CCDEF_ROWID
BLM Structured Name	Conditions_Class_Row_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_SRV_CC_POLY
Definition	Primary key for CVS_SRV_CC_POLY.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.9 CCPROPORTION

Geodatabase Name	CCPROPORTION
BLM Structured Name	Conditions_Class_Proportions_Number
Inheritance	Not Inherited
Feature Class Use	CVS_CCPROPORTIONS_TBL
Definition	Proportion of subplot type area assigned to a specific condition class. Values may range from 0.0001 to 1.0000
Required/Optional	Required

Domain (Valid Values)	None.
Data Type	Double (5,4)

7.10 CLI95HIGH

Geodatabase Name	CLI95HIGH
BLM Structured Name	Accuracy_High_Confidence_Interval_Number
Inheritance	Not inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Upper limit of the accuracy 95% confidence interval. This field is automatically populated by the accuracy assessment procedure. Values may range from 0.0000 to 1.0000.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Double (5,4)

7.11 CLI95LOW

Geodatabase Name	CLI95LOW
BLM Structured Name	Accuracy_Low_Confidence_Interval_Number
Inheritance	Not Inherited
Feature Class Use	Accuracy
Definition	Lower limit of the accuracy 95% confidence interval. This field is automatically populated by the accuracy assessment procedure. Values may range from 0.0000 to 1.0000.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Double (5,4)

7.12 COLUMNNAME

Geodatabase Name	COLUMNNAME
BLM Structured Name	Column_Name_Text
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	This field contains the name of a specific CVS data table column. It is used in conjunction with the TableName column to identify the column

	with which the accuracy assessment statistics are associated.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (25)

7.13 COMMENTS

Geodatabase Name	COMMENTS
BLM Structured Name	Comments_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL, CVS_SUBPLOTDATA_TBL
Definition	A text field provided to the user to allow general comments regarding a specific record. This is an optional field. It may be used for all projects.
Required/Optional	Optional
Domain (Valid Values)	None
Data Type	String (50)

7.14 CONDCLASS

Geodatabase Name	CONDCLASS
BLM Structured Name	Condition_Class_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL, CVS_CCDEFINITIONS_TBL, CVS_CCPROPORTIONS, CVS_DATAERRORS_TBL, CVS_DWMCOARSE_TBL, CVS_ERRORHISTORY_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_SUBPLOTDATA_TBL, CVS_TREEDATA_TBL
Definition	Condition class represents a combination of several specific area and stand condition attributes. Each unique set of these attributes that exists within the PSU is assigned a unique sequential integer value starting at 1. Condition class 1 is assigned to the set of delineating attributes that occur at the center of the principal subplot used for PSU establishment, which is usually subplot 1. Additional condition classes are defined as they are encountered on the PSU. In the CCDefinitions table, the combination of *ProjectID*, *PSUNr* and *CondClass* create a unique identifier. The value of *Row_ID* is unique for each record in this table. It is used link the condition class definition record to each of the subordinate tables and is called *CCDefID* in these subordinate tables. For CVS_CCBOUNDARIES_TBL, CVS_DWMCOARSE_TBL,

	CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_SUBPLOTDATA_TBL, and CVS_TREEDATA_TBL tables, the value of CondClass must match the value of CondClass in an existing Condition Class Definition record having the same Project ID and PSU number. The CVS_CCDEFINITIONS_TBL table may contain a condition class for which there is no corresponding level 3 data. For example, a non-forested condition such as an improved road or a large rock formation would not have any trees or qualified vegetation to tally. In this case there may still be records in the CVS_CCBOUNDARIES_TBL that describe any intersection(s) created by a change in condition class.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.15 CONDCLASSCALC

Geodatabase Name	CONDCLASSCALC
BLM Structured Name	Condition_Class_Spatial_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_CCPROPORTIONS, CVS_SRV_CC_POLY
Definition	Condition class represents a combination of several specific area and stand condition attributes. Each unique set of these attributes that exists within the PSU is assigned a unique sequential integer value starting at 1. Condition class 1 is assigned to the set of delineating attributes that occur at the center of the principal subplot used for PSU establishment, which is usually subplot 1. Additional condition classes are defined as they are encountered on the PSU. This attribute is the spatial data version of CONDCLASS found in the data tables. It is identified from the digitized plot maps.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.16 CONDDIST

Geodatabase Name	CONDDIST
BLM Structured Name	Condition_Disturbance_Identifier

Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	Codes used for the initial installation projects to describe the present vegetative condition and past disturbance(s) that affect the subplot area.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_CONDDIST
Data Type	String (8)

7.17 CONDSTATUS

Geodatabase Name	CONDSTATUS
BLM Structured Name	Condition_Status_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	Condition class represents a combination of several specific area and stand condition attributes. Each unique set of these attributes that exists within the PSU is assigned a unique sequential integer value starting at 1. Condition class 1 is assigned to the set of delineating attributes that occur at the center of the principal subplot used for PSU establishment, which is usually subplot 1. Additional condition classes are defined as they are encountered on the PSU.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_CONDSTATUS
Data Type	Short Integer (3)

7.18 CORNERAZIMUTH

Geodatabase Name	CORNERAZIMUTH
BLM Structured Name	Corner_Azimuth_Number
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL
Definition	Azimuth from the subplot center to the corner point of an angled line that intersects a fixed radius subplot and falls inside the circumference of the subplot. Used when identifying a change in condition class for the subplot. This is a required field for any fixed radius boundary record that has CornerDistance recorded.
Required/Optional	Conditional
Domain (Valid Values)	None

Data Type	Short Integer (3)

7.19 CORNERDISTANCE

Geodatabase Name	CORNERDISTANCE
BLM Structured Name	Corner_Distance_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL
Definition	Distance from the subplot center to the corner point of an angled line that intersects a fixed radius subplot and falls inside the circumference of the subplot. Used when identifying a change in condition class for the subplot. This is a required field for any fixed radius boundary record that has CornerAzimuth recorded.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.20 COUNTY

Geodatabase Name	COUNTY
BLM Structured Name	County_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	County code of the state & county within which the principal subplot of the PSU falls.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_COUNTY
Data Type	Short Integer (2)

7.21 COVERCODE

Geodatabase Name	COVERCODE
BLM Structured Name	Cover_Code
Inheritance	Not Inherited
Feature Class Use	CVS_GNDCOVER_TBL
Definition	Code used to identify the type or class of ground or aerial cover observed on the ground cover linear transect.

Required/Optional	Required
Domain (Valid Values)	dom_CVS_COVERCODE
Data Type	String (6)

7.22 CREW1 (2) (3) (4)

Geodatabase Name	CREW1 (2) (3) (4)
BLM Structured Name	Field_Crew_1_Text (2) (3) (4)
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Name or initials of the field crew person(s) assigned as estimators or recorders for the PSU data collection process. The Crew1 field is required for any PSU that is visited in the field. The remaining three fields are to be used as needed. If used, they should be used in numerical order. Field can include data for federal staff and contractors.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	String (9)

7.23 CREWTYPE

Geodatabase Name	CREWTYPE
BLM Structured Name	Crew_Type_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Code to identify the type of crew used for installation.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_CREWTYPE
Data Type	Short Integer (1)

7.24 CURRDATE

Geodatabase Name	CURRDATE
BLM Structured Name	Current_Date
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL, CVS_PSUHISTORY_TBL

Definition	Ten-character date in the form of MM/DD/YYYY. This is the date that the PSU measurements were taken & recorded.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Date

7.25 CWNCLASS

Geodatabase Name	CWNCLASS
BLM Structured Name	CROWN_CLASS
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL, CVS_NTSITEDATA_TBL
Definition	Crown class, an estimate of crown position of the tree relative to the surrounding canopy.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_CWNCLASS
Data Type	Short Integer (1)

7.26 CWNRATIO

Geodatabase Name	CWNRATIO
BLM Structured Name	Current_Vegetation_Survey_Crown_Ration_Number
Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	Crown ratio; the ratio of live green crown to the total length of the tree. This field is required for: 1) All live individual tally conifers 1.0” DBH and larger 2) All non- tally site trees (VC93) 3) All live individual tally hardwoods 5.0” DBH and larger 4) Group tally conifer saplings (VC16) 5) Hardwood clumps (VC60)
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.27 CWNWIDTH

Geodatabase Name	CWNWIDTH
BLM Structured Name	CROWN_WIDTH_MEASURE
Inheritance	CVS_TREEDATA_TBL, CVS_HWCLUMPS_TBL
Feature Class Use	CVS_TREES_POINT, CVS_CVS_HWCLUMPS_TBL_POINT
Definition	Tree crown width measured to the nearest foot, horizontally at the widest point of the crown. Values range from 01 to 99. This field is required for all growth sample trees, tally site trees and hardwood clumps. It should be left blank (null) for all other observations.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.28 DBH

Geodatabase Name	DBH
BLM Structured Name	Diameter_at_Breast_Height_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_TREEDATA_TBL
Definition	Tree diameter outside bark at breast height (4.5 feet), measured to the nearest 1/10th of an inch. The DBH of an individual tally tree must agree with the associated subplot type. Individual non-tally site trees are always associated with subplot type 2 (the hectare). There is no upper DBH limit for these trees other than the maximum DBH expected from the entire sample. The lower limit should be no less than 5.0” although, in some cases based on species, the lower limit for age of a site tree may be as little as 30 years. In this case the DBH might be smaller than 5.0”. This field is required for all non-tally reference trees, non-tally site trees and live and dead tree records stored in the respective tables.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Double (4,1)

7.29 DBSTATUS

Geodatabase Name	DBSTATUS
BLM Structured Name	Database_Status_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUHISTORY_TBL
Definition	A simple Y/N code to indicate if there is data stored in the BLM CVS master database that corresponds to the PSU number of a row in the PSU History table. If a set of field measurements exists in the BLM Oregon CVS database for the PSU number (GridIntNr), occasion number (OccNr) and survey date (CurrDate) of a specific administrative owner, this field is set to "Y". If the PSU data was collected but is not yet stored in the database, this field is set to "N". This field is left null for all other scenarios (most frequently, if a record identifies a grid intersection near an administrative boundary but falls just outside the boundary, i.e., a grid intersection not eligible for installation).
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (1)

7.30 DEFECT

Geodatabase Name	DEFECT
BLM Structured Name	Defect_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	Percent of non-sound and/or missing wood fiber for the standing portion of an individual live or dead tree, estimated to the nearest 10 percentile. This field is required for individual live or dead trees 5.0" DBH or larger having at least one insect, disease or physical injury code. It is left null in all other cases.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_DEFECT
Data Type	Short Integer (1)

7.31 DISTRICT

Geodatabase Name	DISTRICT
BLM Structured Name	District_Name_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Tree crown width measured to the nearest foot, horizontally at the widest point of the crown.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_DISTRICT
Data Type	Short Integer (3)

7.32 DISTURBANCE (1)(2)(3)

Geodatabase Name	DISTURBANCE(1)(2)(3)
BLM Structured Name	Disturbance_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	Denotes the presence of any of a number of natural or man-made disturbances affecting the accessible land condition classes (Condition Status 1 or 2). Disturbance is not used to delineate a change in condition class. The first disturbance field, Disturbance1, is a required field for all projects whenever the value of the column CondStatus is 1 (Accessible Forest Land). Only one disturbance was identified during the initial installation surveys (CVS3.x and earlier). When CondStatus is 1 for remeasurement projects (CVS4.x and later), the other two disturbance fields will only be populated if two or more additional disturbances have been identified. Code values vary based on individual survey.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_DISTURBANCE
Data Type	Short Integer (2)

7.33 DWDCLASS

Geodatabase Name	DWDCLASS
BLM Structured Name	Downed_Wood_Diameter_Class_Number
Inheritance	Not Inherited

Feature Class Use	CVS_DWMFINES_TBL
Definition	Diameter class of down woody fine pieces. Down woody pieces stored in the DWMFines table are group tallied using two diameter classes. A value of 1 represents pieces in the 0.5-1.9 inch range while a value of 2 is used for fine pieces in the 1.0-2.9 inch class.
Required/Optional	This is a required field.
Domain (Valid Values)	dom_CVS_DWDCLASS
Data Type	Short Integer (1)

7.34 DWDECAYCLS

Geodatabase Name	DWDECAYCLS
BLM Structured Name	Downed_Wood_Decay_Class_Number
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL
Definition	Decay class for down woody pieces 3.0” and larger
Required/Optional	Required
Domain (Valid Values)	dom_CVS_DWDECAYCLS
Data Type	Short Integer (1)

7.35 DWDIAMETER

Geodatabase Name	DWDIAMETER
BLM Structured Name	Downed_Wood_Diameter_Number
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL
Definition	Diameter at the point of intersection for an individual coarse down woody piece. This is a required field with a single exception; down woody piles (VC71) should not have a DWDiameter entry. Diameter is measured at the point of intersection with the linear transect and recorded to the nearest inch.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Double

7.36 DWLENGTH

Geodatabase Name	DWLENGTH
BLM Structured Name	Downed_Wood_Length_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL
Definition	Length in feet of the coarse down woody piece. A minimum piece length of three feet was established with Field Procedures Version 4.1 in 2004. All coarse pieces from earlier surveys that failed to meet this requirement have been deleted from the table.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.37 DW_ROWID

Geodatabase Name	DW_ROWID
BLM Structured Name	Downed_Wood_Piece_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_RES_DW_PT
Definition	Primary Key for CVS_RES_DW_PT. Relative row number (system-generated).
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.38 EASTING

Geodatabase Name	EASTING
BLM Structured Name	Easting_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	Calculated or measured UTM easting coordinate for the subplot. This attribute is system-generated, based on the UTM entries available for the PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain

Data Type	Long Integer (6)

7.39 ELEVATION

Geodatabase Name	ELEVATION
BLM Structured Name	Elevation_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Elevation above sea level of the PSU, recorded to the nearest foot.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (4)

7.40 ERRORDATE

Geodatabase Name	ERRORDATE
BLM Structured Name	Error_Date
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	Date stamp of when the validation process encountered the specific error. It is system-generated, automatically assigned to the error record by the validation, reconciliation, or height recalculation procedures.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Date

7.41 ERRORDETAIL

Geodatabase Name	ERRORDETAIL
BLM Structured Name	Error_Detail_Text
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	A literal string providing a list of columns and associated values from a record in error, used to aid in identifying the problem. It is system-generated, automatically assigned to the error record by the validation, reconciliation, or height recalculation procedures.
Required/Optional	Required

Domain (Valid Values)	No Domain
Data Type	String (255)

7.42 ERRORMESSAGE

Geodatabase Name	ERRORMESSAGE
BLM Structured Name	Error_Message_Text
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	Literal message attached to each error record in the error tables, describing the nature of the error. It is system-generated, automatically assigned to the error record by the validation, reconciliation, or height recalculation procedures.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (255)

7.43 ERRORNUMBER

Geodatabase Name	ERRORNUMBER
BLM Structured Name	Error_Number
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	An integer number used for cross-referencing and indexing of validation error conditions. Values less than 800 are associated with the Validation routine. The 800 values are associated with the Height Recalculation utility. Values of 2000 and greater are associated with the Reconciliation routine. It is system-generated, automatically assigned to the error record by the validation, reconciliation, or height recalculation procedures. Its main purpose is to speed up error processing.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer

7.44 FDRPROGVER

Geodatabase Name	FDRPROGVER

BLM Structured Name	Field_Data_Recorder_Program_Version_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Field data recorder data entry program version identifier. This field is required for any PSU that is visited in the field that had data collected using the field data recorder software during a remeasurement project. Automatically generated by the FDR data entry program. It was not included in the initial installation project software so it should be left NULL in this case (SampleType CVS3.x and earlier).
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (4)

7.45 FLAG

Geodatabase Name	FLAG
BLM Structured Name	Flag_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	Indicates if the plot occurs on two National Forest ownerships.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.46 FOI

Geodatabase Name	FOI
BLM Structured Name	Forest_Operations_Inventory_Identifier
Inheritance	FOIVEG_POLY
Feature Class Use	CVS_PSUDATA_TBL
Definition	Forest Operations Inventory unit code within which the PSU is located.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer

7.47 FORESTTYPE

Geodatabase Name	FORESTTYPE
BLM Structured Name	Forest_Type_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	The third of seven area or stand condition attributes that are used to delineate changes in condition class, Forest type is a numeric code used to identify the tree species that represents the plurality of stocking for all dominant or codominant live trees in the condition class. This is a required field for all projects when the value of the column CondStatus is 1 (Accessible Forest Land).
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_FORESTTYPE
Data Type	String (3)

7.48 GCLENGTH

Geodatabase Name	GCLENGTH
BLM Structured Name	Ground_Cover_Length_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_GNDCOVER_TBL
Definition	Total length of the 50 foot transect covered by the associated ground cover code. This subplot type was discontinued after the initial installation. It is computed as the sum of the five position length values, Pos1Length through Pos5Length. Ground cover data was only collected during the initial installation projects.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.49 GISEASTING

Geodatabase Name	GISEASTING
BLM Structured Name	GIS_Easting_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL

Definition	Calculated UTM easting coordinate for Round 1. For Round 2 it would be the Calculated UTM easting coordinate for Occasion 1 plots (new install). For Remeasurement plots it is the previous GIS data if no GPS data in Round 1 or GPS data from Round 1. It is a calculated value based on a fixed grid intersection.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (6)

7.50 GISNORTHING

Geodatabase Name	GISNORTHING
BLM Structured Name	GIS_Northing_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Calculated UTM easting coordinate for Round 1. For Round 2 it would be the Calculated UTM northing coordinate for Occasion 1 plots (new install). For Remeasurement plots it is the previous GIS data if no GPS data in Round 1 or GPS data from Round 1. It is a calculated value based on a fixed grid intersection.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (7)

7.51 GISPOINT

Geodatabase Name	GISPOINT
BLM Structured Name	GIS_Point_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Contains the subplot number used as the reference point for the GIS-based (calculated) UTM coordinates for Round 1 and appropriate Point for Round 2. It is always set to one for Round 1, the center subplot of the PSU at the CVS grid intersection point, regardless of whether or not the subplot has actually been installed.
Required/Optional	Required
Domain (Valid Values)	No Domain

Data Type	Short Integer (1)

7.52 GNDLANDCLASS

Geodatabase Name	GNDLANDCLASS
BLM Structured Name	Ground_Land_Class_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	The Ground Land Class code is a non-delineating land use attribute used to further describe the condition class. This is a required field for all projects when the value of the column CondStatus is 1 (Accessible Forest Land). For more information on legal coding for condition class records, see the column description for condition status.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_GNDLANDCLASS
Data Type	Short Integer (3)

7.53 GPSEASTING

Geodatabase Name	GPSEASTING
BLM Structured Name	GPS_Easting_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Average UTM easting coordinate based on multiple readings taken at one of the five subplot centers on the PSU. This is a required field for remeasurement projects. It is a measured reading taken with the GPS unit identified in the *GPSUnitType* column. Normally, GPSEasting will be null for the initial installation data but some records might actually contain a value from the subsequent remeasurement project. When present for any project data, the value must first fall within the legal range of easting values stored in the validation lookup table for UTM coordinates.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Long Integer (6)

7.54 GPSFLAG

Geodatabase Name	GPSFLAG
BLM Structured Name	GPS_Flag_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	Indicates whether or not the UTM coordinates stored in Northing and Easting fields for the subplot are GPS (measured) or GIS based (calculated). This field is required for all established subplots.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_GPSFLAG
Data Type	String (1)

7.55 GPSNORTHING

Geodatabase Name	GPSNORTHING
BLM Structured Name	GPS_Northing_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Average UTM northing coordinate based on multiple readings taken at one of the five subplot centers on the PSU. This is a required field for remeasurement projects. It is a measured reading taken with the GPS unit identified in the *GPSUnitType* column. Normally, GPSNorthing will be null for the initial installation data but some records might actually contain a value from the subsequent remeasurement project. When present for any project data, the value must first fall within the legal range of northing values stored in the validation lookup table for UTM coordinates.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Long Integer (7)

7.56 GPSPOINT

Geodatabase Name	GPSPOINT
BLM Structured Name	GPS_Point_Number
Inheritance	Not Inherited

Feature Class Use	CVS_PSUDATA_TBL
Definition	Stores the subplot number from which the GPS readings were taken for the PSU. This is a required field when the GPSNorthing and GPSEasting columns are populated. It may be zero only if both GPSEasting and GPSNorthing are zero. Normally it will be null for initial installation projects. If it is populated for an initial installation project, the remeasurement project rules should be applied.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.57 GPSUNITTYPE

Geodatabase Name	GPSUNITTYPE
BLM Structured Name	GPS_Unit_Type_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Code used to indicate the make and type of GPS unit used to obtain UTM coordinates. This is a required field when GPS UTM coordinates are recorded.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_GPSUNITTYPE
Data Type	Short Integer (1)

7.58 GRIDINFO

Geodatabase Name	GRIDINFO
BLM Structured Name	Grid_Info_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUHISTORY_TBL
Definition	General information on the status, location, or history of the PSU being referenced.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (500)

7.59 GRIDINTNR

Geodatabase Name	GRIDINTNR
BLM Structured Name	Grid_Intersection_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUHISTORY_TBL
Definition	BLM Oregon Current Vegetation Survey fixed grid intersection number. This is a .85-mile fixed grid covering all of Oregon and a small part of northern California. Not all grid intersections are stored in the PSU History table. Only those that fall on BLM land or within close proximity of a boundary between BLM land and a non-BLM landowner will be stored in the PSU History table. Any BLM Oregon CVS fixed grid intersection number inside or within close proximity of a BLM-administered boundary should appear in this table. This usually is the same as the PSUNr.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (7)

7.60 GRID_TYPE

Geodatabase Name	GRID_TYPE
BLM Structured Name	Grid_Type_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	This field is concatenated to the R6 number to make the PLOT_NUM.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.61 GROWTHHT5

Geodatabase Name	GROWTHHT5
BLM Structured Name	Growth_Height_5 year
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	5-year height growth for smaller trees. Measured to the nearest foot or tenth of a foot, depending on tree height. This is a required field for small trees designated as growth sample trees. Height growth is recorded to the nearest tenth of a foot for trees

	less than 15 feet tall. For trees over 15 feet, height growth is recorded to the nearest foot. The selection criteria for trees requiring a height growth measurement differ between the initial installation survey (CVS3.02 and earlier) and the remeasurement survey (CVS4.0 and later).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Double (4,1)

7.62 GROWTHRAD5

Geodatabase Name	GROWTHRAD5
BLM Structured Name	Five_Year_Radial_Growth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	5-year radial growth, measured to the nearest 20^{th} of an inch. This is a required field for all growth sample trees (VC11) or tally site trees (VC13) serving as growth sample trees. The selection criteria for trees requiring a 5-year radial growth measurement differ between the initial installation surveys and the remeasurement surveys.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.63 GROWTHRAD10

Geodatabase Name	GROWTHRAD10
BLM Structured Name	Ten_Year_Radial_Growth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	10-year radial growth, measured to the nearest 20^{th} of an inch. This is a required field for all growth sample trees (VC11) or tally site trees (VC13) serving as growth sample trees. This requirement is also based on DBH and breast height age (i.e., after DBH requirement, BHAge $\geq$ 10 years). The selection criteria for trees requiring a 10-year radial growth measurement differ between the initial installation surveys (CVS3.02 and earlier) and the remeasurement survey (CVS4.0 and later).
Required/Optional	Conditional

Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.64 HEIGHTAG

Geodatabase Name	HEIGHTAG
BLM Structured Name	Height_Above_Ground_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	Height above ground; the vertical height from the tip of the tree to the ground, measured from a point perpendicular to the stem. This measurement along with the offset distance measurement and the length of the tree stem form a right triangle. This field is required for any tree designated as a growth sample, height sample or site index tree (VC=11, 12, 13 or 93) and for any live or dead tree with a broken/missing top (damage code 960).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.65 HEIGHTAVG

Geodatabase Name	HEIGHTAVG
BLM Structured Name	Height_Average_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_UNDERVEGDATA_TBL
Definition	The average vertical height of the vegetation type being measured. This field is required for hardwood clumps and understory vegetation species. Recorded to the nearest foot, a value of “01” is recorded for average heights less than 1 foot.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.66 HWCLUMPNR

Geodatabase Name	HWCLUMPNR
BLM Structured Name	Hardwood_Clump_Identifier

Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_TREEDATA_TBL
Definition	Used as a parent hardwood clump identifier. A sequential integer number starting at 1 and assigned clockwise from north to each hardwood clump that contains one or more live individually tallied hardwood trees. The number of the parent clump is also assigned to the hardwood tree or trees originating from the parent clump. This field was not recorded during the initial installation project (CVS3.x and earlier) and should be left NULL in this case. It is required for all hardwood clumps and for any individual live hardwood tree 5.0" DBH and larger recorded during a remeasurement project (CVS4.0 and later). For any hardwood clump that is not parent to an individual tally hardwood tree and for any hardwood tree that does not share a common root collar with a hardwood clump, this field must be zero. Conversely, for any clump having a non-zero value in this field, there must be at least one qualified hardwood tree with the same number on the same subplot.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.67 HW_ROWID

Geodatabase Name	HW_ROWID
BLM Structured Name	Hardwood_Clump_Row_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_RES_HWCL_PT
Definition	Primary key for the Resource Hardwood Clumps Point (CVS_RES_HWCL_PT) feature class.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.68 IDENT

Geodatabase Name	IDENT
BLM Structured Name	Identification_Code
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL

Definition	Information identifying the individual record with an error which was found during data review. Examples are PSU number or PTN & CTN; depending on error statement. Not fully described in CVS manual.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (50)

7.69 IDPI1

Geodatabase Name	**IDPI(1)(2)(3)**
BLM Structured Name	Insect_Disease_Physical_Injury_Code
Inheritance	Not Inherited
Feature Class Use	CVS_NTSITEDATA_TBL, CVS_STUMPS_TBL, CVS_TREEDATA_TBL
Definition	Insect, disease and physical injury codes. These fields are used for any individual live or dead tree and group tally dead trees observed to have one or more of the conditions described in the above document. When multiple entries are made in the same record, they must be made in ascending sequential order (i.e., IDPI1 used before IDPI2) and Class 1 codes must be entered before any Class 2 codes are allowed.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.70 INSPCREW

Geodatabase Name	INSPCREW
BLM Structured Name	Inspection_Crew_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Name or initials of the field crew members assigned as inspectors for the PSU data inspection process. This field must be entered if *InspDate* is not NULL (i.e., the PSU was field inspected for compliance with the field procedures manual).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	String (25)

7.71 INSPDATE

Geodatabase Name	INSPDATE
BLM Structured Name	Inspection_Date
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Ten-character date in the form of MM/DD/YYYY. This is the date that the PSU was formally inspected for compliance with contract direction. This is a required field for any PSU which was field inspected for compliance with the field procedures manual. This date must be a valid date in the form of MM/DD/YYYY where MM represents the 2-digit month (01 to 12), DD represents the 2-digit day (01 to 31) and YYYY represents the 4-digit year (199x - 20xx). It must be NULL if *InspCrew* is NULL.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Date

7.72 INSTALLSTAT

Geodatabase Name	INSTALLSTAT
BLM Structured Name	Installation_Status_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUHISTORY_TBL
Definition	PSU installation status. If a CVS grid intersection meets the requirements for PSU installation or, having previously met the requirements now fails to meet the requirements (ex., no longer on NFS land), this column indicates the status of that installation.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_INSTALLSTAT
Data Type	Short Integer (1)

7.73 LEDIAMETER

Geodatabase Name	LEDIAMETER
BLM Structured Name	Large_End_Diameter_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL

Definition	Large end diameter of a coarse down woody piece. The cross-sectional measurement of a down woody piece taken at the larger of the two ends, measured to the nearest whole inch. The value will normally be larger than the intersect diameter recorded in the column *DWDiameter*. If not, a warning should be issued. It must always be the same or larger than the small end diameter (*SEDiameter*).
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.74 LEFTAZIMUTH

Geodatabase Name	LEFTAZIMUTH
BLM Structured Name	Left_Azimuth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL
Definition	The left azimuth from the subplot center to the point of intersection between a condition class boundary and a fixed radius subplot circumference. This is a required field for fixed radius subplot boundary records (VC=31). It should be NULL for linear transect boundary records (VC=32).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.75 LEVEL3ID

Geodatabase Name	LEVEL3ID
BLM Structured Name	Level_Three_Error_Record_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	Foreign key used to link a level 3 error record in the error tables to the associated record the level 3 table identified in TableName column of the error record. It is system-generated. It is a positive integer value assigned to the level 3 error record when loaded into the database. It must match a

	unique value in the Row_ID column of the level 3 table identified in the TableName column of the same row.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.76 LUDESIGNATION

Geodatabase Name	LUDESIGNATION
BLM Structured Name	Land_Use_Designation_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUHISTORY_TBL
Definition	This column is used informally to track current land use designation, usually for plots that are in wilderness, partially installed or near private land. This is an optional field if the grid intersection falls entirely on BLM land UNLESS it also meets the requirements for PSU installation or if it previously met but no longer meets the requirements for PSU installation in which case it becomes a required field. More than one designation may be used if applicable. Multiple designations should be separated by a comma without spaces (for example, "Wilderness,NRA"). The inventory coordinator or the database manager populates this field manually.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Text (100)

7.77 MATCHES

Geodatabase Name	MATCHES
BLM Structured Name	Matches_Number
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Number of paired observations that match. This required field is automatically populated by the accuracy assessment procedure.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (6)

7.78 MOSSPCT

Geodatabase Name	MOSSPCT
BLM Structured Name	Moss_Percent_Number
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	Estimated moss coverage on the horizontal surface of all visible limbs in the lower two thirds of a live tree crown. This field is required for all live trees 20” DBH or larger when the PSU is located inside the Marbled Murrelet study area (*CVS_PSUDATA_TBL.Murrelet=”*Y”).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.79 MPFA

Geodatabase Name	MPFA
BLM Structured Name	Marbled_Murrelet_Platform_Abundance_Number
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	Marbled Murrelet platform abundance, the estimated number of limbs in a live tree crown that are near horizontal (less than 45 degree angle), 6 inches or more in diameter and at least 10 meters (33 ft.) above the ground. This field is required for all live trees 20” DBH or larger when the PSU is located inside the Marbled Murrelet study area (*CVS_PSUDATA_TBL.Murrelet=”Y”*).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Integer (2)

7.80 MURRELET

Geodatabase Name	MURRELET
BLM Structured Name	Murrelet_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Indicates whether or not the data was collected as if the PSU falls into the Marbled Murrelet study zone.

Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Text

7.81 NEWTAGNR

Geodatabase Name	NEWTAGNR
BLM Structured Name	New_Tree_Number_Tag_Number
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	The number stamped on the tree number tag that was attached to the base of an individual tree or hardwood clump at the time of the current survey. This field is required for all individual tally trees, hardwood clumps and non-tally site trees that meet the specific size criteria established by the field procedures used during the current survey.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.82 NFC

Geodatabase Name	NFC
BLM Structured Name	National_Forest_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The name of the National Forest the plot falls on.
Required/Optional	Optional
Domain (Valid Values)	dom_CVS_NFC
Data Type	String (3)

7.83 NFC2

Geodatabase Name	NFC2
BLM Structured Name	National_Forest_Code2

Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The name of the second National Forest the plot falls on if the plot falls on more than one forest.
Required/Optional	Optional
Domain (Valid Values)	dom_CVS_NFC
Data Type	String (3)

7.84 NORTHING

Geodatabase Name	NORTHING
BLM Structured Name	Northing_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	Calculated or measured UTM Northing coordinate for the subplot. It is system-generated, based on the UTM entries available for the PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (7)

7.85 NRSUBPLOTS

Geodatabase Name	NRSUBPLOTS
BLM Structured Name	Number_of_Subplots_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL, CVS_PSUHISTORY_TBL
Definition	The number of subplots that are currently installed on the PSU. A non-installed PSU will have a value of zero. An installed PSU will have a value from 1 to 5. This is a system-generated field. It is calculated by summing the number of distinct subplot numbers found in all of the tables that contain measured data for a specific PSU number.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.86 NS_REASON

Geodatabase Name	NS_REASON
BLM Structured Name	Non-Sampled_Reason_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	Used in conjunction with a Condition Status code of 5 (non-sampled) to indicate the reason why the area delineated as non-sampled was excluded. Field is required whenever the Condition Status code of 5 is used in delineating a non-sampled condition class. It must be left null in all other cases. A code of 10 requires that an explanation be entered in the Comment field of either the CVS_PSUDATA_TBL or SubplotData tables.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_NS_REASON
Data Type	Short Integer (2)

7.87 NTST_ROWID

Geodatabase Name	NTST_ROWID
BLM Structured Name	Non-Tally_Site_Tree_Row_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_RES_NT_ST_PT
Definition	Primary key for the Resource Non-Tally Site Tree Point (CVS_RES_NT_ST_PT) feature class.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.88 OCC1DATE

Geodatabase Name	OCC1DATE
BLM Structured Name	Occasion_One_Date
Inheritance	Not Inherited
Feature Class Use	CVS_PSUHISTORY_TBL
Definition	Occasion 1 date. Date of the initial installation dataset for a PSU. This date should match the CurrDate for any grid intersection having an InstallStat value of 2 or 4.

	This is a required field for any row having an InstallStat value other than zero.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Date

7.89 OCCNR

Geodatabase Name	OCCNR
BLM Structured Name	Occasion_Number
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL, CVS_CCDEFINITIONS_TBL CVS_CCPROPORTIONS_TBL, CVS_DATAERRORS_TBL, CVS_DWMCOARSE_TBL, CVS_DWMFINES_TBL, CVS_ERRORHISTORY_TBL, CVS_GNDCOVER_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_PSUADMIN_TBL, CVS_PSUDATA_TBL, CVS_PSUHISTORY_TBL, CVS_STUMPS_TBL, CVS_SUBPLOTDATA_TBL, CVS_TREEDATA_TBL, CVS_UNDERVEGDATA_TBL
Definition	An integer value indicating the sequential occasion number of the site visit. For example, A value of 02 indicates that this is the 2nd time that the PSU has been measured. For any PSU that is installed for the first time, the value must be 1. For all remeasured plots, the value used will be one greater than the previous occasion number for each individual plot. For example, during a single remeasurement project, a new plot is installed, a second plot is remeasured for the first time and a third plot is remeasured for the second time. The values assigned to OccNr for these three plots would be 1, 2 and 3, respectively.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.90 OFFSETDIST

Geodatabase Name	OFFSETDIST
BLM Structured Name	Offset_Distance_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL, CVS_NTSITEDATA_TBL

Definition	The horizontal distance from the base of a tree to the point where it intersects the height above ground measurement, measured to the nearest foot. This measurement, the height above ground measurement and the length of the tree stem create a right triangle. This field is required for all individual trees that have a height above ground recorded.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.91 OLDTAGNR

Geodatabase Name	OLDTAGNR
BLM Structured Name	New_Tree_Number_Tag_Number
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	The number stamped on the tree number tag that was attached to the base of an individual tree or hardwood clump at the time of the previous survey. This field is required for all individual trees and hardwood clumps that were measured during the previous survey and have been remeasured or demonumented during the current survey. It must be left null for individual trees or hardwood clumps that are being measured for the first time.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.92 OWNERGROUP

Geodatabase Name	OWNERGROUP
BLM Structured Name	Owner_Group_Number
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	The second of seven area or stand condition attributes that are used to delineate changes in condition class. Owner group code identifies the owner of the land classified by a condition class.

Required/Optional	Required
Domain (Valid Values)	dom_CVS_OWNERGROUP
Data Type	Short Integer (2)

7.93 PAGUIDE

Geodatabase Name	PAGUIDE
BLM Structured Name	Plant_Association_Guide_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	The plant association guide code identifies which publication was used to key out the plant association codes recorded for the specific PSU.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_PAGUIDE
Data Type	String (3)

7.94 PAN2X

Geodatabase Name	PAN2X
BLM Structured Name	Panel_Two_Longitude_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The longitude of the panel 2 PSU in relationship to the longitude of the panel 1 PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.95 PAN2Y

Geodatabase Name	PAN2Y
BLM Structured Name	Panel_Two_Latitude_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The latitude of the panel 2 PSU in relationship to the latitude of the panel 1 PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.96 PAN3X

Geodatabase Name	PAN3X
BLM Structured Name	Panel_Three_Longitude_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The longitude of the panel 3PSU in relationship to the longitude of the panel 1 PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.97 PAN3Y

Geodatabase Name	PAN3Y
BLM Structured Name	Panel_Three_Latitude_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The latitude of the panel 3 PSU in relationship to the latitude of the panel 1 PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.98 PAN4X

Geodatabase Name	PAN4X
BLM Structured Name	Panel_Four_Longitude_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The longitude of the panel 4 PSU in relationship to the longitude of the panel 1 PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.99 PAN4Y

Geodatabase Name	PAN4Y
BLM Structured Name	Panel_Four_Latitude_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The latitude of the panel 4 PSU in relationship to the latitude of the panel 1 PSU.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.100 PANELNR

Geodatabase Name	PANELNR
BLM Structured Name	Panel_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL, CVS_PSHUHISTORY_TBL, CVS_SMP_PANEL_PT
Definition	Remeasurement panel number. This is a required field for all survey years.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.101 PCTBARE

Geodatabase Name	PCTBARE
BLM Structured Name	Percent_Bare_Soil_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	For a single subplot, the percent of the area of subplot type 5 (24’ fixed radius) covered by bare soil. This is a required field for installed subplots on all remeasurement projects (CVS4.xx and later). It must be left NULL for all uninstalled subplots and for initial installation projects (CVS3.xx and earlier). For a single subplot, the sum of PctBare and PctTotVeg may not exceed 100.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.102 PCTCORRECT

Geodatabase Name	PCTCORRECT
BLM Structured Name	Paired_Match_Observations_Number
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Number of paired observations that match, expressed as a percent. This required field is automatically populated by the accuracy assessment procedure.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Double (8,4)

7.103 PCTCOVER

Geodatabase Name	PCTCOVER
BLM Structured Name	Percent_Cover_Number
Inheritance	Not Inherited
Feature Class Use	CVS_UNDERVEGDATA_TBL
Definition	Percent of the subplot area covered by the understory vegetation species represented by the record. Less than 1% cover is indicated by the "-1" code. An entry of "0" (zero) is used for remeasurement projects only to indicate that a species is no longer present.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.104 PCTERROR

Geodatabase Name	PCTERROR
BLM Structured Name	Percent_Error_Number
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Number of paired observations which do not match, expressed as a percent. This required field is automatically populated by the accuracy assessment procedure.
Required/Optional	Required
Domain (Valid Values)	No Domain

Data Type	Double (8,4)

7.105 PCTFORBS

Geodatabase Name	PCTFORBS
BLM Structured Name	Percent_Forbs_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	For a single subplot, the percent of the area of subplot type 5 (24' fixed radius) covered by non-woody vascular plants. This is a required field for installed subplots on all remeasurement projects (CVS4.xx and later). It must be left NULL for all uninstalled subplots and for initial installation projects (CVS3.xx and earlier). For a single subplot, the sum of PctTrees, PctShrubs, PctForbs, and PctGrams may exceed 100, due to overlap.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.106 PCTGRAMS

Geodatabase Name	PCTGRAMS
BLM Structured Name	Percent_Graminoids_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	For a single subplot, the percent of the area of subplot type 5 (24' fixed radius) covered by graminoids (grasses or grass-like plants). This is a required field for installed subplots on all remeasurement projects (CVS4.xx and later). It must be left NULL for all uninstalled subplots and for initial installation projects (CVS3.xx and earlier). For a single subplot, the sum of PctTrees, PctShrubs, PctForbs, and PctGrams may exceed 100, due to overlap.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.107 PCTHIGH

Geodatabase Name	PCTHIGH
BLM Structured Name	Percent_High_Accuracy_Number
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Upper limit of the accuracy confidence interval expressed as a percent. This required field is automatically populated by the accuracy assessment procedure.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.108 PCTLOW

Geodatabase Name	PCTLOW
BLM Structured Name	Percent_Low_accuracy_Number
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Lower limit of the accuracy confidence interval expressed as a percent. This required field is automatically populated by the accuracy assessment procedure.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.109 PCTSHRUBS

Geodatabase Name	PCTSHRUBS
BLM Structured Name	Percent_Shrubs_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	For a single subplot, the percent of the area of subplot type 5 (24’ fixed radius) covered by perennial woody shrubs. This is a required field for installed subplots on all remeasurement projects (CVS4.xx and later). It must be left NULL for all uninstalled subplots and for initial installation projects (CVS3.xx and earlier). For a single subplot, the sum of PctTrees, PctShrubs, PctForbs, and PctGrams may exceed 100, due to overlap.
Required/Optional	Conditional

Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.110 PCTTOTVEG

Geodatabase Name	PCTTOTVEG
BLM Structured Name	Percent_Total_Vegetation_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	For a single subplot, the percent of the area of subplot type 5 (24' fixed radius) covered by all of the components of the understory vegetation profile (tree seedlings, shrubs, forbs & graminoids). This is a required field for installed subplots on all remeasurement projects (CVS4.xx and later). It must be left NULL for all uninstalled subplots and for initial installation projects (CVS3.xx and earlier). For a single subplot, the sum of PctBare and PctTotVeg may not exceed 100.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.111 PCTTREES

Geodatabase Name	PCTTREES
BLM Structured Name	Percent_Trees_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOT_POLY
Definition	For a single subplot, the percent of the area of subplot type 5 (24' fixed radius) covered by tree seedlings (stems with DBH < 1.0"). This is a required field for installed subplots on all remeasurement projects (CVS4.xx and later). It must be left NULL for all uninstalled subplots and for initial installation projects (CVS3.xx and earlier). For a single subplot, the sum of PctTrees, PctShrubs, PctForbs, and PctGrams may exceed 100, due to overlap.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.112 PHOTODATE

Geodatabase Name	PHOTODATE
BLM Structured Name	Photo_Date
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Ten-character date in the form of MM/DD/YYYY. This is the date that the aerial photograph was taken. This is a required field for remeasurement projects (CVS4.0 and later). This field should be NULL for all initial installation projects (CVS3.x and earlier).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Date

7.113 PHOTONR

Geodatabase Name	PHOTONR
BLM Structured Name	Photo_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Aerial photograph identification number taken from the front of the photograph containing the pinprick which identifies the location of the PSU. This is a required field for any installed PSU. No validation is performed on the contents of this field.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (20)

7.114 PHOTOYEAR

Geodatabase Name	PHOTOYEAR
BLM Structured Name	Photo_Year_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Four digit calendar year of the date when the aerial photograph was taken. This field is required for all project years whenever a PhotoNr is

	present. The photo year alone was recorded for the initial installation projects, 1997-2001. Remeasurement projects recorded the entire photo date. For remeasurement projects, the photo year is taken from the photo date and stored here.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (4)

7.115 PIECECOUNT

Geodatabase Name	PIECECOUNT
BLM Structured Name	Piece_Count_Number
Inheritance	Not Inherited
Feature Class Use	CVS_DWMFINES_TBL
Definition	Number of down woody fine pieces group tallied in either of the two diameter classes recorded. This is a system-generated field. It is calculated by summing the number of distinct subplot numbers found in all of the tables that contain measured data for a specific PSU number.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.116 PLOT_NUM

Geodatabase Name	PLOT_NUM
BLM Structured Name	Plot_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	The nomenclature that BLM uses for the CVS plots that are on BLM land. This field is a concatenation of the GRID_TYPE and R6_NUM fields.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.117 PNFLANDUSE

Geodatabase Name	PNFLANDUSE

BLM Structured Name	Present_Non-Forest_Land_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	The Present Non-Forest Land Use code is a non-delineating land use attribute used in further describing a condition class. This is a required field for all projects when the value of the column CondStatus is 2 (non-forest land).
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_PNFLANDUSE
Data Type	Short Integer (2)

7.118 PNWECOCLASS

Geodatabase Name	PNWECOCLASS
BLM Structured Name	Pacific_Northwest_Ecological_Class_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	PNW Ecoclass code representative of a single subplot. This is a required field for every subplot, whether or not it has been installed, unless it falls on private land (*SPStatus* = 5). The actual PNW ecoclass code might not be recorded in the field. The BLM ecoclass code might be recorded and then crosswalked to the associated PNW ecoclass code. Both will be present in the master database.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	String (6)

7.119 POLYGONID

Geodatabase Name	POLYGONID
BLM Structured Name	Polygon_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	Unknown definition. Value always zero
Required/Optional	Optional
Domain (Valid Values)	No Domain

Data Type	Long Integer

7.120 POR1AZM/ POR2AZM

Geodatabase Name	POR1AZM/POR2AZM
BLM Structured Name	Supplemental_Reference_Points_Azimuth_First_Number, Supplemental_Reference_Points_Azimuth_Second_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Azimuths between the supplemental reference points used to monument the route to plot traverse from the starting point to the principal reference tree (RP tree). These are optional fields for any PSU that is visited in the field and has at least one established subplot. They are required fields if the associated POR#Spec column is populated.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.121 POR1DBH/ POR2DBH

Geodatabase Name	POR1DBH/ POR2DBH
BLM Structured Name	Supplemental_Reference_Points_Diameters_At_Breast_Height_One_Measure, Supplemental_Reference_Points_Diameters_At_Breast_Height_Two_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Diameters at breast height of the supplemental reference points used to monument the route to plot traverse from the starting point to the principal reference tree (RP tree). These are optional fields for any PSU that is visited in the field and has at least one established subplot. They are required fields if the associated POR#Spec column is populated.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.122 POR1DIST/ POR2DIST

Geodatabase Name	POR1DIST/ POR2DIST
BLM Structured Name	Supplemental_Reference_Points_Distance_One_Measure, Supplemental_Reference_Points_Distance_Two_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Distances between the supplemental reference points used to monument the route to plot traverse from the starting point to the principal reference tree (RP tree). These are optional fields for any PSU that is visited in the field and has at least one established subplot. They are required fields if the associated POR#Spec column is populated. The distance should not exceed 900 feet but finding suitable reference trees sometimes require using greater distances. Consequently, exceeding this limit should result only in a warning to the user.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (4)

7.123 POR1SPEC/ POR2SPEC

Geodatabase Name	POR1SPEC/ POR2SPEC
BLM Structured Name	Supplemental_Reference_Tree_Species_One_Code, Supplemental_Reference_Tree_Species_Two_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Species codes of the supplemental reference trees used to monument the route to plot traverse from the starting point to the principal reference tree (RP tree). These are optional fields for any PSU that is visited in the field and has at least one established subplot. When a supplemental POR is established, all four of the associated fields become required (POR#Spec, POR#DBH, POR#Azm and POR#Dist).
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_SPECIES
Data Type	String (6)

7.124 POS1LENGTH/ POS2LENGTH/ POS3LENGTH/ POS4LENGTH/ POS5LENGTH

Geodatabase Name	POS1LENGTH/POS2LENGTH/POS3LENGTH/POS4LENGTH/ POS5LENGTH
BLM Structured Name	Linear_Transect_Section_Length_One_Measure, Linear_Transect_Section_Length_Two_Measure, Linear_Transect_Section_Length_Three_Measure, Linear_Transect_Section_Length_Four_Measure, Linear_Transect_Section_Length_Five_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_GNDCOVER_TBL
Definition	The 50 foot linear ground cover transect is broken into five 10 foot sections or positions. These five columns store the length of the corresponding line segment that is covered by the ground cover code associated with the record. Measurement is recorded to the nearest whole foot. These fields are required for the initial installation data (CVS3.xx). At least one of these five columns must contain a non-zero value for each row in the table. The value in any of these columns may not exceed 10 feet. The sum of these five columns for each row of data is stored in the GCLength column of the row.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.125 PREVDATE

Geodatabase Name	PREVDATE
BLM Structured Name	Previous_Survey_Date
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Ten-character date in the form of MM/DD/YYYY. This is the date that the previous survey measurements were made and recorded for a remeasured PSU. This is a required entry for any remeasured PSU (SampleKind = 2). This date must be a valid date in the form of MM/DD/YYYY where MM represents the 2-digit month (01 to 12), DD represents the 2-digit day (01 to 31) and YYYY represents the 4-digit year (1997 - 20xx).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Date

7.126 PROCOWNER

Geodatabase Name	PROCOWNER
BLM Structured Name	Proclaimed_Owner_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	BLM Oregon District code of the proclaimed owner of the land on which the principal subplot of the PSU falls. The left-most digit will always be a "7" for BLM Oregon Data. This corresponds to the equivalent of Region number used in the Forest Service CVS data. Region 7 does not exist in the Forest Service data so it is used here to allow the user to differentiate between the two agencies when using CVS data from both.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_OWNER
Data Type	Short Integer (3)

7.127 PROJECTID

Geodatabase Name	PROJECTID
BLM Structured Name	Project_Identifier
Inheritance	Not Inherited
Feature Class Use	Most feature classes and tables
Definition	A concatenation of the 3-digit Administrative Owner code and the 4-digit year of the start date of the CVS data acquisition project. This is the definition for the data field in the field data recorder and possibly an earlier version of the database. The definition is now a concatenation of the 3-digit Administrative Owner code, single-digit Round number, and single-digit Panel number. The exception is the Accuracy table. The ProjectID in this table is the 3-digit Administrative Owner code, single-digit Round number, and a default value of "0". Basically informing the user that the data is Round one. This is a key field used to group PSU data by BLM District and project year. For remeasurement projects (sample type CVS4.x or later), the project ID should match the concatenation of the administrative District code and the year of the earliest current survey date from the project.
Required/Optional	Required
Domain (Valid Values)	No Domain

Data Type	Long Integer (8)

7.128 PSUID

Geodatabase Name	PSUID
BLM Structured Name	Primary_Sample_Unit_Identifier
Inheritance	Not Inherited
Feature Class Use	Most feature classes and tables
Definition	Foreign key used to link a record in the current table to the associated CVS_PSUDATA_TBL record. It is system-generated. It is a positive integer value assigned to the record when loaded into the database. It must match a unique value in the Row_ID column of the CVS_PSUDATA_TBL table.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer

7.129 PSU_ROWID

Geodatabase Name	PSU_ROWID
BLM Structured Name	Primary_Sample_Unit_Plot_Row_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PSUPLT_PT
Definition	Primary Sample Unit Plot primary key.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.130 PSUNR

Geodatabase Name	PSUNR
BLM Structured Name	Primary_Sample_Unit_Number
Inheritance	Not Inherited
Feature Class Use	Most feature classes and tables
Definition	Seven-digit Primary Sample Unit number, permanent and unique identifier linking the Primary Sample Unit to the CVS grid map. The millions-place digit (left-most) identifies the grid density: 1 = 3.4 miles; 2 = 1.7 miles; 4 = .85 miles

	This is the unique number that associates the PSU data to its position on the fixed grid system. When combined with the associated occasion number value (OccNr), this number MUST be unique at the plot level (CVS_PSUDATA_TBL & PSUAdmin tables) and it may NOT be NULL for any table.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.131 QATYPE

Geodatabase Name	QATYPE
BLM Structured Name	Quality_Assurance_Type_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Code to identify the type of crew used for installation. Required for any PSU that is visited in the field. The above codes were added for remeasurement projects. But, for initial installation projects (CVS3.x and earlier), the above codes should have been added manually.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_QATYPE
Data Type	String (1)

7.132 R6NUM

Geodatabase Name	R6NUM
BLM Structured Name	Forest_Service_Region_Six_Number
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	This field is concatenated to the GRID_TYPE number to make the PLOT_NUM. Value can be from 1 to 6 numbers long.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.133 RANGE

Geodatabase Name	RANGE
BLM Structured Name	Range_Text
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Range identifier from the legal description of the land on which the principal subplot number of the PSU falls. The three or four character code consists of the 2-digit Range number (including leading zero, if necessary), quadrant code of E or W and, if necessary, a single digit fractional.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (4)

7.134 RECORD

Geodatabase Name	RECORD
BLM Structured Name	RECORD_Code
Inheritance	Not Inherited
Feature Class Use	CVS_ERRORHISTORY_TBL
Definition	Information identifying the individual record with an error which was found during data review. Examples are PSU number or PTN & CTN; depending on error statement. Not fully described in CVS manual.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (255)

7.135 REMARKS

Geodatabase Name	REMARKS
BLM Structured Name	Remarks_Text
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	Specific remarks text applicable to the row of data.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (255)

7.136 REMARKS1/2/3/4/5

Geodatabase Name	REMARKS1/2/3/4/5
BLM Structured Name	Remarks_One_Text, Remarks_Two_Text, Remarks_Three_Text, Remarks_Four_Text, Remarks_Five_Text,
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL, CVS_DWMFINES_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_STUMPS_TBL, CVS_TREEDATA_TBL, CVS_UNDERVEGDATA_TBL
Definition	Specific remarks codes applicable to the row of data.
Required/Optional	Optional
Domain (Valid Values)	dom_CVS_REMARKS
Data Type	String (3)

7.137 REMNANTTREE

Geodatabase Name	REMNANTTREE
BLM Structured Name	Remnant_Tree_Code
Inheritance	Not Inherited
Feature Class Use	CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	Code used to indicate that the tree meets the definition of a remnant tree. This field was not recorded during the initial installation projects (CVS3.x and earlier) and should be null for these records. It is a required field for all individual live tally trees recorded on the remeasurement surveys (CVS4.x and later).
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_REMNANTTREE
Data Type	Short Integer (1)

7.138 REMSTATUS

Geodatabase Name	REMSTATUS
BLM Structured Name	Remeasurement_Status_Code
Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_TREEDATA_TBL, CVS_NTSITEDATA_TBL
Definition	Reconciliation code used during remeasurement to indicate a remeasured, new or demonumented tree.

	This field is required for observations that normally have a number tag from the previous or current survey. Field must be left blank (null) for all other observations. For a PSU with a sample kind of 1 (new plot), all individual trees will have a remeasurement status code of 1 or 2 and all hardwood clumps will have a remeasurement status code of 1.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_REMSTATUS
Data Type	Short Integer (1)

7.139 RESAREA

Geodatabase Name	RESAREA
BLM Structured Name	Resource_Area_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	BLM Oregon Resource Area subdivides an associated BLM Oregon District code.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_RESAREA
Data Type	String (2)

7.140 RIGHTAZIMUTH

Geodatabase Name	RIGHTAZIMUTH
BLM Structured Name	Right_Azimuth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL
Definition	The right azimuth from the subplot center to the point of intersection between a condition class boundary and a fixed radius subplot circumference. This is a required field for fixed radius subplot boundary records (VC=31). It should be NULL for linear transect boundary records (VC=32).
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.141 ROOTDRTG

Geodatabase Name	ROOTDRTG
BLM Structured Name	Root_Disease_Rating_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	Root disease rating for a single subplot. This is a required field for all installed subplots. It must be left NULL for uninstalled subplots.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_ROOTDRTG
Data Type	Short Integer (1)

7.142 ROW_ID

Geodatabase Name	ROW_ID
BLM Structured Name	Row_Identifier
Inheritance	Not Inherited
Feature Class Use	Most feature classes and tables.
Definition	Relative row number in ascending sequential order used as a unique identifier for each individual row within a table. In the error tables, this column is used to point to the row of the designated table containing the error. This field is system generated. It contains a unique integer value assigned to each row of the table in ascending order according to the physical order of entry. The value may repeat across tables but not within a table. This column is used as a foreign key in several tables. The foreign key in the related table will normally have a different name that identifies the table from which it comes. For example, Row_ID in the Condition Class Definitions table is linked as a foreign key in the CVS_TREEDATA_TBL table under the column name “CCDefID” while Row_ID in the CVS_TREEDATA_TBL table is linked as a foreign key in the DataErrors table under the column name “Level3ID.”
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.143 RPAZM

Geodatabase Name	RPAZM

BLM Structured Name	Primary_Reference_Point_Azimuth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Azimuth from the primary Reference Point (RP) tree to the principal subplot number being referenced. This is a required field for any PSU that is visited in the field. The value must be between 1 and 360 degrees. Note – In the original table, the field was named RP2Azm. In reviewing the CVS manual, it seemed that this was a typographic error. The table attribute name was changed from RP2Azm to RPAzm.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Integer (3)

7.144 RPDBH

Geodatabase Name	RPDBH
BLM Structured Name	Primary_Reference_Point_Tree_Diameter_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Diameter at breast height of the primary Reference Point (RP) tree. This is a required field for any PSU that is visited in the field. The DBH should be 5.0 inches or larger if at all possible.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.145 RPDIST

Geodatabase Name	RPDIST
BLM Structured Name	Primary_Reference_Point_Distance_to_Reference_Tree_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Distance from the primary Reference Point (RP) tree to the principal subplot number being referenced. This is a required field for any PSU that is visited in the field. The value is not expected to exceed 900 feet but may when no suitable

	RP trees are available any closer.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (4)

7.146 RPSPEC

Geodatabase Name	RPSPEC
BLM Structured Name	Reference_Point_Tree_Species_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Species code of the primary Reference Point (RP) tree. This is a required field for any PSU that is visited in the field. The RP tree is expected to be a live tree with a DBH of 5.0 inches or more and the species code must match a legal code in the SpeciesCode lookup table. When no suitable tree is available, a reference object such as a large rock outcrop, fence post or building might be used instead. In this rare case, the special code "OBJECT" is used instead of a legal species code.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_SPECIES
Data Type	String (6)

7.147 RPSPREFNO

Geodatabase Name	RPSPREFNO
BLM Structured Name	Reference_Point_Tree_Subplot_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Subplot number referenced by the primary Reference Point (RP) tree. This is referred to as the principle subplot, the one used to establish plot location. This is a required field for any PSU that is visited in the field. It must be a valid subplot number.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.148 SAMPLEKIND

Geodatabase Name	SAMPLEKIND
BLM Structured Name	Sample_Kind_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Code to indicate the status of current vs. previous measurement (i.e., new, remeasured, replacement, etc.). Although it was not recorded for initial installation projects, a code of 1 was added to all of these project records.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_SAMPLEKIND
Data Type	Short Integer (1)

7.149 SAMPLETYPE

Geodatabase Name	SAMPLETYPE
BLM Structured Name	Sample_Type_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	A concatenation of survey type code (CVS), field manual version number and a single letter variant code to indicate if a modified sample design is being used. The naming convention of "SSSm.mmv" is used, creating an 8-character code where "SSS" represents the 3-letter sample type code, "m.mm" is the manual version and "v" the variant letter. This is a unique identifier that applies to all PSU data for a specific project. The variant designation (A, B, C, etc.) will not normally be present. Sample type must match the code in the sample type lookup table (SampleTypes) that is associated with the year of the current survey date from the same record.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (8)

7.150 SCALE

Geodatabase Name	SCALE
BLM Structured Name	Scale_Number

Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	Unknown definition, Value always 1
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Float

7.151 SECTIONNR

Geodatabase Name	SECTIONNR
BLM Structured Name	Section_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Section number from the legal description of the land on which the principal subplot number of the PSU falls.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.152 SEDIAMETER

Geodatabase Name	SEDIAMETER
BLM Structured Name	Small_End_Diameter_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL
Definition	Distance from the primary Reference Point (RP) tree to the principal subplot number being referenced. The value will normally be smaller than the intersect diameter recorded in the column *DWDiameter*. If not, a warning should be issued. It must always be the same or smaller than the large end diameter (*LEDiameter*).
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.153 SITECCNR2/3/4/5

Geodatabase Name	SITECCNR2/3/4/5
BLM Structured Name	Site_Tree_Condition_Class_One_Number, Site_Tree_Condition_Class_Two_Number, Site_Tree_Condition_Class_Three_Number, Site_Tree_Condition_Class_Four_Number, Site_Tree_Condition_Class_Five_Number
Inheritance	Not Inherited
Feature Class Use	CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	The site tree condition class numbers are used to identify up to four additional condition classes on a plot that are represented by a specific site tree. The unique list excludes the actual condition class that the site tree falls into. These are required fields for site trees (VC 13 & 93) only. They must be left blank for all others.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.154 SLOPEDIST

Geodatabase Name	SLOPEDIST
BLM Structured Name	Slope_Distance_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_TREEDATA_TBL
Definition	When used for all individual tally and non-tally trees, hardwood clumps and reference objects, it is the slope distance in tenths of feet measured from the subplot center to the center of the base of the item being referenced (head of the nail that holds the tree tag number). For Subplot Reference Trees, Non-tally Reference Trees or Object, the measured slope distance was required. For tallied trees or hardwood clumps, the recorded value may be the horizontal distances. When used for all coarse down woody pieces, it records the slope distance to the nearest whole foot from the subplot center to the point of intersection. This field is required for all individual trees, both tally and non-tally, hardwood clumps, reference objects and coarse down woody material records. It must be left blank in all other cases. It may not exceed the maximum length of the fixed radius subplot type or linear transect on which the record is tallied.
Required/Optional	Conditional

Domain (Valid Values)	No Domain
Data Type	Double (4,1)

7.155 SLOPEPCT

Geodatabase Name	SLOPEPCT
BLM Structured Name	Slope_Percent_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL, CVS_DWMCOARSE_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_SUBPLOTDATA_TBL, CVS_TREEDATA_TBL
Definition	When used for all individual tally and non-tally trees, reference objects and hardwood clumps, it is the slope percent measured from the subplot center to the center of the base of the item being referenced. For Subplot Reference Trees, Non-tally Reference Trees or Object, the measured slope percent was required. For tallied trees or hardwood clumps, this value may be zero in cases that horizontal distances were recorded. When used for all coarse down woody pieces or a condition class boundary on the down woody transect, it records the slope percent from the subplot center to the point of intersection. When used at the subplot level, records the predominant slope percent on a subplot. This field is required for all associated tables except: 1.SubplotData, where it is recorded for all installed subplots but left null for uninstalled subplots. 2.CVS_CCBOUNDARIES_TBL, where it is required for linear transect boundary records (VC=32) but left NULL for all other record types. Note – The original field name in the CVS_SUBPLOTDATA_TBL was SLOPE. It was changed to SLOPE_PCT to be consistent with other data tables. Note – The original field name in the CVS_SUBPLOTDATA_TBL was SLOPE. It was changed to SLOPE_PCT to be consistent with other data tables.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.156 SNAGDECAYCLS

Geodatabase Name	SNAGDECAYCLS

BLM Structured Name	Snag_Decay_Class_Number
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	Code used to describe the physical condition of any individual standing dead tree. This field is required for all standing dead trees 5.0" DBH and larger. Decay class definitions are consistent across all projects.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.157 SNAGDISAPPEAR

Geodatabase Name	SNAGDISAPPEAR
BLM Structured Name	Snag_Disappear_Code
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	Code used to indicate why a dead tree that was tallied on the previous survey is missing from the sample on the current survey. Applies only to remeasurement data. This field is required for all remeasured individual trees tallied as dead on the previous survey that are missing from the current survey. These trees should have a reconciliation code of 4 (RemStatus). This field should be left NULL in all other cases.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_SNAGDISAPPEAR
Data Type	Short Integer (1)

7.158 SPECIESCODE

Geodatabase Name	SPECIESCODE
BLM Structured Name	Species_Code
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_DWMCOARSE_TBL, CVS_ERRORHISTORY_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_STUMPS_TBL, CVS_TREEDATA_TBL, CVS_UNDERVEGDATA_TBL
Definition	Code used to identify the tree, clump, object or understory vegetation

	species. This is a required field for all tree, hardwood clump, understory vegetation, reference object and coarse down woody material records.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_SPECIES
Data Type	String (6)

7.159 SPREF1AZM/ SPREF2AZM/ SPREF3AZM

Geodatabase Name	SPREF1AZM/SPREF2AZM/SPREF3AZM
BLM Structured Name	Subplot_Reference_Tree_One_Azimuth_Measure, Subplot_Reference_Tree_Two_Azimuth_Measure, Subplot_Reference_Tree_Three_Azimuth_Measure,
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Azimuths from the principal subplot to the 1st, 2nd & 3rd principal subplot reference trees, respectively. These are required fields for any PSU that is visited in the field and has at least one established subplot. The value must correspond to one of the three trees designated as the principal subplot references. These trees are identified by the remarks code "SPR" recorded in one of the five remarks code columns of trees found on the subplot number identified in the RPSPRefNr column of the PSUAdmin table.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.160 SPREF1DBH/SPREF2DBH/SPREF3DBH

Geodatabase Name	SPREF1DBH/SPREF2DBH/SPREF3DBH
BLM Structured Name	Subplot_Reference_Tree_One_Diameter_Measure, Subplot_Reference_Tree_Two_Diameter_Measure, Subplot_Reference_Tree_Three_Diameter_Measure,
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Diameter at breast height of the 1st, 2nd & 3rd principal subplot reference trees, respectively. These are required fields for any PSU that is visited in the field and has at least one established subplot. The value must correspond to one of the three trees designated as the principal subplot references.

	These trees are identified by the remarks code "SPR" recorded in one of the five remarks code columns of trees found on the subplot number identified in the RPSPRefNr column of the PSUAdmin table.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Double (4,1)

7.161 SPREF1DIST/SPREF2DIST/SPREF3DIST

Geodatabase Name	SPREF1DIST/SPREF2DIST/SPREF3DIST
BLM Structured Name	Subplot_Reference_Tree_One_Distance_Measure, Subplot_Reference_Tree_Two_Distance_Measure, Subplot_Reference_Tree_Three_Distance_Measure,
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Distance from the principal subplot to the 1st, 2nd & 3rd principal subplot reference trees, respectively. These are required fields for any PSU that is visited in the field and has at least one established subplot. The value is not expected to exceed 10, 30 or 50 feet depending on the type of item being used as a reference.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Double (4,1)

7.162 SPREF1SPEC/SPREF2SPEC/SPREF3SPEC

Geodatabase Name	SPREF1SPEC/SPREF2SPEC/SPREF3SPEC
BLM Structured Name	Subplot_Reference_Tree_One_Species_Code, Subplot_Reference_Tree_Two_Species_Code, Subplot_Reference_Tree_Three_Species_Code,
Inheritance	Not Inherited
Feature Class Use	CVS_PSUADMIN_TBL
Definition	Species codes for the 1st, 2nd & 3rd principal subplot reference trees, respectively. These are required fields for any PSU that is visited in the field and has at least one established subplot. The value must match a code from the SpeciesCodes lookup table unless the reference is a non-tally object.
Required/Optional	Conditional

Domain (Valid Values)	dom_CVS_SPECIES
Data Type	String (6)

7.163 SPR_ROWID

Geodatabase Name	SPR_ROWID
BLM Structured Name	Non-Tally_Subplot_Reference_Row_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_RES_NT_SPREF_PT
Definition	Non-Tally_Subplot_Reference primary key.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.164 SPSTATUS

Geodatabase Name	SPSTATUS
BLM Structured Name	Subplot_Installation_Status_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	Installation status of subplot. This code indicates whether or not a subplot was installed and, if it was, whether a full or partial sample was collected and the cause for the partial sample (ownership, access or both).
Required/Optional	Required
Domain (Valid Values)	dom_CVS_SPSTATUS
Data Type	Short Integer (1)

7.165 STANDAGE

Geodatabase Name	STANDAGE
BLM Structured Name	Stand_Age_Number
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	The stand age is a non-delineating attribute used to further describe the condition class. Stand age is defined as the average total age of the plurality of all live dominant or codominant trees in the predominant stand size class of the associated condition class. Stand age is recorded to the nearest year with a value of zero representing a non-stocked stand.

	This is a required field for remeasurement projects (CVS4.x and later) when the value of the column CondStatus is 1 (Accessible Forest Land). This information was not collected for initial installation projects (CVS3.x and earlier) but may eventually be derived from the level 3 stand data. If present, it must meet the remeasurement project requirements.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.166 STANDSIZE

Geodatabase Name	STANDSIZE
BLM Structured Name	Stand_Size_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	Stand size class is a delineating attribute used in uniquely identifying a specific condition class. It indicates the size class of all live dominant or codominant trees in the associated condition class. This is a required field for all projects when the value of the column CondStatus is 1 (Accessible Forest Land).
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_STANDSIZE
Data Type	Short Integer (1)

7.167 STATE

Geodatabase Name	STATE
BLM Structured Name	State_Code
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	State code of the state within which the principal subplot of the PSU falls.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_STATE
Data Type	Short Integer (2)

7.168 STEMCOUNT

Geodatabase Name	STEMCOUNT
BLM Structured Name	Stem_Count_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_HWCLUMPS_TBL, CVS_STUMPS_TBL, CVS_TREEDATA_TBL
Definition	The number of stems represented by a single row of data. Set to one for individual tally trees but also represents multiple occurrences for group tally items such as hardwood clumps, stumps and seedlings. In the master database, it will be one (1) for individual tally trees since each record represents one tree. For data collection, this field is required for group tally records but is assumed to be one for individual tally items.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.169 STRUCTURE

Geodatabase Name	STRUCTURE
BLM Structured Name	Stand_Structure_Code
Inheritance	Not Inherited
Feature Class Use	CVS_CCDEFINITIONS_TBL
Definition	Stand structure is a non-delineating attribute used to further describe a specific condition class. It classifies the stand structure within the associated condition class. This is a required field for remeasurement surveys only. It should be left blank for initial installation survey data. This is a required field for remeasurement projects (CVS4.x and later) when the value of the column CondStatus is 1 (Accessible Forest Land). This information was not collected for initial installation projects (CVS3.x and earlier) but may eventually be derived from the level 3 stand data. If present, it must meet the remeasurement project requirements.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_STRUCTURE
Data Type	Short Integer (1)

7.170 SUBPLOTID

Geodatabase Name	SUBPLOTID
BLM Structured Name	Subplot_Identifier
Inheritance	Not Inherited
Feature Class Use	All tables
Definition	A system-generated unique sequential positive integer value used to identify a specific subplot record. It links level 3 data to the Row_ID column in the parent subplot record.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.171 SUBPLOT_ROWID

Geodatabase Name	SUBPLOT_ROWID
BLM Structured Name	Survey_SubPlot_Row_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_SRV_SUBPLT_POLY, CVS_SMP_SUBPLOT_PT
Definition	Survey Sub Plot primary key.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (8)

7.172 SUBPLOTNR

Geodatabase Name	SUBPLOTNR
BLM Structured Name	Subplot_Number_Identifier
Inheritance	Not Inherited
Feature Class Use	All tables
Definition	Numeric identifier for the subplot number at which a specific set of subsamples have been established within a PSU. This is a required field for all subplot and vegetation level data (level 2 & 3 tables).
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.173 SUBPLOTTYPE

Geodatabase Name	SUBPLOTTYPE
BLM Structured Name	Subplot_Type_Code
Inheritance	Not Inherited
Feature Class Use	All tables
Definition	Integer value used to identify the type of subsample and selection criteria associated with the row of data. All subsequent columns in the row must meet the criteria for measurements taken for data associated with the specific subplot type.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (1)

7.174 TABLENAME

Geodatabase Name	TABLENAME
BLM Structured Name	Table_Name
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL, CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	The name of the table from the BLM CVS database where the record containing the error can be found. It is also used in the Accuracy table to identify the parent table of the column to which the accuracy assessment results apply. The table name is automatically assigned to the column when either the validation process or the accuracy assessment procedure is applied to the CVS data.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (25)

7.175 TBA

Geodatabase Name	TBA
BLM Structured Name	Tree_Basal_Area_Number
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	Tree basal area. This value is computed for all live or dead individual tally trees having a DBH of 1.0" or more. Note that trees that have a missing DBH or group tally records with a representative DBH class midpoint value will have a null value for TBA.
Required/Optional	Optional

Domain (Valid Values)	No Domain
Data Type	Double (13,8)

7.176 TOPOGPOS

Geodatabase Name	TOPOGPOS
BLM Structured Name	Topographic_Position_Code
Inheritance	Not Inherited
Feature Class Use	CVS_SUBPLOTDATA_TBL
Definition	Topographic position code describing the physical location of the subplot. This is a required field for all installed subplots. It must be left NULL for uninstalled subplots.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_TOPOGPOS
Data Type	Short Integer (1)

7.177 TOTALOBS

Geodatabase Name	TOTALOBS
BLM Structured Name	Total_Paired_Observations_Number
Inheritance	Not Inherited
Feature Class Use	CVS_ACCURACY_TBL
Definition	Total number of paired observations based on the inspection records for the data item being assessed for accuracy. This required field is automatically populated by the accuracy assessment procedure.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Long Integer (6)

7.178 TOTHEIGHT

Geodatabase Name	TOTHEIGHT
BLM Structured Name	Total_Height_Number
Inheritance	Not Inherited
Feature Class Use	CVS_NTSITEDATA_TBL, CVS_TREEDATA_TBL
Definition	Calculated stem length for trees having a height above ground and an offset distance measured.
Required/Optional	Optional

Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.179 TOWNSHIP

Geodatabase Name	TOWNSHIP
BLM Structured Name	Township_Identifier
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Township identifier from the legal description of the land on which the principal subplot number of the PSU falls. This field is required. The three or four character code consists of the 2-digit Township code (including leading zero, if necessary), quadrant code of N or S and, if necessary, a single digit fractional.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (4)

7.180 TPA

Geodatabase Name	TPA
BLM Structured Name	Trees_Stems_per_Acre_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_TREEDATA_TBL
Definition	Representative number of stems per acre assigned to an individual or group tally observation based on 1) the area or radius of the subplot type on which it was tallied and 2) the number of stems that the observation represents. This is a system-generated field, computed by multiplying the subplot type expansion factor by the stem count (*FixedPlotExpansionFactor* * *StemCount*) when the record is loaded into the database.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Double (5,2)

7.181 TREE_ROWID

Geodatabase Name	TREE_ROWID
BLM Structured Name	Tree_Row_Identifier

Inheritance	Not Inherited
Feature Class Use	CVS_RES_TREE_PT
Definition	Tree primary key.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Integer (8)

7.182 TRNAZIMUTH

Geodatabase Name	TRNAZIMUTH
BLM Structured Name	Linear_Transect_Azimuth_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_CCBOUNDARIES_TBL, CVS_CCPROPORTIONS, CVS_DWMCOARSE_TBL, CVS_DWMFINES_TBL
Definition	A specific azimuth recorded in degrees and associated by subplot number with a linear transect for collecting down woody material data. Two down woody fuels transects are currently installed under manual ver. 4.xx. Initial installation plots, manual ver. 3.xx or earlier, were installed using a single transect azimuth for each subplot. This field is required for the CVS_DWMCOARSE_TBL and CVS_DWMFINES_TBL tables. This field is required in the CVS_CCBOUNDARIES_TBL for linear transect boundary records (VC=32). It must be NULL for all other record types. This field is required in the CVS_CCPROPORTIONS_TBL for subplot type 7 and null for all other subplots.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (3)

7.183 TRNSLOPEDIST

Geodatabase Name	TRNSLOPEDIST
BLM Structured Name	Transect_Slope_Distance_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL, CVS_CCBOUNDARIES_TBL
Definition	The slope distance recorded to the nearest foot along the down woody transect from the subplot center to the point of intersection with 1) a piece of coarse woody debris, 2) a down woody debris pile or 3) a condition class boundary.

	This field is required for all coarse down woody material records (veg. codes 70 & 71). It is required for any condition class boundary record having a veg. code of 32. It must be left blank in all other cases.
Required/Optional	Conditional
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.184 UTMZONE

Geodatabase Name	UTMZONE
BLM Structured Name	Universal_Transverse_Mercator_Zone_Number
Inheritance	Not Inherited
Feature Class Use	CVS_PSUDATA_TBL
Definition	Universal Transverse Mercator zone within which the principal subplot of the PSU falls. For BLM Oregon, only UTM Zone 10 may be used. Datum is NAD27 for survey dates prior to October 2004. Datum is NAD83 for all survey dates starting in October 2004.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Short Integer (2)

7.185 VEGCODE

Geodatabase Name	VEGCODE
BLM Structured Name	Vegetation_Code
Inheritance	CVS_CCBOUNDARIES_TBL, CVS_DATAERRORS_TBL, CVS_DWMCOARSE_TBL, CVS_DWMFINES_TBL, CVS_ERRORHISTORY_TBL, CVS_GNDCOVER_TBL, CVS_HWCLUMPS_TBL, CVS_NTSITEDATA_TBL, CVS_NTSPREFS_TBL, CVS_STUMPS_TBL, CVS_TREEDATA_TBL, CVS_UNDERVEGDATA_TBL
Feature Class Use	Most tables.
Definition	Two-digit integer number used to identify the type of vegetation data being recorded.
Required/Optional	Required
Domain (Valid Values)	dom_CVS_VEGCODE
Data Type	Short Integer (2)

7.186 WARNINGFLAG

Geodatabase Name	WARNINGFLAG
BLM Structured Name	Warning_Flag_Text
Inheritance	Not Inherited
Feature Class Use	CVS_DATAERRORS_TBL, CVS_ERRORHISTORY_TBL
Definition	A single character flag set to Y or N. Used to indicate if a record in the table represents an error condition (N) or just a warning (Y).
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (1)

7.187 WILDUSAGE

Geodatabase Name	WILDUSAGE
BLM Structured Name	Wildlife_Usage_Code
Inheritance	Not Inherited
Feature Class Use	CVS_DWMCOARSE_TBL, CVS_TREEDATA_TBL
Definition	Wildlife usage; a code describing the presence/absence and size class of wildlife excavations in any standing live tree or dead tree. This field is required in the TreeData table for all individual standing dead trees 3.0 inches DBH and larger on initial installation projects (SampleType CVS3.x and earlier) or 5.0 inches DBH and larger on remeasurement projects (SampleType CVS4.0 and later). It is also required for initial installation coarse down woody debris legacy data (Sample Type CVS3.x and earlier). It should be left NULL in all other cases.
Required/Optional	Conditional
Domain (Valid Values)	dom_CVS_WILDUSAGE
Data Type	Short Integer (1)

7.188 X_ELEV

Geodatabase Name	X_ELEV

BLM Structured Name	
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	Unsure of definition. X coordinate of the centroid of a Digital Elevation Model grid cell that was used to assign an elevation value to the CVS plot point.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Float

7.189 X_TEN

Geodatabase Name	X_TEN
BLM Structured Name	
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	UTM Zone 10 Easting Coordinate of the CVS plot point. Datum is NAD27.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.190 X_UTM10NAD83

Geodatabase Name	X_UTM10NAD83
BLM Structured Name	Plot_Universal_Transverse_Mercator_Easting_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	UTM Zone 10 Easting Coordinate of the CVS plot point. Datum is NAD83.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.191 Y_ELEV

Geodatabase Name	Y_ELEV
BLM Structured Name	

Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	Unsure of definition. Y coordinate of the centroid of a digital elevation model grid cell that was used to assign an elevation value to the CVS plot point.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	Float

7.192 Y_TEN

Geodatabase Name	Y_TEN
BLM Structured Name	
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	UTM Zone 10 Northing Coordinate of the CVS plot point. Datum is NAD27.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	Float

7.193 Y_UTM10NAD83

Geodatabase Name	Y_UTM10NAD83
BLM Structured Name	Plot_Universal_Transverse_Mercator_Northing_Measure
Inheritance	Not Inherited
Feature Class Use	CVS_SMP_PANEL_PT
Definition	UTM Zone 10 Northing Coordinate of the CVS plot point. Datum is NAD83.
Required/Optional	Required.
Domain (Valid Values)	No Domain
Data Type	Float

8. LAYER FILES (PUBLICATION VIEWS)

8.1 GENERAL

Master corporate feature classes/datasets maintained in the edit database (currently ORSOEDIT) are "published" to the user database (currently ORSOVCTR) in several ways:

A. Copied completely with no changes (replicated).

B. Copied with no changes except to omit one or more feature classes from a feature dataset.

C. Minor changes made (e.g., clip, dissolve, union with ownership) in order to make the data easier to use. Feature classes that have been changed are indicated by "PUB" in their name. They are created through scripts that can be automatically executed and are easily rebuilt from the master (ORSOEDIT) data whenever necessary.

Layer files are not new data requiring storage and maintenance but point to existing data. They have appropriate selection and symbolization for correct use and display of the data. They provide the guidance for data published on the web. Layer files are created by simple, documented processes, and can be deleted and recreated at any time.

8.2 SPECIFIC TO THIS DATASET

A publication feature dataset will be created for publishing spatial and tabular data. The publication dataset includes geodatabase relationship classes to link objects correctly. The relationship classes are listed in Appendix B of this document.

Layer files will be provided that join tables to feature classes where there are 1:1 relationships.

All datasets are published, both internally and externally, with the attribute VERSION_NAME removed (for privacy reasons).

9. EDITING PROCEDURES

9.1 MANAGING OVERLAP (GENERAL GUIDANCE)

"Overlap" means there are potentially more than one feature in the same feature class that occupies the same space ("stacked" polygons). **Depending on the query, acres will be double-counted**.

In this discussion, an area entity may consist of more than one polygon, and a line entity may consist of more than one arc. They would have multiple records in the spatial table (with identical attributes). Multi-part features are not allowed. Multi-part features are easily created inadvertently and not always easy to identify. If they are not consciously and consistently avoided, feature classes will end up with a mixture of single and multi-part features. Multi-part features can be more difficult to edit, query, and select, along with impacting overall performance.

Overlap is only allowed in the ODF in limited and controlled scenarios. In each case, the "cause" of the overlap (the attribute changes that "kick off" a new feature which may overlap an existing feature) is carefully defined and controlled. In other words, in feature classes that permit overlap for a change in spatial extent, there is always a new feature created which may overlap an existing feature, but in addition there are certain attribute(s) that will result in a new feature even if there is no spatial change. The feature classes (and the one feature dataset) that allow overlap, and the attributes that lead to a new, possibly overlapping feature, are described below.

1. Overlapping Polygons where polygons are part of a POLY/ARC feature dataset.

Topology rules apply only to the POLY/ARC relationship (Polylines in the POLY feature class covered by arcs in the ARC feature class and vice versa; Arcs must not have dangles, intersect, self-overlap or overlap adjacent arcs). The AVY_PLAN dataset allows any number of plans or projects to overlap; a new PLANID creates a new polygon. For all other POLY/ARC feature datasets, overlap is only allowed if there is a dataset for proposed entities, for example proposed ACEC (ACEC_P POLY/ARC dataset) or wilderness (WLD_P POLY/ARC dataset).

2. Overlapping Polygons where polygons are a stand-alone feature class.

No topology rules.

a) Species Occurrence Group: These are distinct sites defined by species and time. A different species creates a new polygon which may overlap another site in whole or part. A change in time (new visit date) will create a new polygon if it is desired that the old spatial extent and date is retained (as historic). Additionally, for wildlife, a different season/type of use (e.g., winter range vs. spring breeding) will create new polygon that may overlap others. Examples: WEEDS_POLY, GB_FLORA_SITE.

b) Survey Group: Within each feature class a new survey is created only for a new date. This group might also include proposed surveys in separate feature classes. Examples: GB_SURVEY, Archeological Survey (CULT_SURV).

c) Treatment Activity Group: Within each feature class (BURN, HARV, MECH, CHEM, BIO, REVEG, PROT), an overlapping treatment area is created only for a new date, and sometimes for a different method (if it is not possible to SPLIT the treatment area by method and it is important to capture more than one method applied to the same area on the same day). This group also includes proposed treatments which could overlap existing treatments and have additional overlap created by different treatment alternatives.

d) Recreation Site Polygons (RECSITE_POLY): An overlapping site polygon is created only for different name, type or development level.

e) Land Status Encumbrances Group: A new, possibly overlapping polygon is created for a new casefile number even if it is the same area. Examples: easement/ROW areas (ESMTROW_POLY) and land acquisitions/disposals (ACQ_DSP_POLY).

3. Overlapping Arcs where arcs are a stand-alone feature class.

No topology rules.

Examples: easement/ROW lines (ESMTROW_ARC) a new, possibly overlapping arc is created for a new casefile number; structures (STRCT_ARC) a new, possibly overlapping arc is created for a different name, type, RIPS number or construction date.

4. Overlapping Points.
Generally these are allowed and do not cause a problem since points have no spatial extent. However, it is easy to inadvertently create more than one point making it important to search for and delete duplicates.

9.2 POLY/ARC TOPOLOGY (BOUNDARY GROUP DATASETS)

A poly/arc feature dataset means there is a polygon feature class plus an arc feature class that represents the perimeter of the polygon, and which must be kept coincident with the polyline. This requires advanced topological editing skills and in the ODF these poly/arc pair datasets are limited to the "Boundary" group of themes. Recommended order of capture and maintenance for poly/arc datasets:

1. Acquire annotated boundary maps or other sources defining the perimeters of the polygons.
2. Create a line feature class with lines copied in from other sources. Fill in COORD_SRC, DEF_FEATURE and ACCURACY_FT as each set of lines is brought in. For planning designation boundary datasets start with the arcs for the planning area boundary.
3. Clean up the lines:
   a) Split and snap the line endpoints as needed.
   b) Where there are duplicate lines, retain the line from the most accurate source.
   c) Snap vertices between endpoints to the correct source.
   d) Delete extra vertices or vertices too close together, especially at ends of lines.
   e) Ensure that the lines are complete, with no overlap and no gaps.
4. Construct polygons from the full set of lines. Check for gaps or extra polygons (small slivers) and go back to step 3 if there is additional cleanup needed.
5. Attribute the polygons.

9.3 EDITING QUALITY CONTROL

1. Duplicate features. Checking for undesired duplicates is critical. Polygons or arcs that are 100% duplicate are easily found by searching for identical attributes along with identical Shape_Area and/or Shape_Length. Searching for partially overlapping arcs or polygons is harder, and each case must be inspected to determine if the overlap is desired or not.

2. To avoid overlapping polygons on the same area, polygons from different input themes are incorporated with the Union spatial overlay tool, not copied.

3. Union rather than Intersect is used to prevent unintended data loss.

4. Gap and overlap slivers. These can be hard to find if there are no topology rules. A temporary map topology can be created to find overlap slivers. Gap slivers can be found by constructing polygons from all arcs and checking polygons with very small area.

5. Buffer and dissolve considerations. Where polygons are created with the buffer tool, the correct option must be selected. The default option is "None," which means overlap will be retained. Sometimes the overlap should be dissolved and the option changed to "All." Lines resulting from buffer have vertices too close together, especially around the end curves. They should be generalized to thin the vertices. If the dissolve tool is used on polygons or arcs, the "Create multipart features" should be unchecked.

6. GPS considerations. GPS linework is often messy and should always be checked and cleaned up as necessary. Often vertices need to be thinned (generalize) especially at line ends. Multi-part polygons are sometimes inadvertently created when GPS files with vertices too close together or crossing lines or spikes are brought into ArcGIS. Tiny, unwanted polygons are created but are "hidden" because they are in a multi-part.

7. Be careful when merging lines. Multi-part lines will be created if there are tiny unintentional (unknown) gaps and it can be difficult to find these unless the multi-parts are exploded.

8. Null geometry. Check any features that have 0 or very small Shape_Area or Shape_Length. If a feature has 0 geometry and you can't zoom to it, it is probably an inadvertently created "Null" feature and should be deleted. Very small features may also be unintended, resulting from messy linework.

9. Check tolerances. In general, set Cluster Tolerance as small as possible. This is 0.000000009 Degree (0.000007 degree is approximately 1 meter).

10. Snapping considerations. Where line segments with different COORD_SRC meet, the most accurate or important (in terms of legal boundary representation) are kept unaltered, and other lines snapped to them. In general, the hierarchy of importance is PLSS (CadNSDI points/lines) first, with DLG or SOURCEL next, then DEM, and MAP last. When snapping to the data indicated in COORD_SRC (as opposed to duplicating with copy/paste), be sure there are exactly the same number of vertices in the target, and source theme arcs. When the DEF_FEATURE is "SUBDIVISION," snap the line segment to PLSS points, and make sure there are the same number of vertices in the line as PLSS points.

11. Check that all date fields contain valid dates in YYYYMMDD, YYYYMM or YYYY format. If an attribute has a domain, check for invalid values. The values must be exact.

12. Check for capitalization and spacing differences in attribute values that should be the same. Check for leading or trailing blanks what will make a different value even if it looks identical.

9.4 VERTICAL INTEGRATION

In the ODF, the need for vertical integration is confined to, and characteristic of, the "Boundaries" group of themes. Boundaries polygons have perimeters that are defined by other features and are *required* to stay that way. Activities and Resources polygon perimeters are "self-defining." For example, a road, ownership or watershed line might be used to build a prescribed burn unit, but the unit perimeter is *defined* by the actual burned area.

Boundaries polylines (arcs) have attributes DEF_FEATURE and COORD_SRC which provide the information needed for vertical integration. When the GIS feature class indicated by COORD_SRC changes, the arc might need to be re-snapped.

Many boundaries are defined largely by legal land lines and therefore should be snapped to Cadastral NSDI PLSS Points. Theoretically, whenever PLSS Points are updated, all polylines with COORD_SRC = "CADNSDI" (or "GCD") should be re-snapped, but not all themes have the same need or priority. Sub-groups of ODF Boundaries provide a prioritization with the "Land Status" group being the highest priority, followed by the "Political and Administrative" group then the "Special Management Area" group.

Vertical Integration to updated legal land lines is accomplished simply by re-snapping vertices to PLSS Points and is not difficult as long as the polylines have vertices that coincide with PLSS points. Datasets can be updated independently of each other and partially, as time permits.

When arcs are copied from one boundary dataset to another, DEF_FEATURE may need to be changed. For example, a Resource Area Boundary (RAB) polyline might be defined as "SUBDIVISION", but when it is copied to Plan Area Boundary (PLANBDY) the plan boundary is defined by Resource Area and DEF_FEATURE should be changed to "BLM_ADMIN". It is important that boundary lines copied from other themes NOT be merged, even though the attributes are all the same. The splits in the original source theme should be retained in order to retain exact coincidence and facilitate future updates.

9.5 THEME SPECIFIC GUIDANCE

There is much in the data standard that addresses editing and provides guidance especially in the Data Management Protocols (Section 3).

In general, there should be very little editing of any kind done to the CVS data. This data standard is for the second occasion (i.e. remeasurement data only). All of the data was collected on or before 2011. There may be a few minor changes is large substantial errors or omissions are found, the data is assumed to complete. There are known errors in the data, however it is not the intent to correct these at this time. Error correction can introduce bias into the sample. The data steward will determine if, when, how and who will correct any errors.

10. OREGON/WASHINGTON DATA FRAMEWORK OVERVIEW

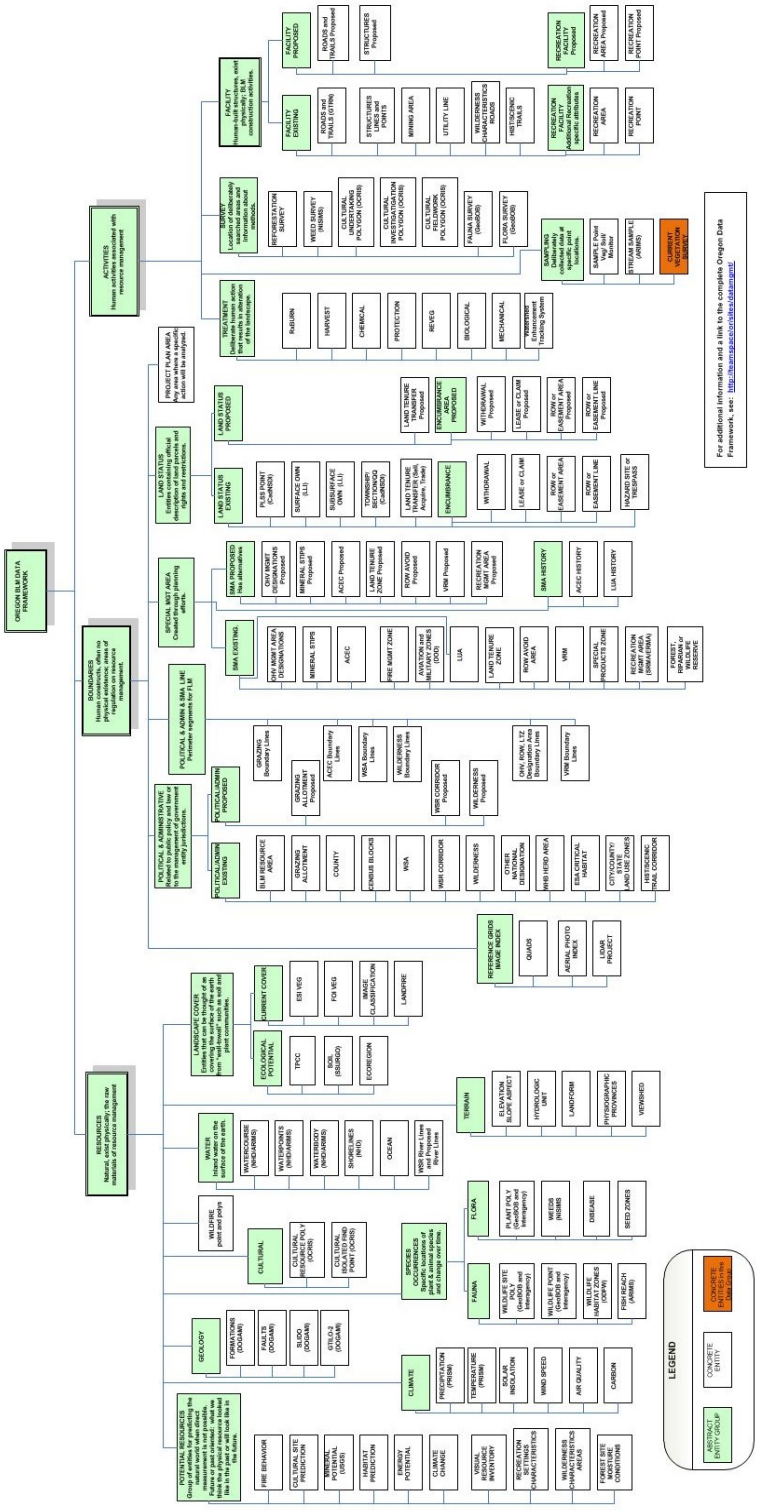

Figure 2 Oregon Data Framework Overview

11. ABBREVIATIONS AND ACRONYMS USED

(Does not include abbreviations/acronyms used as codes for particular data attributes or domain values)

Abbreviations	Descriptions
ARC	GIS line feature
BLM	Bureau of Land Management, U.S. Department of the Interior
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
GIS	Geographic Information System
GPS	Global Positioning System
NAD	North American Datum
POLY	GIS polygon feature
PUB	Publication
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
SDE	Spatial Database Engine
WEB	Worldwide Web (internet)

Table 2 Abbreviations/Acronyms Used

APPENDIX A: DOMAINS (VALID VALUES)

These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: http://www.blm.gov/or/datamanagement/index.php

For domains not listed at that site contact:

Eric Hiebenthal
Acting OR/WA State Data Administrator
Bureau of Land Management
P.O. Box 2965
Portland, OR 97208
503-808-6565

A.1 dom_CVS_CONDDIST

(CVS Condition Disturbance Code)

A	Evidence of fire
B	Domestic animal use
C	Wild animal use
D	Rodent damage
E	Recent PCT
F	Recent CT
G	Wind throw
H	Unstable slope
I	Abundant rock
J	Stony soil
K	Windrowed slash
L	Scattered slash
M	Cultural features
N	Hand piled slash
O	Abundant brush
P	Vehicle disturbance
Q	No Disturbance
R	Disturbance not listed
Z	Subplot not installed

A.2 dom_CVS_CONDSTATUS

(CVS Condition Status Code)

1	Accessible forest land
2	Non-forest land

3	Non-census water
4	Census water
5	Nonsampled

A.3 dom_CVS_COUNTY

(CVS County Code)

03	Benton
05	Clackamas
07	Clatsop
09	Columbia
11	Coos
15	Curry
19	Douglas
29	Jackson
31	Jefferson
33	Josephine
35	Klamath
37	Lake
39	Lane
41	Lincoln
43	Linn
47	Marion
51	Multnomah
53	Polk
57	Tillamook
67	Washington
71	Yamhill
93	Siskiyou

A.4 dom_CVS_COVERCODE

(CVS Cover Code)

EXSO	Exposed Soil (excluding improved roads)
CRYPTO	Cryptogam (moss or lichen)
ROFR	Rock Fragments (particles 0.125” – 0.75” w/ 50%+ coverage)
ROCK	Rock (particles more than 0.75” in diameter)
ROAD	Road (gravel of paved, excludes Cut/fill/ditches)
ORMA	Other Ground Contacts (all other components, trees, stumps, logs, debris, root masses, organic material etc.)
WATER	Bodies of water, rivers, streams, ponds, lakes etc.
XXX	No tally, transect on private lands.
AECO	Aerial Coverage

A.5 dom_CVS_CREWTYPE

(CVS Crew Type)

0	Site was not visited in the field.
1	Standard field crew
2	QA crew (any QA crew member present collecting data)

A.6 dom_CVS_CWNCLASS

(CVS Crown Class)

1	Open Grown
2	Dominant
3	Codominant
4	Intermediate
5	Overtopped

A.7 dom_CVS_DEFECT

(CVS Defect)

0	No defect
1	1 to 10%
2	11 to 20%
3	21 to 30%
4	31 to 40%
5	41 to 50%
6	51 to 60%
7	61 to 70%
8	71 to 80%
9	81 to 100%

A.8 dom_CVS_DISTRICT

(CVS District)

701	Lakeview
708	Salem
709	Eugene
710	Roseburg
711	Medford
712	Coos Bay

A.9 dom_CVS_DISTURBANCE

(CVS Disturbance Code)

0	None
1	Clear-cut harvest
2	Partial harvest - heavy (20% removed)
3	Partial harvest - light (less than 20% removed)
4	Firewood or local use harvest
5	Incidental harvest
6	Wildfire
10	Insects
20	Disease
30	Fire
31	Ground fire
32	Crown fire
40	Animal damage
41	Beaver
42	Porcupine
43	Deer/ungulate
44	Bear
45	Rabbit
46	Domestic animal or livestock
50	Weather
51	Ice
52	Wind
53	Flooding
54	Drought
60	Vegetation
70	Unknown / unsure / other
80	Human caused damage
91	Landslide
92	Avalanche track
93	Volcanic blast zone
94	Other geologic event

A.10 dom_CVS_DWDCLASS

(CVS Downed Wood Diameter Class Code)

1	0.5-1.9 inch range
2	1.0-2.9 inch range

A.11 dom_CVS_DWDECAYCLS

(CVS Downed Wood Decay Class Code)

1	Bark intact, Limbs/Twigs present, Texture intact, Shape round, Color original, Ground contact none, elevated on supports
2	Bark intact, Limbs/Twigs absent, Texture Intact to soft, Shape round, Color original, Ground contact parts touch, still elevated
3	Bark trace, Limbs/Twigs absent, Texture Hard, large pieces, Shape round, Color original to faded, Ground contact bole on ground
4	Bark absent, Limbs/Twigs absent, Texture Soft, blocky pieces, Shape round to oval, Color Light brown to faded brown, Ground contact partially below ground
5	Bark absent, Limbs/Twigs absent, Texture Soft, powdery, Shape oval, Color Faded to light yellow or gray, Ground contact mostly below ground

A.12 dom_CVS_FORESTTYPE

(CVS Forest Type Code)

C	Conifer: Classify an area as conifer forest type if the conifer canopy component is greater than 75 percent.
H	Hardwood: Classify an area as hardwood forest type if the hardwood canopy component is greater than 75 percent.
M	Hardwood/conifer mixed: Classify an area as hardwood/conifer mix forest type if the criteria for conifer or hardwood forest type is not met.
N	Non-forest: Land not qualifying as forest land.
183	Western juniper
184	Juniper woodland
201	Douglas-fir
202	Port-Orford-cedar
221	Ponderosa pine
222	Incense cedar
223	Jeffrey pine / Coulter pine / bigcone Douglas-fir
224	Sugar pine
241	Western white pine
261	White fir
262	Red fir
263	Noble fir
264	Pacific silver fir
265	Engelmann spruce
266	Engelmann spruce / subalpine fir
267	Grand fir
268	Subalpine fir
270	Mountain hemlock
271	Alaska-yellow-cedar
281	Lodgepole pine
301	Western hemlock
304	Western redcedar

305	Sitka spruce
341	Redwood
361	Knobcone pine
367	Whitebark pine
368	Misc. western softwoods
703	Cottonwood
704	Willow
709	Cottonwood / willow
722	Oregon ash
901	Aspen
902	Paper birch
904	Balsam poplar
911	Red alder
912	Bigleaf maple
922	California black oak
923	Oregon white oak
931	Coast live oak
932	Canyon live oak / interior live oak
941	Tanoak
942	California laurel
943	Giant chinkapin
951	Pacific madrone
953	Cercocarpus woodland
955	Misc. western hardwood woodlands

A.13 dom_CVS_GNDLANDCLASS

(CVS Ground Land Class Code)

20	Timberland
41	Other forest-rocky
43	Other forest-pinyon-juniper
44	Other forest-oak
45	Other forest-chaparral
46	Other forest-unsuitable site
49	Other forest-low site - If condition class should be other than "other forest-low site," explain on the "Identification Form." Do not code "other forest-low site" for forest condition classes other than 1; if you think it should be a 49, give it a 20 (timberland); explain in writing why you feel the condition class is "Other forest-low site."
63	Natural grassland or pasture, non-forest marsh, or abandoned farmland.
64	Farmland, including croplands, irrigated and/or artifically seeded grassland (pasture), and farmsteads
66	Cultural non-forest stringers - constructed roads, powerlines, pipelines, canals, and railroads. No minimum width but must be >0.4 hectare (1 acre) in size.
67	Urban. Townsites and clustered suburbs, residential industrial buildings, city streets, developed parks. Isolated developments surrounded by forest land do not have to be >0.4 hectare (1acre) in size.
68	Naturally nonvegetated - barren rock, sand, pumice, lava, and glaciers.

69	Christmas tree farms, tree nurseries
92	Water includes lakes that are 0.4 to 1.8 hectare (1.0 to 4.5 acres) in size and streams that are between 10 and 200 feet wide.
98	Census water includes lakes greater than 1.8 hectare (4.5 acres) in size and streams greater than 200 feet wide.
120	Timberland
141	Other forest-rocky
144	Other forest-oak(formally oak woodland)
146	Other forest-unsuitable site (OR & WA Only)
149	Other forest Low productivity(this code will correspond to TPCC low site designations)
150	Other forest-curl leaf mountain mahogany
161	Cropland
162	Improved pasture
163	Natural range land
164	Farmland
165	Marsh
166	Cultural non-forest stringer
167	Urban
168	Naturally non-vegetated
169	Christmas tree lands
192	Water

A.14 dom_CVS_GPSFLAG

(CVS GPS Flag Code)

N	Based on calculated coordinates from GIS and centered on subplot 1 for Round 1. Round 2 is based on values from GIS if there is not any GPS data. Coordinates may be based from any of the subplots.
Y	Based on actual GPS readings from a different subplot.
X	Unadjusted GPS readings taken at this subplot.

A.15 dom_CVS_GPSUNITTYPE

(CVS GPS Unit Type Code)

0	GPS Coordinates not collected
1	Rockwell Precision Lightweight GPS Receiver (PLGR)
2	Other brand capable of field averaging
3	Trimble GeoExplorer or Pathfinder Pro

A.16 dom_CVS_INSTALLSTAT

(CVS Install Status Code)

0	Does not meet requirements for PSU installation.
1	A PSU was remeasured at this intersection.
2	A new PSU was installed at this intersection.
3	An existing PSU was removed (demonumented).
4	A new PSU replaced an existing, previously removed or lost PSU (OccNr=1).
5	An existing PSU was scheduled to be but could not be remeasured (snowed out, active wildfire, etc.)

A.17 dom_CVS_NFC

(CVS National Forest Code)

COL	Colville NF
CRG	Crooked River Grasslands
DES	Deschutes NF
FRE	Fremont NF
GIP	Gifford Pinchot NF
MAL	Malheur NF
MBS	Mount Baker - Snoqualmie NF
MTH	Mount Hood NF
OCH	Ochoco NF
OKA	Okanogen NF
OLY	Olympic NF
ROR	Rogue River NF
SIS	Siskiyou NF
SIU	Siuslaw NF
UMA	Umatilla NF
UMP	Umpqua NF
WAW	Wallowa Whitman NF
WEN	Wenatchee NF
WIL	Willamette NF
WIN	Wind River NF

A.18 dom_CVS_NS_REASON

(CVS Non-Sampled Reason Code)

1	Not in sample
2	Access Denied
3	Hazardous
10	Other

A.19 dom_CVS_OWNER

(CVS Owner Code)

Coos Bay	712
Eugene	709
Lakeview	701
Medford	711
Roseburg	710
Salem	708

A.20 dom_CVS_OWNERGROUP

(CVS Owner Group Code)

10	Forest Service
20	Other Federal
22	BLM
30	State & Local Government
40	Private

A.21 dom_CVS_PAGUIDE

(CVS Plant Association Guide Code)

SWO	Southwestern Oregon
NWO	Westside Central Cascades of NW Oregon
NOC	Northern Oregon Coast Range
SCO	South Central Oregon (Eastern Oregon)

A.22 dom_CVS_PNFLANDUSE

(CVS Present Non-Forest Land Use Code)

63	Natural grassland or pasture, non-forest marsh, or abandoned farmland.
64	Farmland, including croplands, irrigated and/or artificially seeded grassland (pasture), and farmsteads
66	Cultural non-forest stringers - constructed roads, power lines, pipelines, canals, and railroads. No minimum width but must be >0.4 hectare (1 acre) in size.
67	Urban. Town sites and clustered suburbs, residential industrial buildings, city streets, developed parks. Isolated developments surrounded by forest land do not have to be >0.4 hectare (1acre) in size.
68	Naturally nonvegetated - barren rock, sand, pumice, lava, and glaciers.
69	Christmas tree farms, tree nurseries

92	Water includes lakes that are 0.4 to 1.8 hectare (1.0 to 4.5 acres) in size and streams that are between 10 and 200 feet wide.
98	Census water includes lakes greater than 1.8 hectare (4.5 acres) in size and streams greater than 200 feet wide.
10	Agricultural land
11	Cropland
12	Pasture
13	Idle farmland
14	Orchard
15	Christmas tree plantation
20	Rangeland
30	Developed
31	Cultural or Urban
32	Rights-of-way
33	Recreation
40	Other
41	Naturally nonvegetated
45	Non-forest -chaparral

A.23 dom_CVS_QATYPE

(CVS QA Type Code)

P	Standard production crew
C	Cold check (Contract compliance check)
X	Certification PSU

A.24 dom_CVS_REMARKS

(CVS Remarks Code)

BAR	Barnes Site Table for western hemlock
BCT	Barber-chaired tree
BS	Butt swell
BT	Broken top tree
CAL	Age calculated – large tree
CU	Curtis Site Table
DEB	Debris accumulation above ground line
D2N	DBH 2-nail or est.
D3	DBH taken at 3’ high
D4	DBH taken at 4’ high
D5	DBH taken at 5’ high
D6	DBH taken at 6’ high
D7	DBH Irregularities - Limbs
D8	DBH Irregularities - Burls
D9	DBH Irregularities – Lightning scars
D10	DBH Irregularities - Cracks

D11	DBH Irregularities - Swelling
D12	DBH Irregularities - Seams
D13	DBH Irregularities - Logging scars
DLC	DBH location change
EST	Estimated tree age
FK1	Tree forked below breast Height
FK2	Tree forked above breast height
FK3	Conifers forked > 5.0" DBH
FK4	Fork with largest diameter
HD	Horizontal distance
HIT	High tag on tree
HOL	Hollow tree
HS	Hann-Scrivani Site Table
HWL	Headwall
HWR	Headwater of stream
KG	King's Site Table
LE	Leaning tree
LIT	Litter accumulation above ground line
MC	McArdle's Site Table
NAG	Age Indeterminable
NMS	Not in mineral soil
NST	Not a sample tree
OT	Orange tag on reference tree
PDI	Previous DBH incorrect
PIS	Pistol butt
PIT	Previously incorrectly tallied
PNI	Previous No. incorrect
POR	Point of reference
PP	Ponderosa pine site Bulletin 630
PSI	Previous species incorrect
RA	Red alder site PNW 358
RF	Red fir site
RO	Rock outcrop
ROT	Tree rotten at breast height
RP	Reference point
SD	Sand dunes
SL	Slump
SPR	Subplot Reference
SWP	Sweep
TA	Talus slope
TGT	DBH calculated – trees grown together
TPS	Subplot stake not permanently installed (temporary point stake) due to rock, road, water, trail, cliff etc.
WF	White fir site Bulletin 407
WTN	Windthrown tree

A.25 dom_CVS_REMNANTTREE

(CVS Remnant Tree Code)

0	Not a remnant tree
1	Remnant tree

A.26 dom_CVS_REMSTATUS

(CVS Remeasurement Status Code)

0	No Status
1	Live
2	Dead
3	Removal
4	Missing
5	Ingrowth
6	Missed
9	Reference only

A.27 dom_CVS_RESAREA

(CVS Resource Area Code)

KF	Klamath Falls
LV	Lakeview
CA	Cascades
MP	Marys Peak
TL	Tillamook
CR	Coast Range
MC	McKenzie
SV	South Valley
SR	South River
SW	Swiftwater
AS	Ashland
BF	Butte Falls
GL	Glendale
GP	Grants Pass
MY	Myrtlewood
UM	Umpqua

A.28 dom_CVS_ROOTDRTG

(CVS Root Disease Rating Code)

0	No evidence of root disease visible on subplot.
2	Minor evidence of root disease on subplot, such as a suppressed tree killed by root disease, or a minor part of the overstory showing symptoms of infection. Little or no detectable reduction in canopy closure or volume.
3	Canopy reduction evident, up to 20 percent, usually as result of death of one codominant tree on an otherwise fully stocked site. In absence of mortality, numerous trees showing symptoms of root disease infection.
4	Canopy reduction of 20-29 percent as a result of root disease-caused mortality. Snags and downed trees removed from canopy by disease, as well as live trees with advance symptoms of disease, contribute to impact.
5	Canopy reduction of 30-49 percent as a result of root disease. At least half of the ground area of subplot considered infested with evidence of root disease-killed trees. Subplots representing mature stands with half of their volume in root disease-tolerant species usually don't go much above condition 5 because of the ameliorating effect of the disease-tolerant trees.
6	50-74 percent reduction in canopy with most of the ground area considered infested as evidenced by symptomatic trees. Much of the canopy variation in this category is generally a result of root disease-tolerant species occupying infested ground.
7	At least 75 percent canopy reduction. Subplots that reach this condition level usually are occupied by only the most susceptible species. There are very few of the original overstory trees remaining, although infested ground is often densely stocked with regeneration of susceptible species.
8	The entire subplot falls within a definite root disease pocket with only one or very few susceptible overstory trees present.
9	The entire subplot falls within a definite root disease pocket with no overstory trees of the susceptible species present.

A.29 dom_CVS_SAMPLEKIND

(CVS Sample Kind Code)

1	Initial PSU establishment
2	Remeasurement of previously established PSU
3	Replacement PSU

A.30 dom_CVS_SNAGDISAPPEAR

(CVS Snag Disappear Code)

2	Fell over “naturally” (wind, decay, etc.) or no longer self-supported; still present.
3	Fell over “naturally”, removed from the site, or not discernible by crew.
4	Cut down or pushed over; still present.
5	Cut down or pushed over; removed from the site or not discernible by crew.
6	DBH and/or height no longer meet minimum for tally (snag “shrank” to less than 5.0 in. DBH or less than 4.5 feet tall).

A.31 dom_CVS_SPECIES

(CVS Species Code)

ABAM	ABAM - Abies amabilis Pacific silver fir
ABCO	ABCO - Abies concolor White fir
ABGR	ABGR - Abies grandis Grand fir
ABLA	ABLA - Abies lasiocarpa Subalpine fir
ABLA2	ABLA2 - Abronia latifolia Coastal sand verbena
ABMA	ABMA - Abies magnifica California red fir
ABPR	ABPR - Abies procera Noble fir
ABSH	ABSH - Abies x-shastensis Shasta red fir
ACCI	ACCI - Acer circinatum Vine maple
ACGL	ACGL - Acer glabrum Rocky Mountain maple
ACGLD4	ACGLD4 - Acer glabrum Douglas maple
ACLE8	ACLE8 - Achnatherum lemmonii Lemmon's needlegrass
ACMA3	ACMA3 - Acer macrophyllum Bigleaf maple
ACMI2	ACMI2 - Achillea millefolium common yarrow
ACOCO	ACOCO - Achnetherum occidentalis western needlegrass
ACRE3	ACRE3 - Acroptilon repens Russian knapweed
ACRU2	ACRU2 - Actaea rubra red baneberry
ACTR	ACTR - Achlys triphylla sweet after death
ADBI	ADBI - Adenocaulon bicolor American trailplant
ADPE	ADPE - Adiantum pedantum L. northern maidenhair fern
AECO	AECO - Aerial coverage Ground cover transect, aerial layer
AGHE	AGHE - Agoseris heterophylla false dandelion
AGHU	AGHU - Agrostis humilis Bentgrass
AGOC2	AGOC2 - Ageratina occidentalis western snakeroot
AGSP	AGSP - Agropyron spicatum bluebunch wheatgrass
AGUR	AGUR - Agastache urticifolia nettleleaf giant hyssop
AICA	AICA - Aira caryophyllae silver hairgrass
ALLIU	ALLIU - Allium spp. onion species
ALRH2	ALRH2 - Alnus rhombifolia white alder
ALRU2	ALRU2 - Alnus rubra Red alder
ALVI2	ALVI2 - Allotropa virgata candystick
ALVIS	ALVIS - Alnus viridus Sitka alder
AMAL2	AMAL2 - Amelanchier alnifolia Saskatoon serviceberry
AMAR4	AMAR4 - Ammophila arenaria European beachgrass
ANAR5	ANAR5 - Antennaria argentea Silver pussytoes
ANCA14	ANCA14 - Anthriscus caucalis bur chervil
ANDE3	ANDE3 - Anemone deltoidea Columbian windflower
ANLU2	ANLU2 - Antennaria luzuloides rush pussytoes
ANLY	ANLY - Anemone lyallii nine-leaf anemone
ANMA	ANMA - Anaphalis margaritacea pearly everlasting
ANOR	ANOR - Anemone oregana blue windflower
ANPI	ANPI - Anemone piperi Piper's anemone
ANTEN	ANTEN - Antennaria spp. Antennaria Species
APAN2	APAN2 - Apocynum androsaemifolium spreading dogbane
AQFO	AQFO - Aquilegia formosa western columbine

ARAR8	ARAR8 - Artemisia arbuscula little sagebrush
ARCA2	ARCA2 - Aralia californica California spikenard
ARCA5	ARCA5 - Arctostaphylos canescens hoary manzanita
ARCO3	ARCO3 - Arctostaphylos columbiana hairy manzanita
ARCO9	ARCO9 - Arnica cordifolia heartleaf arnica
ARCTO3	ARCTO3 - Arctostaphylos manzanita
ARDO3	ARDO3 - Artemisia douglasiana Douglas' sagewort
AREGE	AREGE - Argentina egedii Pacific silverweed
AREL3	AREL3 - Arrhenatherum elatius tall oatgrass
ARENA	ARENA - Arenaria sandwort
ARLA8	ARLA8 - Arnica latifolia broadleaf arnica
ARME	ARME - Arbutus menziesii Pacific madrone
ARNE	ARNE - Arctostaphylos nevadensis pinemat manzanita
ARNIC	ARNIC - Arnica spp. Arnica Species
ARPA6	ARPA6 - Arctostaphylos patula greenleaf manzanita
ARRI2	ARRI2 - Artemisia rigida scabland sagebrush
ARTR2	ARTR2 - Artemisia tridentata big sagebrush
ARTRV	ARTRV - Artemisia tridentata mountain big sagebrush
ARUV	ARUV - Arctostaphylos uva-ursi kinnikinnick
ARVI4	ARVI4 - Arctostaphylos viscida sticky whiteleaf manzanita
ASCA2	ASCA2 - Asarum caudatum British Columbia wildginger
ASDE6	ASDE6 - Aspidotis densa Indian's dream
ASPR10	ASPR10 - Asyneuma prenanthoides California harebell
ASTER	ASTER - Aster spp. aster species
ASTRA	ASTRA - Astralagus spp. milkvetch species
ATFI	ATFI - Athyrium filix-femina common ladyfern
AVFA	AVFA - Avena fatua Wild oat
BAPI	BAPI - Baccharis pilularis coyotebrush
BASA3	BASA3 - Balsamorhiza sagittata arrowleaf balsamroot
BEPAC	BEPAC - Betula papyrifera Western paper birch
BLENN	BLENN - Blennosperma stickyseed
BLSP	BLSP - Blechnum spicant deer fern
BOMA3	BOMA3 - Boykinia major large boykinia
BOOC2	BOOC2 - Boykinia occidentalis boykinia
BRCA5	BRCA5 - Bromus carinatus California brome
BRELA	BRELA - Brodiaea elegans harvest brodiaea
BRMA	BRMA - Briza maxima Big quakinggrass
BROMU	BROMU - Bromus brome
BRSY	BRSY - Brachypodium sylvaticum slender false brome
BRTE	BRTE - Bromus tectorum cheatgrass
BRVU	BRVU - Bromus vulgaris Columbia brome
BUDA2	BUDA2 - Buddleja davidii Butterflybush
CAAN5	CAAN5 - Cardamine angulata seaside bittercress
CABU	CABU - Calypso bulbosa lady slipper
CACO11	CACO11 - Carex concinnoides northwestern sedge
CADE27	CADE27 - Calocedrus decurrens Incense cedar
CAGE2	CAGE2 - Carex geyeri Geyer's sedge
CALA20	CALA20 - Carthamus lanatus Woolly distaff thistle
CALAB2	CALAB2 - Carthamus lanatus spp. baeficus Smooth distaff thistle

CALLI6	CALLI6 - Callitriche water-starwort
CAME7	CAME7 - Cssiope mertensiana White mountain heather
CAMPA	CAMPA - Campanula Spp. Bellflower
CANE2	CANE2 - Carex nebrascensis Nebraska sedge
CAOB3	CAOB3 - Carex obnupta slough sedge
CAOC6	CAOC6 - Calystegia occidentalis chaparral false bindweed
CAPE6	CAPE6 - Acrex pensylvanica Pennsylvania sedge
CAPU47	CAPU47 - Calamagrostis purpurea purple reedgrass
CAQU2	CAQU2 - Camassia quamash Common camas
CAREX	CAREX - Carex sedge
CARO5	CARO5 - Carex rossii Ross' sedge
CARU	CARU - Calamagrostis rubescens pinegrass
CASC7	CASC7 - Campanula scouleri Scouler's bluebell
CASO2	CASO2 - Calystegia soldanella seashore false bindweed
CASTI2	CASTI2 - Castilleja mustis Indian paintbrush
CASTI3	CASTI3 - Calamagrostis stricta inexpansa northern reedgrass
CEAR4	CEAR4 - Cerastium arvense field chickweed
CEAU	CEAU - Cephalanthera austiniae phantom orchid
CEBI2	CEBI2 - Centaurea biebersteinii Spotted knapweed
CECU	CECU - Ceanothus cuneatus buckbrush
CEDET	CEDET - Centaurea debeauxii Meadow knapweed
CEDI3	CEDI3 - Centaurea diffusa Diffuse knapweed
CEER5	CEER5 - Centarium erythraea Europian centaury
CEIN3	CEIN3 - Ceanothus integerrimus deerbrush
CELE3	CELE3 - Cercocarpus ledifolius curl-leaf mountain-mahogany
CEMOG	CEMOG - Cercocarpus montanous Birchleaf mountain mahogany
CEPR	CEPR - Ceanothus prostratus squawcarpet
CEPU	CEPU - Ceanothus pumilus dwarf ceanothus
CESA	CESA - Ceanothus sanguineus redstem ceanothus
CESO3	CESO3 - Centaurea solstitialis Yellow star-thistle
CETH	CETH - Ceanothus thyrsiflorus blueblossom
CETR8	CETR8 - Centaurea triumfettii Squarrose knapweed
CEVE	CEVE - Ceanothus velutinus snowbrush ceanothus
CEVU	CEVU - Cerastium fontanum ssp. Vulgare big chickweed
CHANA2	CHANA2 - Chamerion angustifolium fireweed
CHCH7	CHCH7 - Chrysolepis chrysophylla Golden chinkapin
CHGL5	CHGL5 - Chrysosplenium glechomifolium Pacific golden saxifrage
CHJU	CHJU - Chondrilla juncea Rush skeletonweed
CHLA	CHLA - Chamaecyparis lawsoniana Port Orford cedar
CHME	CHME - Chimaphila menziesii little prince's pine
CHNA3	CHNA3 - Leucophysalis nana dwarf chamaesaracha
CHNO	CHNO - Chamaecyparis nootkatensis Alaska cedar
CHRYS2	CHRYS2 - Chrysanthemum spp. daisy species
CHUM	CHUM - Chimaphila umbellata pipsissewa
CIAL	CIAL - Circaea alpine small enchanter's nightshade
CIAR4	CIAR4 - Cirsium arvense Canadian thistle
CIBR2	CIBR2 - Cirsium brevistylum clustered thistle
CIIN	CIIN - Cichorium intybus chicory
CIRSI	CIRSI - Cirsium (spp) thistle

CIVU	CIVU - Cirsium vulgare bull thistle
CLDO2	CLDO2 - Clinopodium douglasii yerba buena
CLPEP	CLPEP - Claytonia perfoliata miner's lettuce
CLRH	CLRH - Clarkia rhomboidea diamond clarkia
CLSI2	CLSI2 - Claytonia sibirica Siberian springbeauty
CLUN2	CLUN2 - Clintonia uniflora bride's bonnet
CLVI6	CLVI6 - Clematis vitalba Old man's beard
COAR4	COAR4 - Convolvulus arvensis field bindweed
COCA13	COCA13 - Cornus canadensis bunchberry dogwood
COCO6	COCO6 - Corylus cornuta var. cornuta beaked hazelnut
COHE2	COHE2 - Collomia heterophylla varied leaf collomia
COLA3	COLA3 - Coptis laciniata Oregon goldthread
COLLI	COLLI - Collinsia blue eyed Mary
COMA4	COMA4 - Corallorrhiza maculata coral root
COME4	COME4 - Corallorrhiza mertensiana spotted coralroot
CONU4	CONU4 - Cornus nuttallii Pacific dogwood
COPA3	COPA3 - Collinsia parviflora Maiden blue eyed Mary
COPTI	COPTI - Coptis A coptis
CORAL	CORAL - Corallorrhiza species A corallorrhiza (coralroot)
COSE16	COSE16 - Cornus sericea red osier dogwood
COST	COST - Corallorrhiza striata striped coralroot
CRAC3	CRAC3 - Cryptogramma acrostichoides Rockbrake
CRATA	CRATA - Crataegus spp. Hawthorn genus
CRATA	CRATA - Crategus spp. Hawthorn genus
CRIN8	CRIN8 - Cryptantha intermedia Clearwater cryptantha
CRYPTO	CRYPTO - Cryptogam (moss or lichen) Ground cover transect, ground layer
CUPRE	CUPRE - Cupressus spp. Cypress genus
CYEC	CYEC - Cynosurus echinatus bristly dogstail grass
CYGR	CYGR - Cynoglossum grande Pacific hound's tongue
CYMO2	CYMO2 - Cypripedium montar mountian ladies slipper
CYOF	CYOF - Cynoglossum officionale gypsy flower
CYSC4	CYSC4 - Cytisus scoparius Scotch broom
CYST7	CYST7 - Cytisus striatus Portugese broom
DACA3	DACA3 - Danthonia californica California oatgrass
DACA6	DACA6 - Daucus carota Queen Anne's lace
DAGL	DAGL - Dactylis glomerata Orchardgrass
DEPI	DEPI - Descurainia pinnata western tansymustard
DICO19	DICO19 - Dichelostemma congestum ookow
DIFO	DIFO - Dicentra formosa Pacific bleeding heart
DIHO3	DIHO3 - Disporum hookeri drops of gold
DIHOO	DIHOO - Disporum hookeri Oregon drops of gold
DIID	DIID - Dichelostemma ida-maia firecracker flower
DIPU	DIPU - Digitalis purpurea purple foxglove
DISM2	DISM2 - Disporum smithii largeflower fairybells
DISP	DISP - Distichlis spicata saltgrass
DISPO	DISPO - Disporum sp. A disporum
DITR2	DITR2 - Disporum trachycarpum roughfruit fairybells
DODEC	DODEC - Dodecatheon spp. shootingstar
DRAR3	DRAR3 - Dryopteris arguta coastal woodfern

DRCA11	DRCA11 - Dryopteris cathusiana spinulose woodfern
DRCA3	DRCA3 - Dryopteris campyloptera Shield-fern
ELELE	ELELE - Elymus elymoides squirreltail
ELGL	ELGL - Elymus glaucus blue wildrye
EPCI	EPCI - Epilobium ciliatum fringed willowherb
EPILO	EPILO - Epilobium willowherb
EQAR	EQAR - Equisetum arvense field horsetail
EQUIS	EQUIS - Equisetum horsetail
ERBL2	ERBL2 - Ericameria bloomeri Gray rabbitbrush
ERCI6	ERCI6 - Erodium cicutarium redstem stork's bill
ERIGE2	ERIGE2 - Erigeron spp. fleabane species
ERLA6	ERLA6 - Eriophyllum lanatum common wooley flower
ERMI6	ERMI6 - Erechtites minima coatal burnweed
ERMO8	ERMO8 - Erythronium montanum white avalanche-lily
EROR4	EROR4 - Erythronium oregonum giant white fawnlily
ERPE3	ERPE3 - Erigeron peregrinus subalpine daisy
ERUM	ERUM - Eriogonum umbellatum sulphur-flower buckwheat
EUES	EUES - Euphorbia esula Leafy spurge
EULE14	EULE14 - Eucephalus ledophyllus Cascade aster
EUOC4	EUOC4 - Euthamia occidentalis western goldentop
EURA11	EURA11 - Eurybia radulinus roughleaf aster
EUVI8	EUVI8 - Eucephalus vialis wayside aster
EXSO	EXSO - Exposed soil (excluding improved roads) Ground cover transect, ground layer
FECA	FECA - Festuca californica California fescue
FEID	FEID - Festuca idahoensis Idaho fescue
FEOC	FEOC - Festuca occidentalis western fescue
FERU2	FERU2 - Festuca rubra L. red fescue
FESTU	FESTU - Festuca fescue
FESU	FESU - Festuca subulata bearded fescue
FRAGA	FRAGA - Fragaria spp. woodland strawberry spp.
FRALA	FRALA - Frasera albicaulis whitestem frasera
FRCAC5	FRCAC5 - Frangula californica ssp. californica California buckthorn
FRLA	FRLA - Fraxinus latifolia Oregon ash
FRPU7	FRPU7 - Frangula purshiana Pursh's buckthorn
GAAM2	GAAM2 - Galium ambiguum Yolla Bolly bedstraw
GAAP2	GAAP2 - Galium aparine stickywilly
GABU2	GABU2 - Garrya buxifolia dwarf silktassel
GAFR	GAFR - Garrya fremontii bearbrush
GALIU	GALIU - Galium species a bedstraw
GAOR	GAOR - Galium oreganum Oregon bedstraw
GAOV2	GAOV2 - Gaultheria ovatifolia western teaberry
GASH	GASH - Gaultheria shallon salal
GATR3	GATR3 - Galium triflorum fragrant bedstraw
GECA	GECA - Gentiana calycosa Rainier pleated gentian
GEMO2	GEMO2 - Genista monspessulana French broom
GERAN	GERAN - Geranium geranium
GICAC3	GICAC3 - Gilia capitata ssp. capitata bluehead gilia
GOOB2	GOOB2 - Goodyera oblongifolia western rattlesnake plantain
GRIND	GRIND - Grindelia spp. gumweed

GYDR	GYDR - Gymnocarpium dryopteris western oakfern
HABEN	HABEN - Habenaria Sp. a bog orchid
HEHE	HEHE - Hedera helix English ivy
HEMA17	HEMA17 - Heracleum mantegazzianum Giant hogweed
HEMA80	HEMA80 - Heracleum maximum common cowparsnip
HEMI20	HEMI20 - Hemizonella minima opposite-leaved tarweed
HEUCH	HEUCH - Heuchera spp. alumroot
HIAL2	HIAL2 - Hieracium albiflorum white hawkweed
HIBO	HIBO - Hieracium bolanderi Bolander's hawkweed
HICY	HICY - Hieracium cynoglossoides houndstongue hawkweed
HIGR	HIGR - Hieracium gracile slender hawkweed
HIOC	HIOC - Hierochloe occidentalis California sweetgrass
HODI	HODI - Holodiscus discolor oceanspray
HOLA	HOLA - Holcus lanatus common velvet grass
HORDE	HORDE - Hordeum Barley
HOSE	HOSE - Horkelia sericata silky horkelia
HYPE	HYPE - Hypericum perforatum common St. Johnswort
HYRA3	HYRA3 - Hypochaeris radicata hairy cat's ear
HYTE	HYTE - Hydrophyllum tenuipes Pacific waterleave
ILAQ80	ILAQ80 - Ilex aquifolium English holly
ILEX	ILEX - Illex sp. holly
IMGL	IMGL - Impatiens glandulifera Policeman's helmet
IRCH	IRCH - Iris chyrsophaylls yellow iris
IRIS	IRIS - Iris species an iris
IRTE	IRTE - Iris tenax toughleaf iris
ISTI	ISTI - Isatis tinctoria Dyers woad
JUCO6	JUCO6 - Juniperus communis common juniper
JUDR	JUDR - Juncos drummondii Drummond’s rush
JUME3	JUME3 - Juncos mertensianus Merten’s rush
JUNCO	JUNCO - Juncus species in the genus rush
JUOC	JUOC - Juniperus occidentalis western juniper
LACTU	LACTU - Lactuca spp. lettuce
LALAL4	LALAL4 - Lathyrus latifolius everlasting pea
LALY	LALY - Larix lyallii Subalpine larch
LANEN2	LANEN2 - Lathyrus nevadensis lanceolatus Sierra pea
LAOC	LAOC - Larix occidentalis Western larch
LAPO3	LAPO3 - Lathyrus polyphyllus leafy pea
LASE	LASE - Lactuca seriola prickly lettuce
LATHY	LATHY - Lathyrus sp. pea
LEDA	LEDA - Leucothoe davisiae Sierra-laurel
LEVU	LEVU - Leucanthemum vulgare oxeye daisy
LIAP	LIAP - Liqusticum apiifolium celeryleaf licoriceroot
LIBO3	LIBO3 - Linnaea borealis twinflower
LIBOL2	LIBOL2 - Linnaea borealis longtube twinflower
LICA10	LICA10 - Litera caurina northwestern twayblade
LICO	LICO - Lilium columbianum Columbian lily
LICO6	LICO6 - Listera cordata heartleaf twayblade
LIDA	LIDA - Linaria dalmatica Dalmation toadflax
LIDE3	LIDE3 - Lithocarpus densiflorus tanoak (tree form)

LIDEE	LIDEE - Lithocarpus densiflorus var. echinoides tanoak (shrub form)
LIGR	LIGR - Ligusticum grayi Gray's lovage
LINAN2	LINAN2 - Linanthus linanthus
LIVU2	LIVU2 - Linaria vulgaris Yellow toadflax
LIWA	LIWA - Lilium washingtonianum Washington lily
LOCA6	LOCA6 - Lonicera caerulea sweetberry honeysuckle
LOCI3	LOCI3 - Lonicera ciliosa orange honeysuckle
LOCO5	LOCO5 - Lonicera conjugialis purpleflower honeysuckle
LOCO6	LOCO6 - Loyus corniculatus bird's-foot treefoil
LOCR	LOCR - Lotus Crassifolius big deervetch
LOG	LOG - Non-tally reference log
LOHI2	LOHI2 - Lonicera hispidula pink honeysuckle
LOHU2	LOHU2 - Lotus humistratus foothill deervetch
LOIN5	LOIN5 - Lonicera involucrata twinberry honeysuckle
LOMA5	LOMA5 - Lomatium martindalei biscuitroot
LOTUS	LOTUS - Lotus spp. trefoil
LUAL3	LUAL3 - Lupinus albicaulis sicklekeel lupine
LUAR3	LUAR3 - Lupinus argenteus silvery lupine
LUCA	LUCA - Lupinus caudatus tailcup lupine
LUCA2	LUCA2 - Luzula campestris field woodrush
LUDI	LUDI - Luzula divaricata. Forked woodrush
LUGLH	LUGLH - Luzula glabrata var. hitchcockii Hitchcock's smooth woodrush
LULA4	LULA4 - Lupinus latifolius broadleaf lupine
LULE2	LULE2 - Lupinus lepidus Pacific lupine
LUMUM2	LUMUM2 - Luzula multiflora var. multiflora common woodrush
LUPE	LUPE - Luetkea pectinata partridge foot
LUPIN	LUPIN - Lupinus sp. Lupine
LUZUL	LUZUL - Luzula spp. woodrush genus
LYAM3	LYAM3 - Lysichiton americanus American skunkcabbage
LYSA2	LYSA2 - Lythrum salicaria Purple loosestrife
MAAQ2	MAAQ2 - Mahonia aquifolium hollyleaved barberry
MADI	MADI - Maianthemum dilatatum false lily of the vally
MAFAF	MAFAF - Marah fabaceus var. fabaceus California manroot
MAFU	MAFU - Malus fusca Oregon crab apple
MAGR3	MAGR3 - Madia gracilis grassy tarweed
MALUS	MALUS - Malus spp. Apple genus
MAMA	MAMA - Madia madioides woodland madia
MANE2	MANE2 - Mahonia nervosa Cascade barberry
MAOR3	MAOR3 - Marah oreganos wild cucumber
MARA7	MARA7 - Maianthemum racemosum feathery false lily of the valley
MARE11	MARE11 - Mahonia repens creeping barberry
MAST4	MAST4 - Maianthemum stellatum starry false lily of the valley
MEFE	MEFE - Menziesia ferruginea rusty menziesia
MEHA2	MEHA2 - Melica harfordii Harford's oniongrass
MELIC	MELIC - Melica species Melic
MENTH	MENTH - Mentha species mint species
MERTE	MERTE - Mertensia sp. Bluebells
MESA	MESA - Medicago sativa alfalfa
MESU	MESU - Melica subulata Alaska oniongrass

METR3	METR3 - Menyanthes trifoliata buckbean
MIBR6	MIBR6 - Mitella breweri Brewer's miterwort
MIDE3	MIDE3 - Mimulus dentatus coastal monkeyflower
MIGU	MIGU - Mimulus guttatus Monkeyflower
MILAS	MILAS - Microseris laciniata ssp. Siskiyouensis cutleaf silverpuffs
MIMUL	MIMUL - Mimulus species a monkeyflower
MIPE	MIPE - Mitella pentandra Fivestamen miterwort
MIST3	MIST3 - Mitella stauropetala smallflower miterwort
MITEL	MITEL - Mitella species A miterwort
MITR4	MITR4 - Mitella trifida threeparted miterwort
MOCA6	MOCA6 - Morella californica California wax myrtle
MOHY3	MOHY3 - Monotropa hypopithys Pinesap
MOMA3	MOMA3 - Moehringia macrophylla largeleaf sandwort
MOOD	MOOD - Mondarella odoratissima Benth. mountain mondarella
MOPA2	MOPA2 - Montia parvifolia littleleaf minerslettuce
MOUN2	MOUN2 - Moneses uniflora single delight
MOUN3	MOUN3 - Monotropa uniflora Indianpipe
MYMU	MYMU - Mycelis muralis wall-lettuce
NEPA	NEPA - Nemophila parviflora smallflower nemphila
NONE3	NONE3 - Nothochelone nemorosa woodland beardtongue
OBJECT	OBJECT - Non-tally reference object
OECE	OECE - Oemleria cerasiformis Indian plum
OESA	OESA - Oenanthe sarmentosa water parsely
ONAC	ONAC - Onopordum acanthium Scotch thistle
OPHO	OPHO - Oplopanax horridus devilsclub
ORMA	ORMA - Organic material (all other organic components in contact with the ground) Ground cover transect, ground layer
ORPI2	ORPI2 - Orobanche pinorum conifer broomrape
ORSE	ORSE - Orthilia secunda sidebells wintergreen
OSBE	OSBE - Osmorhiza benteroi sweetcicely
OSMOR	OSMOR - Osmorhiza sp. a sweetcicely
OSPU	OSPU - Osmorhiza purpurea purple sweetroot
OXOR	OXOR - Oxalis oregana redwood-sorrel
OXSU	OXSU - Oxalis suksdorfii Suskorf woodsorrel
PAMY	PAMY - Paxistima myrsinites Oregon boxleaf
PEDE	PEDE - Pedicularis densiflora Indian warrior
PEFR5	PEFR5 - Petasites frigidus arctic sweet coltsfoot
PEFRN	PEFRN - Petasites frigidus var. nivalus artic sweet coltsfoot
PEFRP	PEFRP - Petasites frigidus palmatus artic sweet coltsfoot
PELA7	PELA7 - Penstemon laetus mountain blue penstemon
PEOR6	PEOR6 - Perideridia oregana Oregon Yampah
PERA	PERA - Pedicularis racemosa Parrotbeak lousewort
PESE5	PESE5 - Penstemon serrulatus serrulate penstemon
PHAD2	PHAD2 - Phlox adsurgens northern phlox
PHCA11	PHCA11 - Physocarpus capitatus Pacific ninebark
PHEM	PHEM - Phyllodoce empetriformis pink mountainheath
PHHEH	PHHEH - Phacelia heterophyla varileaf phacelia
PHLE4	PHLE4 - Philadelphus lewisii Lewis' mock orange
PHMA5	PHMA5 - Physocarpus malvaceus mallow ninebark

PHPR3	PHPR3 - Phleum pratense timothy
PHVI9	PHVI9 - Phoradendron villosum oak mistletoe
PIAL	PIAL - Pinus albicaulis whitebark pine
PIAT	PIAT - Pinus attenuata knobcone pine
PIBR	PIBR - Picea breweriana Brewer spruce
PICO	PICO - Pinus contorta lodgepole pine
PIEN	PIEN - Picea engelmannii Engelmann spruce
PIFL2	PIFL2 - Pinus flexilis Limber pine
PIJE	PIJE - Pinus jeffreyi Jeffrey pine
PILA	PILA - Pinus lambertiana sugar pine
PIMO3	PIMO3 - Pinus monticola Western white pine
PIPO	PIPO - Pinus ponderosa ponderosa pine
PISI	PISI - Picea sitchensis Sitka spruce
PIUN3	PIUN3 - Piperia unalascensis Alaska bog orchid
PLAGI	PLAGI - Plagiobothrys popcornflower
PLCO4	PLCO4 - Plectritus congesta shortspur seablush
PLHI3	PLHI3 - Plagiobothrys hispidus Cascade popcornflower
PLLA	PLLA - Plantago lanceolata narrowleaf plantain
POA	POA - Poaceae Species a bluegrass
POACE	POACE - Poaceae In family Poaceace
POBAT	POBAT - Populus balasmifera trichocarpa Black cottonwood
POBR4	POBR4 - Polystichum braunii Braun's hollyfern
POBU	POBU - Poa bulbosa Bulbous bluegrass
POCU6	POCU6 - Polygonum cuspidatum Japanese knotweed
PODA	PODA - Polygonum davisiae Knotweed
POGL	POGL - Poa glauca glaucous bluegrass
POGL8	POGL8 - Polypodium glycyrrhiza Licorice fern
POGLG4	POGLG4 - Potentilla glandulosa Sticky cinquefoil
POGR9	POGR9 - Potentilla gracilis slender cinquefoil
POLYG	POLYG - Polygonum SP. giant Japanese knotweed
POLYSP	POLYSP - Polygonum sp. Knotweeds
POMU	POMU - Polystichum munitum western swordfern
PONE2	PONE2 - Poa nervosa Wheeler bluegrass
POPRP2	POPRP2 - Poa pratensis ssp. pratensis Kentucky bluegrass
POPU3	POPU3 - Polemonium pulcherrimum Jacob's-ladder
POSA12	POSA12 - Poa sandbergii Sandberg bluegrass
POSC4	POSC4 - Polypodium scouleri leathery polypody
POSE	POSE - Poa secunda Sandberg bluegrass
POTEN	POTEN - Potentilla spp. Sticky cinquefoil
POTR2	POTR2 - Poa trivialis rough bluegrass
POTR5	POTR5 - Populus tremuloides quaking aspen
PREM	PREM - Prunus emarginata bitter cherry
PRSU2	PRSU2 - Prunus subcordata Klamath plum
PRVU	PRVU - Prunella vulgaris Selfheal
PSJA2	PSJA2 - Pseudostellaria jamesiana tuber starwort
PSME	PSME - Pseudotsuga menziesii Douglas-fir
PTAN2	PTAN2 - Pterospora andromedea woodland pinedrops
PTAQ	PTAQ - Pteridium aquilinum western brackenfern
PUMOL	PUMOL - Pueraria montana Kudzu

PUTR2	PUTR2 - Purshia tridentata antelope bitterbrush
PYAS	PYAS - Pyrola asarifolia liverleaf wintergreen
PYPI2	PYPI2 - Pyrola picta whiteveined wintergreen
QUCH2	QUCH2 - Quercus chrysolepis Canyon live oak
QUGA4	QUGA4 - Quercus garryana Oregon white oak
QUGAB	QUGAB - Quercus garryana var. breweri Brewer's oak
QUKE	QUKE - Quercus kelloggii California black oak
QULO	QULO - Quercus loco California white oak
QUSA2	QUSA2 - Quercus sadleriana R. Br. deer oak
QUVA	QUVA - Quercus vacciniifolia huckleberry oak
RAMU	RAMU - Rosa multiflora multiflora rose
RANUN	RANUN - Ranunculus spp. buttercup
RARE3	RARE3 - Ranunculus repens creeping buttercup
RHAL2	RHAL2 - Rhododendron albiflorum Cascade azalea
RHMA3	RHMA3 - Rhododendron macrophyllum Pacific rhododendron
RHOC	RHOC - Rhododendron occidentale western azalea
RIBES	RIBES - Ribes species a currant (gooseberry)
RIBI	RIBI - Ribes binominatum ground gooseberry
RIBR	RIBR - Ribes bracteosum stink currant
RICE	RICE - Ribes cereum wax currant
RICR	RICR - Ribes cruentum shinyleaf currant
RILA	RILA - Ribes lacustre prickly currant
RILO	RILO - Ribes lobbii gummy gooseberry
RIMA2	RIMA2 - Ribes marshallii Hupa gooseberry
RISA	RISA - Ribes sanguineum redflower currant
RIVI3	RIVI3 - Ribes viscosissimum sticky currant
ROAD	ROAD - Road surface, improved Ground cover transect, ground layer
ROCA2	ROCA2 - Rosa californica California wildrose
ROCK	ROCK - Rock (surface particles > 0.75" dia.) Ground cover transect, ground layer
ROFR	ROFR - Rock fragments (50%+ surface particles 0.125-0.75" dia.) Ground cover transect, ground layer
ROGY	ROGY - Rosa gymnocarpa dwarf rose
ROMAN	ROMAN - Romanzoffia speciew a mistmaiden
RUAC3	RUAC3 - Rumex acetosella common sheep sorrel
RUAR9	RUAR9 - Rubus armeniacus Himalayan blackberry
RUCR	RUCR - Rumex crispus curly dock
RUDI2	RUDI2 - Rubus discolor Himalayan blackberry
RULA2	RULA2 - Rubus lasiococcus roughfruit berry
RULE	RULE - Rubus leucodermis black raspberry
RUNI2	RUNI2 - Rubus nivalis snow raspberry
RUPA	RUPA - Rubus parviflorus thimbleberry
RUPE	RUPE - Rubus pedatus strawberryleaf raspberry
RUPH3	RUPH3 - Rupertia phsodes forest scurfpea
RUSP	RUSP - Rubus spectabilis salmonberry
RUUR	RUUR - Rubus ursinus California blackberry
SACR2	SACR2 - Sanicula crassicaulis Pacific sanicle
SAHO	SAHO - Salix hookeriana dune williow
SALIX	SALIX - Salix willow
SAMBU	SAMBU - Sambucus sp. an elderberry

SARA2	SARA2 - Sambucus racemosa red elderberry
SARCT	SARCT - Sanicula cassicaulis Pacific blacksnakeroot
SASC	SASC - Salix scouleriana Scouler's willow
SCMI2	SCMI2 - Scirpus microcarpus panicled bulrush
SEBO	SEBO - Senecio bolanderi Ragwort
SEJA	SEJA - Senecio jacobaea stinking willie
SENEC	SENEC - Senecio species a grounsel
SEOR2	SEOR2 - Sedum oregonese cream stonecrop
SESE3	SESE3 - Sequoia sempervirens redwood
SESP	SESP - Sedum spathulifolium Boadleaf stonecrop
SETR	SETR - Senecio triangularis arrowleaf groundsel
SEVU	SEVU - Senecio vulgaris old-man-in-the-Spring
SOOL	SOOL - Sonchus oleraceus common sowthistle
SOSI2	SOSI2 - Sorbus sitchensis Sitka mountain ash
SPBE2	SPBE2 - Spiraea betulifolia white spirea
SPDOM	SPDOM - Spiraea douglasii Menzies' spirea
SPJU2	SPJU2 - Spartium junceum Spanish broom
STAKE	STAKE - Non-tally reference stake
STAM2	STAM2 - Streptopus amplexifolius claspleaf twistedstalk
STCHC3	STCHC3 - Stachys chamissonis var. cooleyae coastal hedgenettle
STELL	STELL - Stellaria species a starwort
STLAR	STLAR - Streptopus lanceolatus var. roseus rosy twistedstalk
STME	STME - Stachys mexicana Mexican hedgenettle
STME2	STME2 - Stellaria media common chickweed
STUMP	STUMP - Non-tally reference stump
SYAL	SYAL - Symphoricarpos albus common snowberry
SYHA	SYHA - Symphyotrichum hallii Hall’s aster
SYHE	SYHE - Symphoricarpos hesperius G.N. Jones trailing snowberry
SYMO	SYMO - Symphoricarpos mollis Nutt. creeping snowberry
SYRE	SYRE - Synthyris reniformis snowqueen
TABR2	TABR2 - Taxus brevifolia Pacific yew
TACA8	TACA8 - Taeniatherum caput-medusae medusahead
TAOF	TAOF - Taraxacum officinale dandelion
TEGR2	TEGR2 - Telima grandiflora bigflower tellima
THMO6	THMO6 - Thermopsis montana mountain goldenbanner
THOC	THOC - Thalictrum occidentale western meadow-rue
THPL	THPL - Thuja plicata western red cedar
TITR	TITR - Tiarella trifoliata L. threeleaf foamflower
TITRT	TITRT - Tiarella trifoliata threeleaf foamflower
TITRU	TITRU - Tiarella trifoliata oneleaf foamflower
TOAR	TOAR - Torilis arvensis headgeparsley
TODI	TODI - Taxicodendron diversiloba Pacific poinson oak
TOME	TOME - Tolmiea menziesii youth on age
TRAGO	TRAGO - Tragopogon goatsbeard
TRBOL	TRBOL - Trientalis borealis Raf. ssp. Latifolia broadleaf starflower
TRCA	TRCA - Trautvetteria caoliniensis false bugbane
TRCA21	TRCA21 - Trisetum canescens Tall trisetum
TRCH2	TRCH2 - Trillium chloropetalum giant trillium
TRDU	TRDU - Tragopogon dubius yellow salsify

TREE	TREE - Unknown tree species Unknown tree species
TREEC	TREEC - Unknown conifer tree species Unknown conifer
TREED	TREED - Unknown hardwood tree species Unknown hardwood
TRIFO	TRIFO - Trifolium spp. clover spp.
TRLA6	TRLA6 - Trientalis latifolia broadleaf starflower
TRLO	TRLO - Trifolium longipes longstalk clover
TROV2	TROV2 - Trillium ovatum Pacific trillium
TRRE3	TRRE3 - Trifolium repens white clover
TRTE	TRTE - Tribulus terrestris Puncturevine
TSHE	TSHE - Tsuga heterophylla western hemlock
TSME	TSME - Tsuga mertensiana mountain hemlock
ULEU	ULEU - Ulex europaeus Gorse
UMCA	UMCA - Umbellularia californica California laurel
URDI	URDI - Urtica dioica stinging nettle
VACA13	VACA13 - Vaccinium cespitosum var. cespitosum dwarf bilberry
VADE	VADE - Vaccinium deliciosum blueleaf huckleberry
VAHE	VAHE - Vancouveria hexandra white insideout flower
VAME	VAME - Vaccinium membranaceum thinleaf huckleberry
VAOV	VAOV - Vaccinium ovalifolium oval-leaf blueberry
VAOV2	VAOV2 - Vaccinium ovatum California huckleberry
VAPA	VAPA - Vaccinium parvifolium red huckleberry
VASC	VASC - Vaccinium scoparium grouse whortleberry
VASI	VASI - Valeriana sitchensis Sitka valerian
VAUL	VAUL - Vaccinium uliginosum bog blueberry
VEBL	VEBL - Verbascum blattaria moth mullein
VECA2	VECA2 - Veratrum californicum California false hellebore
VERAT	VERAT - Veratrum species a false hellebore
VETH	VETH - Verbascum thapsus common mullein
VEVI	VEVI - Veratrum viride green false hellebore
VIAD	VIAD - Viola adunca hookedspur violet
VIAM	VIAM - Vicia Americana American vetch
VICA5	VICA5 - Vitis californica California wild grape
VICIA	VICIA - Vicia species a vetch
VIGL	VIGL - Viola glabella pioneer violet
VIOR	VIOR - Viola orbiculata darkwoods violet
VISE3	VISE3 - Viola sempervirens evergreen violet
VUBR	VUBR - Vulpia bromoides brome fescue
WATER	WATER - Water (lakes, rivers, ponds,streams) Ground cover transect, ground layer
WHMO	WHMO - Whipplea modesta common whipplea
WYAM	WYAM - Wyethia amplexicaulis mule-ears
WYGL	WYGL - Wyethia glabra Coast Range Mules Ear
WYMO	WYMO - Wyethia mollis woolly mule-ears
XASP2	XASP2 - Xanthium spinosum Spiny cocklebur
XETE	XETE - Xerophyllum tenax common beargrass
XXX	XXX - Not in sample (private land) Ground cover transect, ground layer

A.32 dom_CVS_SPSTATUS

(CVS Subplot Status Code)

1	Subplot installed, full sample
2	Subplot installed, partial sample, ownership
3	Subplot installed, partial sample, access
4	Subplot installed, partial sample, both
5	Subplot not installed, ownership
6	Subplot not installed, access

A.33 dom_CVS_STANDSIZE

(CVS Stand Size Code)

1	Seedlings and saplings
2	Pole timber
3	Small timber
4	Medium timber
5	Large timber
6	Giant timber
7	Non-stocked

A.34 dom_CVS_STATE

(CVS Stand Size Code)

41	Oregon

A.35 dom_CVS_STRUCTURE

(CVS Stand Structure Code)

1	Even-aged single-storied
2	Even-aged two-storied
3	Uneven-aged
4	Mosaic

A.36 dom_CVS_TOPOGPOS

(CVS Topographic Position Code)

0	Other, see subplot remarks
1	Ridge top or mountain peak over 130 feet wide
2	Narrow ridge top or peak less than 130 feet wide
3	Side hill -- upper 1/3

4	Side hill -- middle 1/3
5	Side hill -- lower 1/3
6	Canyon bottom less than 660 feet wide
7	Bench, terrace or dry flat
8	Broad alluvial flat over 660 feet wide
9	Swamp or wet flat

A.37 dom_CVS_VEGCODE

(CVS Vegetation Code)

10	Live Tree
11	Growth Sample Tree (GST, conifer species)
12	Height Sample Tree (HST, conifer species)
13	Site Tree (conifers except Pacific yew and junipers, no hardwoods except Red alder). Round 1 Site Trees on the Hectare (DBH GTE 48.0 inches) were recorded as VC 93 and placed in the NTSiteData table. Round 2, these tree were recorded as VC 13.
14	Age Sample Tree (AST, conifers and hardwoods) Added for Round 2.
15	Conifer Seedling Group Tally, height class of 0.5 to 4.4 feet (HeightAG of 1 to 4)
16	Conifer Sapling Group Tally, DBH class of 0.1 to 0.9 inches (HeightAG of 5 or more)
17	Hardwood Saplings Group Tally, DBH class of 1.0 to 4.9 inches (HeightAG of 5 or more); See Subplot Type for changes between Rounds.
20	Dead Tree $\geq$ 5.0" DBH; See Subplot Type for changes between Rounds.
25	Dead Tree Group Tally, DBH class of 1.0 to 4.9 inches; See Subplot Type for changes between Rounds.
22	Stump Group Tally, stumps with evidence of root disease and a cross-sectional diameter of 5.0" or more
30	Condition class definition
31	Condition class boundary data
32	Condition class transect segment data
40	Indicator (key) species
41	Noxious weed species
42	Other species $\geq$ 3% cover
60	Hardwood Clump, three or more stems in the DBH class of 1.0 to 4.9 inches; See Subplot Type for changes between Rounds.
70	Coarse Down Woody Material, intersect Diameter $\geq$ 3.0 inches & $\geq$ 3 feet
71	Coarse Down Woody Material Pile intersect Diameters $\geq$ 3.0 inches
75	Fine Down Woody Material, intersect diameter of 1.0 to 2.9 inches
76	Fine Down Woody Material, intersect diameter of 0.2 to 0.9 inches
90	Ground Cover
93	Non-tally site tree (within hectare, conifers except Pacific yew and junipers, no hardwoods except Red alder)
99	Non-tally subplot reference

A.38 dom_CVS_WILDUSAGE

(CVS Wildlife Usage Code)

0	No cavity or den present.
1	Cavity or den present, < 6 inches.
2	Cavity or den present, ≥ 6 inches.

APPENDIX B: RELATIONSHIP CLASSES

These are the relationship classes within the geodatabase.

B.1 rel_CCDefinitions_to_CCBoundaries

Origin Feature class/Table: CVS_CCDEFINITIONS_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_CCBOUNDARIES_TBL
Destination Field: CCDEFID
Relationship Type: 1 to Many

B.2 rel_CCDefinitions_to_CCProportions

Origin Feature class/Table: CVS_CCDEFINITIONS_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_CC_PROPORTIONS_TBL
Destination Field: CCDEFID
Relationship Type: 1 to Many

B.3 rel_PSUData_to_PSUAdmin

Origin Feature class/Table: CVS_PSUDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_PSUADMIN_TBL
Destination Field: PSUID
Relationship Type: 1 to Many

B.4 rel_PSUData_to_PSUHistory

Origin Feature class/Table: CVS_PSUDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_PSUHISTORY_TBL
Destination Field: PSUID
Relationship Type: 1 to Many

B.5 rel_Res_DW_to_DWMCoarse

Origin Feature class/Table: CVS_RES_DW_PT
Origin Field: DW_ROWID
Destination Feature class/Table: CVS_DWMCOARSE_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.6 rel_Res_HWCL_to_HWClumps

Origin Feature class/Table: CVS_RES_HWCL_PT
Origin Field: HW_ROWID
Destination Feature class/Table: CVS_HWCLUMPS_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.7 rel_Res_NT_Spref_to_NTSPrefData

Origin Feature class/Table: CVS_RES_NT_SPREF_PT
Origin Field: SPR_ROWID
Destination Feature class/Table: CVS_NTSPREFS_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.8 rel_Res_NT_ST_to_NTSiteData

Origin Feature class/Table: CVS_RES_NT_ST_PT
Origin Field: NTST_ROWID
Destination Feature class/Table: CVS_NTSITEDATA_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.9 rel_Res_Tree_to_TreeData

Origin Feature class/Table: CVS_RES_TREE_PT
Origin Field: TREE_ROWID
Destination Feature class/Table: CVS_TREEDATA_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.10 rel_Smp_PsuPlt_to_PSUData

Origin Feature class/Table: CVS_SMP_PSUPLT_PT
Origin Field: PSU_ROWID
Destination Feature class/Table: CVS_PSUDATA_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.11 rel_Srv_CC_Poly_to_CCDefinitions

Origin Feature class/Table: CVS_SRV_CC_POLY
Origin Field: CCDEF_ROWID
Destination Feature class/Table: CVS_CCDEFINITIONS_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.12 rel_Srv_SubPlot_Poly_to_SubPlotData

Origin Feature class/Table: CVS_SRV_SUBPLT_POLY
Origin Field: SUBPLOT_ROWID
Destination Feature class/Table: CVS_SUBPLOTDATA_TBL
Destination Field: ROW_ID
Relationship Type: 1 to 1

B.13 rel_SubPlotData_to_CCBoundaries

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_CCBOUNDARIES_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.14 rel_SubPlotData_to_DWMCoarse

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_DWMCOARSE_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.15 rel_SubPlotData_to_DWMFines

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_DWMFINES_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.16 rel_SubPlotData_to_GndCover

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_GNDCOVER_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.17 rel_SubPlotData_to_HWClumps

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_HWCLUMPS_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.18 rel_SubPlotData_to_NTSiteData

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_NTSITEDATA_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.19 rel_SubPlotData_to_NTSPrefs

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_NTSPREFS_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.20 rel_SubPlotData_to_Stumps

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_STUMPS_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.21 rel_SubPlotData_to_TreeData

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_TREEDATA_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many

B.22 rel_SubPlotData_to_UnderVegData

Origin Feature class/Table: CVS_SUBPLOTDATA_TBL
Origin Field: ROW_ID
Destination Feature class/Table: CVS_UNDERVEGDATA_TBL
Destination Field: SUBPLOTID
Relationship Type: 1 to Many