Oregon/Washington Bureau of Land Management

RANGE MONITORING

SPATIAL DATA STANDARD

A typical location where staff perform Range Monitoring activities.

Document Revisions

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Navigation

This document uses hyperlinks to display additional information on topics. External links are displayed with an underline. Internal links are blue text, not underlined. After clicking on an internal link, press the Alt +left arrow keys to return to the original location from the target location.

Table of Contents

1 General Information 10
1.1 Roles and Responsibilities 11
1.2 FOIA Category 11
1.3 Records Retention Schedule 11
1.4 Security/Access/Sensitivity 12
1.5 Keywords 12
1.6 Subject Function Codes 12
2 Dataset Overview 13
2.1 Usage 13
2.2 Sponsor/Affected Parties 13
2.3 Relationship to Other Datasets, Databases or Files 13
2.4 Data Category/Architecture Link 13
2.5 Relationship to DOI Enterprise Architecture Data Resource Model 16
3 Data Management Protocols 17
3.1 Accuracy Requirements 17
3.2 Collection, Input, and Maintenance Protocols 17
3.3 Update Frequency and Archival Protocols 18
3.4 Statewide Monitoring 18
4 Range Monitoring Schema (Simplified) 19
4.1 KEY_MGT_INFO_TBL (Key Management Info Table) 19
4.2 COLE_BROWSE_INFO_TBL (Cole Browse Info Table) 20
4.3 COLE_BROWSE_DATA_TBL (Cole Browse Details Table) 22
4.4 HGT_WGT_INFO_TBL (Height Weight Info Table) 23
4.5 HGT_WGT_DATA_TBL (Height Weight Details Table) 24
4.6 KEY_SPECIES_TBL (Key Species Table) 24
4.7 LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) 26
4.8 LPI_INFO_TBL (Line Point Intercept Info Table) 27
4.9 LPI_DATA_TBL (Line Point Intercept Details Table) 28
5 Projection and Spatial Extent 29
6 Spatial Entity Characteristics 29
7 Attribute Characteristics and Definition (In alphabetical order) 30
7.1 AGE_CLASS 30
7.2 ALLOT_NM 30
7.3 ALLOT_NR 31
7.4 ANIMAL 31

7.5 ASPECT 32
7.6 AVG_LEADER_USE 32
7.7 AVG_UNGRAZED_PLANT_HGT 32
7.8 AVG_UTIL_HW 33
7.9 AVG_UTIL_LA 33
7.10 COMMENTS 33
7.11 CULM_PRESENT 34
7.12 DISTRICT 35
7.13 ECOLOGICAL_SITE 35
7.14 ELEVATION 35
7.15 EXAMINER 36
7.16 FORM_CLASS 36
7.17 GLOBALID 36
7.18 GRAZED_HT 37
7.19 GRAZED_UNGRAZED_UOM 37
7.20 GROWTH_INDEX 37
7.21 KEY_MGMT_AREA_NM 38
7.22 KEY_SP_1 38
7.23 KEY_SP_2 38
7.24 KEY_SP_3 39
7.25 KEY_SP_4 39
7.26 KEY_SPECIES 39
7.27 LEADER_LENGTH_1 40
7.28 LEADER_LENGTH_2 40
7.29 LEADER_LENGTH_3 40
7.30 LEADER_LENGTH_4 41
7.31 LEADER_LENGTH_5 41
7.32 LEADER_LENGTH_6 41
7.33 LEADER_LENGTH_7 42
7.34 LEADER_LENGTH_8 42
7.35 LEADER_LENGTH_9 42
7.36 LEADER_LENGTH_10 43
7.37 LEADER_LENGTH_UOM 43
7.38 LEADER_USE_PCT 43
7.39 LIVESTOCK_WILDLIFE_SEASON 43
7.40 LOWER_1 44
7.41 LOWER_1_DEAD 44

7.42 LOWER_2 44
7.43 LOWER_2_DEAD 45
7.44 LOWER_3 45
7.45 LOWER_3_DEAD 45
7.46 NUM_LEADERS_MEASURED 46
7.47 NUM_PLANTS_FORM_CLASS_7_8 46
7.48 NUM_SAMPLED_PLANTS 46
7.49 NUM_UNGRAZED_PLANTS 47
7.50 PASTURE 47
7.51 PCT_AGE_CLASS_1 47
7.52 PCT_AGE_CLASS_2 48
7.53 PCT_AGE_CLASS_3 48
7.54 PCT_AGE_CLASS_4 48
7.55 PCT_BARE_GROUND 48
7.56 PCT_BASAL_COVER 49
7.57 PCT_CANOPY_COVER 49
7.58 PCT_FORM_CLASS_1 50
7.59 PCT_FORM_CLASS_2 50
7.60 PCT_FORM_CLASS_3 50
7.61 PCT_FORM_CLASS_4 50
7.62 PCT_FORM_CLASS_5 51
7.63 PCT_FORM_CLASS_6 51
7.64 PCT_FORM_CLASS_7 51
7.65 PCT_FORM_CLASS_8 52
7.66 PCT_UTILIZATION 52
7.67 PERIOD_USE_BEGIN 52
7.68 PERIOD_USE_END 53
7.69 PLANT_COMMUNITY 53
7.70 POINT_NUM 53
7.71 QTR_QTR_SEC 54
7.72 QTR_SEC 54
7.73 RECORDER 54
7.74 RESOURCE_AREA 55
7.75 RGE 55
7.76 SAMP_INT 55
7.77 SEC 56
7.78 SLOPE 56

7.79 SOIL_SURFACE 56
7.80 SOIL_SURFACE_PC 57
7.81 SOIL_SURFACE_PC_DEAD 57
7.82 SP1_0_5 57
7.83 SP1_6_20 58
7.84 SP1_21_40 58
7.85 SP1_41_60 58
7.86 SP1_61_80 59
7.87 SP1_81_94 59
7.88 SP1_95_100 59
7.89 SP1_AVG_UTIL 60
7.90 SP2_0_5 60
7.91 SP2_6_20 60
7.92 SP2_21_40 61
7.93 SP2_41_60 61
7.94 SP2_61_80 61
7.95 SP2_81_94 62
7.96 SP2_95_100 62
7.97 SP2_AVG_UTIL 62
7.98 SP3_0_5 63
7.99 SP3_6_20 63
7.100 SP3_21_40 63
7.101 SP3_41_60 64
7.102 SP3_61_80 64
7.103 SP3_81_94 64
7.104 SP3_95_100 65
7.105 SP3_AVG_UTIL 65
7.106 SP4_0_5 65
7.107 SP4_6_20 66
7.108 SP4_21_40 66
7.109 SP4_41_60 66
7.110 SP4_61_80 67
7.111 SP4_81_94 67
7.112 SP4_95_100 67
7.113 SP4_AVG_UTIL 68
7.114 SP_GUID 68
7.115 STATE 68

7.116 STUDY_ID 69
7.117 TOP_CANOPY 69
7.118 TOP_CANOPY_DEAD 69
7.119 TOT_AGE_CLASS_1 70
7.120 TOT_AGE_CLASS_2 70
7.121 TOT_AGE_CLASS_3 70
7.122 TOT_AGE_CLASS_4 70
7.123 TOT_FORM_CLASS_1 71
7.124 TOT_FORM_CLASS_2 71
7.125 TOT_FORM_CLASS_3 71
7.126 TOT_FORM_CLASS_4 72
7.127 TOT_FORM_CLASS_5 72
7.128 TOT_FORM_CLASS_6 72
7.129 TOT_FORM_CLASS_7 72
7.130 TOT_FORM_CLASS_8 73
7.131 TOT_HGT_UNGRAZED 73
7.132 TOT_LEADER_LENGTH 73
7.133 TOT_LEADER_USE_PCT_0 74
7.134 TOT_LEADER_USE_PCT_5 74
7.135 TOT_LEADER_USE_PCT_25 74
7.136 TOT_LEADER_USE_PCT_50 75
7.137 TOT_LEADER_USE_PCT_75 75
7.138 TOT_LEADER_USE_PCT_95 75
7.139 TOT_PCT_UTIL_SAMPLED_PLANTS 76
7.140 TRANSECT_AZ 76
7.141 TRANSECT_LEN 76
7.142 TRANSECT_LEN_UOM 77
7.143 TWP 77
7.144 UNGRAZED_HT 77
7.145 USAGE_0_5 78
7.146 USAGE_6_20 78
7.147 USAGE_21_40 78
7.148 USAGE_41_60 79
7.149 USAGE_61_80 79
7.150 USAGE_81_94 79
7.151 USAGE_95_100 80
7.152 USE_INDEX 80

7.153 VEG_TYPE 80
7.154 VERSION_NAME 80
7.155 VISIT_DT 81
7.156 VISIT_GUID 82
8 Layer Files (Publication Views) 83
8.1 General 83
8.2 Specific to this Dataset 83
9 Editing Procedures 85
9.1 Managing Overlap (General Guidance) 85
9.2 POLY/ARC Topology (Boundary Group Datasets) 85
9.3 Editing Quality Control 85
9.4 Vertical Integration 85
9.5 Theme Specific Guidance 85
10 Abbreviations and Acronyms 86
A Domains (Valid Values) 87
A.1 dom_BROWSE_AGE_CLASS 87
A.2 dom_COMPASS_DIR 87
A.3 dom_DEGREE0TO359 87
A.4 dom_DIST_NAME 88
A.5 dom_FORM_CLASS 88
A.6 dom_LEADER_USE_PCT 88
A.7 dom_LIVESTOCK_ANIMAL_TYPE 89
A.8 dom_RA_NAME 89
A.9 dom_SOIL_SURFACE 90
A.10 dom_UOM 90
A.11 dom_USDA_PLANTS_LPI 90
A.12 dom_YN 91

1 General Information

The Range Monitoring theme depicts characteristics observed by the OR/WA BLM through the monitoring of rangeland ecosystems using a variety of different methods. The methods used by the BLM are described in detail in the *Utilization Studies and Residual Measurements Technical Reference* 1734-3, available on the BLM website and *Monitoring Manual for Grassland, Shrubland and Savanna Ecosystems* (Volume 1: Core Methods). Editors, analysts, and others who will use the data contained in this theme should be familiar with the protocols used to collect the data so they can properly interpret the results.

Bear in mind that this theme does not include data collected as part of the BLM Assessment, Inventory, and Monitoring (AIM) Strategy, which should be collected only using the Database for Inventory, Monitoring, and Assessment (DIMA). For more information on AIM and DIMA, see https://jornada.nmsu.edu/monit-assess.

The OR/WA BLM enterprise GIS environment implements the Range Monitoring theme as a series of non-spatial tables in a relational system with the existing Sample Points feature class as the parent spatial feature. The protocols (methods) used to collect and store the Range Monitoring data include:

- Cole Browse: Includes information on shrubby vegetation (browse), including browse species, age, availability, hedging, and estimated utilization. Staff use transects to collect information about each species of browse.
- Height-Weight: Involves the measurement of heights of ungrazed and grazed grass or grass-like plants to determine average utilization. Measurements of plant heights recorded along transects are converted to percent of weight utilized by means of a utilization gauge.
- Key Species: A combination of the Landscape Appearance Method and the Ocular Estimate Method. An ocular estimate of the amount of forage removed by weight on individual key species provides a base for the utilization levels. Record observations in one of seven utilization classes. Data are collected along a line transect or a pace transect.
- Landscape Appearance: Uses an ocular estimate of forage utilization based on the general appearance of the rangeland. Utilization levels are determined by comparing observations with written descriptions of each utilization class.
- Line-Point Intercept: Provides a rapid, accurate method for quantifying soil cover, including vegetation, litter, rocks, and biotic crusts. These measurements relate to wind and water erosion, water infiltration, and the ability of the site to resist and recover from degradation.

Additional Key Management Information is stored in the KEY_MGT_INFO_TBL (Key Management Info Table that is the direct child of the Sample Point feature class.

Historically, BLM range staff collected Range Monitoring data using paper forms. The Range Monitoring theme allows more efficient, streamlined collection of the data using a customized version of the S1 Mobile Application for Android.

Dataset (Theme) Name: RANGE MONITORING (RGE_MON)

- Dataset (Table): COLE_BROWSE_DATA_TBL (Cole Browse Details Table),
  COLE_BROWSE_INFO_TBL (Cole Browse Info Table),
  HGT_WGT_DATA_TBL (Height Weight Details Table),
  HGT_WGT_INFO_TBL (Height Weight Info Table),
  KEY_MGT_INFO_TBL (Key Management Info Table),
  KEY_SPECIES_TBL (Key Species Table),
  LNDSCPE_APPRNCE_TBL (Landscape Appearance Table),
  LPI_DATA_TBL (Line Point Intercept Details Table),
  LPI_INFO_TBL (Line Point Intercept Info Table)

1.1 Roles and Responsibilities

Current personnel assigned these Roles, can be found at the following link:

https://www.blm.gov/about/data/oregon-data-management

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Data Steward	The State Data Steward responsibilities include approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential Privacy issues, and managing that data 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 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 ensure the consistency and accordance with the established data standards of data input into the enterprise Spatial Database Engine (SDE) geodatabase. 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 compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator 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 classifies data under the proper records retention schedule and determines the appropriate Freedom of Information Act category.

1.2 FOIA Category

Records Access Category 1A-Public Data.

1.3 Records Retention Schedule

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

"PERMANENT. Cutoff at the end of each Fiscal Year (FY), or, when making significant changes and additions 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."

Oregon/Washington (OR/WA) Bureau of Land Management (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 Range Monitoring 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 dataset is not sensitive and there are no restrictions on access to this data, from either within the BLM or external to the BLM. This dataset falls under the standard Records Access Category 1A-Public Data. However, since the data is highly specific to the Range program and a casual user could misinterpret it, data distribution will be by request only. Make requests to the State Data Administrator.

There are or no privacy issues or concerns associated with this data theme.

1.5 Keywords

Keywords used to locate this dataset include:

- BLM Thesaurus Keywords: Range, Vegetation, Management
- ISO Thesaurus Keywords: biota, economy, environment, location, farming
- Additional Keywords: Monitoring, Utilization, Grazing, Livestock, Animal, Ranching

1.6 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 – Data Administration
- 4010 – Range Management Program Records
- 4400 – Rangeland Inventory, Monitoring, and Evaluation
- 6515 – Wildlife—Range Management
- 9167 – Geospatial and Mapping
- 9264 – Range Management

2 Dataset Overview

2.1 Usage

This dataset is the spatial repository for vegetation utilization data and vegetation attribute data including foliar and basal cover, and composition. Utilization data may be used to identify livestock distribution patterns, but should not be used alone to determine stocking rates. Collect line-point intercept data at the same location at different points in time to establish a trend. Trend is described as moving; “towards meeting objectives”, “away from meeting objectives”, “not apparent”, or “static”. Trend data are important in determining the effectiveness of on-the-ground management actions. This dataset provides a centralized and spatial location for Range program monitoring data.

Additionally, the Range Monitoring theme will make mobile collection of the data easier. By implementing the theme in the Oregon Data Framework, range technicians will be able to collect the data using a mobile application on a smartphone or tablet, reducing the volume and weight of paper forms, GPS devices, and cameras carried into the field.

Note that the data collected and published through the Range Monitoring theme is in an unprocessed format. Users should have knowledge of the data collection methodology, protocols, and the rangeland management discipline prior to interpreting the data. Avoid attempting to use the data without this knowledge because it could lead users to draw inappropriate conclusions.

2.2 Sponsor/Affected Parties

The sponsor for this data set is the Deputy State Director for Resources, Lands, Minerals, and Fire.

Affected parties for this data include OR/WA BLM Range program staff and their customers. The data is specific to OR/WA and does not need to be matched across jurisdictional boundaries.

2.3 Relationship to Other Datasets, Databases or Files

As stated previously, the Range Monitoring theme participates in a series of relationship classes with the OR/WA Sample Points (SAMPLE_PT) dataset. Range Monitoring features inherit their spatial location and core attribution from Sample Points. The tables containing the Range Monitoring-specific attributes relate to Sample Points in the following manner:

- KEY_MGT_INFO_TBL (Key Management Info Table: 1:1 (one or zero records per Sample Point feature)
- LNDSCPE_APPRNCE_TBL (Landscape Appearance Table): M:1 (zero to many records per Sample Point feature)
- COLE_BROWSE_INFO_TBL (Cole Browse Info Table): M:1 (zero to many records per Sample Point feature)
- LPI_INFO_TBL (Line Point Intercept Info Table): M:1 (zero to many records per Sample Point feature)
- HGT_WGT_INFO_TBL (Height Weight Info Table): M:1 (zero to many records per Sample Point feature)

Additional tables (HGT_WGT_DATA_TBL, LPI_DATA_TBL, and COLE_BROWSE_DATA_TBL (Cole Browse Details Table) have many-to-one (M: 1) relationships with their corresponding *_INFO_TBL table.

Plant material observed during the survey are identified using codes from the USDA NRCS Plant List of Accepted Nomenclature Taxonomy & Symbols (PLANTS) Database (http://plants.usda.gov).

2.4 Data Category/Architecture Link

This data theme is a portion of the Oregon Data Framework (ODF) shown in Figure 1, Oregon Data Framework (ODF) Overview a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The ODF utilizes the concept of inheritance to define specific instances of data. The ODF divides all OR/WA resource-related data into three general categories:

- Activities
- Resources
- Boundaries

Physical data is populated in the basic data sets. Those groups/categories above them do not contain actual data but set parameters that all data of that type must follow. See Figure 2, Data Organization Structure for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The Hazard Site or Trespass Data Organization Structure entities are highlighted. The range monitoring entities are highlighted. For additional information about the ODF, contact the State Data Administrator.

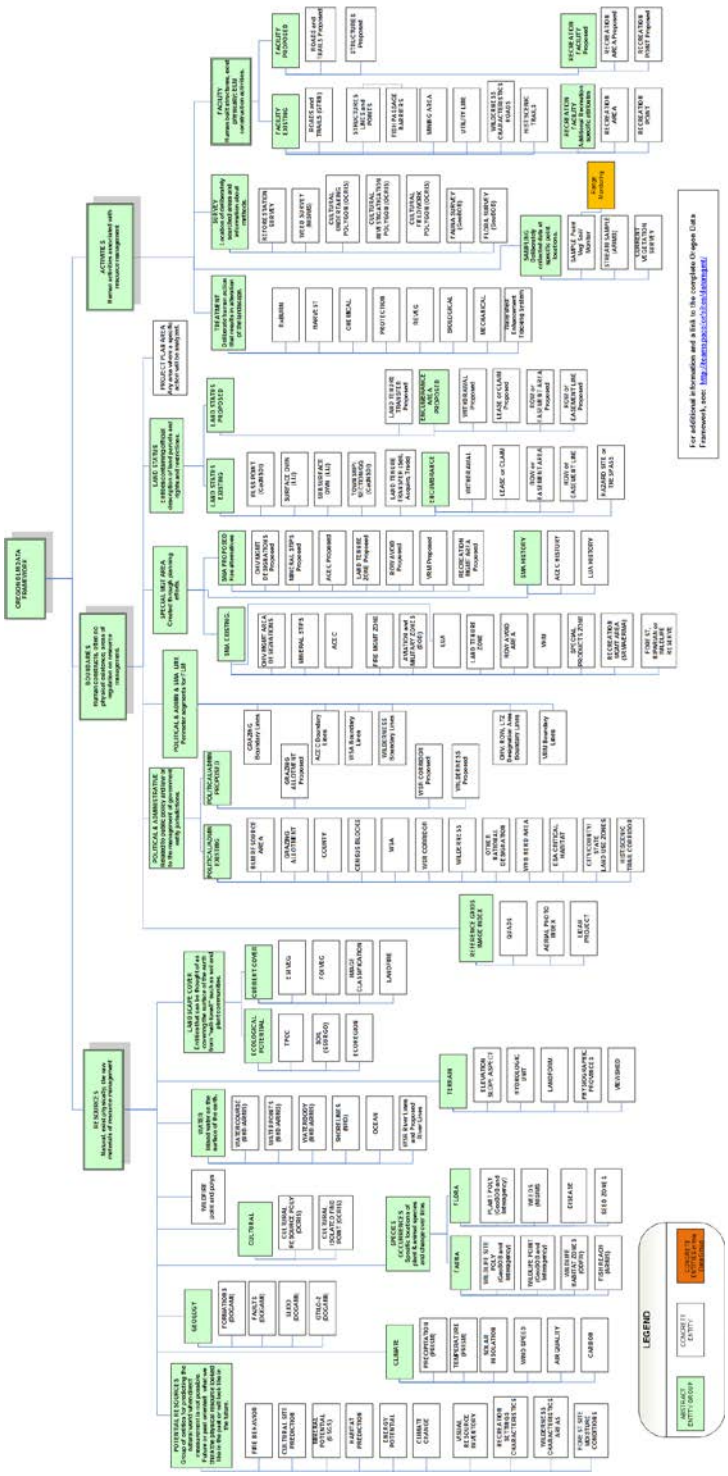

Figure 1 Oregon Data Framework Overview

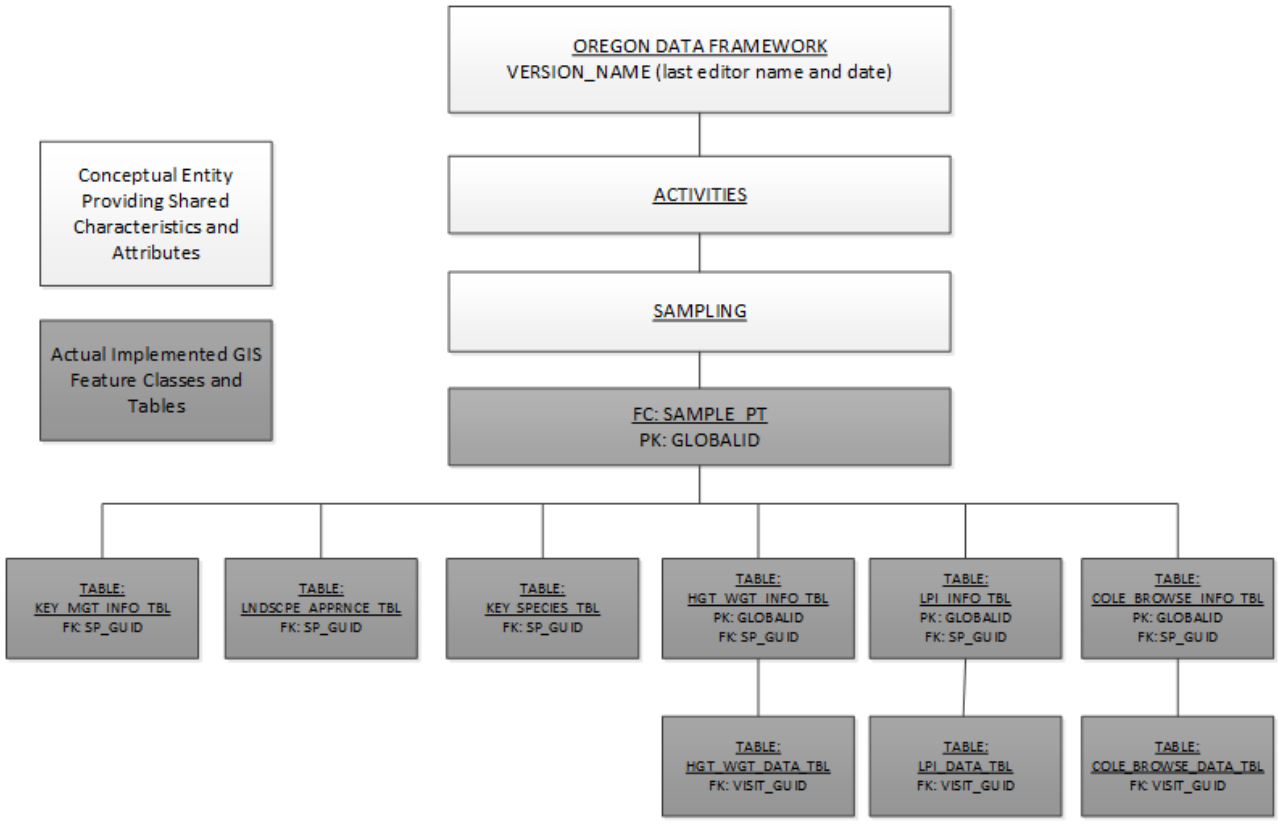

Figure 2 Data Organization Structure

In the ODF, HAZ_TRES_POLY is considered a boundary and categorized as follows:

ODF

Activities

Sampling

Sample Points

Range Monitoring

2.5 Relationship to DOI 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. Address data sharing through complete documentation and simple data structures that make sharing easier. Address data description through the section on Attribute Descriptions. Address data context 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

3 Data Management Protocols

3.1 Accuracy Requirements

Since Range Monitoring uses non-spatial tables related to the Sample Point feature class, it inherits spatial accuracy requirements (and the attribute accuracy requirements for the SAMPLE_PT parent feature) from the Sample Points theme. For Sample Points, required attributes should have an accuracy of at least 90 percent. Spatial accuracy should generally be within 50 feet. Since these features will be collected primarily using a Global Positioning System (GPS)-enabled mobile application (see next section), the ACCURACY_FT column will be automatically populated with measurements from the device's location service.

Attribute validity for the Range Monitoring tables should meet or exceed a 95 percent threshold. This means that the total number of records minus records with the following problems should meet or exceed 95 percent of the total:

- Blank or null values in required fields
- Attribute values outside of any applied coded-value or range domains
- Records related to the same SAMPLE_PT feature with identical (duplicate) values in all attributes except for OBJECTID and GLOBALID attribute types, which are always unique

3.2 Collection, Input, and Maintenance Protocols

In most cases, field-going staff will collect Range Monitoring data using a specialized version of the S1 Mobile for Android application. To collect this data, a staff member must first obtain the appropriate mobile editor user account within the BLM ArcGIS Online (AGOL) organization. Then, administrators will add Range Monitoring mobile editors to the designated group in AGOL that allows them to access the editable feature service. Make specific decisions about how to manage AGOL users at the District or Field Office level.

Once added to the correct group, users can log in to the S1 Mobile for Range Monitoring application and download an editable replica of the Range Monitoring dataset to their device for offline use in the field. This application allows users to create Range Monitoring points (Sample Points), select one of the protocols listed in Section 1 General Information and enter their observation data into the forms as specified for each protocol.

Once the user has created a Range Monitoring Point (Sample Point), the user may add a related record to the table corresponding to the type of protocol they are using. These include:

- Cole Browse
- Line-Point Intercept
- Key Species
- Height-Weight
- Landscape Appearance

Capture additional information about the sampling protocol in the Key Management Info table.

When populating date fields within the Range Monitoring theme, note that there are two different date formats. In the Range Monitoring (Sample Point) parent feature, enter dates in the ISO 8601 format (YYYYMMDD), with partial date information (YYYY or YYYYMM) allowed. In the child Range monitoring tables, dates are in the date time format, which integrates better with the S1 Mobile for Android application. These date time fields do not allow the entry of a "partial" date value, so enter a full year, month, and day. Note any inconsistencies or impacts of this format on precision/accuracy in the COMMENTS field for the applicable record.

When the user returns to the office and re-establishes wireless internet connectivity on the device, they will then choose the option to synchronize and submit their data from the mobile application. This will add the created, updated, and/or deleted features/records to a BLM SDE Version queue. Authorized GIS specialists will then

import this mobile version into ArcGIS Desktop, where they will review the data, perform any needed corrections or updates, and submit the version for automated QAQC, reconcile, and posting.

The automated QAQC process will check the version for missing values in required fields, values outside of applied range and/or coded value domains, and duplicate records.

3.3 Update Frequency and Archival Protocols

Staff will create and update Range Monitoring data as needed, but at least annually. Data administration staff will archive the datasets provided in the publication geodatabase annually at the end of the fiscal year, per ODF guidelines. Most updates will occur during the BLM's annual "field season," an approximate period during the year when the weather is warmer and conditions are best for on-the-ground sampling and management activities. For the Range program, this roughly corresponds to March through October. Data administration and GIS staff should expect a higher volume of edits during and immediately following this period.

3.4 Statewide Monitoring

Each year, the Resource Science Group of the BLM Division of Resources, Lands, Minerals, and Fire meets with the state data stewards and technical leads for every corporate geospatial theme to conduct an annual review of the data. During the annual review, geospatial staff present the state data stewards and technical leads with a report detailing QAQC results performed on the data. The QAQC checks include:

- All attribute values conform to the range or coded-value domains to which they are applied
- All attributes marked as required in the data standard have values
- Duplicate features (or records) which have the same geometry and attributes
- Invalid geometry (such as self-intersections or null geometry)
- Other checks, as necessary (can be customized according to the data standard)

In addition to this report, geospatial staff conduct a qualitative needs assessment with the data steward and technical leads to identify any unmet needs or problems with the status of the data. At the conclusion of the review, the team records the data steward's and technical leads approval of the datasets reviewed. Data administration staff note this approval in the official corporate metadata.

4 Range Monitoring Schema (Simplified)

General Information: The Key Management Info Table lists attributes in the order they appear in the geodatabase feature class. That order is an indication of the importance of the attribute for theme definition and use. Appendix A **Domains (Valid Values)** lists the approved domains used in this data standard. Domains can change without a re-issue of the data standard. You can find the current domains 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: https://www.blm.gov/site-page/oregon-data-management. For domains not listed at that site, contact the State Data Administrator.

Range Monitoring Tables

4.1 KEY_MGT_INFO_TBL (Key Management Info Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
DISTRICT	String	50		Yes*	dom_DIST_NAME
STATE	String	2		Yes*	
RESOURCE_AREA	String	50		No*	dom_RA_NAME
ALLOT_NM	String	50		No*	
ALLOT_NR	String	5		No*	
LIVESTOCK_WILDLIFE_SEASON	String	50		No	
KEY_MGMT_AREA_NM	String	50		Yes	
TWP	String	3		No*	
RGE	String	3		No*	
SEC	String	2		No*	
QTR_SEC	String	2		No*	
QTR_QTR_SEC	String	2		No*	
ELEVATION	Short Integer			No*	
SLOPE	String	50		No	
ASPECT	String	15		No	dom_COMPASS_DIR
VEG_TYPE	String	100		No	
COMMENTS	String	255		No	
GLOBALID	GlobalID			Yes*	
SP_GUID	GUID			Yes*	
ECOLOGICAL_SITE	String	50		No	
PLANT_COMMUNITY	String	50		No	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.2 COLE_BROWSE_INFO_TBL (Cole Browse Info Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SAMP_INT	String	50		No	
SP_GUID	GUID	38		Yes*	
ALLOT_NM	String	50		Yes*	
ALLOT_NR	String	5		Yes*	
PASTURE	String	50		No*	
ANIMAL	String	15		No	dom_LIVESTOCK_ANIMAL_TYPE
PERIOD_USE_BEGIN	Date			No	
PERIOD_USE_END	Date			No	
COMMENTS	String	255		No	
TRANSECT_AZ	Short Integer			No	dom_DEGREE0TO359
TRANSECT_LEN	Short Integer			No	
KEY_SPECIES	String	15		No	
TOT_FORM_CLASS_1	Short Integer			No*	
TOT_FORM_CLASS_2	Short Integer			No*	
TOT_FORM_CLASS_3	Short Integer			No*	
TOT_FORM_CLASS_4	Short Integer			No*	
TOT_FORM_CLASS_5	Short Integer			No*	
TOT_FORM_CLASS_6	Short Integer			No*	
TOT_FORM_CLASS_7	Short Integer			No*	
TOT_FORM_CLASS_8	Short Integer			No*	
TOT_AGE_CLASS_1	Short Integer			No*	
TOT_AGE_CLASS_2	Short Integer			No*	

Attribute Name	Data Type	Length	Default Value	Required	Domain
TOT_AGE_CLASS_3	Short Integer			No*	
TOT_AGE_CLASS_4	Short Integer			No*	
TOT_LEADER_USE_PCT_0	Short Integer			No*	
TOT_LEADER_USE_PCT_5	Short Integer			No*	
TOT_LEADER_USE_PCT_25	Short Integer			No*	
TOT_LEADER_USE_PCT_50	Short Integer			No*	
TOT_LEADER_USE_PCT_75	Short Integer			No*	
TOT_LEADER_USE_PCT_95	Short Integer			No*	
NUM_SAMPLED_PLANTS	Short Integer			No*	
TOT_LEADER_LENGTH	Double			No*	
NUM_PLANTS_FORM_CLASS_7_8	Short Integer			No*	
NUM_LEADERS_MEASURED	Short Integer			No*	
AVG_LEADER_USE	Double			No*	
GROWTH_INDEX	Double			No*	
USE_INDEX	Double			No*	
TRANSECT_LEN_UOM	String	30		No	dom_UOM
LEADER_LENGTH_UOM	String	30		No	dom_UOM
PCT_FORM_CLASS_1	Double			No*	
PCT_FORM_CLASS_2	Double			No*	
PCT_FORM_CLASS_3	Double			No*	
PCT_FORM_CLASS_4	Double			No*	
PCT_FORM_CLASS_5	Double			No*	
PCT_FORM_CLASS_6	Double			No*	
PCT_FORM_CLASS_7	Double			No*	
PCT_FORM_CLASS_8	Double			No*	

Attribute Name	Data Type	Length	Default Value	Required	Domain
PCT_AGE_CLASS_1	Double			No*	
PCT_AGE_CLASS_2	Double			No*	
PCT_AGE_CLASS_3	Double			No*	
PCT_AGE_CLASS_4	Double			No*	
STUDY_ID	String	60		Yes	
VISIT_DT	Date			Yes*	
EXAMINER	String	30		Yes*	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.3 COLE_BROWSE_DATA_TBL (Cole Browse Details Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
POINT_NUM	Short Integer			No*	
VISIT_GUID	GUID			Yes*	
FORM_CLASS	Short Integer			No	dom_FORM_CLASS
AGE_CLASS	String	10		No	dom_BROWSE_AGE_CLASS
LEADER_USE_PCT	String	15		No	dom_LEADER_USE_PCT
LEADER_LENGTH_1	Double			No	
LEADER_LENGTH_2	Double			No	
LEADER_LENGTH_3	Double			No	
LEADER_LENGTH_4	Double			No	
LEADER_LENGTH_5	Double			No	
LEADER_LENGTH_6	Double			No	
LEADER_LENGTH_7	Double			No	
LEADER_LENGTH_8	Double			No	
LEADER_LENGTH_9	Double			No	
LEADER_LENGTH_10	Double			No	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

4.4 HGT_WGT_INFO_TBL (Height Weight Info Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SAMP_INT	String	50		No	
SP_GUID	GUID			Yes*	
ALLOT_NM	String	50		Yes*	
ALLOT_NR	String	5		Yes*	
PASTURE	String	50		No*	
ANIMAL	String	15		No	dom_LIVESTOCK_ANIMAL_TYPE
PERIOD_USE_BEGIN	Date			No	
PERIOD_USE_END	Date			No	
COMMENTS	String	255		No	
CULM_PRESENT	String	1		No	dom_YN
NUM_UNGRAZED_PLANTS	Short Integer			Yes*	
TOT_HGT_UNGRAZED	Double			Yes*	
NUM_SAMPLED_PLANTS	Short Integer			Yes*	
TOT_PCT_UTIL_SAMPLED_PLANTS	Double			Yes*	
AVG_UNGRAZED_PLANT_HGT	Double			Yes*	
AVG_UTIL_HW	Double			Yes*	
TRANSECT_AZ	Short Integer			No	dom_DEGREE0TO359
TRANSECT_LEN	Short Integer			No	
TRANSECT_LEN_UOM	String	30		No	dom_UOM
GRAZED_UNGRAZED_UOM	String	30		No	dom_UOM
KEY_SPECIES	String	50		No	
STUDY_ID	String	60		Yes	
VISIT_DT	Date	8		Yes*	
EXAMINER	String	30		Yes*	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.5 HGT_WGT_DATA_TBL (Height Weight Details Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
VISIT_GUID	GUID			Yes*	
POINT_NUM	Short Integer			No*	
UNGRAZED_HT	Double			No	
GRAZED_HT	Double			No	
PCT_UTILIZATION	Double			Yes*	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.6 KEY_SPECIES_TBL (Key Species Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SAMP_INT	String	50		No	
SP_GUID	GUID			Yes*	
ALLOT_NM	String	50		Yes*	
PASTURE	String	50		No*	
KEY_SP_1	String	15		Yes	
KEY_SP_2	String	15		No	
KEY_SP_3	String	15		No	
KEY_SP_4	String	15		No	
ANIMAL	String	15		No	dom_LIVESTOCK_ANIMAL_TYPE
PERIOD_USE_BEGIN	Date			No	
PERIOD_USE_END	Date			No	
SP1_0_5	Short Integer			Yes*	
SP1_6_20	Short Integer			Yes*	
SP1_21_40	Short Integer			Yes*	
SP1_41_60	Short Integer			Yes*	
SP1_61_80	Short Integer			Yes*	
SP1_81_94	Short Integer			Yes*	

Attribute Name	Data Type	Length	Default Value	Required	Domain
SP1_95_100	Short Integer			Yes*	
SP1_AVG_UTIL	Double			Yes*	
SP2_0_5	Short Integer			No*	
SP2_6_20	Short Integer			No*	
SP2_21_40	Short Integer			No*	
SP2_41_60	Short Integer			No*	
SP2_61_80	Short Integer			No*	
SP2_81_94	Short Integer			No*	
SP2_95_100	Short Integer			No*	
SP2_AVG_UTIL	Double			No*	
SP3_0_5	Short Integer			No*	
SP3_6_20	Short Integer			No*	
SP3_21_40	Short Integer			No*	
SP3_41_60	Short Integer			No*	
SP3_61_80	Short Integer			No*	
SP3_81_94	Short Integer			No*	
SP3_95_100	Short Integer			No*	
SP3_AVG_UTIL	Double			No*	
SP4_0_5	Short Integer			No*	
SP4_6_20	Short Integer			No*	
SP4_21_40	Short Integer			No*	
SP4_41_60	Short Integer			No*	

Attribute Name	Data Type	Length	Default Value	Required	Domain
SP4_61_80	Short Integer			No*	
SP4_81_94	Short Integer			No*	
SP4_95_100	Short Integer			No*	
SP4_AVG_UTIL	Double			No*	
COMMENTS	String	255		No	
ALLOT_NR	String	5		Yes*	
TRANSECT_AZ	Short Integer			No	dom_DEGREE0TO359
TRANSECT_LEN	Integer			No	
TRANSECT_LEN_UOM	String	30		No	dom_UOM
STUDY_ID	String	60		Yes	
VISIT_DT	Date			Yes*	
EXAMINER	String	30		Yes*	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.7 LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SAMP_INT	String	15		No	
SP_GUID	GUID			Yes*	
ALLOT_NM	String	50		Yes*	
ALLOT_NR	String	5		Yes*	
PASTURE	String	50		No*	
ANIMAL	String	15		No	dom_LIVESTOCK_ANIMAL_TYPE
PERIOD_USE_BEGIN	Date			No	
PERIOD_USE_END	Date			No	
USAGE_0_5	Short Integer			Yes*	
USAGE_6_20	Short Integer			Yes*	
USAGE_21_40	Short Integer			Yes*	

Attribute Name	Data Type	Length	Default Value	Required	Domain
USAGE_41_60	Short Integer			Yes*	
USAGE_61_80	Short Integer			Yes*	
USAGE_81_94	Short Integer			Yes*	
USAGE_95_100	Short Integer			Yes*	
AVG_UTIL_LA	Double			Yes*	
COMMENTS	String	255		No	
TRANSECT_AZ	Short Integer			No	dom_DEGREE0TO359
TRANSECT_LEN	Short Integer			No	
TRANSECT_LEN_UOM	String	30		No	dom_UOM
STUDY_ID	String	60		Yes	
VISIT_DT	Date			Yes*	
EXAMINER	String	30		Yes*	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.8 LPI_INFO_TBL (Line Point Intercept Info Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SAMP_INT	Double	50		Yes	
SP_GUID	GUID			Yes*	
ALLOT_NM	String	50		Yes*	
ALLOT_NR	String	5		Yes*	
PASTURE	String	50		No*	
COMMENTS	String	255		No	
PCT_CANOPY_COVER	Double			Yes*	
PCT_BARE_GROUND	Double			Yes*	
PCT_BASAL_COVER	Double			Yes*	
TRANSECT_AZ	Short Integer			No	dom_DEGREE0TO359
TRANSECT_LEN	Short Integer			Yes	

Attribute Name	Data Type	Length	Default Value	Required	Domain
TOP_CANOPY_DEAD	Short Integer			No	
LOWER_1_DEAD	Short Integer			No	
LOWER_2_DEAD	Short Integer			No	
LOWER_3_DEAD	Short Integer			Nov	
SOIL_SURFACE_PC_DEAD	Short Integer			No	
PERIOD_USE_BEGIN	Date			No	
PERIOD_USE_END	Date			No	
TRANSECT_LEN_UOM	String	30		Yes	dom_UOM
RECORDER	String	30		No	
STUDY_ID	String	60		Yes	
VISIT_DT	Date			Yes*	
EXAMINER	String	30		Yes*	
GLOBALID	GlobalID			Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

4.9 LPI_DATA_TBL (Line Point Intercept Details Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
VISIT_GUID	GUID	38		Yes*	
POINT_NUM	Short Integer	2		Yes*	
TOP_CANOPY	String	6		Yes	dom_USDA_PLANTS_LPI
TOP_CANOPY_DEAD	Short Integer			No	
LOWER_1	String	6		No	dom_USDA_PLANTS_LPI
LOWER_1_DEAD	Short Integer			No*	
LOWER_2	String	6		No	dom_USDA_PLANTS_LPI
LOWER_2_DEAD	Short Integer			No*	

Attribute Name	Data Type	Length	Default Value	Required	Domain
LOWER_3	String	6		No	dom_USDA_PLANTS_LPI
LOWER_3_DEAD	Short Integer			No*	
SOIL_SURFACE	String	6		Yes	dom_SOIL_SURFACE
SOIL_SURFACE_PC	String	6		No	dom_USDA_PLANTS_LPI
SOIL_SURFACE_PC_DEAD	Short Integer			No	
GLOBALID	GlobalID	38		Yes*	
VERSION_NAME	String	255	InitialLoad	Yes*	

*Values automatically generated

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

There are no spatial entities described in this data standard.

7 Attribute Characteristics and Definition (In alphabetical order)

7.1 AGE_CLASS

Geodatabase Name	AGE_CLASS
BLM Structured Name	Browse_Age_Class_Code
Alias Name	Age Class
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Choice of one of four class values of browse plant age
Required/Optional	Optional
Domain (Valid Values)	dom_BROWSE_AGE_CLASS
Data Type	String (10)

7.2 ALLOT_NM

Geodatabase Name	ALLOT_NM
BLM Structured Name	Grazing_Allotment_Name
Alias Name	Allotment Name
Inheritance	Inherited from Grazing Allotments theme
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_MGT_INFO_TBL (Key Management Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Name of the grazing allotment where the monitoring takes place.
Required/Optional	Optional (automatically calculated)
Domain (Valid Values)	No domain.
Data Type	String (50)

7.3 ALLOT_NR

Geodatabase Name	ALLOT_NR
BLM Structured Name	Grazing_Allotment_Number
Alias Name	Allotment Number
Inheritance	Inherited from Grazing Allotments theme
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table), HGT_WGT_INFO_TBL (Height Weight Info Table), KEY_MGT_INFO_TBL (Key Management Info Table) KEY_SPECIES_TBL (Key Species Table), LNDSCPE_APPRNCE_TBL (Landscape Appearance Table), LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Number assigned to the grazing allotment where the monitoring takes place.
Required/Optional	Optional (automatically calculated)
Domain (Valid Values)	No domain.
Data Type	String (5)

7.4 ANIMAL

Geodatabase Name	ANIMAL
BLM Structured Name	Livestock_Type_Text
Alias Name	Livestock Type
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Type of animal grazing or browsing on the allotment/pasture where the monitoring is taking place.
Required/Optional	Optional
Domain (Valid Values)	dom_LIVESTOCK_ANIMAL_TYPE
Data Type	String (15)

7.5 ASPECT

Geodatabase Name	ASPECT
BLM Structured Name	Aspect_Measure
Alias Name	Aspect
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The compass direction that a slope faces.
Required/Optional	Optional
Domain (Valid Values)	dom_COMPASS_DIR
Data Type	String (15)

7.6 AVG_LEADER_USE

Geodatabase Name	AVG_LEADER_USE
BLM Structured Name	Average_Leader_Use_Percent_Number
Alias Name	Average Leader Use
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Average leader use is a percentage value based on the total of the estimated leader use divided by the total number of plants sampled, minus the plants in form classes 7 or 8 (dead or unavailable). The specific calculation is: AVG_LEADER_USE = ((5 X TOTAL_LEADER_USE_PCT_5) + (25 X TOTAL_LEADER_USE_PCT_25) + (50 X TOTAL_LEADER_USE_PCT_50) + (75 X TOTAL_LEADER_USE_PCT_75) + (95 X TOTAL_LEADER_USE_PCT_95)) / (NUM_SAMPLED_PLANTS – NUM_PLANTS_FORM_CLASS_7_8) * 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.7 AVG_UNGRAZED_PLANT_HGT

Geodatabase Name	AVG_UNGRAZED_PLANT_HGT
BLM Structured Name	Average_Ungrazed_Plant_Height_Measure
Alias Name	Average Ungrazed Plant Height
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Calculated by dividing the sum of un-grazed plant heights by the total number of ungrazed plants sampled.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain

Data Type	Double (double-precision floating-point number)

7.8 AVG_UTIL_HW

Geodatabase Name	AVG_UTIL_HW
BLM Structured Name	Average_Utilization_Measure
Alias Name	Average Utilization (Height-Weight)
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Calculates the average utilization for a key species by totaling the percent utilization for the individual sampled plants and dividing by the number of sampled plants of that species. The calculation is: AVG_UTIL_HW = TOT_PCT_UTIL_SAMPLED_PLANTS / NUM_SAMPLED_PLANTS
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.9 AVG_UTIL_LA

Geodatabase Name	AVG_UTIL_LA
BLM Structured Name	Landscape_Appearance_Average_Utilization_Measure
Alias Name	Average Utilization (Landscape Appearance)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Average Utilization is calculated by taking the count of observations for each utilization class, multiplying that number by the midpoint of the class interval for each class, and summing the products for all classes. The sum is then divided by the total number of observations on the transect and multiplied by 100 to arrive at a percentage value. The calculation is: AVG_UTIL_LA = (((USAGE_0_5 x 2.5) + (USAGE_6_20 x 13) + (USAGE_21_40 x 30) + USAGE_41_60 x 50) + USAGE_61_80 x 70) + (USAGE_81_94 x 88) + (USAGE_95_100 x 97.5)) / (USAGE_0_5 + USAGE_6_20 + USAGE_21_40 + USAGE_41_60 + USAGE_61_80 + USAGE_81_94 + USAGE_95_100)) x 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.10 COMMENTS

Geodatabase Name	COMMENTS
BLM Structured Name	Comments_Text
Alias Name	Comments
Inheritance	Inherited from ODF

Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table_ LNDSCPE_APPRNCE_TBL (Landscape Appearance Table), LPI_INFO_TBL (Line Point Intercept Info Table), KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Comments pertaining to the protocol
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (255)

7.11 CULM_PRESENT

Geodatabase Name	CULM_PRESENT
BLM Structured Name	Culm_Present_Text
Alias Name	Culm Present
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	The culm is the aboveground or aerial stem of grasses and sedges. Depending on the season, culms of the sampled species will be present or absent.
Required/Optional	Required
Domain (Valid Values)	dom_YN
Data Type	String (1)

7.12 DISTRICT

Geodatabase Name	DISTRICT
BLM Structured Name	District_Name_Text
Alias Name	District
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The name of the BLM district where the protocol is performed.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	dom_DIST_NAME
Data Type	String (50)

7.13 ECOLOGICAL_SITE

Geodatabase Name	ECOLOGICAL_SITE
BLM Structured Name	Ecological_Site_Text
Alias Name	Ecological Site
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Type of rangeland with a specific potential natural community and special characteristics, differing from other kinds of rangeland in its ability to produce vegetation and to respond to management. Ecological sites are defined and described with soil, species composition, and production emphasis. In short, the potential vegetation community that could exist based on soil type.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (50)

7.14 ELEVATION

Geodatabase Name	ELEVATION
BLM Structured Name	Elevation_Measure
Alias Name	Elevation
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The elevation in feet above sea level of the site where the protocol is performed.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.15 EXAMINER

Geodatabase Name	EXAMINER
BLM Structured Name	Examiner_Name
Alias Name	Examiner
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Name of the person who is conducting the study.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (30)

7.16 FORM_CLASS

Geodatabase Name	FORM_CLASS
BLM Structured Name	Form_Class_Code
Alias Name	Form Class
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	A numerical value between 1 and 8 specified by a combination of browse plant availability and degree of hedging.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	dom_FORM_CLASS
Data Type	Short Integer

7.17 GLOBALID

Geodatabase Name	GLOBALID
BLM Structured Name	Global_ID_Identifier
Alias Name	None
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_MGT_INFO_TBL (Key Management Info Table KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table) COLE_BROWSE_DATA_TBL (Cole Browse Details Table) HGT_WGT_DATA_TBL (Height Weight Details Table) LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Primary key (PK) field used to link to child tables
Required/Optional	Required (populated by geodatabase)

Domain (Valid Values)	No domain
Data Type	GlobalID

7.18 GRAZED_HT

Geodatabase Name	GRAZED_HT
BLM Structured Name	Grazed_Height_Measure
Alias Name	Grazed Height
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table).
Definition	Records the measured height for sampled grazed plants. Unit of measure is stored in the GRAZED_UNGRAZED_UOM attribute of the HGT_WGT_DATA_TBL.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.19 GRAZED_UNGRAZED_UOM

Geodatabase Name	GRAZED_UNGRAZED_UOM
BLM Structured Name	Plant_Height_Unit_of_Measure_Text
Alias Name	Unit of Measure (Plant Height)
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	The selected unit of measure for GRAZED_HT and UNGRAZED_HT. Valid selections are Feet, Meters, Inches, or Centimeters.
Required/Optional	Required
Domain (Valid Values)	dom_UOM: Example: Feet, Meters, Inches, Centimeters
Data Type	String (30)

7.20 GROWTH_INDEX

Geodatabase Name	GROWTH_INDEX
BLM Structured Name	Growth_Index_Measure
Alias Name	Growth Index
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	The growth index is the average length of the ungrazed leaders on the sampled plants: GROWTH_INDEX = TOT_LEADER_LENGTH / NUM_LEADERS_MEASURED
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.21 KEY_MGMT_AREA_NM

Geodatabase Name	KEY_MGMT_AREA_NM
BLM Structured Name	Key_Management_Area_Name
Alias Name	Key Management Area Name
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Key management areas are a small portion of a range selected as a monitoring point for grazing because of its location, use, or grazing value. Key areas, if properly selected, reflect the overall acceptability of current range grazing management.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (50)

7.22 KEY_SP_1

Geodatabase Name	KEY_SP_1
BLM Structured Name	Key_Species_1_Name
Alias Name	1st Key Species
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	First Plant Species selected for browse study sampling, using the PLANTS Database species code, a four-letter code based on the first two letters of the genus and species, or the common name.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	String (15)

7.23 KEY_SP_2

Geodatabase Name	KEY_SP_2
BLM Structured Name	Key_Species_2_Name
Alias Name	2nd Key Species
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Second Plant Species selected for browse study sampling, using the PLANTS Database species code, a four-letter code based on the first two letters of the genus and species, or the common name.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (15)

7.24 KEY_SP_3

Geodatabase Name	KEY_SP_3
BLM Structured Name	Key_Species_3_Name
Alias Name	3rd Key Species
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Third Plant Species selected for browse study sampling, using the PLANTS Database species code, a four-letter code based on the first two letters of the genus and species, or the common name.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (15)

7.25 KEY_SP_4

Geodatabase Name	KEY_SP_4
BLM Structured Name	Key_Species_4_Name
Alias Name	4th Key Species
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Fourth Plant Species selected for browse study sampling, using the PLANTS Database species code, a four-letter code based on the first two letters of the genus and species, or the common name.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (15)

7.26 KEY_SPECIES

Geodatabase Name	KEY_SPECIES
BLM Structured Name	Key_Species_Name
Alias Name	Key Species
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table), HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Plant Species selected for Cole Browse or Height-Weight study sampling. Use the PLANTS Database species code, a four-letter code based on the first two letters of the genus and species, or the common name.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	String (15)

7.27 LEADER_LENGTH_1

Geodatabase Name	LEADER_LENGTH_1
BLM Structured Name	Leader_Length_One_Measure
Alias Name	Leader Length (1)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.28 LEADER_LENGTH_2

Geodatabase Name	LEADER_LENGTH_2
BLM Structured Name	Leader_Length_Two_Measure
Alias Name	Leader Length (2)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.29 LEADER_LENGTH_3

Geodatabase Name	LEADER_LENGTH_3
BLM Structured Name	Leader_Length_Three_Measure
Alias Name	Leader Length (3)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.30 LEADER_LENGTH_4

Geodatabase Name	LEADER_LENGTH_4
BLM Structured Name	Leader_Length_Four_Measure
Alias Name	Leader Length (4)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.31 LEADER_LENGTH_5

Geodatabase Name	LEADER_LENGTH_5
BLM Structured Name	Leader_Length_Five_Measure
Alias Name	Leader Length (5)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.32 LEADER_LENGTH_6

Geodatabase Name	LEADER_LENGTH_6
BLM Structured Name	Leader_Length_Six_Measure
Alias Name	Leader Length (6)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.33 LEADER_LENGTH_7

Geodatabase Name	LEADER_LENGTH_7
BLM Structured Name	Leader_Length_Seven_Measure
Alias Name	Leader Length (7)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.34 LEADER_LENGTH_8

Geodatabase Name	LEADER_LENGTH_8
BLM Structured Name	Leader_Length_Eight_Measure
Alias Name	Leader Length (8)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.35 LEADER_LENGTH_9

Geodatabase Name	LEADER_LENGTH_9
BLM Structured Name	Leader_Length_Nine_Measure
Alias Name	Leader Length (9)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.36 LEADER_LENGTH_10

Geodatabase Name	LEADER_LENGTH_10
BLM Structured Name	Leader_Length_Ten_Measure
Alias Name	Leader Length (10)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) Length measurements for a single plant.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.37 LEADER_LENGTH_UOM

Geodatabase Name	LEADER_LENGTH_UOM
BLM Structured Name	Leader_Length_Unit_of_Measure_Text
Alias Name	Unit of Measure (Leader Length)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Unit of measure for leader length measurement
Required/Optional	Required
Domain (Valid Values)	dom_UOM
Data Type	String (30)

7.38 LEADER_USE_PCT

Geodatabase Name	LEADER_USE_PCT
BLM Structured Name	Leader_Use_Percent_Text
Alias Name	Leader Use (Percent)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table)
Definition	Leader (current year's annual growth) use percentage.
Required/Optional	Optional
Domain (Valid Values)	dom_LEADER_USE_PCT
Data Type	String (15)

7.39 LIVESTOCK_WILDLIFE_SEASON

Geodatabase Name	LIVESTOCK_WILDLIFE_SEASON
BLM Structured Name	Wildlife_Season_Text
Alias Name	Livestock/Wildlife Season of Use
Inheritance	Not inherited

Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The season during which the wildlife on which the Key or Crucial Management Area are concerned utilize the area.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (50)

7.40 LOWER_1

Geodatabase Name	LOWER_1
BLM Structured Name	Lower_Canopy_Layer_1_Code
Alias Name	Lower Canopy Layer 1
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	First lower canopy (below top canopy) plant species intercepted, using line point intercept sampling. Valid values include symbols from the USGS, NRCS PLANTS Database, Herbaceous Litter, Woody Litter, and one of several unknown plant codes.
Required/Optional	Optional
Domain (Valid Values)	dom_USDA_PLANTS_LPI Examples: “L”, “NONE”, “FEID”, “AG#”
Data Type	String (6)

7.41 LOWER_1_DEAD

Geodatabase Name	LOWER_1_DEAD
BLM Structured Name	Lower_Canopy_Layer_1_Dead
Alias Name	Lower Canopy Layer 1 Dead
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	A value of 1 indicates that the plant found in Lower Canopy Layer 1 is dead.
Required/Optional	Optional (automatically populated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.42 LOWER_2

Geodatabase Name	LOWER_2
BLM Structured Name	Lower_Canopy_Layer_2_Code
Alias Name	Lower Canopy Layer 2
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Second lower canopy (below top canopy) plant species intercepted, using line

	point intercept sampling. Valid values include symbols from USGS, NRCS PLANTS Database, Herbaceous Litter, Woody Litter, and one of several unknown plant codes.
Required/Optional	Optional
Domain (Valid Values)	dom_USDA_PLANTS_LPI Examples: “L”, “NONE”, “FEID”, “AG#”
Data Type	String (6)

7.43 LOWER_2_DEAD

Geodatabase Name	LOWER_2_DEAD
BLM Structured Name	Lower_Canopy_Layer_2_Dead
Alias Name	Lower Canopy Layer 2 Dead
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	A value of 1 indicates that the plant found in Lower Canopy Layer 2 is dead.
Required/Optional	Optional (automatically populated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.44 LOWER_3

Geodatabase Name	LOWER_3
BLM Structured Name	Lower_Canopy_Layer_3_Code
Alias Name	Lower Canopy Layer 3
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Third lower canopy (below top canopy) plant species intercepted, using line point intercept sampling. Valid values include symbols from the USGS, NRCS PLANTS Database, Herbaceous Litter, Woody Litter, and one of several unknown plant codes.
Required/Optional	Optional
Domain (Valid Values)	dom_USDA_PLANTS_LPI Examples: “L”, “NONE”, “FEID”, “AG#”
Data Type	String (6)

7.45 LOWER_3_DEAD

Geodatabase Name	LOWER_3_DEAD
BLM Structured Name	Lower_Canopy_Layer_3_Dead
Alias Name	Lower Canopy Layer 3 Dead
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)

Definition	A value of 1 indicates that the plant found in Lower Canopy Layer 3 is dead.
Required/Optional	Optional (Automatically populated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.46 NUM_LEADERS_MEASURED

Geodatabase Name	NUM_LEADERS_MEASURED
BLM Structured Name	Leaders_Measured_Number
Alias Name	Total Count of Leaders Measured
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Number of leaders (annual new growth) measured during the Cole Browse study.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.47 NUM_PLANTS_FORM_CLASS_7_8

Geodatabase Name	NUM_PLANTS_FORM_CLASS_7_8
BLM Structured Name	Plants_In_Form_Class_7_or_8_Count
Alias Name	Total Plants in Form Class 7 & 8
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Number of plants found to be in form class 7 or 8 (dead or unavailable).
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.48 NUM_SAMPLED_PLANTS

Geodatabase Name	NUM_SAMPLED_PLANTS
BLM Structured Name	Sampled_Plants_Number
Alias Name	Number of Sampled Plants
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Total number of sampled plants using Height-Weight or Cole Browse.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.49 NUM_UNGRAZED_PLANTS

Geodatabase Name	NUM_UNGRAZED_PLANTS
BLM Structured Name	Ungrazed_Plants_Number
Alias Name	Total Number of Ungrazed Plants
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Total number of ungrazed plants using Height-Weight measurement protocol. This is the count of UNGRAZED_HT measurements in the HGT_WGT_DATA_TBL records related to the HGT_WGT_INFO_TBL (Height Weight Info Table) record.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.50 PASTURE

Geodatabase Name	PASTURE
BLM Structured Name	Pasture_Name
Alias Name	Pasture
Inheritance	Inherited from Grazing Allotments
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Name of grazing area enclosed and separated from other areas by fence or natural barrier.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (50)

7.51 PCT_AGE_CLASS_1

Geodatabase Name	PCT_AGE_CLASS_1
BLM Structured Name	Seedling_Age_Class_Percent_Number
Alias Name	Percent Age Class (Seedling)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_AGE_CLASS_1 = (TOT_AGE_CLASS_1 / NUM_SAMPLED_PLANTS) X 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.52 PCT_AGE_CLASS_2

Geodatabase Name	PCT_AGE_CLASS_2
BLM Structured Name	Young_Age_Class_Percent_Number
Alias Name	Percent Age Class (Young)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_AGE_CLASS_2 = (TOT_AGE_CLASS_2 / NUM_SAMPLED_PLANTS) X 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.53 PCT_AGE_CLASS_3

Geodatabase Name	PCT_AGE_CLASS_3
BLM Structured Name	Mature_Age_Class_Percent_Number
Alias Name	Percent Age Class (Mature)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_AGE_CLASS_3 = (TOT_AGE_CLASS_3 / NUM_SAMPLED_PLANTS) X 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.54 PCT_AGE_CLASS_4

Geodatabase Name	PCT_AGE_CLASS_4
BLM Structured Name	Decadent_Age_Class_Percent_Number
Alias Name	Percent Age Class (Decadent)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_AGE_CLASS_4 = (TOT_AGE_CLASS_4 / NUM_SAMPLED_PLANTS) X 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.55 PCT_BARE_GROUND

Geodatabase Name	PCT_BARE_GROUND
BLM Structured Name	Bare_Ground_Percent_Number

Alias Name	Percent Bare Ground
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	This is based on the number of points with no canopy intercepts and soil surface that is visibly unprotected. That is, the count of all LPI_DATA_TBL records related to a LPI_INFO_TBL record where TOP_CANOPY, LOWER_1, LOWER_2, and LOWER_3 are all NULL and SOIL_SURFACE = 'S', divided by the count of related LPI_DATA_TBL records, times 100 to arrive at a percentage value.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.56 PCT_BASAL_COVER

Geodatabase Name	PCT_BASAL_COVER
BLM Structured Name	Basal_Cover_Percent_Number
Alias Name	Percent Basal Cover
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	This is based on the number of points where the pin flag intercepts a plant base. That is, the count of all LPI_DATA_TBL records related to a LPI_INFO_TBL record where SOIL_SURFACE = 'PC', divided by the count of related LPI_DATA_TBL records, times 100 to arrive at a percentage value.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.57 PCT_CANOPY_COVER

Geodatabase Name	PCT_CANOPY_COVER
BLM Structured Name	Canopy_Cover_Percent_Number
Alias Name	Percent Canopy Cover
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Based on the number of points where the pin flag intercepts a plant base, including hits in the top canopy layer. That is, the count of all LPI_DATA_TBL records related to a LPI_INFO_TBL record where 'TOP_CANOPY IS NOT NULL', divided by the count of related LPI_DATA_TBL records, times 100 to arrive at a percentage value.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.58 PCT_FORM_CLASS_1

Geodatabase Name	PCT_FORM_CLASS_1
BLM Structured Name	Form_Class_1_Percent
Alias Name	Percent Form Class 1
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_1 = (TOT_FORM_CLASS_1 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.59 PCT_FORM_CLASS_2

Geodatabase Name	PCT_FORM_CLASS_2
BLM Structured Name	Form_Class_2_Percent
Alias Name	Percent Form Class 2
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_2 = (TOT_FORM_CLASS_2 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.60 PCT_FORM_CLASS_3

Geodatabase Name	PCT_FORM_CLASS_3
BLM Structured Name	Form_Class_3_Percent
Alias Name	Percent Form Class 3
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_3 = (TOT_FORM_CLASS_3 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.61 PCT_FORM_CLASS_4

Geodatabase Name	PCT_FORM_CLASS_4

BLM Structured Name	Form_Class_4_Percent
Alias Name	Percent Form Class 4
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_4 = (TOT_FORM_CLASS_4 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.62 PCT_FORM_CLASS_5

Geodatabase Name	PCT_FORM_CLASS_5
BLM Structured Name	Form_Class_5_Percent
Alias Name	Percent Form Class 5
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_5 = (TOT_FORM_CLASS_5 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.63 PCT_FORM_CLASS_6

Geodatabase Name	PCT_FORM_CLASS_6
BLM Structured Name	Form_Class_6_Percent
Alias Name	Percent Form Class 6
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_6 = (TOT_FORM_CLASS_6 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.64 PCT_FORM_CLASS_7

Geodatabase Name	PCT_FORM_CLASS_7
BLM Structured Name	Form_Class_7_Percent
Alias Name	Percent Form Class 1

Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_7 = (TOT_FORM_CLASS_7 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.65 PCT_FORM_CLASS_8

Geodatabase Name	PCT_FORM_CLASS_8
BLM Structured Name	Form_Class_8_Percent
Alias Name	Percent Form Class 8
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	PCT_FORM_CLASS_8 = (TOT_FORM_CLASS_8 / N) x 100 (Where N is the total plant observations points.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.66 PCT_UTILIZATION

Geodatabase Name	PCT_UTILIZATION
BLM Structured Name	Utilization_Percent_Number
Alias Name	Percent Utilization
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	This is based on KEY_SPECIES (in HGT_WGT_INFO_TBL) and AVG_UNGRAZED_PLANT_HGT (also in HGT_WGT_INFO_TBL). Each species has a corresponding lookup table such that inputting the GRAZED_HT value for the record in HGT_WGT_DATA_TBL outputs the percent weight utilized for that plant species. If a value is recorded in UNGRAZED_HT (i.e., the sampled plant has not been grazed), PCT_UTILIZATION is zero (0).
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.67 PERIOD_USE_BEGIN

Geodatabase Name	PERIOD_USE_BEGIN
BLM Structured Name	Period_Use_Begin_Date

Alias Name	Period of Use Beginning
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Date when use of a pasture or allotment for grazing begins.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Date

7.68 PERIOD_USE_END

Geodatabase Name	PERIOD_USE_END
BLM Structured Name	Period_Use_End_Date
Alias Name	Period of Use End
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Date when use of a pasture or allotment for grazing ends.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Date

7.69 PLANT_COMMUNITY

Geodatabase Name	PLANT_COMMUNITY
BLM Structured Name	Plant_Community_Text
Alias Name	Plant Community
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The assemblage of plants occurring together at any point in time, thus denoting no particular successional status (group of plants). Values can include common names or USDA plant codes.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (50)

7.70 POINT_NUM

Geodatabase Name	POINT_NUM

BLM Structured Name	Point_Number
Alias Name	Point Number
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table) HGT_WGT_DATA_TBL (Height Weight Details Table)
Definition	Individual observation point number.
Required/Optional	Required (Automatically generated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.71 QTR_QTR_SEC

Geodatabase Name	QTR_QTR_SEC
BLM Structured Name	Quarter_Quarter_Section_Identifier
Alias Name	Quarter Section
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Quarter-quarter section where the key management area is located.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (2)

7.72 QTR_SEC

Geodatabase Name	QTR_SEC
BLM Structured Name	Quarter_Section_Identifier
Alias Name	Quarter Section
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Quarter section where the key management area is located.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (2)

7.73 RECORDER

Geodatabase Name	RECORDER
BLM Structured Name	Recorder_Name
Alias Name	Recorder
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_INFO_TBL (Line Point Intercept Info Table)

Definition	Name of person recording data. For the Line-Point Intercept method, it is customary to use a two-person team of Examiner and Recorder for reasons of efficiency.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (30)

7.74 RESOURCE_AREA

Geodatabase Name	RESOURCE_AREA
BLM Structured Name	Resource_Area_Text
Alias Name	Resource Area
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The name of the BLM resource area/field office where the protocol is performed.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	dom_RA_NAME
Data Type	String (50)

7.75 RGE

Geodatabase Name	RGE
BLM Structured Name	Range_Identifier
Alias Name	Range
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Range where the key management area is located.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (3)

7.76 SAMP_INT

Geodatabase Name	SAMP_INT
BLM Structured Name	Sampling_Interval_Text
Alias Name	Sampling Interval
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Distance between sampling observation points or transects.

Required/Optional	Optional (Required in LPI_INFO_TBL)
Domain (Valid Values)	No domain
Data Type	String (50), Double in LPI_INFO_TBL

7.77 SEC

Geodatabase Name	SEC
BLM Structured Name	Section_Identifier
Alias Name	Section
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Section where the key management area is located.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (2)

7.78 SLOPE

Geodatabase Name	SLOPE
BLM Structured Name	Slope_Text
Alias Name	Slope
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The slope of the key management area (descriptive).
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (50)

7.79 SOIL_SURFACE

Geodatabase Name	SOIL_SURFACE
BLM Structured Name	Soil_Surface_Code
Alias Name	Soil Surface
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Observation at Soil Surface intercept point. If the user selects value of “PC”, the SOIL_SURFACE_PC field will become required.
Required/Optional	Required
Domain (Valid Values)	dom_SOIL_SURFACE
Data Type	String (6)

7.80 SOIL_SURFACE_PC

Geodatabase Name	SOIL_SURFACE_PC
BLM Structured Name	Soil_Surface_Plant_Code
Alias Name	Soil Surface Plant Code
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Observed plant species at the soil surface (basal) point. Valid values include symbols from the USGS, NRCS PLANTS Database, Herbaceous Litter, Woody Litter, and one of several unknown plant codes.
Required/Optional	Optional (required if SOIL_SURFACE = 'PC')
Domain (Valid Values)	dom_USDA_PLANTS_LPI Examples: "L", "FEID", "AG#"
Data Type	String (6)

7.81 SOIL_SURFACE_PC_DEAD

Geodatabase Name	SOIL_SURFACE_PC_DEAD
BLM Structured Name	Soil_Surface_Plant_Dead_Number
Alias Name	Soil Surface Plant Dead
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	A value of 1 indicates that the plant found at the soil surface (basal) level is dead
Required/Optional	Optional (automatically populated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.82 SP1_0_5

Geodatabase Name	SP1_0_5
BLM Structured Name	Species_1_No_Use_Count
Alias Name	SP1 No Use (0-5%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (0-5%) - No or negligible use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.83 SP1_6_20

Geodatabase Name	SP1_6_20
BLM Structured Name	Species_1_Slight_Use_Count
Alias Name	SP1 Slight (6-20%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (6-20%) - Slight use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.84 SP1_21_40

Geodatabase Name	SP1_21_40
BLM Structured Name	Species_1_Light_Use_Count
Alias Name	SP1 Light (21-40%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (21-40%) - Light use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.85 SP1_41_60

Geodatabase Name	SP1_41_60
BLM Structured Name	Species_1_Moderate_Use_Count
Alias Name	SP1 Moderate (41-60%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (41-60%) - Moderate use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.86 SP1_61_80

Geodatabase Name	SP1_61_80
BLM Structured Name	Species_1_Heavy_Use_Count
Alias Name	SP1 Heavy (61-80%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (61-80%) - Heavy use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.87 SP1_81_94

Geodatabase Name	SP1_81_94
BLM Structured Name	Species_1_Severe_Use_Count
Alias Name	SP1 Severe (81-94%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (81-94%) - Severe use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.88 SP1_95_100

Geodatabase Name	SP1_95_100
BLM Structured Name	Species_1_Extreme_Use_Count
Alias Name	SP1 Extreme (95-100%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 1 with (95-100%) - Severe use.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.89 SP1_AVG_UTIL

Geodatabase Name	SP1_AVG_UTIL
BLM Structured Name	Species_1_Average_Utilization_Percent
Alias Name	SP1 Average Utilization
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Average utilization percent for species 1 (sum of midpoint values / total count of species 1 records)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.90 SP2_0_5

Geodatabase Name	SP2_0_5
BLM Structured Name	Species_2_No_Use_Count
Alias Name	SP2 No Use (0-5%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (0-5%) - No or negligible use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.91 SP2_6_20

Geodatabase Name	SP2_6_20
BLM Structured Name	Species_2_Slight_Use_Count
Alias Name	SP2 Slight (6-20%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (6-20%) - Slight use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.92 SP2_21_40

Geodatabase Name	SP2_21_40
BLM Structured Name	Species_2_Light_Use_Count
Alias Name	SP2 Light (21-40%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (21-40%) - Light use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.93 SP2_41_60

Geodatabase Name	SP2_41_60
BLM Structured Name	Species_2_Moderate_Use_Count
Alias Name	SP2 Moderate (41-60%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (41-60%) - Moderate use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.94 SP2_61_80

Geodatabase Name	SP2_61_80
BLM Structured Name	Species_2_Heavy_Use_Count
Alias Name	SP2 Heavy (61-80%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (61-80%) - Heavy use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.95 SP2_81_94

Geodatabase Name	SP2_81_94
BLM Structured Name	Species_2_Severe_Use_Count
Alias Name	SP2 Severe (81-94%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (81-94%) - Severe use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.96 SP2_95_100

Geodatabase Name	SP2_95_100
BLM Structured Name	Species_2_Extreme_Use_Count
Alias Name	SP2 Extreme (95-100%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 2 with (95-100%) - Severe use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.97 SP2_AVG_UTIL

Geodatabase Name	SP2_AVG_UTIL
BLM Structured Name	Species_2_Average_Utilization_Percent
Alias Name	SP2 Average Utilization
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Average utilization percent for species 2 (sum of midpoint values / total count of species 2 records)
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.98 SP3_0_5

Geodatabase Name	SP3_0_5
BLM Structured Name	Species_3_No_Use_Count
Alias Name	SP3 No Use (0-5%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (0-5%) - No or negligible use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.99 SP3_6_20

Geodatabase Name	SP3_6_20
BLM Structured Name	Species_3_Slight_Use_Count
Alias Name	SP3 Slight (6-20%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (6-20%) - Slight use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.100SP3_21_40

Geodatabase Name	SP3_21_40
BLM Structured Name	Species_3_Light_Use_Count
Alias Name	SP3 Light (21-40%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (21-40%) - Light use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.101SP3_41_60

Geodatabase Name	SP3_41_60
BLM Structured Name	Species_3_Moderate_Use_Count
Alias Name	SP3 Moderate (41-60%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (41-60%) - Moderate use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.102SP3_61_80

Geodatabase Name	SP3_61_80
BLM Structured Name	Species_3_Heavy_Use_Count
Alias Name	SP3 Heavy (61-80%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (61-80%) - Heavy use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.103 SP3_81_94

Geodatabase Name	SP3_81_94
BLM Structured Name	Species_3_Severe_Use_Count
Alias Name	SP3 Severe (81-94%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (81-94%) - Severe use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.104 SP3_95_100

Geodatabase Name	SP3_95_100
BLM Structured Name	Species_3_Extreme_Use_Count
Alias Name	SP3 Extreme (95-100%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 3 with (95-100%) - Severe use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.105 SP3_AVG_UTIL

Geodatabase Name	SP3_AVG_UTIL
BLM Structured Name	Species_3_Average_Utilization_Percent
Alias Name	SP3 Average Utilization
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Average utilization percent for species 3 (sum of midpoint values / total count of species 3 records).
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.106 SP4_0_5

Geodatabase Name	SP4_0_5
BLM Structured Name	Species_4_No_Use_Count
Alias Name	SP4 No Use (0-5%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (0-5%) - No or negligible use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.107 SP4_6_20

Geodatabase Name	SP4_6_20
BLM Structured Name	Species_4_Slight_Use_Count
Alias Name	SP4 Slight (6-20%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (6-20%) - Slight use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.108 SP4_21_40

Geodatabase Name	SP4_21_40
BLM Structured Name	Species_4_Light_Use_Count
Alias Name	SP4 Light (21-40%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (21-40%) - Light use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.109 SP4_41_60

Geodatabase Name	SP4_41_60
BLM Structured Name	Species_4_Moderate_Use_Count
Alias Name	SP4 Moderate (41-60%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (41-60%) - Moderate use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.110 SP4_61_80

Geodatabase Name	SP4_61_80
BLM Structured Name	Species_4_Heavy_Use_Count
Alias Name	SP4 Heavy (61-80%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (61-80%) - Heavy use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.111 SP4_81_94

Geodatabase Name	SP4_81_94
BLM Structured Name	Species_4_Severe_Use_Count
Alias Name	SP4 Severe (81-94%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (81-94%) - Severe use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.112 SP4_95_100

Geodatabase Name	SP4_95_100
BLM Structured Name	Species_4_Extreme_Use_Count
Alias Name	SP4 Extreme (95-100%)
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Count of observations for estimated degree of utilization of key herbaceous species 4 with (95-100%) - Severe use.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.113 SP4_AVG_UTIL

Geodatabase Name	SP4_AVG_UTIL
BLM Structured Name	Species_4_Average_Utilization_Percent
Alias Name	SP4 Average Utilization
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_SPECIES_TBL (Key Species Table)
Definition	Average utilization percent for species 4 (sum of midpoint values / total count of species 4 records).
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.114 SP_GUID

Geodatabase Name	SP_GUID
BLM Structured Name	Sample_Point_Globally_Unique_Identifier
Alias Name	Sample Point ID
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table) KEY_SPECIES_TBL (Key Species Table) LPI_DATA_TBL (Line Point Intercept Details Table) HGT_WGT_DATA_TBL (Height Weight Details Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Foreign Key (FK) field used to relate child records to their parent in the Range Monitoring Geodatabase.
Required/Optional	Required (Automatically generated)
Domain (Valid Values)	No domain.
Data Type	GUID

7.115 STATE

Geodatabase Name	STATE
BLM Structured Name	State_Text
Alias Name	State
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The name of the State where the protocol is performed.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (2)

7.116 STUDY_ID

Geodatabase Name	STUDY_ID
BLM Structured Name	Study_Identifier
Alias Name	Study ID
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Local alphanumeric identifier code for applicable study protocol.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	String (60)

7.117 TOP_CANOPY

Geodatabase Name	TOP_CANOPY
BLM Structured Name	Top_Canopy_Code
Alias Name	Top Canopy
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Observed plant species at top canopy intercept point. Valid values include symbols from the USGS, NRCS PLANTS Database, Herbaceous Litter, Woody Litter, and one of several unknown plant codes.
Required/Optional	Required
Domain (Valid Values)	dom_USDA_PLANTS_LPI Examples: “L”, “NONE”, “FEID”, “AG#”
Data Type	String (6)

7.118 TOP_CANOPY_DEAD

Geodatabase Name	TOP_CANOPY_DEAD
BLM Structured Name	Top_Canopy_Dead_Number
Alias Name	Top Canopy Dead
Inheritance	Not inherited
Feature Class Use/Entity Table	LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	A value of 1 indicates that the plant found at the top canopy layer is dead.
Required/Optional	Optional (automatically populated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.119TOT_AGE_CLASS_1

Geodatabase Name	TOT_AGE_CLASS_1
BLM Structured Name	Total_Seedling_Count_Number
Alias Name	Total Count Age Class Seedling
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of samples where plants are defined as Seedling.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.120TOT_AGE_CLASS_2

Geodatabase Name	TOT_AGE_CLASS_2
BLM Structured Name	Total_Young_Count_Number
Alias Name	Total Count Age Class Young
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of samples where plants are defined as Young.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.121 TOT_AGE_CLASS_3

Geodatabase Name	TOT_AGE_CLASS_3
BLM Structured Name	Total_Mature_Count_Number
Alias Name	Total Count Age Class Mature
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of samples where plants are defined as Mature.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.122TOT_AGE_CLASS_4

Geodatabase Name	TOT_AGE_CLASS_4
BLM Structured Name	Total_Decadent_Count_Number
Alias Name	Total Count Age Class Decadent
Inheritance	Not inherited

Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of samples where plants are defined as Decadent.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.123 TOT_FORM_CLASS_1

Geodatabase Name	TOT_FORM_CLASS_1
BLM Structured Name	Total_Form_Class_1_Count
Alias Name	Total Count Form Class 1
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 1.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.124 TOT_FORM_CLASS_2

Geodatabase Name	TOT_FORM_CLASS_2
BLM Structured Name	Total_Form_Class_2_Count
Alias Name	Total Count Form Class 2
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 2.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.125 TOT_FORM_CLASS_3

Geodatabase Name	TOT_FORM_CLASS_3
BLM Structured Name	Total_Form_Class_3_Count
Alias Name	Total Count Form Class 3
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 3.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.126TOT_FORM_CLASS_4

Geodatabase Name	TOT_FORM_CLASS_4
BLM Structured Name	Total_Form_Class_4_Count
Alias Name	Total Count Form Class 4
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 4.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.127 TOT_FORM_CLASS_5

Geodatabase Name	TOT_FORM_CLASS_5
BLM Structured Name	Total_Form_Class_5_Count
Alias Name	Total Count Form Class 5
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 5.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.128TOT_FORM_CLASS_6

Geodatabase Name	TOT_FORM_CLASS_6
BLM Structured Name	Total_Form_Class_6_Count
Alias Name	Total Count Form Class 6
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 6.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.129TOT_FORM_CLASS_7

Geodatabase Name	TOT_FORM_CLASS_7
BLM Structured Name	Total_Form_Class_7_Count
Alias Name	Total Count Form Class 7
Inheritance	Not inherited

Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 7.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.130TOT_FORM_CLASS_8

Geodatabase Name	TOT_FORM_CLASS_8
BLM Structured Name	Total_Form_Class_8_Count
Alias Name	Total Count Form Class 8
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Total count of plants in form class 8.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.131TOT_HGT_UNGRAZED

Geodatabase Name	TOT_HGT_UNGRAZED
BLM Structured Name	Total_Height_Ungrazed_Plants_Measure
Alias Name	Total Height of Ungrazed Plants
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Sum of all ungrazed sampled point height measurements for a single species.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.132TOT_LEADER_LENGTH

Geodatabase Name	TOT_LEADER_LENGTH
BLM Structured Name	Total_Leader_Length_Measure
Alias Name	Total Leader Length
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of all ungrazed leader lengths for all sampled plants. That is, the sum of values in LEADER_LENGTH_1 … LEADER_LENGTH_10 for all related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain

Data Type	Double (double-precision floating-point number)

7.133 TOT_LEADER_USE_PCT_0

Geodatabase Name	TOT_LEADER_USE_PCT_0
BLM Structured Name	Total_Leader_Use_0_Percent
Alias Name	Total Count Leader Use 0%
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of number of sampled plants with estimated leader use of 0%. That is, the count of related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records with a value of 0 in LEADER_USE_PCT.
Required/Optional	Required (Automatically calculated).
Domain (Valid Values)	No domain
Data Type	Short Integer

7.134 TOT_LEADER_USE_PCT_5

Geodatabase Name	TOT_LEADER_USE_PCT_5
BLM Structured Name	Total_Leader_Use_5_Percent
Alias Name	Total Count Leader Use 1% - 10%
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of number of sampled plants with estimated leader use of 1% - 10%. That is, the count of related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records with a value of 5 in LEADER_USE_PCT.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.135 TOT_LEADER_USE_PCT_25

Geodatabase Name	TOT_LEADER_USE_PCT_25
BLM Structured Name	Total_Leader_Use_25_Percent
Alias Name	Total Count Leader Use 11% - 40%
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of number of sampled plants with estimated leader use of 11% - 40%. That is, the count of related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records with a value of 25 in LEADER_USE_PCT.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.136 TOT_LEADER_USE_PCT_50

Geodatabase Name	TOT_LEADER_USE_PCT_50
BLM Structured Name	Total_Leader_Use_50_Percent
Alias Name	Total Count Leader Use 41% - 60%
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of number of sampled plants with estimated leader use of 41% - 60%. That is, the count of related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records with a value of 50 in LEADER_USE_PCT.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.137 TOT_LEADER_USE_PCT_75

Geodatabase Name	TOT_LEADER_USE_PCT_75
BLM Structured Name	Total_Leader_Use_75_Percent
Alias Name	Total Count Leader Use 41% - 60%
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of number of sampled plants with estimated leader use of 41% - 60%. That is, the count of related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records with a value of 75 in LEADER_USE_PCT.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.138 TOT_LEADER_USE_PCT_95

Geodatabase Name	TOT_LEADER_USE_PCT_95
BLM Structured Name	Total_Leader_Use_95_Percent
Alias Name	Total Count Leader Use 91% - 100%
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	Sum of number of sampled plants with estimated leader use of 91% - 100%. That is, the count of related COLE_BROWSE_DATA_TBL (Cole Browse Details Table) records with a value of 95 in LEADER_USE_PCT.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.139 TOT_PCT_UTIL_SAMPLED_PLANTS

Geodatabase Name	TOT_PCT_UTIL_SAMPLED_PLANTS
BLM Structured Name	Total_Utilization_of_Sampled_Plants_Percent_Number
Alias Name	Total Percent Utilization for Sampled Plants
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_INFO_TBL (Height Weight Info Table)
Definition	Sum of all estimated percent utilization for all sample points. That is, the sum of the values in PCT_UTILIZATION for all related HGT_WGT_DATA_TBL records. (This value will be zero (0) for ungrazed plants.)
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.140TRANSECT_AZ

Geodatabase Name	TRANSECT_AZ
BLM Structured Name	Transect_Azimuth_Measure
Alias Name	Transect Azimuth
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Compass direction of transect line in degrees.
Required/Optional	Optional
Domain (Valid Values)	dom_DEGREE0TO359
Data Type	Short Integer

7.141 TRANSECT_LEN

Geodatabase Name	TRANSECT_LEN
BLM Structured Name	Transect_Length_Measure
Alias Name	Transect Length
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Length of transect line. Units are defined by value in TRANSECT_LEN_UOM.
Required/Optional	Optional (Required in LPI_INFO_TBL)

Domain (Valid Values)	No domain
Data Type	Short Integer

7.142TRANSECT_LEN_UOM

Geodatabase Name	TRANSECT_LEN_UOM
BLM Structured Name	Transect_Length_Unit_of_Measure_Text
Alias Name	Unit of Measure (Transect Length)
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) KEY_SPECIES_TBL (Key Species Table) LPI_INFO_TBL (Line Point Intercept Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Unit of measure defining TRANSECT_LEN value
Required/Optional	Optional (Required in LPI_INFO_TBL)
Domain (Valid Values)	dom_UOM
Data Type	String (30)

7.143 TWP

Geodatabase Name	TWP
BLM Structured Name	Township_Identifier
Alias Name	Township
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	Township where the key management area is located.
Required/Optional	Optional (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	String (3)

7.144 UNGRAZED_HT

Geodatabase Name	UNGRAZED_HT
BLM Structured Name	Ungrazed_Height_Measure
Alias Name	Ungrazed Height
Inheritance	Not inherited
Feature Class Use/Entity Table	HGT_WGT_DATA_TBL (Height Weight Details Table)
Definition	Records the measured height for sampled ungrazed plants. Unit of measure is stored in the GRAZED_UNGRAZED_UOM attribute of the HGT_WGT_INFO_TBL.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.145 USAGE_0_5

Geodatabase Name	USAGE_0_5
BLM Structured Name	No_Usage_Count_Number
Alias Name	No Usage (0-5%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 0-5% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.146 USAGE_6_20

Geodatabase Name	USAGE_6_20
BLM Structured Name	Slight_Usage_Count_Number
Alias Name	Slight Usage (6-20%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 6-20% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.147 USAGE_21_40

Geodatabase Name	USAGE_21_40
BLM Structured Name	Light_Usage_Count_Number
Alias Name	Light Usage (21-40%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 21-40% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.148USAGE_41_60

Geodatabase Name	USAGE_41_60
BLM Structured Name	Moderate_Usage_Count_Number
Alias Name	Moderate Usage (41-60%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 41-60% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.149 USAGE_61_80

Geodatabase Name	USAGE_61_80
BLM Structured Name	Heavy_Usage_Count_Number
Alias Name	Heavy Usage (61-80%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 61-80% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.150 USAGE_81_94

Geodatabase Name	USAGE_81_94
BLM Structured Name	Severe_Usage_Count_Number
Alias Name	Severe Usage (81-94%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 81-94% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.151USAGE_95_100

Geodatabase Name	USAGE_95_100
BLM Structured Name	Extreme_Usage_Count_Number
Alias Name	Extreme Usage (95-100%)
Inheritance	Not inherited
Feature Class Use/Entity Table	LNDSCPE_APPRNCE_TBL (Landscape Appearance Table)
Definition	Count of sample points on transect where plant browse utilization was in the 95-100% utilization class.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Short Integer

7.152 USE_INDEX

Geodatabase Name	USE_INDEX
BLM Structured Name	Use_Index_Measure
Alias Name	Use Index
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table)
Definition	USE_INDEX = AVG_LEADER_USE * GROWTH_INDEX / 100
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Double (double-precision floating-point number)

7.153 VEG_TYPE

Geodatabase Name	VEG_TYPE
BLM Structured Name	Vegetation_Type_Text
Alias Name	Vegetation Type
Inheritance	Not inherited
Feature Class Use/Entity Table	KEY_MGT_INFO_TBL (Key Management Info Table)
Definition	The existing plant community with distinguishable characteristics described in terms of present vegetation that dominates the aspect or physiognomy of the area. In short, the dominant current vegetation on the landscape.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (100)

7.154VERSION_NAME

Geodatabase Name	VERSION_NAME

BLM Structured Name	Geodatabase_Version_Text
Alias Name	None
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_MGT_INFO_TBL (Key Management Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table) COLE_BROWSE_DATA_TBL (Cole Browse Details Table) HGT_WGT_DATA_TBL (Height Weight Details Table) LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Name of the corporate geodatabase version previously used to edit the record. If value is “InitialLoad” this means the feature has not been edited in ArcSDE.
Required/Optional	Required (Automatically generated)
Domain (Valid Values)	No domain.
Data Type	String (255)

7.155VISIT_DT

Geodatabase Name	VISIT_DT
BLM Structured Name	Visit_Date
Alias Name	Visit Date
Inheritance	Not inherited
Feature Class Use/Entity Table	COLE_BROWSE_INFO_TBL (Cole Browse Info Table) HGT_WGT_INFO_TBL (Height Weight Info Table) KEY_SPECIES_TBL (Key Species Table) LNDSCPE_APPRNCE_TBL (Landscape Appearance Table) LPI_INFO_TBL (Line Point Intercept Info Table)
Definition	Date on which the protocol was performed.
Required/Optional	Required (Automatically calculated)
Domain (Valid Values)	No domain
Data Type	Date

7.156VISIT_GUID

Geodatabase Name	VISIT_GUID
BLM Structured Name	Visit_Globally_Unique_Identifier
Alias Name	Visit ID
Inheritance	Inherited from ODF
Feature Class Use/Entity Table	COLE_BROWSE_DATA_TBL (Cole Browse Details Table) HGT_WGT_DATA_TBL (Height Weight Details Table) LPI_DATA_TBL (Line Point Intercept Details Table)
Definition	Foreign Key (FK) field used to relate child records to their parent in the Range Monitoring Geodatabase.
Required/Optional	Required (Automatically generated)
Domain (Valid Values)	No domain.
Data Type	GUID

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:

- Copied completely with no changes (replicated)
- Copied with no changes except to omit one or more feature classes from a feature dataset
- 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

The SDE-enabled ORSOEDIT production/edit geodatabase will serve as the edit environment. When edits are posted to the default geodatabase version, the data will be replicated to the ORSOVCTR publication SDE geodatabase using the following methodology:

- Select Sample Points features with related records in one or more Range Monitoring tables
- Replicate the selected features to a Range Monitoring publication database, preserving GLOBALIDs and GUID values
- Relationship classes will be replicated into the publication geodatabase to provide user access to the Range Monitoring-specific information within the tables

However, attachments will not carry forward into the publication geodatabase. The software being used in the collection phase allows photos or documents to be related to a geographic location as stored in the Sample Point feature. When the photos or documents are collected, they are stored as geodatabase "attachments" - a special form of geodatabase "relationship class". When the collected data is finalized as corporate data, the attachments are removed from the edit environment and relocated to a network repository. The FILEPATH field in Sample Points will store the location of where the attachments of interest exist.

Additionally, the Range Monitoring summary tables (direct children of the SAMPLE_PT feature class) will be joined to the Sample Points feature class, and exported as stand-alone feature classes in the ORSOVCTR publication geodatabase. In cases where multiple protocols have been performed on a single SAMPLE_PT feature, the publication process will create separate point features for each related child record. These feature classes will enable simpler symbolizing, labelling, and analysis of the Range Monitoring data. The feature classes will have the following names:

- RGE_MON_CB_PT (Cole Browse Points)
- RGE_MON_HW_PT (Height-Weight Points)
- RGE_MON_LA_PT (Landscape Appearance Points)
- RGE_MON_KS_PT (Key Species Points)
- RGE_MON_LPI_PT (Line-Point Intercept Points)

Once the publication process has completed and the data is updated in ORSOVCTR, the data will be again replicated to the BLMReplication network file share in two separate file geodatabase format for consumption by desktop software applications:

- Range_monitoring_pub.gdb: Contains separate point feature classes for each survey protocol conducted at a given sample point. If multiple protocols were performed at the same point location, overlapping points will be created for each protocol.

- Samplepoints.gdb: Contains the SAMPLE_PT feature class with related tables mimicking the edit environment. The relationship classes will have the same properties as in ORSOEDIT. This geodatabase will allow users to examine the fine-grained data collected as part of each survey.

All publication datasets will have the attributes potentially containing names of individuals removed to protect Personally-Identifiable Information (PII) from exposure. These attributes include RECORDER, EXAMINER, and VERSION_NAME. The geodatabase with the stand-alone feature classes will be provided to the public upon request. To initiate a request for the Range Monitoring data, contact the State Data Administrator. The State Data Administrator's contact information can be found at:

https://www.blm.gov/site-page/oregon-data-management

9 Editing Procedures

9.1 Managing Overlap (General Guidance)

Refer to the ODF Sample Points data standard for managing overlap guidance for Sample Points. The data standard is available here:

https://www.blm.gov/or/datamanagement/files/Sample_Points_Spatial_Data_Standard.pdf

9.2 POLY/ARC Topology (Boundary Group Datasets)

Refer to the ODF Sample Points data standard for topology guidance for Sample Points.

9.3 Editing Quality Control

Refer to the ODF Sample Points data standard for editing quality control guidance for Sample Points.

9.4 Vertical Integration

Refer to the ODF Sample Points data standard for vertical integration guidance for Sample Points.

9.5 Theme Specific Guidance

Range Monitoring points should occur within a grazing allotment polygon in all cases. Specific guidance on how to edit Range Monitoring tabular data is provided on the internal Range and GIS program SharePoint pages. For access to these documents, contact the data steward.

10 Abbreviations and Acronyms

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

Table 2 Abbreviations/Acronyms Used

Abbreviations	Descriptions
AGOL	ArcGIS Online
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
FOIA	Freedom of Information Act
GIS	Geographic Information System
GPS	Global Positioning System
LPI	Line-Point Intercept
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
PLANTS	Plant List of Accepted Nomenclature Taxonomy & Symbols
POLY	GIS polygon feature
PUB	Publication
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
S1	Service First
SDE	Spatial Database Engine
USDA	United State Department of Agriculture
WEB	Worldwide Web (internet)

A Domains (Valid Values)

These are the currently approved domains. Domains change without a re-issue of the data standard. Some of the domains used in this data standard are also available at the following web site:

https://www.blm.gov/site-page/oregon-data-management

For domains not listed at that site contact the State Data Administrator.

A.1 dom_BROWSE_AGE_CLASS

Browse Age Class. Classifies the age of browsed plants.

Code	Value
S	Seedling
Y	Young
M	Mature
D	Decadent

A.2 dom_COMPASS_DIR

Compass Direction. Defines the general bearing/azimuth of a transect line.

Code	Value
E	E - East (67.5-112.5)
N	N - North (0-22.5 and 337.5-360)
NE	NE - Northeast (22.5-67.5)
NW	NW - Northwest (292.5-337.5)
S	S - South (157.5-202.5)
SE	SE - Southeast (112.5-157.5)
SW	SW - Southwest (202.5-247.5)
W	W - West (247.5-292.5)

A.3 dom_DEGREE0TO359

Degrees (0 to 359). Range domain-defining direction in degrees.

Code	Value
0	Min value
359	Max value

A.4 dom_DIST_NAME

District Name. Name of the BLM District where the monitoring activities take place.

Code	Value
Lakeview District	Lakeview District
Burns District	Burns District
Vale District	Vale District
Prineville District	Prineville District
Roseburg District	Roseburg District
Medford District	Medford District
Coos Bay District	Coos Bay District
Spokane District	Spokane District
Northwest Oregon District	Northwest Oregon District

A.5 dom_FORM_CLASS

Form Class. Codes defining the degree of availability and hedging of vegetation.

Code	Value
1	All available, Little or no hedging
2	All available, Moderately hedged
3	All available, Severely hedged
4	Partially available, Little or no hedging
5	Partially available, Moderately hedged
6	Partially available, Severely hedged
7	Unavailable
8	Dead

A.6 dom_LEADER_USE_PCT

Leader Use Percentage. Estimate of the intensity of use (for Cole Browse protocol). The value included represents the midpoint of each percentage class.

Code	Value
0	0%
5	1% - 10%
25	11% - 40%
50	41% - 60%
75	61% - 90%
95	91% - 100%

A.7 dom_LIVESTOCK_ANIMAL_TYPE

Livestock Animal Type. Type of livestock using pasture.

Code	Value
Cattle	Cattle
Sheep	Sheep
Llama	Llama
Other	Other
Unknown	Unknown
Horse	Horse

A.8 dom_RA_NAME

Resource Area Name. BLM Resource Area Name.

Code	Value
Lakeview RA	Lakeview Resource Area
Klamath Falls RA	Klamath Falls Resource Area
Three Rivers RA	Three Rivers Resource Area
Andrews RA	Andrews Resource Area
Malheur RA	Malheur Resource Area
Baker RA	Baker Resource Area
Central Oregon RA	Central Oregon Resource Area
Deschutes RA	Deschutes Resource Area
Cascades RA	Cascades Resource Area
Marys Peak RA	Marys Peak Resource Area
Tillamook RA	Tillamook Resource Area
Siuslaw RA	Siuslaw Resource Area
Upper Willamette RA	Upper Willamette Resource Area
Swiftwater RA	Swiftwater Resource Area
South River RA	South River Resource Area
Butte Falls RA	Butte Falls Resource Area
Ashland RA	Ashland Resource Area
Glendale RA	Glendale Resource Area
Grants Pass RA	Grants Pass Resource Area
Umpqua RA	Umpqua Resource Area
Myrtlewood RA	Myrtlewood Resource Area
Border RA	Border Resource Area
Wenatchee RA	Wenatchee Resource Area

A.9 dom_SOIL_SURFACE

Soil Surface. Description of the character and makeup of the soil surface.

Code	Value
R	Rock fragment >5mm or 1/4 inch in diameter
BR	Bedrock
M	Moss
LC	Visible Biotic Crust on Soil
S	Soil, without any other soil surface code
EL	Embedded Litter
D	Duff
PC	Plant Code (Enter for Basal Hit)

A.10 dom_UOM

Unit of Measure. The standard unit used for the observation.

Code	Value
Feet	Feet
Meters	Meters
Inches	Inches
Centimeters	Centimeters

A.11 dom_USDA_PLANTS_LPI

USDA PLANTS Line-Point Intercept Code. Available codes to enter observations at the various canopy and soil surface (basal) levels for Line-Point Intercept. Domain is sorted in order of common use. The following is a sample, the full list of domain values is too long to display in this document, but can be found in the domains section at https://www.blm.gov/about/data/oregon-data-management.

Code	Value
NONE	NONE - No Canopy
L	L (Herbacious Litter)
W	W (Woody Litter)
AF#	AF# (Unknown Annual Forb)
PF#	PF# (Unknown Perennial Forb)
AG#	AG# (Unknown Annual Graminoid)
PG#	PG# (Unknown Perennial Graminoid)
SH#	SH# (Unknown Shrub)
TR#	TR# (Unknown Tree)
PHSE	PHSE - silky phacelia
VEDU	VEDU - North Africa grass
SYAL	SYAL - common snowberry

FEID	FEID - Idaho fescue

A.12 dom_YN

Yes No Code. Generic domain for Yes/No/Unknown coding.

Code	Value
Y	Yes
N	No
U	Unknown