Oregon/Washington Bureau of Land Management



Grazing Allotments and Pastures

Spatial Data Standard



Cattle resting near windmill and stock tank.

Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	10/19/1999	Janet Pacioretty	First version.	All
1.0	06/08/2001	Stan Frazier	Updated look and addition of attributes for transactional updates.	All
1.0	6/2/2004	Stand Frazer	Added boundary type LAKE, boundary code CFF. Extended pasture name to 50 characters.	Section A2, 7.11.
1.5	11/21/2011	Pam Keller	Replaced ADMINRA with domain dom_BLM_ORG_CODE. Dropped ADMINST can be derived from AMINRA. ALLOTNUM and PASTNUM dropped can be derived from the attribute ALTPAST. Renamed dom_MGTCAT to dom_MGMTCAT. Incorporated standalone edit guide into standard.	All
2.0	12/19/2013	Pam Keller	Changes to the data standard with this revision is the addition of attribute GIS_ACRES, two additional Grazing System choices and correction of minor text errors.	Section 7.9
2.3	03/10/2017	Kyler Diershaw	Updated contact information for State Data Steward, Lead GIS Specialist, State Data Administrator, State Records Administrator. Added Document Revision Table.Secti 2.5, 4 Appe This	
2.4	03/14/2017	Kyler Diershaw	Added automatic TOC. Updated BLM_ORG_CD. Updated Records Retention Schedule.	TOC A.1 1.3
3.0	10/1/2018	Al Thompson	Update format and reorganize content to conform to All the new template.	
3.0	3/22/2019	Eric Hiebenthal	Added clarification on use of ALTPAST for "NOALC", "OUT", "UNALT".Section 7.3 10.2	



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1. General Information

This dataset contains livestock grazing allotment and pasture boundaries with associated attributes describing some basic characteristics of the allotments and pastures. Allotments are made up of pastures. The dataset contains pasture boundary polygons, GRA_POLY, and its coincident line pair, GRA_ARC, which contains boundary definition information. The BLM allotments are tied to the 1934 Taylor Grazing Act that set up grazing districts. All BLM lands should have grazing management identified. However, some districts have considerably more rangeland and larger blocks of BLM parcels and some districts have only scattered parcels and a small or nonexistent grazing program. The ALTPAST attribute, the main attribute for GRA_POLY, accommodates these differences. This theme is associated with the Rangeland Administration System (RAS), a national database application for allotment billing.

The relationship of grazing allotments and pastures to fence lines can be confusing. The themes are not identical, but there will be a great deal of coincidence. Pastures (GRA_POLY) are areas (polygons) that keep animals in. Usually, fences (lines) are the physical spatial features that comprise these pasture boundaries, but there may be others like steep terrain or water features. These are defined by attribute DEF_FEATURE of GRA_ARC (line pair to GRA_POLY). Fence lines exist as a separate spatial feature class not described in this standard. While not necessarily identical to the lines in GRA_ARC, there will be a great deal of coincidence and the themes should be maintained together.

This dataset also contains proposed pasture polygons, GRA_P_POLY. During planning activities such as Allotment Management Plan (AMP) or Resource Management Plan (RMP) development, it may be necessary to create and analyze different proposals for allotment and pasture changes. The theme will be highly variable and should be archived with other project/plan specific data at the appropriate decision date. Approved pasture changes are incorporated into GRA_POLY and GRA_ARC.

- Dataset (Theme) Name: GRAZING ALLOTMENTS AND PASTURES (GRA)
- Dataset (Feature Class): GRA_POLY, GRA_ARC, GRA_P_POLY
- FOIA Category: Public

1.1 Roles and Responsibilities

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Data Steward	The <u>State Data Steward</u> 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 <u>GIS Technical Lead</u> 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.

Table 1	Roles and	Responsibilities	(Continued)
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Roles	Responsibilities
State Data Administrator	The <u>State Data Administrator</u> 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 <u>State Records Administrator</u> 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 Records Retention Schedule(s)

The DRS/GRS/BLM Combined Records Schedule under Schedule 20/52a3 (Electronic Records/Geographic Information Systems) lists Grazing Allotments and Pastures 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 significant changes and additions have been made, before and after the change. Use BLM 20/52a. Transfer to the National Archives every three years after cutoff. Under the instruction in 36 CFR 1235.44-50, or whichever guidance is in place at the time of the transfer. Submissions are full datasets and are in addition to, not replacements, of earlier submissions.

According to the DRS/GRS/BLM Records Schedules, Schedule 20 Item 52a3, the NOC is responsible for transfer to NARA.

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 offline, 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.

1.3 Security/Access/Sensitivity

The Grazing Allotments (GRA) and Pastures set of themes does not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the Oregon/Washington (OR/WA) Bureau of Land Management (BLM)).

This data is not sensitive, and there are no restrictions on access to this data from either within the BLM or external to the BLM. There are no privacy issues or concerns associated with these data themes.

1.4 Keywords

Keywords used to locate this dataset include:

- BLM Thesaurus: Areas of Critical Environmental Concern, ACEC, Outstanding Natural Area, ONA, Research Natural Area, and RNA.
- Additional keywords: Grazing, Allotments, Pastures, GRA.
- ISO Thesaurus Keywords: biota, economy, environment, location, farming.

1.5 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 Data Administration
- 4120 Grazing Management

2. Dataset Overview

2.1 Usage

This dataset is used for depicting grazing allotments and pastures on maps. Pasture boundaries are dissolved to form allotment boundaries (see Layer Files section). The grazing allotment and pasture dataset is one of the most important dataset to BLM business, and it is also used in most National Environmental Policy Act planning, and other resource analysis. Resource specialists involved in administration of livestock grazing programs use this dataset. Use the GRAZSYS attribute to select areas available or not available for livestock grazing.

2.2 Sponsor/Affected Parties

The sponsor for this data set is the deputy State Director for the Division of Resources, Lands, Mineral and Fire.

Other Government agencies, private corporations, and individuals are affected by changes in grazing allotment boundaries. Matching allotment boundaries across BLM districts and states is important. The United States Forest Service also administers grazing allotments, and it is important to match across agency jurisdictions.

2.3 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 Grazing Allotment and Pastures entities are highlighted. For additional information about the ODF, contact the <u>state data administrator</u>.

For GRA and Pastures, the categories/groups that the dataset is part of are:

BLM GRA/Pasture Polygon:

ODF

Boundaries

Political & Admin

Political & Admin Existing

GRA_POLY

Political & Admin Proposed

GRA_P_POLY

BLM GRA/Pasture Line:

ODF

Boundaries

Political Administrative Special Management Area Line

GRA_ARC





Figure 2 Grazing Allotments and Pastures Data Organization Structure

2.4 Relationship to DOI Enterprise Architecture Data Resource Model

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

- Data Subject Area: Geospatial and Geography
- Information Class: Spatial Dataset

For a complete list of all DOI Data Subject Areas and Information Classes, contact: the state data administrator.

3. Data Management Protocols

3.1 Accuracy Requirements

Positional accuracy is important for the GRA theme. The COORD_SRC and ACCURACY_FT fields contain feature level accuracy information stratified by input method and absolute accuracy (how close, in +/- feet, the GIS mapped feature is to the actual ground feature). This flags the less accurate lines for replacement when possible. Use Global Positioning System (GPS) to locate fence lines accurately.

3.2 Collection, Input, and Maintenance Protocols

The District Data Steward will develop standard field data collection methods, and work with the GIS Coordinator to develop corresponding standard GIS input methods. The most common methods of allotment and pasture line capture are:

- Manuscript the lines onto United States Geological Survey quad maps and digitize.
- Collect the pasture boundaries (fences) in the field with a GPS device and input the GPS coordinates into GIS.
- Use orthophotos as a backdrop for on-screen digitizing.
- Import Digital Line Graph (DLG) fence lines, roads, and other existing data.

There are many sources for GRA lines because of the nature of pastures. A pasture is an area that keeps animals in. The boundaries of the pasture might include fences, roads, rivers, or steep terrain. It is important to know what type of boundary each GIS line segment represents so that appropriate existing data can be brought in rather than digitizing new data. The DEF_FEATURE field within the line attribute table contains this information and is the main attribute for GRA_ARC. A pervasive problem with GRA lines is the large degree of coincidence with subdivision lines. Constructed fences that were intended to follow ownership are often slightly off. To avoid creating a huge number of sliver areas when the GRA theme is combined with the ownership theme, it is recommended that the district data steward and GIS coordinator decide on a minimum distance under which coincidence will be forced for mapped fences. For example, if the mapped fence line is within 100 feet of the subdivision line it is intended to follow, use the subdivision line not the mapped line. If the fence line is collected by GPS, then the GPS line is used. In all three cases, DEF_FEATURE is "FENCE," but the fence line collected by GPS has COORD_SRC of "GPS," the mapped fence will be "DOQ," or "DRG," or "MAP," and the online fence will be "SUBDIVISION."

The main attribute for GRA_POLY is ALTPAST, and a good understanding of the possible values is critical. The GRA theme is a wall-to-wall polygon theme. This means that every acre of ground within a district needs to have a GRA label. There are many potentially confusing terms used to describe areas not under BLM grazing management (not allocated, unallotted, excluded, custodial, etc.), and it is important to understand the choices and differences. The ALTPAST field and dependent field GRAZSYS field contain this information.

It is highly recommended that source maps be maintained for each 7.5-minute (1:24000) quad on the district. The reference maps are used to show changes to the allotment, pasture boundaries, and names over time.

Allotment boundaries are specified by Range Line Agreements (RLA) and should not be changed without amending the RLA. Interior pasture boundaries are more flexible and can be modified to reflect changes in fences or better data without formal documentation beyond theme metadata. Significant changes to pastures that are not reflected in the current Land Use Plan (LUP) should be documented with a LUP Maintenance Sheet. The GIS editors and Data Stewards need to coordinate with neighboring districts where allotments cross district lines. Possible maintenance includes:

- Replace lines with better digital versions of the pasture definitions (e.g., a fence replacing a parcel line or a fence line collected by GPS replacing a manuscripted fence).
- Pastures split or merged.
- New or changed pasture or allotment boundaries.
- Review of DEF_FEATURE to determine if improvement can be made (e.g., Can an "UNKNOWN" be replaced by "FENCE").

It is also the responsibility of the data stewards to work with the GIS editors to ensure that any database external to the GIS (especially the RAS) be kept current and consistent with GRA.

3.3 Update Frequency and Archival Protocols

Once the GRA theme has been created for a district, it is the responsibility of the district data steward to ensure that the theme remains current. Bringing the theme up to a current level should take place at least once per year and probably more frequently.

In addition to annual archival, GRA should be archived at RMP, AMP, and other major plan Record of Decision dates.

3.4 Statewide Monitoring

The state data steward, in conjunction with the district data stewards, is responsible for reviewing the GRA theme across the states at least once per year. A key item to be reviewed is consistency between districts in attributing and using the same GRAZSYS values to mean the same thing. Additional guidance for labeling may need to be developed. Consistency in minimum pasture size is another suggested check. Exclosures can be very small. The minimum size at which they are omitted from the GRA theme and shown as a small polygon or simple point on some other theme (e.g., Treatments or Structures) is currently left up to the individual field offices. Progress toward similar levels of accuracy is another review item. Correct linkage to RAS should be tested at least annually.

4. Grazing Allotments and Pastures Schema (Simplified)

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

For domains not listed at that site contact the state data administrator.

4.1 Grazing Allotments and Pastures Feature Dataset

4.1.1 GRA_POLY Feature Class (GRA Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
ADMINRA	String	5		Yes	dom_BLM_ORG_CD
ALLOTNAME	String	50		Yes	
ALTPAST	String	8		Yes	
GIS_ACRES	Decimal	12,6		Yes*	
GRAZSYS	String	2		Yes	dom_GRAZSYS
MGMTCAT	String	1		No	dom_MGMTCAT
PASTNAME	String	50		No	
VERSION_NAME	String	50	Initial Load	Yes*	

* Values automatically generated

4.1.2 GRA _ARC (GRA Lines)

Attribute Name	Data Type	Length	Default Value	Required ?	Domain
ACCURACY_FT	Short Integer			No	
COORD_SRC	String	7		Yes	dom_COORD_SRC
DEF_FEATURE	String	25		Yes	dom_DEF_FEATURE
VERSION_NAME	String	50	InitialLoad	Yes*	

* Values automatically generated

4.2 GRA_P_POLY Stand-alone Feature Class (Grazing Allotment and Pasture Proposed Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
ADMINRA	String	5		Yes	dom_BLM_ORG_CD
ALLOTNAME	String	50		Yes	
ALTERNATIVE	String	10		No	
ALTPAST_P	String	8		Yes	
GIS_ACRES	Decimal	12,6		Yes*	
PASTNAME	String	50		No	
VERSION_NAME	String	50	Initial Load	Yes*	

* Values automatically generated

5. Projection and Spatial Extent

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are in decimal degrees. Spatial extent (area of coverage) includes all lands in the states of OR/WA. See the metadata for this dataset for more precise description of the extent.

6. Spatial Entity Characteristics

- GRAZING ALLOTMENT POLYGONS (GRA_POLY)
 - 1. Description: Instance of Political and Admin Existing group.
 - 2. Geometry: Non-overlapping polygons that cover the landscape.
 - **3.** Topology: Yes. The GRA_POLY lines are coincident with GRA_ARC lines and together make the feature dataset GRA.
 - 4. Integration Requirements: None.
- GRAZING ALLOTMENT LINES (GRA_ARC)
 - 5. Description: Instance of Existing Political Admin Special Management Areas Line group.
 - 6. Geometry: Simple, non-overlapping lines that are split between endpoints as needed.
 - 7. Topology: Yes. The GRA_ARC lines are coincident with GRA_POLY lines and together make the feature dataset GRA.
 - 8. Integration Requirements: The GRA_ARC lines must remain coincident with the source data indicated by attributes DEF_FEATURE and COORD_SRC either through duplication or through snapping.
- GRAZING ALLOTMENT POLYGONS PROPOSED (GRA_P_POLY)
 - 9. Description: Instance of Political and Admin Proposed group.
 - 10. Geometry: Polygons do not cover the landscape nor do they cover all BLM lands continuously.
 - 11. Topology: No.
 - 12. Integration Requirements: Polygons may overlap each other and/or polygons from GRA_POLY.

7. Attribute Characteristics and Definitions

Attributes are listed in alphabetical order.

7.1 ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	Accuracy_Feet_Measure
Alias Name	None
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE
Feature Class Use/Entity Table	GRA _ARC (GRA Lines)
Definition	How close, in feet, the spatial GIS depiction is in relation to the actual location on the ground. There are several factors to consider in GIS error: scale and accuracy of map- based sources, accuracy of Global Positioning System (GPS) equipment, and the skill level of the data manipulators. A value of "0" indicates no entry was made. This is the correct value when the COORD_SRC is another GIS theme (Digital Line Graph, Cadastral National Spatial Data Infrastructure and Digital Elevation Model) because the accuracy is determined by that theme. However, if COORD_SRC is MAP (digitized from a paper map) or GPS, a value of "0" indicates a missing value that should be filled in either with a non-zero number or "-1." A value of "-1" indicates that the accuracy is unknown and no reliable estimate can be made.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 3 (for high accuracy GPS), 40 (best possible for United States Geological Survey (USGS) 24K topo map), 200
Data Type	Short Integer

7.2 ADMINRA

Geodatabase Name	ADMINRA
BLM Structured Name	Administrative_Resource_Area_Code
Alias Name	None
Inheritance	Inherited from entity POLITICAL ADMIN POLY
Feature Class Use/Entity Table	GRA_POLY Feature Class, GRA_P_POLY Stand-alone Feature Class
Definition	The BLM state, district, and field office that has administrative responsibility for the allotment.
Required/Optional	Required
Domain (Valid Values)	dom_BLM_ORG_CD
Data Type	String (5)

7.3 ALLOTNAME

Geodatabase Name	ALLOTNAME
BLM Structured Name	Grazing_Allotment_Name
Alias Name	None
Inheritance	Not Inherited
Feature Class Use/Entity Table	GRA_POLY Feature Class, GRA_P_POLY Stand-alone Feature Class
Definition	The official name assigned to a specific allotment. All keyboard characters except special characters may be used. If ALTPAST contains "NOALC" then this attribute should be "NOT ALLOCATED". If ALTPAST contains "OUT" then this attribute should be "OUT". If the allotment is a Fenced Federal Range (FFR), include FFR in the name (e.g., "Pickled Butte FFR"). Should be downloaded from RAS.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (50)

7.4 ALTERNATIVE

Geodatabase Name	ALTERNATIVE
BLM Structured Name	Alternative_Text
Alias Name	None
Inheritance	Inherited from entity POLITICAL ADMIN PROPOSED
Feature Class Use/Entity Table	GRA_POLY Feature Class (GRA Polygons),
Definition	Identifier for the alternative during the planning process (e.g., A, B, C, D, E). Free choice values for different plans, can be concatenated when same polygon applies to multiple alternatives (BCD, ACD, etc.).
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (10)

7.5 ALTPAST

Geodatabase Name	ALTPAST
BLM Structured Name	Grazing Allotment Identification Number
Alias Name	None
Inheritance	Not Inherited
Feature Class Use/Entity Table	GRA_POLY Feature Class (GRA Polygons),
Definition	The polygon identifier for the allotment and pastures. It normally consists of the five- character allotment number, an underscore (_), and the two-character pasture number. All preceding blank characters must be populated with zeros. For example, allotment number 302, pasture number 2, would be input as "00302_02". This field may be used as a link to other related databases, including RAS. The ALTPAST concatenated with Administrative state (derived from BLM_ORG_CD) is unique in RAS, but, in GRA, it is possible to have more than one polygon with the same ALTPAST. In this case, RAS acres are the sum of the polygon acres. Also, not all allotments and pastures are included in RAS. There is dependence between this attribute and the GRAZSYS (Grazing Allotment System CD) attribute. Certain codes in GRAZSYS dictate the form

	that this (ALTPAST) attribute takes. Certain questions must be asked in order to determine the correct choice for ALTPAST. The most important is the question: is this area within an allotment or not? This may take some research into old files to determine. Many areas assumed outside of allotments are, in fact, still officially included in an allotment. Because pastures are defined by fences, not exact ownership lines, there are many instances where slivers and small parcels of BLM are fenced in with areas outside of allotments. There are also scattered, isolated BLM parcels that are not included in allotments. The various choices for ALTPAST are described below. Areas within Allotments:
	1. General Pastures usually contain a large percentage of public land but can have a large percentage of private land if the pasture is part of a grazing system in an AMP. This is the type of pasture present in most allotments and is always listed in RAS. All records in RAS should have corresponding polygons in GRA, but not vice versa. Because RAS is for billing, GRA will have areas not covered by RAS. Valid value: "05231_11"
	 The FFR (Fenced Federal Range) is an allotment that is mostly private but contains some public land fenced within. This area is always listed in RAS. The ALTPAST should have the standard format as for General Pastures. The GRAZSYS is Custodial (CU).
	 Mostly Private Pastures that contain a very small percentage of public land, usually slivers of public land where fences do not follow ownership lines, are another type of areas within allotments. These pastures are included within an allotment and should (but may not) be listed in RAS. The GRAZSYS is "99". Valid value: "06010_99"
	4. Exclosures are areas designed and constructed with the idea of keeping livestock and sometimes wildlife out of a particular area. If they are large enough, they should have pasture numbers within allotments and be included in RAS. The GRAZSYS is "EX", "RX", "MX", or "XX". Valid value: "05231_11"
	Areas NOT within Allotments:
	 Not Allocated areas are closed to livestock grazing through a LUP decision or legislation. These lands generally may have an allotment and/or pasture number, but often do not. The GRAZSYS has NX. Valid value: "NOALC"
	2. Completely private, state, U.S. Fish and Wildlife Service, or other lands which are not part of any allotment controlled by a BLM district and do not fall under BLM grazing management. These areas would not be within any allotment or pasture and would not be in RAS. The GRAZSYS is "00" (zeroes). Valid value: "OUT"
	3. Areas of mostly private, state, or other federal jurisdiction, but with slivers of BLM land fenced in. Lands may be grazed, but are not in a BLM allotment or under BLM grazing management. Format includes 2 character code ("ST" for state, "FS" for Forest Service, "FW" for Fish and Wildlife Service, "BR" for Bureau of Reclamation) followed by underscore followed by the other jurisdiction's allotment number. The GRAZSYS is "00". Example values: "FS_A056", "FS_00177"
	4. Unallotted areas are BLM lands not officially assigned to a particular livestock permit. These lands are not closed to livestock grazing and could be assigned to a permit in the future. These areas may have an allotment and/or pasture number and may be included in RAS. The GRAZSYS is Unallotted (UA). Districts with large, non-BLM areas surrounding scattered BLM parcels may have large polygons labeled "UNALT" if there is no grazing management on these scattered BLM parcels and no identified fences to block off the large non-BLM blocks. Valid value: "UNALT"
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (8)

7.6 ALTPAST_P

Geodatabase Name	ALTPAST_P
BLM Structured Name	Grazing Allotment Identification Number
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	GRA_P_POLY Stand-alone Feature Class
Definition	The proposed allotment and pasture number. It normally consists of the five-character allotment number, an underscore (_), and the two-character pasture number. All preceding blank characters must be populated with zeroes. For example, allotment no. 302, pasture no. 2, would be input as 00302_02. This field may be used as a link to other related databases, including RAS. The proposed pasture might be a "special case" such as unallotted, not allocated, fenced Federal range, or a "99" pasture. Certain questions must be asked in order to determine the correct choice for ALTPAST. Most important is the question: Is the area proposed to be within an allotment or not? This may take some research into old files to determine. Many areas assumed outside of allotments are, in fact, still officially included in an allotment. Because pastures are defined by fences, not exact ownership lines, there are many instances where slivers and small parcels of BLM lands are fenced in with areas outside of allotments. There are also scattered, isolated BLM parcels that are not included in allotments. See the ALTPAST attribute for a more complete description of the choices.
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (8)

7.7 COORD_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	Coordinate_Source_Code
Alias Name	None
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE
Feature Class Use/Entity Table	GRA _ARC (GRA Lines)
Definition	The actual source of the GIS coordinates for the line segments. If the line is copied from another theme and already has COORD_SRC, it should be reviewed and may need to be changed for use in this dataset.
Required/Optional	Required
1 1	
Domain (Valid Values)	dom_COORD_SRC

7.8 DEF_FEATURE

Geodatabase Name	DEF_FEATURE	
BLM Structured Name	Defining_Feature_Code	
Alias Name	None	
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE	
Feature Class Use/Entity Table	GRA _ARC (GRA Lines)	
Definition	The physical or legal feature that defines the boundary according to the legal boundary description. In general, the lowest level defining feature, but it depends on how the boundary segment is actually defined. For example, SUBDIVISION rather than COUNTY unless the boundary segment is specifically defined as following the county boundary. If the line is copied from another theme and already has DEF_FEATURE, it should be reviewed and may need to be changed for use in this dataset.	
	Allotments and pastures may be legally described by township, range and sections. It is important to know the legal description. However, it is not sufficient just to know the legal description because the physical features that keep livestock in or out define pastures. Legal land lines are used only if there is no physically confining feature and the pasture needs to be closed.	
	If fences are not yet digitally captured, it may be necessary to use ownership and section lines, or roads, or streams as legally described, but these should be replaced when the fence is captured. If it is known that a particular pasture boundary segment is a fence, then the GRA_ARC attribute DEF_FEATURE should be set to "FENCE" even if the line temporarily used to depict it is a parcel line.	
	The GRA lines depicting pasture boundaries usually represent or are related to fences, rims, water, roads, and subdivisions (sections or ownership) which may be found on other themes. It is important to know as precisely as possible what defines a pasture boundary. If the boundary is described as a stream, then the question, "Which side of the stream?" determines which pasture includes the water. Often a pasture boundary will follow the middle of a stream or road, in which case the appropriate segment from the GIS transportation or hydrography theme is copied. If the boundary is defined as one side or the other, then the transportation or hydrography segment can be buffered, and the appropriate buffer line used or an offset line can be digitized.	
	In summary, the following hierarchy is used for creating GRA lines and attributing DEF_FEATURE:	
	1. FENCE, always use fence lines first, if possible	
	2. RIM, LAKE, STREAM_LBANK, STREAM_RBANK, STREAM	
	3. ROAD, ROAD_OFFSET	
	4. SUBDIVISION 5. POINT TO POINT	
	6. UNKNOWN	
Required/Optional	Required	
Domain (Valid Values)	dom_DEF_FEATURE	
Data Type	String (25)	

7.9 GIS_ACRES

Geodatabase Name	GIS_ACRES		
BLM Structured Name	GIS_Acres_Measure		
Alias Name	None		
Inheritance	Inherited from entity POLITICAL ADMIN	Inherited from entity POLITICAL ADMIN	
Feature Class Use/Entity Table	GRA_POLY Feature Class), GRA_P_PO	LY Stand-alone Feature Class	
Definition	GIS_ACRES is calculated when the submitted polygon is approved for incorporation into the dataset. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating acres so the features are projected to one of three projections as determined by the BLM_ORG_CD of the record. These three projections all utilize linear units of meters, so the ESRI Geodatabase-controlled field SHAPE.AREA can be used to convert to acres with the factor based on the U.S. Survey Foot: GIS_ACRES = SHAPE.AREA * 0.0002471044.		
	District indicated by BLM_ORG_CD:	ESRI Projection used:	
	Prineville	NAD 1983 USFS R6 Albers	
	Coos Bay, Eugene, Lakeview, Medford, Roseburg, Salem	NAD 1983 UTM Zone 10N	
	Burns, Spokane, Vale	NAD 1983 UTM Zone 11N	
Required/Optional	Required (automatically calculated when replicated to publication database)		
Domain (Valid Values)	No domain		
Data Type	Decimal (12,6)		

7.10 GRAZSYS

Geodatabase Name	GRAZSYS
BLM Structured Name	Grazing_Allotment_System_Code
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	GRA_POLY Feature Class (GRA Polygons),
Definition	Primary grazing management system within the pasture. Code containing an X (XX, EX, RX, MX, NX) plus UA indicates BLM lands with no livestock grazing currently. NX indicates a longer-term removal from livestock grazing, through either a Land Use Plan (RMP) or legislation or court order. Not a RAS field, but related.
Required/Optional	Required
Domain (Valid Values)	dom_GRAZSYS
Data Type	String (2)

7.11 MGMTCAT

Geodatabase Name	MGMTCAT	
BLM Structured Name	Grazing_Allotment_Management_Category_Code	
Alias Name	None	
Inheritance	Not inherited	
Feature Class Use/Entity Table	GRA_POLY Feature Class (GRA Polygons),	
Definition	Range condition assessment categories as defined in the Rangeland Program Summary (RPS). RAS contains an equivalent field and the two should match.	
Required/Optional	Optional	
Domain (Valid Values)	dom_MGMTCAT	
Data Type	String (1)	

7.12 PASTNAME

Geodatabase Name	PASTNAME
BLM Structured Name	Grazing_Allotment_Pasture_Name
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	GRA_POLY, GRA_P_POLY
Definition	The name of a specific pasture in an allotment. Allow all keyboard characters except special characters. Should be downloaded from RAS.
Required/Optional	Optional
Domain (Valid Values)	No Domain
Data Type	String (50)

7.13 VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Alias Name	None
Inheritance	Inherited from entity ODF. Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.
Feature Class Use/Entity Table	GRA_POLY Feature Class (GRA Polygons), GRA_P_POLY Stand-alone Feature Class , GRA _ARC (GRA Lines)
Definition	Name of the corporate geodatabase version previously used to edit the record. InitialLoad = feature has not been edited in ArcSDE. Format: username.XXX-mmddyy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). Where "XXX" equals theme abbreviation. Example: "sfrazier.GRA-121211-111034"
Required/Optional	Required
Domain (Valid Values)	No Domain
Data Type	String (50)

8. Associated Files or Databases

The national database, RAS, is closely associated with this dataset. A download from RAS is acquired on an annual basis (at a minimum) and made available for use with the spatial data. The RAS provides attribute information related to grazing preference (amount of grazing authorized in the allotment), permit expiration date, preference code (section 3 or section 15), and a few other, related data items.

The ALTPAST concatenated with ADMINST is unique in RAS. However, there may be more than one polygon in GRA with the same ALTPAST. Also, not all allotments and pastures are included in RAS.

Periodically, a download is obtained from the national RAS database and loaded as two tables into the Spatial Database Engine (SDE). This will occur annually in the winter. It may occur more frequently at the request of a district and after major edits to GRA. All OR/WA allotments will be extracted. The specific RAS fields will vary but at a minimum, will include:

- Table 1 (RAS Pasture table, name it RAS_PASTURE_yyyymmdd):
 - 13. Allotment number and name
 - 14. Pasture number and name
 - 15. Management status
 - **16.** Office code
- Table 2 (RAS Authorization table, name it RAS_AUTH_yyyymmdd):
 - 17. Allotment number
 - 18. Active Animal Unit Month (AUMs)
 - **19.** Plan implemented date
 - 20. Permit expiration date
 - 21. Preference code (section 3 permit or section 15 lease)
 - 22. Range specialist name (may be in Undefined Field #1)

The ALTPAST link field is added to the RAS Pasture table by concatenating Allotment number and Pasture number. The RAS Pasture table can then be joined to GRA, and used for checking the corresponding attributes (ALLOTNAME, PASTNAME, MGMTCAT and ADMINRA) and making the necessary corrections to either GRA or RAS.

The RAS Authorization table has additional attributes, not found in GRA that have meaning at the allotment level. There may be one or many authorizations (permit/permittees) per allotment, each with a different permit expiration date, and Grazing Animal Unit Month (AUMs). An integer field, TOTAL_ALLOT_AUMS, is added to the table, and filled with the sum of the individual permit AUMs per allotment. When GRA is dissolved to form Allotments (see below), the RAS Authorization table can be related to Allotments and/or the single field TOTAL_ALLOT_AUMS can be joined.

9. Layer Files (Publication Views)

A publication dataset is provided that dissolves the pasture boundaries to provide a dataset of only allotment boundaries. This is provided as a stand-alone feature class (GRA_ALLOTMENT_POLY) within SDE and will be automatically refreshed during the OSODBA GRA version check-in and publication process. The creation of this layer will follow these steps:

- Perform the following definition query on GRA_POLY:
 - 23. ALTPAST not equal "OUT"
 - 24. not equal "NOALC"
 - 25. not equal "UNALT"
 - 26. not equal "NULL" or " " (Blank)
 - 27. not like "FS_%" or "ST_%"
- Create ALLOTNUM attribute from first five characters of ALTPAST, and PASTNUM from the last two characters of ALTPAST (to be retained on GRA_POLY).
- Dissolve on ALLOTNUM creating GRA_ALLOTMENT_POLY.
- Join back the attributes of GRA_POLY using ALLOTNUM.
 - 28. On GRA_ALLOTMENT_POLY, drop attributes that are not relevant to allotments: (ALTPAST, PASTNAME, PASTNUM, and GRAZSYS).
 - **29.** Two layer files will be automatically created from GRA and refreshed after major edits. These will be available to the districts.
- Pastures.lyr: GRA_POLY symbolized with thin dashed line and containing all attributes. It has a definition query of:
 - 30. ALTPAST not equal "OUT"
 - 31. not equal "NOALC"
 - 32. not equal "UNALT"
 - **33.** not contain "_99"
 - 34. not equal "NULL", or " " (Blank)
 - 35. not like "FS_%" or "ST_%"
- Allotments.lyr: GRA_ALLOTMENT_POLY symbolized with a thicker, solid line for display on top of Pastures.lyr. Relate to RAS Authorization table using allotment Layer files will be created through scripts that can be automatically executed.

10. Editing Procedures

Use the ORSOVCTR RAS_PASTURE table for the comparison and reconciliation of GRA and RAS. The editor should make two joins, one from RAS_PASTURE to GRA_POLY and one from GRA_POLY to RAS_PASTURE. Join on ALTPAST and "Keep all records."

The first join indicates all the pasture records in RAS that are not in GRA_POLY (select "GRA_POLY.ALTPAST IS NULL"). Anything in RAS should be in GRA.

The second join indicates all the pastures in GRA_POLY that are not in RAS (for example, select RAS_PASTURE_20100504.ALTPAST IS NULL). Not all GRA polys are appropriate for inclusion in RAS, but they should be checked.

To correct GRA and/or RAS errors, the entire allotment and the range files (including the official RLA) must be reviewed with the range specialist. A "missing" pasture may, in fact, be there just with a different name. Pasture names and numbers might have been swapped or reused.

10.1 Rules and Procedures for Spatial Feature Editing

- The GRA dataset has rules, described below, to be followed during spatial feature editing. The Grazing_Allotments feature dataset consists of two feature classes, GRA_POLY and GRA_ARC that must be edited together. The arcs and polylines (poly perimeters) must be coincident.
- Create arcs in GRA_ARC first. This can only occur if the boundaries have been defined.
- Multi-part arcs are not allowed. Arcs that have tiny gaps or overlaps (not visible unless zoomed in), create multipart lines if merged. Finding and eliminating multi-part lines is difficult, avoid creating them to begin with. One tip is to delete very short arcs and extend the adjacent one (snapping) rather than merge.
- Do not "unsplit" or merge arcs unless you are sure the attributes are identical. Attributes may change from segment to segment even if there is no intersection with another arc.
- Check arcs for vertices that are too close together. This is a common problem with GPS sources. Simplify arcs (one meter is generally acceptable).
- Snap to vertex or end, not edge. Common themes to snap to are fences and CadNSDI points.
- To prevent unintentional gaps between polygons, cluster tolerance must be as small as possible (0.000007 degrees). Check for tiny, sliver gaps between adjacent polygons.
- Here are three acceptable methods for updating pasture arcs to new fence locations:
 - 36. If the change is small, simply use the Topology Edit Tool cursor to move vertices for both polygons at once. Use Ctrl+N to select a shared node and move. Set snapping to vertex and end of the fence shapefile or feature class.
 - 37. If the change is large, or the new fence creates a new pasture *and* the pastures are relatively small, edit GRA_ARC to bring in the new fence and modify the existing fence so that they are cleanly split and snapped to each other (no gaps or overlaps). Delete all the polys that are touched by the modified arcs. Select all the arcs needed to re-create the pasture polys and use Construct Features on the topology toolbar.
 - **38.** If the pastures are large, selecting all the relevant arcs and constructing new polys can be difficult, so consider other methods like Cut Polygon or Zipper Task.
- Multi-part polygons are not allowed.
- Pasture changes must be input into RAS at the same time as GRA_POLY. Interior pasture boundaries can be changed with the approval of the range specialist. If, however, the pasture boundary also forms the allotment boundary, changes must have a signed RLA modification.
- Significant changes to pastures that are not reflected in the current LUP should be documented with a LUP Maintenance Sheet.

10.2 Rules and Procedures for Attribute Editing

Follow these rules during attribute editing:

- The most important GRA_ARC attribute is DEF_FEATURE. Please review DEF_FEATURE in the Attribute Characteristics and Definitions section.
- The most important GRA_POLY attribute is ALTPAST. Please review ALTPAST in the Attribute Characteristics and Definitions section.
- Allotment and Pasture names and numbers must match RAS exactly:
 - **39.** All caps. Required by RAS.
 - 40. For Fenced Federal Range. The RAS has no naming conventions, but try to be consistent within your district. Put FFR in the name (e.g., "PICKLED BUTTE FFR").
 - 41. Check spelling and make corrections in RAS and/or GRA.
 - 42. Check for leading or trailing blanks. An easy way to see this is to "Select by Attributes" and "Get Unique Values;" there will be multiple entries for the same pasture/allotment name. For example, "WEST FORK #1" and "WEST FORK #1" (trailing blank).
 - 43. Avoid special characters in names (parentheses, period, comma, question mark, slash, quote, and asterisk). Dashes are allowed but no space before or after, e.g., "DUGOUT-BRIDGE GULCH." The pound sign is allowed with a space before but not after, e.g., "WEST FORK #1." This is preferred to "NUMBER" or "NO".
 - 44. No "00" Pastures. If an allotment is not subdivided into pastures, the entire allotment is pasture "01". Exceptions are small exclosures or enclosures (GRAZSYS contains "X" or "E"), but the preference is to have all areas in RAS with an assigned number.
 - 45. Do not swaps or reuse pasture names and numbers, if you can avoid it. It is preferable to leave a gap in the numbering sequence than to use an old number on a new pasture.
 - 46. Check for the letter "O" when it should be zero.
- Dependencies between ALTPAST, Names, Numbers, GRAZSYS, MGMTCAT:
 - 47. If ALTPAST = "NOALC' then ALLOTNAME = "NOT ALLOCATED".
 - 48. If ALTPAST = "OUT" then ALLOTNAME = "OUT".
 - 49. The ALLOTNUM and PASTNUM are derived and auto-calculated from ALTPAST.
 - 50. If FFR, then GRAZSYS is CU and name has FFR suffix.
 - 51. If ALTPAST is a regular pasture (e.g., 05210_09), then GRAZSYS can be anything except "00" or "99".
 - 52. If ALTPAST = "UNALT" (and GRAZSYS = "UA") and there is an actual allotment and/or pasture number assigned then ALLOTNAME would equal the appropriate text name associated with that number.
 - 53. If ALTPAST = "UNALT" (and GRAZSYS = "UA") and there no associated allotment and/or pasture number assigned (which is more often the case) then ALLOTNAME would equal "UNALLOTED".
 - 54. If GRAZSYS is "UA" then ALTPAST can be a regular pasture or "UNALT".
 - 55. If GRAZSYS is "NX" then ALTPAST can be a regular pasture or "NOALC".
 - 56. If ALTPAST is "OUT", then GRAZSYS is "00", and vice versa.
 - 57. If ALTPAST has "xxxxx_99," then GRAZSYS and PASTNUM are "99", and vice versa.

The last four cases for ALTPAST (plus ALTPAST null or blank) are removed for creation of the Pastures.lyr and before uploading to the national database since they may not be in RAS.

10.3 Other Quality Controls

The following are other data quality checks to perform:

- Check ADMINRA. This is an important attribute for the creation of accurate resource area and district layer files.
- Check for duplicate ALTPAST. Multi-part polys are not allowed, therefore, it is potentially possible to have the same ALTPAST on more than one polygon. Duplicates should be checked. A Different PASTNAME should have a different PASTNUM.
- Check for duplicate ALLOTNAME with different ALLOTNUM and fix in GRA (and RAS, if needed).
- Check for duplicate PASTNAME. While it is potentially possible to have the same PASTNAME on more than one polygon, it should be checked. Avoid using the same PASTNAME/PASTNUM in different allotments.

11. Abbreviations and Acronyms used in This Standard

Abbreviations/acronyms used as codes for particular data attributes are not included.

Abbreviations	Descriptions
AMP	Allotment Management Plan
BLM	Bureau of Land Management
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
GCD	Geographic Coordinate Database
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
IDP	Interdisciplinary
LUP	Land Use Plan
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
ODF	Oregon Data Framework
OR/WA	Oregon/Washington
RA	Resource Area
RAS	Rangeland Administration System
RLA	Range Line Agreement
RMP	Resource Management Plan
RPS	Range Program Summary
SDE	Spatial Data Engine
SMA	Special Management Areas
USFS	United States Forest Service

A. **Domains (Valid Values)**

The domains listed below are those that were in effect at the time the data standard was approved and may not be current. Contact the. <u>State Data Administrator</u> for current lists.

dom_BLM_ORG_CD

Administrative Unit Organization Code. Standard BLM Organization codes generated from the national list of organization codes. This is a subset of OR/WA administrative offices and those in other states that border OR/WA (http://www.blm.gov/or/datamanagement/index.php).

Code	Value
OR000	OR000 – Oregon/Washington BLM
ORB00	ORB00 – Burns District Office
ORB05	ORB05 – Three Rivers Field Office
ORB06	ORB06 – Andrews Field Office
ORC00	ORC00 – Coos Bay District Office
ORC03	ORC03 – Umpqua Field Office
ORC04	ORC04 – Myrtlewood Field Office
ORL00	ORL00 – Lakeview District Office
ORL04	ORL04 – Klamath Falls Field Office
ORL05	ORL05 – Lakeview Field Office
ORM00	ORM00 – Medford District Office
ORM05	ORM05 – Butte Falls Field Office
ORM06	ORM06 – Ashland Field Office
ORM07	ORM07 – Grants Pass Field Office
ORN00	ORN00 – Northwest Oregon District Office
ORN01	ORN01 – Cascades Field Office
ORN02	ORN02 – Mary's Peak Field Office
ORN03	ORN03 – Siuslaw Field Office
ORN04	ORN04 – Tillamook Field Office
ORN05	ORN05 – Upper Willamette Field Office
ORP00	ORP00 – Prineville District Office
ORP04	ORP04 – Central Oregon Field Office
ORP06	ORP06 – Deschutes Field Office
ORR00	ORR00 – Roseburg District Office
ORR04	ORR04 – Swiftwater Field Office
ORR05	ORR05 – South River Field Office
ORV00	ORV00 – Vale District Office
ORV04	ORV04 – Malheur Field Office
ORV05	ORV05 – Baker Field Office
ORW00	ORW00 – Spokane District Office

Code	Value
ORW02	ORW02 – Wenatchee Field Office
ORW03	ORW03 – Border Field Office

dom_COORD_SRC

Coordinate Source Code. The source of the geographic coordinates (lines, points, polygons). Choices relevant to GRA are highlighted (<u>http://www.blm.gov/or/datamanagement/index.php</u>).

Code	Value
CADNSDI	CADNSDI – Lines from or snapped to the CADNSDI dataset
CFF	CFF – Lines duplicated or buffered from Cartographic Feature Files
DEM	DEM – Digital Elevation Model (30m or better accuracy) used for creation of contours
DIS	DIS – Lines generated to connect discontinuous features
DLG	DLG – Lines duplicated or buffered from (24K scale accuracy) USGS Digital Line Graphs
DOQ	DOQ – Screen digitized linework over Digital Orthoquad backdrop
DRG	DRG – Screen digitized linework over Digital Raster Graphic (USGS) backdrop
GCD	GCD – Lines snapped to Geographic Coordinate Database Points
GPS	GPS – Lines obtained from a Global Positioning System device
IMG	IMG – Linework derived from interpretation of non-photographic imagery
MAP	MAP – Digitized line work from hardcopy map
MTP	MTP – Lines duplicated from Digital Master Title Plat
SOURCEL	SOURCEL – Source layer from BLM GIS
SRV	SRV – Survey methods were used to create the linework
TIGER	TIGER – Tiger data
TRS	TRS – Coordinates only given as a legal description (township, range, section)
UNK	UNK – Unknown coordinate source

dom_DEF_FEATURE

Defining Feature Code. Physical features or administrative lines that define an official boundary. Choices relevant to GRA are highlighted (<u>http://www.blm.gov/or/datamanagement/index.php</u>).

Code	Value
BLM_ADMIN	BLM_ADMIN-Bureau of Land Management administrative boundary
CLOSURE	CLOSURE - Closure extension. Used to close small gaps
COAST_3MILE	COAST_3MILE – Separating coastal water from territorial sea at 3-mile
COUNTY	COUNTY – County boundary
ELEVATION	ELEVATION – Line of common elevation
FENCE	FENCE – Boundary defined by a Fence line regardless of whether it forms part of a grazing unit
FOREST_SERVICE_ADMIN	FOREST_SERVICE_ADMIN – Forest Service administrative boundaries

Code	Value
GRAZING_BOUNDARY	GRAZING_BOUNDARY – Boundary defined as a pasture or other administrative grazing boundary (regardless of whether it is fenced or follows a subdivision or other legal boundary)
HU	HU–Hydrologic unit divide
JETTY	JETTY–Jetty
JURISDICTION	JURISDICTION–Surface jurisdiction boundary (e.g., boundary defined as BLM ownership regardless of subdivision)
LAVA	LAVA-Edge of lava flow
LEVEE	LEVEE–Dike or levee
MARSH	MARSH-Edge of Marsh, wetland, swamp, or bog boundary
MINERAL_DISTURBANCE	MINERAL_DISTURBANCE – Edge of quarry, mine, gravel stockpile or other mineral surface disturbance area
NLCS_BOUNDARY	NLCS_BOUNDARY – Wilderness, Wild and Scenic River, Historic District or other NLCS designation boundary
PARKING_AREA	PARKING_AREA – Motorized vehicle parking area
POINT-TO-POINT	POINT-TO-POINT – Boundary defined by a straight line segment between two points
POWERLINE	POWERLINE–Power transmission line or buffer offset
RIDGE	RIDGE-Ridge
RIGHT-OF-WAY	RIGHT-OF-WAY – A legal right of way forms boundary
RIM	RIM-Line generally follows a natural topographic barrier
ROAD	ROAD-Routes managed for use by low or high-clearance (4WD) vehicles, but not All Terrain Vehicles
ROAD_OFFSET	ROAD_OFFSET-Boundary is offset from a road (not a consistent buffer)
SHORELINE	SHORELINE-Lake, pond, reservoir, bay or ocean shoreline or meander line
STREAM_LBANK	STREAM_LBANK–Downstream left stream bank
STREAM_RBANK	STREAM_RBANK–Downstream right stream bank
SUBDIVISION	SUBDIVISION–Public Land Survey System derived aliquot (1/2s, 1/4s) parts and lots define the legal boundary
TRAIL	TRAIL – Routes managed for human-powered, stock or off-highway vehicle forms of travel
UNKNOWN	UNKNOWN–Defining feature is unknown
VEGETATION	VEGETATION-Boundary is defined as a seeding boundary or other relatively permanent vegetation change
WATERCOURSE	WATERCOURSE – Stream, river, ditch, canal or drainage centerline

dom_GRAZSYS

Grazing System Code. Primary grazing management system within the pasture (http://www.blm.gov/or/datamanagement/index.php).

Code	Value
WO	WO - Winter Only use annually with no use extending into other seasons.
SP	SP - Early spring use annually with no use extending into other seasons.
SS	SS - Use throughout the critical growing season (Spring/Summer) annually.
SL	SL - Season Long. Use throughout the growing season (spring, summer, fall).
YL	YL - Year Long. Use throughout the entire year (spring, summer, fall, winter).
SD	SD - Early Spring/Deferred. Early spring and after seed-ripe use annually.
DF	DF – Deferred. Delay of livestock grazing on an area for an adequate period of time to provide for plant reproduction, establishment of new plants, or restoration of vigor of existing plants.
DR	Deferred Rotation: Any grazing system that provides for a systematic rotation of the deferment among pastures.
RR	RR - Rest/Rotation. At least one year of rest from livestock grazing is scheduled within the rotation.
RE	RE - Reservoir Enclosure. Grazed reservoir enclosure, fenced to allow livestock access from more than one pasture.
ME	ME – Management Enclosure. Fenced areas such as corrals and holding pens.
XX	XX – Exclosure. An area fenced to exclude livestock grazing for non-specified reasons.
RX	RX - Riparian Exclosure. Areas adjacent to water that are fenced to exclude livestock grazing.
EX	EX - Experimental Exclosure. Study or experimental plot excluded from livestock grazing.
МХ	MX - Management Exclosure. Area excluded from livestock grazing to protect other resource values such as recreation sites, wildlife guzzlers, wells, disposal sites, or otherwise not suitable for grazing.
UA	UA - Unallotted. Small areas of BLM not currently assigned to an allotment.
NX	NX - Not Allocated. Area is closed to livestock grazing either through a land use plan or by legislation.
CU	CU - Custodial. Areas where the grazing system is not defined and resource values are protected, such as Fenced Federal Range (FFR).
UN	UN - Unknown. Grazing system is unknown (Default value).
00	00 - (zeroes) Out. Area with no BLM land or otherwise not part of the allotment system. Includes areas with fenced-in slivers of BLM land that may be grazed but are not under BLM grazing management control.
99	99 - Mostly private area with small slivers of BLM land (not currently managed) within an allotment.
FA	FA - Grazing use occurs in the fall months after most plants have reached seed ripe and have stored carbohydrate reserves.
FW	FW - Grazing use occurs in the fall and winter months when plants are dormant.

dom_MGMTCAT

Range Management Category Code. Range condition assessment categories as defined in the rangeland program summary (RPS).

Code	Value
Ι	Improve current unsatisfactory resource(s) condition
М	Maintain current satisfactory resource(s) condition
С	Custodial Allotment – manage "custodially" while protecting existing resource values