Oregon/Washington Bureau of Land Management

Leases and Claims

Spatial Data Standard

Photo of Newberry Geothermal Lease Project, located 22 miles south of Bend, Oregon within the Bend-Fort Rock Ranger District of the Deschutes National Forest. Photo by Michael Campbell, BLM, taken 2/3/2012.

Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	05/11/2017	Eric Hiebenthal	Initial Release	All
1.1	05/30/2017	Eric Hiebenthal	Changes CASEFILE from 15 to 17 characters. Changed LSE_CLM_TP from 10 to 20 characters. Changed "ET ALT" to "et al." Changed CASEFILE from required "Yes" to "No" to match description in Section 7.2.	Section 4, 7.2 Section 7.8 Section 7.9, 7.10 Section 4.2
1.2	5/15/2018	Micah Babinski	Added hyperlinks for roles and responsibilities, corrected formatting and domains	1.1, 2.5, 2.6, 4, Appendix A
2.0	8/21/2023	Dana Baker-Allum	Reformatted document to meet Section 508 standards and match the latest data standard template. Updated FOIA category, records retention schedule text, and keywords. Updated general information and relationships sections to add relationship to MLRS and reformatted for ease of reading. Updated architecture diagrams. Added new CSE_NR field, inherited from MLRS. Changed CASEFILE to optional. Renamed LSE_CLM_P_NM to LSE_CLM_NM. Renamed RGT_P_HOLDER_NM to RGT_HOLDER_NM. Added field aliases, edit tracking fields, default values for required fields, and constraint rules. Modified BLM_ORG_CD to show it is auto calculated on data entry. Added attribute rules to editing procedures. Changed document cover photo.	All
3.0	12/19/2025	Dana Baker-Allum, Shelley Moore, Greta Krost, Lisa Stone	Merged LSE_CLM_POLY and LSE_CLM_P_POLY into a single feature class LSE_CLM_POLY. Replaced the STATUS_P field with the field: MLRS_CASE_DISP and new domain. Updated content in section 3 to reflect the changes above and replaced references to LR2000 with MLRS. Changed MLRS Case Number (CSE_NR) field to required. Section 3.4 changed Realty Specialists to Minerals Specialists. Modified publication dataset requirements for data published to the web. The following field names were changed to match MLRS names: LSE_CLM_NM changed to CSE_NM, LSE_CLM_TP changed to BLM_PROD, COMMODITY changed to: CMMDTY, RGT_HOLDER_NM changed to CUST_NM, CASEFILE changed to: LEG_CSE_NR, CASETP changed to: CSE_TYPE_NR, MLRS_CASE_DISP changed to: CSE_DISP, CSE_NR changed to required. Increased the size of the CSE_NM field to 100.	Many

Navigation

This document is easier to view if the Microsoft Word Navigation pane is displayed (View -> Navigation Pane). If viewing in PDF format, open the document in Acrobat and click the Contents button.

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.

Contents

1 General Information

This dataset is a spatial representation of Leases and Claims (LSE_CLM). It is a portion of the total encumbrance data category that includes information about entities, rights, and restrictions relating to the use of Federal minerals. This dataset contains Leases and Claims within Oregon and Washington BLM-administered lands (surface and subsurface) and over mineral estate in areas of split estate (i.e., areas where the BLM administers Federal mineral estate, but the surface is not owned by the BLM).

There are three basic types of minerals on Federal lands:

1. Locatable (subject to the General Mining Law of 1872, as amended).
2. Leasable (subject to the various Mineral Leasing Acts).
3. Saleable (subject to mineral materials disposed of under the Materials Act of 1947, as amended).

Locatable minerals include most metallic minerals (gold, silver, lead, copper, zinc, nickel, etc.), certain nonmetallic (fluorspar, gypsum, mica, etc.) and industrial minerals. Prospecting and discovery can lead to the filing of a "Claim." The two most common types of claims with different types of spatial representation are:

- "Lode Claims" are usually located as parallelograms with the side lines parallel to the vein or lode; and
- "Placer Claims" are located by legal subdivision.

Since 1920, the Federal Government has leased fuels and certain other minerals. Today, minerals that are subject to lease include oil and gas, oil shale, geothermal resources, potash, sodium, gilsonite, phosphate, and coal. In addition, some hardrock minerals, depending on their location, may be considered leasable. Generally, areas are nominated for lease by the public and the BLM adjudicates the parcels.

Saleable minerals do not participate in this data standard. Saleable minerals include common varieties of sand, gravel, stone, pumice, and cinders. Use of saleable minerals requires either a sales contract or a free-use permit. Disposals of saleable minerals from BLM lands is an important part of Resource Management Plans (RMP). Areas with saleable minerals are also called Mineral Materials Sites or Community Pits and participate in the Mineral Activities data standard. One method to differentiate between the Leases and Claims dataset compared to the Mineral Activities dataset is that Leases and Claims are adjudicated by a Land Law Examiner and Mineral Activities is used for BLM to inspect surface disturbances.

- Dataset (Theme) Name: Leases and Claims
- Dataset (Feature Class): LSE_CLM_POLY

1.2 Roles and Responsibilities

To find the latest contact information for the employees assigned to these roles, see https://www.blm.gov/about/data/oregon-data-management.

- 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 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 FOIA/Privacy Act Team Lead - the State FOIA/Privacy Act team lead assists the state data steward to identify any privacy issues related to spatial data. The State FOIA/Privacy Act team-lead also provides direction and guidance on data release, fees, and classification under the appropriate Freedom of Information Act exemption.
- State Records Administrator - the state records administrator classifies data under the proper records retention schedule.

1.3 FOIA Category

The existing Leases and Claims features fall under the standard Records Access Category 1B - BLM Records that may contain protected information that must be considered for segregation prior to release. See section 8 for more information on which data are available to the public. Proposed Leases and Claims features fall under Category 2 - Bureau of Land Management (BLM) Records Requiring a FOIA request.

1.4 Records Retention Schedule

The DRS/GRS/BLM Combined Records Schedule, under Schedule **20/52a1** (Electronic Records/Geographic Information Systems), lists this theme, **Rights and Restrictions**, 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."

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."

1.5 Security/Access/Sensitivity

The Leases and Claims dataset 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 within the BLM. This dataset falls under the standard Records Access Category 1B - BLM Records that may contain protected information that must be considered for segregation prior to release. Proposed Leases and Claims features fall under Category 2 - Bureau of Land Management (BLM) Records Requiring a FOIA request. See section 8 for more information on which data are available to the public.

There are no privacy issues or concerns associated with these data themes. This dataset falls under the Privacy Act System of Records Notice LLM-32, Land and Minerals Authorization Tracking System.

1.6 Keywords

Keywords that can be used to locate this dataset include:

- BLM Thesaurus: Energy, Geology, Authorization, Geospatial, Mining
- Additional keywords: Encumbrance, Energy, Minerals, Management, Claim, Lease
- ISO Thesaurus: geoscientific information, environment

1.7 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 - Data Administration
- 9167 - Geographic Information System (GIS)
- 3000 - Minerals Management
- 3100 – Oil and Gas Leasing
- 3200 – Geothermal Leasing
- 3400 – Coal Management
- 3500 - Leasing of Solid Minerals Other than coal and oil shale
- 3700 – Multiple Use; Mining
- 3800 - Mining Claims Under the General Mining Laws

2 Dataset Overview

2.1 Usage

This dataset is used for depicting Leases and Claims on maps. All BLM planning and management actions must identify any encumbrances on the land. The dataset includes both existing and proposed Leases and Claims. Leases and Claims are intersected with other resources to determine impact and/or feasibility of the proposed action. The status of a claim or lease is captured in the CSE_DISP attribute. Proposed features (CSE_DISP = Filed or Pending), for most purposes, should not be included in analysis and display.

This dataset is intended to contain Leases and Claims issued by the BLM. CUST_NM contains the name of the individual or company holding the lease or claim. Leases and Claims are issued for specific commodities. The CMMDTY attribute provides this information.

2.2 Sponsor/Affected Parties

The sponsor for this dataset is the Deputy State Director, Resource Use, Planning and Protection. A Lease or Claim is defined by, and specific to, the BLM. Matching interagency data across the landscape is not necessary, but correcting discrepancies between BLM and non-BLM databases is important.

2.3 Relationships to Other Datasets, Databases, or Files

Leases and Claims are related to the following datasets:

- **Mineral Activities (MIN_ACTY)** - The Leases and Claims entities are legal boundaries. They are often

related to physical entities such as minerals excavation or drilling sites. The Lease or Claim boundary is described in relation to the construction/excavation (existing or proposed) but is usually not identical. The actual disturbance (human construction) is found in the Mineral Activities dataset, described in the Mineral Activities data standard. A GIS spatial overlay between LSE_CLM and MIN_ACTY will show the relationship.

- **Mineral Stipulations (MINSTIP)** - In addition to the Acts of Congress described in Section 2.1, Leases and Claims are governed, to some extent, by minerals stipulation zones, created as part of BLM's landscape-level RMPs, which lay out the long-term management actions for BLM administrative units. The dataset containing locatable, leasable, and saleable stipulations areas (MINSTIP) is described in a different data standard.
- **Easements and Rights-of-Ways (ESMTROW)** - The Leases and Claims dataset is related to other encumbrance entities, such as Easements and Rights-Of-Way. A primary difference between the two types of encumbrances is that the rights are granted under different authorities and that Leases and Claims involve a commodity that will be removed from public lands, whereas Easements and Rights-Of-Way (ROWs) are often simply a right to cross or otherwise occupy public lands. In addition, the ESMTROW theme includes both rights granted by the BLM and rights granted to the BLM (Easements), whereas Leases and Claims are only rights granted by the BLM. The Federal Aid to Highways Minerals Sites (ODOT Min Mat Sites) are within the ESMTROW data standard.
- **Mineral & Land Records System (MLRS)** - As of 2023, MLRS is the official repository for records of land and mineral use authorizations. The features in LSE_CLM represent just a portion of these records and contain only a portion of the information for those records that are represented. The polygons on LSE_CLM link to MLRS via the CSE_NR attribute.
- **LR2000** - This dataset is retired and replaced by MLRS. Legacy Leases and Claims polygons can be related to the LR2000 data using the LEG_CSE_NR attribute.
- **Master Title Plats** - OR/WA BLM is currently working on creating GIS feature classes representing the information portrayed on Master Title Plats (MTPs). Some of the cases represented in GIS datasets currently in use and proposed here are subsets of the MTP GIS. They also have proposed entities which are not portrayed on MTPs.
- **Abandoned Mine and Site Cleanup Module Database (AMSCM)** - a centralized BLM inventory and repository for data about each abandoned mine and hazardous materials site.

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 on page 9. The illustration is 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

These general categories are broken into sub-categories that inherit spatial characteristics and attributes from their parent category. These sub-categories may be further broken into more specific groups until the basic data set cannot be further sub-divided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated. Those groups/categories above them do not contain actual data but set parameters which all data of that type must follow.

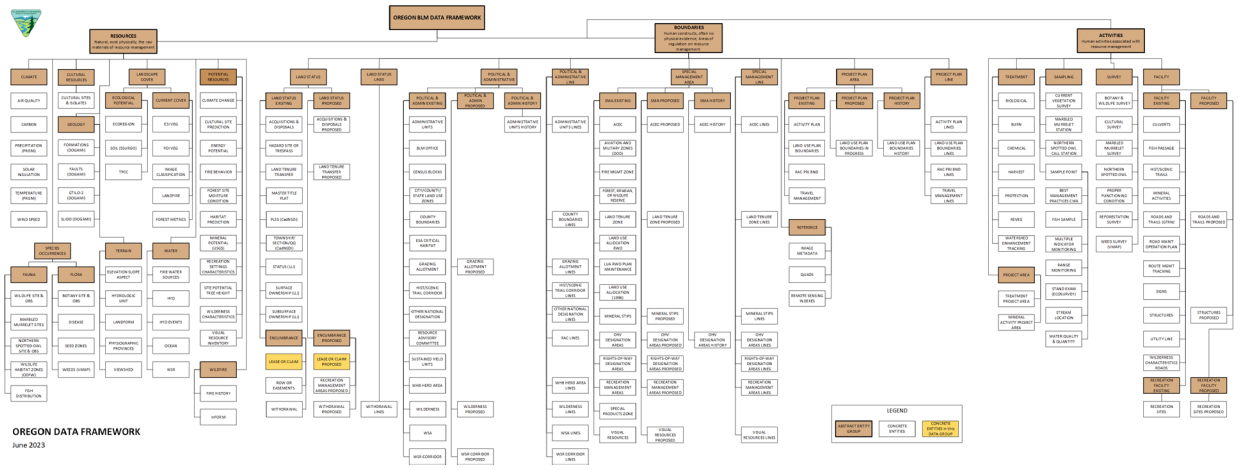

Figure 1 Oregon Data Framework Overview

For an easier to view version of the Oregon Data Framework diagram, go to: https://gis.blm.gov/ORDownload/DataFramework/BLM_ODF_Model_Mini_Status.pdf.

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 Lease and Claim entities are highlighted. For additional information about the ODF, contact the State Data Administrator. The State Data Administrator's contact information can be found at the following link: https://www.blm.gov/about/data/oregon-data-management.

In the ODF, Lease and Claim dataset is considered a Boundary and categorized as follows:

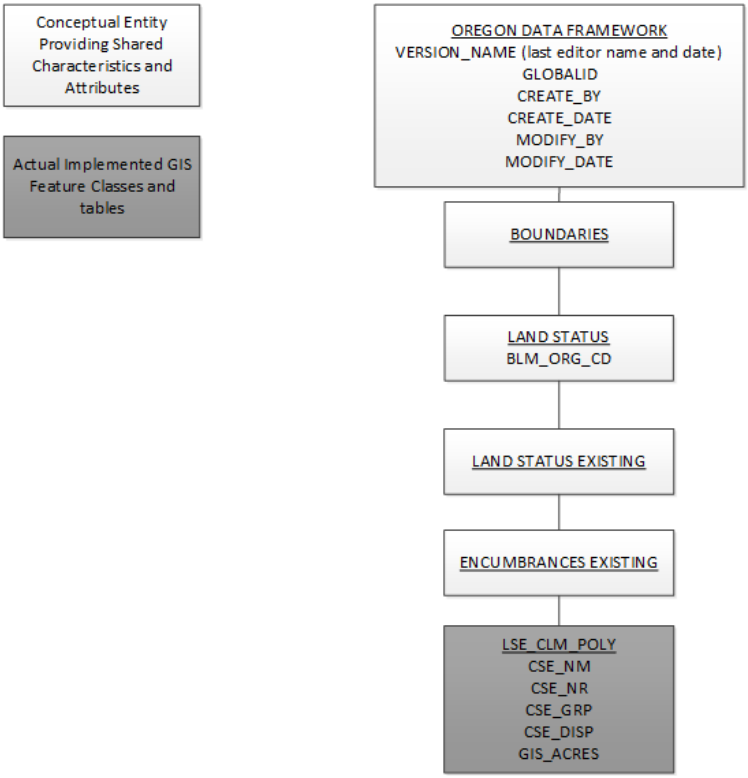

Figure 2 Data Organization Structure

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. Data sharing is addressed through complete documentation and simple data structures which make sharing easier. Data description is addressed through the section on Attribute Descriptions. Data context is addressed through the data organization and structure portions of this document. In addition, the DOI Data Resource Model categorizes data by use of standardized Data Subject Areas and Information Classes. For this data set, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

3 Data Management Protocols

3.1 Accuracy Requirements

This dataset is not complete for all Leases and Claims on BLM lands and, in addition, only basic information about the lease or claim is provided. Details of the complete rights and restrictions history are found in the following authoritative sources: case file records, Master Title Plats (MTPs), MLRS, and the Legacy Rehost 2000 (LR2000) database. The case file record is the primary source, with MTPs and MLRS as secondary sources. Moreover, this dataset will never be complete. Over time, more approved LSE_CLM features will be added to the dataset, but it will never contain the complete record (found in the case files).

This dataset requires the highest possible accuracy. Accuracy is determined by availability of survey data and Cadastral National Spatial Data Infrastructure (CADNSDI) GIS features for the area. Where a feature in LSE_CLM follows a road or other physical features, the coordinates are obtained from the most accurate source available (see Collection, Input and Maintenance Protocols).

Proposed features (CSE_DISP = Filed or Pending), are transitory and have varying degrees of accuracy. Accuracy is reviewed and improved, if possible, if a proposed feature becomes Active or Authorized.

Required attributes have an accuracy of at least ninety percent.

3.2 Collection, Input, and Maintenance Protocols

Existing Leases and Claims (CSE_DISP = Active, Authorized, or Interim) are defined and described by the case file record and are sometimes depicted on the MTP. If a digital MTP with GIS features or a digital survey is available, the appropriate spatial features are selected and copied from these. If there is no digital MTP or survey source, the lines and polygons are created from the legal description and other information in the authoritative sources (MTPs, MLRS, and the case file record). Where the feature is described by legal land line parcels or surveyed lines, a vertex is placed at every CADNSDI point and snapped to it. It is rare that a Lease or Claim will be described by anything except a legal subdivision (and coordinates obtained by anything other than CADNSDI), but if so, the coordinates should be obtained from GPS or imagery with a total locational accuracy of 100 feet or better. Existing linework is not replaced unless a more accurate spatial representation of the legal description is provided.

Proposed Leases and Claims (CSE_DISP = Filed or Pending) are created from legal descriptions in the same way as described above for Existing Leases and Claims. If a proposed Lease or Claim is adjudicated or issued, the CSE_DISP is updated to the appropriate code. At the district Data Steward's discretion, when an authorized LSE_CLM becomes "closed", for whatever reason (relinquished, terminated, expired, abandoned), the CSE_DISP should be updated to "Closed." This might be done if the Data Steward feels the feature has potential to become a proposal again or if it is important to retain the historic information in a readily available spatial form.

3.3 Update Frequency and Archival Protocols

The unit of processing for the LSE_CLM dataset is the individual Lease or Claim. If there is a CADNSDI update which shifts the points of the LSE_CLM polylines, then the lines need to be re-snapped to the updated CADNSDI points. Other updates to correct or improve locational accuracy are done when discovered.

Changes to this dataset are potentially very frequent. At a minimum, this data set is to be updated at least annually by reporting due at the end of the fiscal year, September 30. Updates can be done at any time and do not need to be done only on an annual basis. Claims change daily. Leases do not change often.

3.4 Statewide Monitoring

State Office Minerals Specialists are required to check the themes for spatial and attribute accuracy, when necessary, keep the theme consistent and current with MLRS and the case files, and confirm that the CSE_DISP field is updated after approval. The State Data Stewards are responsible for checking consistency across districts. At least once yearly, LSE_CLM_POLY will be checked by comparing to MLRS. The number of cases in MLRS and not in LSE_CLM_POLY, and vice versa, will be used to determine completeness. Over time, the gap should narrow.

Each year, the Resource Science Data team of the BLM Division of Resources, Lands, and Minerals meets with each state data steward for every corporate geospatial theme to conduct an annual review of the data. During the annual review, geospatial staff present the state data stewards with a report detailing Quality Assurance/Quality Control (QAQC) results performed on the data. The QAQC does the following:

- Checks that all attribute values conform to the range or coded-value domains to which they are applied.
- Checks that all attributes marked as required in the data standard have values.
- Checks for duplicate features which have the same geometry and attributes.
- Checks for overlapping features if forbidden by the data standard.
- Checks for invalid 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 steward to identify any unmet needs or problems with the status of the data. At the conclusion of the review, the team records the steward's approval of the datasets reviewed. These approvals are then added to the corporate metadata.

4 Leases and Claims Schema (simplified)

General Information: Attributes are listed in the order they appear in the geodatabase feature class. The order is an indication of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: https://www.blm.gov/about/data/oregon-data-management.

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

4.1 LSE_CLM_MLRS_POLY Feature Class (Leases and Claims MLRS Polygon)

Attribute Name	Data Type	Length	Default Value	Required	Domain
CSE_NM	String	100		No	
CSE_NR	String	17		Yes**	
LEG_CSE_NR	String	17		No	
CSE_GRP	String	10		No	dom_MLRS_CSE_GRP_LSECLM
BLM_PROD_CD	String	7		Yes	dom_MLRS_BLM_PROD_CD_LSECLM
BLM_PROD	String	100		Yes	dom_MLRS_BLM_PROD_LSECLM
CMMDTY	String	50		No	dom_MLRS_CMMDTY_LLS
CSE_DISP	String	20		Yes	dom_MLRS_CSE_DISP_LSECLM
CSE_EXP_DT	Date			No	
CSE_DISP_DT	Date			No	
GLOBALID	GUID			Yes *	

4.2 LSE_CLM_MLRS_CUST_NM_TBL

Attribute Name	Data Type	Length	Default Value	Required	Domain
CSE_NR	String	17		Yes **	
CUST_NM	String	60		Yes	
INT_RLTNSHP	String	60		Yes	
GLOBALID	GUID			Yes *	

4.3 LSE_CLM_POLY Feature Class (Lease or Claim Polygons)

For domain and default values, see Section 7 Attribute Characteristics and Definition (In alphabetical order) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
CSE_NM	String	100		Yes	
CSE_NR	String	17		Yes	
CSE_GRP	String	10		No	dom_MLRS_CSE_GRP_LSECLM
CSE_DISP	String	20	Pending	Yes	dom_MLRS_CSE_DISP_LSECLM
BLM_ORG_CD	String	5	OR000	Yes *	dom_BLM_ORG_CD
GIS_ACRES	Double			Yes *	
VERSION_NAME	String	50	InitialLoad	Yes ***	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

* Values automatically generated

** Enforced during quality control, may appear in data as not required

*** Maintained through versioning tools, may appear not required in database

4.4 Relationship Classes

4.4.1 rel_LSE_CLM_MLRS_CUST_NM_TBL

Origin Table	LSE_CLM_ POLY
Origin Primary Key	CSE_NR
Destination Table	LSE_CLM_MLRS_CUST_NM_TBL
Destination Foreign Key	CSE_NR
Relationship Type	Simple
Labels	Leases and Claims MLRS Customer Name Table, Leases and Claims Polygon
Messages	None
Cardinality	1 to Many

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 in OR/WA. See the metadata for this dataset for more precise description of the extent.

6 Spatial Entity Characteristics

- LSE_CLM_MLRS_POLY
  - Description: Editable only in the MLRS application. The spatial representation will be updated in MLRS using the LSE_CLM_POLY data.
  - Geometry: Simple polygon features. Overlapping features are allowed.
  - Topology: No topology enforced.
  - Integration Requirements: All LSE_CLM_MLRS_POLY areas should be on federal land, except for split estates. If the leases and claims are defined by aliquot parts, they should be snapped to CADNSDI.
- LSE_CLM_POLY
  - Description: The intent of the LSE_CLM_POLY is the same as the LSE_CLM_MLRS_POLY, the exception is that the spatial representation of the data editable in GIS will be more accurate in the short term. Over time the spatial representation of the Lease and Claim polygons should be the same. Geometry: Simple polygon features. Overlapping features are allowed.
  - Topology: No topology enforced.
  - Integration Requirements: All LSE_CLM_POLY areas should be on federal land, except for split estates. If the leases and claims are defined by aliquot parts, they should be snapped to CADNSDI.

7 Attribute Characteristics and Definition (In alphabetical order)

7.1 BLM_ORG_CD

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	Administrative_Unit_Organization_Code
Inheritance	Not Inherited
Alias Name	BLM Administrative Unit
Feature Class Use/Entity Table	LSE_CLM_POLY
Definition	A combination of the BLM administrative state and field office which has administrative responsibility for the spatial entity. This includes which office covers the entity for planning purposes and which office is the lead for GIS edits. Another agency or individual may have the physical management responsibility for the on-the-ground entity. This field applies particularly when a spatial entity crosses field office or district boundaries, and the administrative responsibility is assigned to one or the other rather than splitting the spatial unit. Similarly, OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, or California and vice versa. When appropriate, the office can be identified only to the district or even the state level rather than to the field office level. This field is auto calculated on data entry based on the spatial location of the polygon or point centroid. The value may be changed to reflect the actual organization code responsible for the record.
Required/Optional	Required
Domain (Valid Values)	dom_BLM_ORG_CD
Data Type	String (5)

7.2 BLM_PROD

Geodatabase Name	BLM_PROD
BLM Structured Name	Mineral_and_Land_Records_System_Mineral_Product_Code
Inheritance	Inherited from BLM National MLRS System
Alias Name	Product
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY
Definition	The specific type or mineral lease or claim in text format.
Required/Optional	Required
Domain (Valid Values)	dom_MLRS_BLM_PROD_LSECLM
Data Type	String (100)

7.3 BLM_PROD_CD

Geodatabase Name	BLM_PROD_CD
BLM Structured Name	Mineral_and_Land_Records_System_Mineral_Product_Code_Code

Inheritance	Inherited from BLM National MLRS System
Alias Name	Product Code
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY
Definition	BLM product code is a coded number system that identifies the case (e.g., authorization, conveyances, withdrawals, acquisitions, etc.). The six-digit code is constructed as follows: First two digits “00” through “99” denotes major groups generally listed in 43 CFR (e.g., 31 - Oil and Gas Leases and Agreements, 32 - Geothermal Leases and Agreements, 34 - Coal Leases and Agreements, 35 - Other solid mineral leases, 37 - Multiple Mineral Development, 38 - Mining Claims).
Required/Optional	Required
Domain (Valid Values)	dom_MLRS_BLM_PROD_CD_LSECLM
Data Type	String (7)

7.4 CMMDTY

Geodatabase Name	CMMDTY
BLM Structured Name	Mineral_and_Land_Records_System_Mineral_Commodity_Code
Inheritance	Inherited from BLM National MLRS System
Alias Name	Commodity
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY
Definition	The commodity code (defined by MLRS) for the type of mineral commodity associated with the lease or claim. Only minerals found in OR/WA are included in the domain. Locatable Mineral claims are not required to report what commodity is being extracted. Therefore, this value will likely be UNDETERMINED for these cases. This field is required for all Case Disposition values except "Filed."
Required/Optional	Conditional
Domain (Valid Values)	dom_MLRS_CMMDTY_LLS
Data Type	String (50)

7.5 CREATE_BY

Geodatabase Name	CREATE_BY
BLM Structured Name	Record_Created_By_Text
Inheritance	Inherited from entity ODF
Alias Name	Created By
Feature Class Use/Entity Table	LSE_CLM_POLY
Definition	The BLM login ID of the person who entered the data. This field is auto populated during editing.

Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: jdoe, msmith
Data Type	String (50)

7.6 CREATE_DATE

Geodatabase Name	CREATE_DATE
BLM Structured Name	Record_Created_Date
Inheritance	Inherited from entity ODF
Alias Name	Created Date
Feature Class Use/Entity Table	LSE_CLM_POLY
Definition	The date the record was entered. This field is auto populated during editing.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 1/5/1999, 10/15/2021
Data Type	Date

7.7 CSE_DISP

Geodatabase Name	CSE_DISP
BLM Structured Name	Mineral_and_Land_Records_System_Case_Disposition_Code
Inheritance	Inherited from BLM National MLRS System
Alias Name	MLRS Case Disposition
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY, LSE_CLM_POLY
Definition	The case disposition or status" of the claim. The default value for this field is "Pending."
Required/Optional	Required
Domain (Valid Values)	dom_MLRS_CSE_DISP_LSECLM
Data Type	String (20)

7.8 CSE_DISP_DT

Geodatabase Name	CSE_DISP_DT
BLM Structured Name	Mineral_and_Land_Records_System_Case_Disposition_Date
Inheritance	Inherited from BLM National MLRS System
Alias Name	Disposition Date
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY
Definition	Disposition date is the date when the geologist closes the case; all final reclamation has been completed.

Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Date

7.9 CSE_EXP_DT

Geodatabase Name	CSE_EXP_DT
BLM Structured Name	Mineral_and_Land_Records_System_Case_Expiration_Date
Inheritance	Inherited from BLM National MLRS System
Alias Name	Expiration Date
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY
Definition	Expiration date is the date that the permit expires.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Date

7.10 CSE_GRP

Geodatabase Name	CSE_GRP
BLM Structured Name	Mineral_and_Land_Records_System_Case_Group_Code
Inheritance	Inherited from BLM National MLRS System
Alias Name	Case Group
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY, LSE_CLM_POLY
Definition	Case group is a coded number system (defined by MLRS) that identifies a case (e.g., authorization, conveyances, withdrawals, acquisitions, etc.). The first two digits of the code refer to the Code of Federal Regulations (CFR) section covering and authorizing the case. These major groups are expressed as digits “00” through “99”. The following case groups are included in this data standard: • Oil and Gas (3100) • Geothermal (3200) • Coal (3400) • Non-energy Leasables (3500) • Use and Occupancy (3700) • Mining Claims and Mining Claim Management (3800) This field identifies the case group further for the Lode Claims (3841), Place Claims (3842), Tunner Sites (3842), and Mill Sites (3844) case groups.
Required/Optional	Required
Domain (Valid Values)	dom_MLRS_CSE_GRP_LSECLM
Data Type	String (10)

7.11 CSE_NM

Geodatabase Name	CSE_NM
BLM Structured Name	Mineral_and_Land_Records_System_Case_Name_Text
Inheritance	Inherited from BLM National MLRS System
Alias Name	Lease or Claim Name
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY, LSE_CLM_POLY
Definition	Identifying name for the proposed or existing Lease or Claim or the project it is part of.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: "Fields M.S.", "EP Minerals Claims"
Data Type	String (100)

7.12 CSE_NR

Geodatabase Name	CSE_NR
BLM Structured Name	Mineral_and_Land_Records_System_Case_Number_Text
Inheritance	Inherited from BLM National MLRS System
Alias Name	MLRS Casefile Number
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY, LSE_CLM_MLRS_CUST_NM_TBL, LSE_CLM_POLY
Definition	Case number assigned by the MLRS database.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: ORORR200005541, WAOR200153830
Data Type	String (17)

7.13 CUST_NM

Geodatabase Name	CUST_NM
BLM Structured Name	Mineral_and_Land_Records_System_Customer_Name
Inheritance	Inherited from BLM National MLRS System
Alias Name	Customer Name
Feature Class Use/Entity Table	LSE_CLM_MLRS_CUST_NM_TBL
Definition	Name of the organization or person that holds the rights granted in the Lease or Claim. In the Proposed Lease or Claim feature class, this is the name of the person or entity applying for a Lease or Claim. Multiple names can be concatenated. In the case where the names would exceed the 60-character limit, using the last name of the first customer (or the customer with the highest percentage of interest) and ", et al." to indicate there is more than one customer.
Required/Optional	Optional

Domain (Valid Values)	No domain. Examples: "CELATOM MINE INC", "DIAMOND RANCH LLC."
Data Type	String (60)

7.14 GIS_ACRES

Geodatabase Name	GIS_ACRES
BLM Structured Name	GIS_Acres_Measure
Inheritance	Not Inherited
Alias Name	GIS Acres
Feature Class Use/Entity Table	LSE_CLM_POLY
Definition	Area of a polygon feature in acres. GIS_ACRES is automatically calculated when the polygon is created or modified. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating acres, so the features are projected as determined by the BLM_ORG_CD of the record: Prineville: NAD 1983 USFS R6 Albers Coos Bay, Lakeview, Medford, NW Oregon, Roseburg: NAD 1983 UTM Zone 10N Burns, Spokane, Vale: NAD 1983 UTM Zone 11N
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	Double

7.15 GLOBALID

Geodatabase Name	GLOBALID
BLM Structured Name	Global_Unique_Identifier
Inheritance	Inherited from entity ODF
Alias Name	None
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY, LSE_CLM_MLRS_CUST_NM_TBL, LSE_CLM_POLY
Definition	An alpha-numeric code that serves as the universal and unique identifier for each feature within the feature class or table of a geodatabase. Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data.
Required/Optional	Required
Domain (Valid Values)	No domain. Example: 4747B796-44B4-4628-B069-2D496422E59F
Data Type	GUID

7.16 INT_RLTNSHP

Geodatabase Name	INT_RLTNSHP
BLM Structured Name	Mineral_and_Land_Records_System_Interest_Relationship_Text
Inheritance	Inherited from BLM National MLRS System
Alias Name	Interest Relationship
Feature Class Use/Entity Table	LSE_CLM_MLRS_CUST_NM_TBL
Definition	Identifies the association of the CUST_NM to the case. For example, the relationship an entity can have with a case applicant, operator, permittee, claimant, etc.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	String (60)

7.17 LEG_CSE_NR

Geodatabase Name	LEG_CSE_NR
BLM Structured Name	Mineral_and_Land_Records_System_Casefile_Number
Inheritance	Inherited from BLM National MLRS System
Alias Name	Legacy LR2000 Casefile Number
Feature Class Use/Entity Table	LSE_CLM_MLRS_POLY
Definition	The legacy case number assigned by the LR2000 database (serial number full) when an action is begun (either by BLM action or due to receipt of an application). Include suffix (a unique identifier of cases resulting from the division of an original case into multiple, separate, and unique cases). For features with no BLM action, enter "PRIVATE." This field has been replaced by the CSE_NR field. However, the legacy number is retained for cross-referencing numbers.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "OROR 065814", "OROR 06818PT", "OROR 061083FB", "OROR 06173P1", "ORORE 0014635"
Data Type	String (17)

7.18 MODIFY_BY

Geodatabase Name	MODIFY_BY
BLM Structured Name	Record_Last_Modified_By_Text
Inheritance	Inherited from entity ODF
Alias Name	Modified By
Feature Class Use/Entity Table	LSE_CLM_POLY
Definition	The BLM login ID of the person who last edited the data. This field is auto populated during editing.

Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: jdoe, msmith
Data Type	String (50)

7.19 MODIFY_DATE

Geodatabase Name	MODIFY_DATE
BLM Structured Name	Record_Last_Modified_Date
Inheritance	Inherited from entity ODF
Alias Name	Modified Date
Feature Class Use/Entity Table	LSE_CLM_POLY
Definition	The date the record was last edited. This field is auto populated during editing.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 1/5/1999, 10/15/2021
Data Type	Date

7.20 VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from entity ODF
Alias Name	None
Feature Class Use/Entity Table	LSE_CLM_POLY
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 the last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX = theme abbreviation. 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.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	String (50)

8 Publication Views

8.1 General

Master corporate feature classes/datasets maintained in the edit database are "published" to the user database 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) 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 data whenever necessary.

8.2 Specific to This Dataset

A file geodatabase named leases_claims.gdb will be created for ***internal*** use where:

- LSE_CLM_PUB_POLY will be created by appending the MLRS tabular data (LSE_CLM_MLRS_POLY) to the Leases and Claims Poly feature class (LSE_CLM_POLY); the MLRS spatial polygons will not be used in any publication datasets. CSE_NR will be used as the primary key. See 8.2.1 LSE_CLM_PUB_POLY (Leases and Claims Publication Polygons) for fields, source, and field order.
- The attribute VERSION_NAME is removed (for privacy reasons).
- The edit tracking attributes CREATE_BY, CREATE_DATE, MODIFY_BY, MODIFY_DATE are removed.

An ***external*** publication dataset will be created that meets these requirements:

- All requirements of the internal dataset.
- Only features with CSE_DISP = Active, Authorized, or Interim will be published to the web.

8.2.1 LSE_CLM_PUB_POLY (Leases and Claims Publication Polygons)

Attribute Name	Data Type	Length	Domain
CSE_NM[1]	String	100	
CSE_NM_MLRS[2]	String	100	
CSE_NR[1,2]	String	17	
LEG_CSE_NR[2]	String	17	
CSE_GRP[2]	String	10	dom_MLRS_CSE_GRP_LSECLM
BLM_PROD_CD[2]	String	7	dom_MLRS_BLM_PROD_CD_LSECLM
BLM_PROD[2]	String	100	dom_MLRS_BLM_PROD_LSECLM
CMMDTY[2]	String	50	dom_MLRS_CMMDTY_LLS
CSE_DISP[2]	String	20	dom_MLRS_CSE_DISP_LSECLM
CSE_EXP_DT[2]	Date		
CSE_DISP_DT[2]	Date		
GIS_ACRES[1]	Double		
BLM_ORG_CD[1]	String	5	dom_BLM_ORG_CD

Attribute Name	Data Type	Length	Domain
GLOBALID[1]	GUID		

[1] LSE_CLM_POLY

[2] LSE_CLM_MLRS_POLY tabular data

8.2.2 LSE_CLM_MLRS_CUST_NM_TBL

Attribute Name	Data Type	Length	Domain
CSE_NR	String	17	
CUST_NM	String	60	
INT_RLTNSHP	String	60	
GLOBALID	GUID		

8.2.3 rel_LSE_CLM_MLRS_CUST_NM_PUB_TBL

Origin Table	LSE_CLM_PUB_POLY
Origin Primary Key	CSE_NR
Destination Table	LSE_CLM_MLRS_CUST_NM_TBL
Destination Foreign Key	CSE_NR
Relationship Type	Simple
Labels	Leases and Claims MLRS Customer Name Table, Leases and Claims Polygon
Messages	None
Cardinality	1 to Many

8.3 Layer Files

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.

9 Editing Procedures

9.1 Managing Overlap (General Guidance)

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

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

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

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

- No topology rules.
- Land Status Encumbrances Group: A new, possibly overlapping polygon is created for a new casefile number even if it is the same area. Examples: Leases and Claims (LSE_CLM_POLY), Easement/ROW areas (ESMTROW_POLY), and land acquisitions/disposals (ACQ_DSP_POLY).

9.2 Editing Quality Control

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

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

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

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

Buffer and dissolve considerations. Where polygons are created with the buffer tool, the correct options must be selected. The default option is "None," which means overlap will be retained. Sometimes the overlap should be dissolved, and the option changed to "All." It is recommended to use the planar option, not geodesic to retain the curve between vertices. Lines resulting from buffer have vertices too close together, especially around the end curves. They should be generalized to thin the vertices. If the dissolve tool is used on polygons or arcs, the "Create multipart features" should be unchecked.

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

Be careful when merging lines. Multipart lines will be created if there are tiny unintentional (unknown) gaps, and

it can be difficult to find these unless the multi-parts are exploded.

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

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

9.3 Theme Specific Guidance

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

9.3.1 Calculation Data Rules

The following are a list of calculation rules that occur during editing. Calculation rules are used to automatically populate attributes in a field. These are in addition to the default values defined in Sections 4 and 7.

There are no calculation data rules for this dataset. Calculation rules are used to automatically populate attributes in a field. These are in addition to the default values defined in Sections 4 and 7.

9.3.2 Constraint Data Rules

The following are a list of data constraint rules that are enforced during editing. Constraint rules specify allowable combinations of values between two or more fields in a record. They are used to ensure that specific conditions are met.

LSE_CLM_POLY:

- CMMDTY - This field is required for all Case Disposition values except "Filed."

9.3.3 Data Check-in Validation Rules

The following are a list of rules that are enforced on edit version check-in.

- The CSE_GRP value in the LSE_CLM_POLY should match the value in the LSE_CLM_MLRS_POLY.
- The CSE_DISP value in the LSE_CLM_POLY should match the value in the LSE_CLM_MLRS_POLY.

10 Abbreviations and Acronyms

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

Table 2 Abbreviations/Acronyms Used

Abbreviations	Descriptions
ARC	GIS line feature
BLM	Bureau of Land Management, U.S. Department of the Interior
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
IDP	Interdisciplinary
LR2000	Legacy Rehost 2000 Database
MLRS	Minerals and Lands Records System
MTP	Master Title Plat
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
POLY	GIS polygon feature
PUB	Publication
RMP	Resource Management Plan
USFS	United States Forest Service, U.S. Department of Agriculture
USGS	United States Geological Survey, U.S. Department of the Interior
SDE	Spatial Database Engine
SRHA	Stock-Raising Homestead Act
WEB	Worldwide Web (internet)

A Domains (Valid Values)

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

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

A.1 dom_BLM_ORG_CD

Administrative Unit Organization Code. Standard BLM organization codes generated from the national list. This is a subset of OR/WA administrative offices and those in other states that border.

This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom_BLM_ORG_CODE.xls.

A.2 dom_MLRS_BLM_PROD_CD_LSECLM

MLRS Product Code for Leases and Claims. The MLRS product code with a subset of values related to the Leases and Claims dataset.

This is a lengthy domain. For the full list of values go to:

https://gis.blm.gov/ORDownload/Domains/dom_MLRS_BLM_PROD_LSECLM.xls.

A.3 dom_MLRS_BLM_PROD_LSECLM

MLRS Product for Leases and Claims. The MLRS Product with a subset of values related to the Leases and Claims dataset.

This is a lengthy domain. For the full list of values go to:

https://gis.blm.gov/ORDownload/Domains/dom_MLRS_BLM_PROD_LSECLM.xls.

A.4 dom_MLRS_CMMDTY_LLS

MLRS Commodity Code for Leasable, Locatable, or Saleable Minerals. The MLRS Commodity with a subset of values related to leasable, locatable, or saleable minerals.

This is a lengthy domain used by Leases and Claims and Mineral Activities. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom_MLRS_CMMDTY_LLS.xls.

A.5 dom_MLRS_CSE_DISP_LSECLM

MLRS Case Disposition for Leases and Claims. The MLRS Case Disposition with a subset of values related to the Leases and Claims dataset.

Code	Description
Active	Active - Adjudicated (mining claim)
Authorized	Authorized - Approved

Code	Description
Closed	Closed - No further action on this case is probable
Filed	Filed - Submitted with complete data and payment (mining claim)
Interim	Interim - Cancelled, expired, terminated, relinquished, or awaiting a decision
Pending	Pending - Waiting BLM approval

A.6 dom_MLRS_CSE_GRP_LSECLM

MLRS Case Group for Leases and Claims. The MLRS Case Group with a subset of values related to the Leases and Claims dataset.

Code	Description
3100	3100 - Oil and Gas
3200	3200 - Geothermal
3400	3400 - Coal
3500	3500 - Non-Energy Leasables
3700	3700 - Use and Occupancy
3800	3800 - General Mining Law Other
3841	3841 - Lode Claim
3842	3842 - Placer Claim
3843	3843 - Tunnel Site
3844	3844 - Mill Site