Oregon/Washington Bureau of Land Management

NATIONAL SYSTEM OF PUBLIC LANDS
U.S. DEPARTMENT OF THE INTERIOR
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

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.

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. Salable (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." There are two types of claims with different types of spatial representation:

- "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, native asphalt, solid and semisolid bitumen, bituminous rock, phosphate, and coal. Solid leasables, other than coal and oil shale, are leased in two ways:

- Competitive issues in areas where we know there is a mineral deposit; and

- Competitive leases through a bidding process.

Only Leases and Claims likely to occur on BLM property within the states of Oregon and Washington are included in this dataset, but it can easily be expanded as necessary.

Salable minerals do not participate in this data standard. Salable minerals include common varieties of sand, gravel, stone, pumice and cinders. Use of salable minerals requires either a sales contract or a free-use permit. Disposals of salable minerals from BLM lands is an important part of Resource Management Plans (RMP). Areas with salable minerals are also called Mineral Materials Sites or Community Pits and participate in the Mineral Activities data standard.

- Dataset (Theme) Name: Leases and Claims

- Dataset (Feature Class): LSE_CLM_POLY, LSE_CLM_P_POLY

1.2   Roles and Responsibilities

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Data Steward	The State Data Steward responsibilities include approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential Privacy issues, and managing that data as a corporate resource. The State Data Steward coordinates with field office data stewards, the State Data Administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality.
GIS Technical Lead	The GIS Technical Lead works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the

	development of data standards. The GIS technical lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS technical lead works with data editors to ensure the consistency and accordance with the established data standards of data input into the enterprise Spatial Database Engine (SDE) geodatabase. The GIS technical lead provides technical assistance and advice on GIS analysis, query, and display of the dataset.
State Data Administrator	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State 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

- Additional keywords: Encumbrance, Energy, Minerals, Management, Claim, Lease

- ISO Thesaurus: geoscientificInformation, environment

1.7   Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 - Data Administration

- 9167 - Geographic Information System (GIS)

- 2900 - USE: LEASES AND PERMITS

- 3000 - Minerals Management

- 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 STATUS_P attribute. If the STATUS_P attribute is "Initial," the proposed Lease or Claim should, for most purposes, not be included in analysis and display.

This dataset is intended to contain Leases and Claims issued by the BLM. RGT_HOLDER_NM contains the name of the individual or company holding the lease or claim. Leases and Claims are issued for specific commodities. The COMMODITY 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   Relationship 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 salable 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.

- **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 replaces by MLRS. The polygons on LSE_CLM link to LR2000 via the CASEFILE 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.

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.
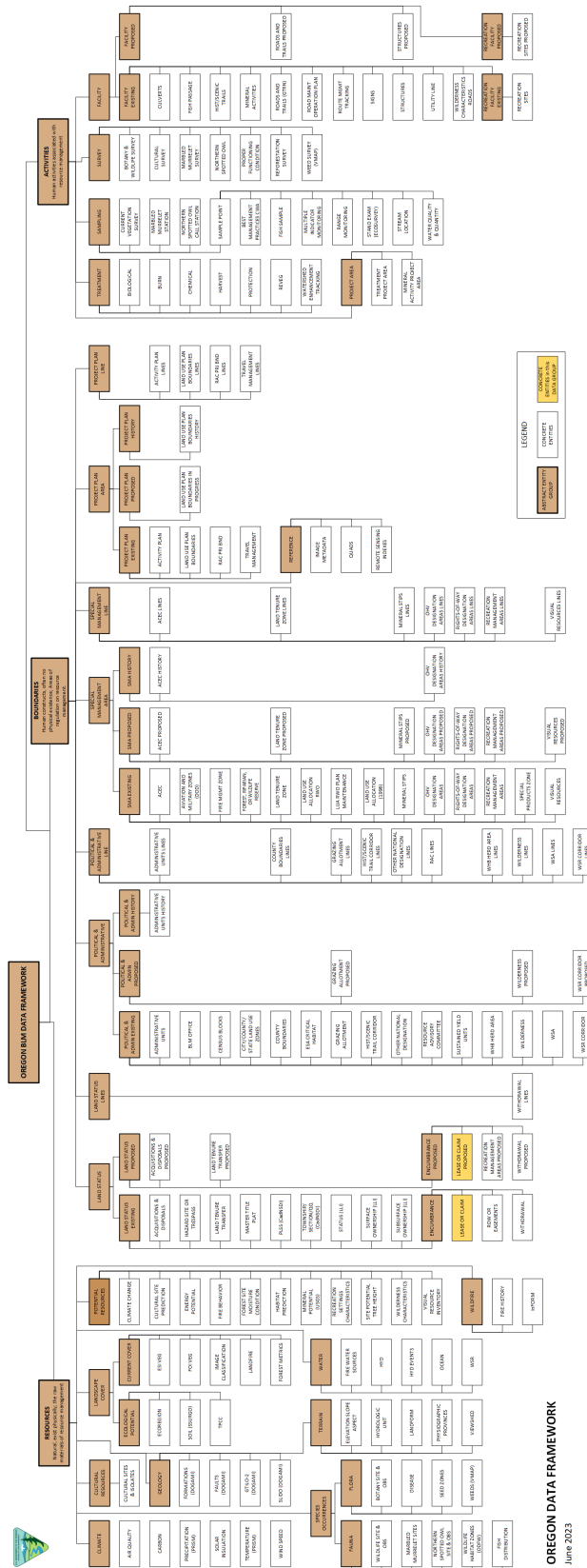
Figure 1   Oregon Data Framework Overview

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:
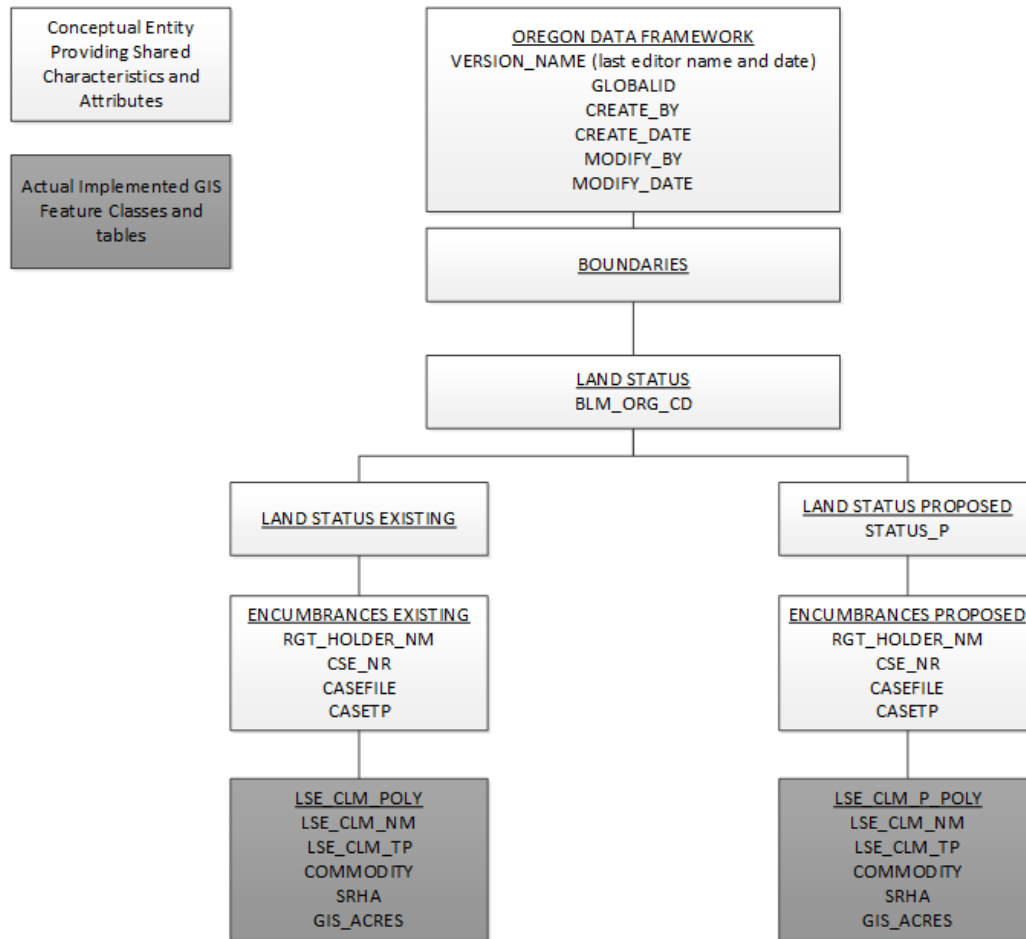
Figure 2   Data Organization Structure

2.5   Relationship to DOI Enterprise Architecture Data Resource Mode

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 LR2000 as secondary sources. Moreover, this dataset will never be complete. Over time, more and 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, on LSE_CLM_P_POLY, are transitory and have varying degrees of accuracy. Accuracy is reviewed and improved, if possible, if a proposed feature becomes authorized and is moved to LSE_CLM_POLY.

Required attributes have an accuracy of at least ninety percent.

3.2   Collection, Input, and Maintenance Protocols

Existing Leases and Claims (LSE_CLM_POLY) are defined and described by the case file record and are sometimes depicted on 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, LR2000, and the case file record). OR/WA BLM is working on an automated method for creating GIS polygons directly from LR2000 descriptions. These could be used as a starting point for LSE_CLM polygons. 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 (LSE_CLM_P_POLY) are created from legal descriptions in the same way as described above for LSE_CLM_POLY. If a proposed Lease or Claim becomes fact (is authorized), it is copied to LSE_CLM_POLY and deleted from LSE_CLM_P_POLY. At the district Data Steward's discretion, when an authorized LSE_CLM becomes "closed", for whatever reason (relinquished, terminated, expired, abandoned), the feature can be moved back to the proposed feature class with the appropriate value placed in the attribute STATUS_P. 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 dataset 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 on a daily basis. Leases do not change often.

3.4   Statewide Monitoring

District Realty Specialists are required to check the themes for spatial and attribute accuracy within their district, keep the themes consistent and current with LR2000 and the case files, and confirm that proposed (LSE_CLM_P_POLY) were moved to existing (LSE_CLM_POLY) 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 LR2000. The number of cases in LR2000 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_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
LSE_CLM_NM	String	30		Yes	
LSE_CLM_TP	String	20	Other	Yes	dom_LSE_CLM_TP
COMMODITY	String	20	UN	Yes	dom_COMMODITY
SRHA	String	1	U	Yes	dom_YN
RGT_HOLDER_NM	String	60		No	
CSE_NR	String	16		No	
CASEFILE	String	17		No	
CASETP	String	6		No	
BLM_ORG_CD	String	5	OR000	Yes *	dom_BLM_ORG_CD
GIS_ACRES	Decimal	12,6		Yes *	
VERSION_NAME	String	50	InitialLoad	Yes ***	
GLOBALID	GUID			Yes *	
CREATE_BY	String	30		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	20		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

4.2 LSE_CLM_P_POLY Feature Class (Proposed 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
LSE_CLM_NM	String	30		Yes	
LSE_CLM_TP	String	20	Other	Yes	dom_LSE_CLM_TP
COMMODITY	String	20	UN	Yes	dom_COMMODITY
SRHA	String	1	U	Yes	dom_YN
RGT_HOLDER_NM	String	60		No	
CSE_NR	String	16		No	
CASEFILE	String	17		No	
CASETP	String	6		No	
STATUS_P	String	12	Initial	Yes	dom_STATUS_P
BLM_ORG_CD	String	5	OR000	Yes *	dom_BLM_ORG_CD
GIS_ACRES	Decimal	12,6		Yes *	
VERSION_NAME	String	50	InitialLoad	Yes ***	
GLOBALID	GUID			Yes *	
CREATE_BY	String	30		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	20		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

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_POLY

    - Description: Instance of Land Status Existing group.

    - Geometry: Polygons may overlap entirely or in part.

    - Topology: No topology enforced.

    - Integration Requirements: If polylines are defined as parcels, they must have a vertex for every CADNSDI point, and be snapped to it.

- LSE_CLM_P_POLY

    - Description: Instance of Land Status Proposed group.

    - Geometry: Polygons may overlap each other entirely or in part and may overlap LSE_CLM_POLY features.

    - Topology: No topology enforced.

    - Integration Requirements: If polylines are defined as parcels, they must have a vertex for every CADNSDI point, and be snapped to it.

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	Inherited from entity Land Status
Alias Name	BLM Administrative Unit
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_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   CASEFILE

Geodatabase Name	CASEFILE
BLM Structured Name	Casefile_Number
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	Casefile Number
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	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". The value in CASEFILE must match exactly with the serial numbers in LR2000, including any spacing in the number (see the examples below).
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "OROR 065814", "OROR 06818PT", "OROR 061083FB", "OROR 06173P1", "ORORE 0014635"
Data Type	String (17)

7.3 CASETP

Geodatabase Name	CASETP
BLM Structured Name	Case_Type_Number
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	Case Type
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	A coded number system (defined by LR2000) that identifies a 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, 36 ‑ Mineral Material (sand & gravel, community pits), 38 ‑ Mining Claims). For a complete list of Case types go to: https://reports.blm.gov/document/lr2000/249/CR_Casetypes_sorted_%20by_Code.pdf
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 322200, 311122, 384101
Data Type	String (6)

7.4 COMMODITY

Geodatabase Name	COMMODITY
BLM Structured Name	Mineral_Commodity_Code
Inheritance	Not Inherited
Alias Name	Commodity
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	The commodity code (defined by LR2000) 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.
Required/Optional	Required
Domain (Valid Values)	dom_COMMODITY
Data Type	String (20)

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, LSE_CLM_P_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 (30)

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, LSE_CLM_P_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_NR

Geodatabase Name	CSE_NR
BLM Structured Name	MLRS_Case_Number_Text
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	MLRS Casefile Number
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	Case number assigned by the MLRS database.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: OROR200005541, WAOR200153830
Data Type	String (16)

7.8   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, LSE_CLM_P_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

7.9   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_POLY, LSE_CLM_P_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

7.10   LSE_CLM_NM

Geodatabase Name	LSE_CLM_NM
BLM Structured Name	Lease_Claim_Name
Inheritance	Not Inherited
Alias Name	Lease or Claim Name

Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	Identifying name for the proposed or existing Lease or Claim or the project it is part of.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "Fields M.S.", "EP Minerals Claims"
Data Type	String (30)

7.11   LSE_CLM_TP

Geodatabase Name	LSE_CLM_TP
BLM Structured Name	Lease_Claim_Type_Code
Inheritance	Not Inherited
Alias Name	Lease or Claim Type
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	The general type or mineral lease or mining claim.
Required/Optional	Required
Domain (Valid Values)	dom_LSE_CLM_TP
Data Type	String (20)

7.12   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, LSE_CLM_P_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 (30)

7.13   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, LSE_CLM_P_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

7.14 RGT_HOLDER_NM

Geodatabase Name	RGT_HOLDER_NM
BLM Structured Name	Right_Holder_Organization_Code
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	Right Holder Name
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
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)

7.15 SRHA

Geodatabase Name	SRHA
BLM Structured Name	Stock_Raising_Homestead_Act_Indicator
Inheritance	Not Inherited
Alias Name	Stock Raising Homestead Act
Feature Class Use/Entity Table	LSE_CLM_POLY, LSE_CLM_P_POLY
Definition	Only relevant for mining claims; indicates whether the claim falls within original SRHA lands and, therefore, has different filing requirements and fees.
Required/Optional	Optional
Domain (Valid Values)	dom_YN
Data Type	String (1)

7.16   STATUS_P

Geodatabase Name	STATUS_P
BLM Structured Name	Proposed_Status_Code
Inheritance	Inherited from entity Land Status Proposed
Alias Name	Status
Feature Class Use/Entity Table	LSE_CLM_P_POLY
Definition	The status of a proposed facility, structure or application.
Required/Optional	Required
Domain (Valid Values)	dom_STATUS_P
Data Type	String (12)

7.17   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	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
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 (currently ORSOEDIT) are "published" to the user database (currently ORSOVCTR) in several ways:

- Copied completely with no changes (replicated).

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

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

8.2   Specific to This Dataset

Publication feature classes will be created for internal use where:

- The attribute VERSION_NAME is removed (for privacy reasons).

- The edit tracking attributes CREATE_BY, CREATE_DATE, MODIFY_BY, MODIFY_DATE are removed.

Publication feature classes will be created for publishing to the web, release to the public, where:

- Data not in proposed theme layers. LSE_CLM_P_POLY is not published to the web.

- The attribute VERSION_NAME is removed (for privacy reasons).

- The edit tracking attributes CREATE_BY, CREATE_DATE, MODIFY_BY, MODIFY_DATE are removed.

- The attributes RGT_HOLDER_NM is removed (for Privacy reasons).

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

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

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.

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

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 and LSE_CLM_P_POLY:

- CASETP - must be a 6-digit number.

- SRHA - value "Y" is only valid when the LSE_CLM_TP equals "LodeClaim, "PlacerClaim", "MillSite", "TunnelSite", or "Other". For all other types, SRHA must equal "N."

- CASEFILE - must include "MC" if the LSE_CLM_TP equals "LodeClaim, "PlacerClaim", "MillSite", or "TunnelSite."

- CASEFILE - must NOT include "MC" if the LSE_CLM_TP equals "Geothermal", "OilandGas", "MinMatSite", "CommunityPit", "ODOTMatSite", "RandPP", or "Other."

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)
WODDB	Western Oregon Digital Database

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_COMMODITY

Commodity Code. Commodity Exposed at Location

Code	Description
12	12 - ALUMINUM, CLAY
43	43 - ASPHALTIC MINERALS
50	50 - BARIUM
51	51 - BARIUM, BARITE
91	91 - CALCIUM, LIMESTONE
121	121 - CHROMITE
135	135 - CLAY, BENTONITE
137	137 - CLAY, COMMON
140	140 - COAL
170	170 - COPPER
171	171 - COPPER, SULFIDES
186	186 - ABRASIVE, FELDSPAR
255	255 - GEMSTONE, SEMIPREC SIL
256	256 - GEMSTONE, SEMIPREC OTH
257	257 - GEMSTONE, NON-PRECIOUS
260	260 - GOLD
261	261 - GOLD, LODE
262	262 - GOLD, PLACER
271	271 - GRAPHITE, AMORP-CRYST
340	340 - LEAD
350	350 - LITHIUM

Code	Description
353	353 - LIMESTONE
380	380 - MERCURY
410	410 - NATURAL GAS
420	420 - NICKEL
440	440 - PERLITE
459	459 - OIL & GAS
470	470 - PLATINUM GROUP
471	471 - PLATINUM
483	483 - POTASH, POTASSIUM NIT
491	491 - PUMICE, PUMICITE
492	492 - PUMICE, VOLCANIC ASH
493	493 - PUMICE, VOLCANIC CINDER
495	495 - PUMICE, SCORIA
496	496 - OBSIDIAN
497	497 - RHYOLITE
500	500 - QUARTZ, CRYSTAL
521	521 - SAND AND GRAVEL, SAND
522	522 - SAND AND GRAVEL, SHALE
523	523 - SAND AND GRAVEL, GRAVEL
524	524 - SAND AND GRAVEL, CLINKER
525	525 - SAND AND GRAVEL, S&G
526	526 - SHALE
531	531 - SILICON, QUARTZ
532	532 - SILICON, QUARTZITE
540	540 - SILVER
550	550 - SODIUM
561	561 - STONE, DIMENSION
562	562 - STONE, CRUSHED & BROKEN
563	563 - STONE, RIPRAP
564	564 - STONE, WEATHERED GRANITE
565	565 - STONE, SPECIALTY
566	566 - STONE, TUFA
650	650 - URANIUM, (U308 CONTENT)
690	690 - ZEOLITES
693	693 - ZEOLITES, CLINOPTILOLITE
701	701 - ZINC, SULFIDES

Code	Description
770	770 - GEOTHERMAL
772	772 - GEOTHERMAL, WATER
800	800 - TWO OR MORE MINERALS
848	848 - GEMSTONE, SEMIPRECIOUS
878	878 - PUBLIC PURPOSES
879	879 - RECREATION PURPOSES
885	885 - OTHER
891	891 - SOIL/OTHER, FILL
892	892 - SOIL/OTHER, TOPSOIL
894	894 - SOIL/OTHER, DIATOMITE
899	899 - ALL MATERIAL RESOURCE
UN	UN-UNKNOWN

A.3 dom_LSE_CLM_TP

Lease or Claim Type Code. The general type of mineral lease or mining claim.

Code	Description
LodeClaim	LodeClaim - Lode Claim Mining
PlacerClaim	PlacerClaim -Placer Claim Mining
Geothermal	Geothermal - Geothermal Lease
OilandGas	OilandGas - Oil and Gas Lease
MinMatSite	MinMatSite - BLM Mineral Materials Site
CommunityPit	CommunityPit - Free Use Pit
ODOTMatSite	ODOTMatSite - ODOT Highway ROW Materials Site
RandPP	RandPP - Recreation and Public Purpose Lease
Other	Other - Other Lease or Claim Site
MillSite	MillSite - Mill Processing Site
TunnelSite	TunnelSite - Tunnel Site

A.4 dom_STATUS_P

Facility Proposed Status Code. The status of a proposed facility, structure, or application.

Code	Description
Initial	Initial - Pre-application or scoping, action not yet started
Pending	Pending - Active proposal, application filed
Suspended	Suspended - Activity halted

Code	Description
Relinquished	Relinquished - Proposal released by the proponent
Rejected	Rejected - Considered by BLM and found unsuitable
Closed	Closed - Realty case closed; proposal expired

A.5 dom_YN

Yes/No flag code.

Code	Description
Y	Yes
N	No
U	Unknown