



Potential Unauthorized Use

Spatial Data Standard



*Photo by BLM. Unauthorized facilities and use along Hwy 26,
Central Oregon Field Office, Prineville District.*

Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	6/30/2026	Dana Baker-Allum, Joel Krestik, Brandon Sikes, Shelley Moore	Initial Release	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.

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1 General Information

The Potential Unauthorized Use (PUU) dataset represents spatial location and basic information about trespass or potential trespass sites. Trespass is defined as unauthorized use, occupancy or development other than casual use, upon public lands without a prior land use authorization or a right granted by statute or law, that causes physical damage to public lands, property located thereon or resources or loss of revenue to the United States. This dataset replaces the trespass portion of the previously used Hazardous or Trespass dataset.

Attributes include information about the type of site and material as well as status of action on the site and dates.

- Dataset (Theme) Name: Potential Unauthorized Use
- Dataset (Feature Class): PUU_POLY

1.1 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 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.

1.2 FOIA Category

BLM Records Access Categories classifies "491 - Civil Trespass/Unauthorized Use Case Files Pending and Closed" under Category 2 - BLM Records Requiring a Freedom of Information Act (FOIA) Request. Since data collected within this dataset would often be included in a Pending Unauthorized Use Case, the BLM cannot make this data available to public without going through the FOIA request process.

1.3 Records Retention Schedule

The DRS/GRS/BLM Combined Records Schedule, under Schedule 20/52a (Electronic Records/Geographic Information Systems), does **NOT** list this theme as one of the system-centric themes that are significant for BLM's mission that must be permanently retained.

TEMPORARY. Delete when no longer needed for administrative, legal, audit, or other operational purposes (subject to any records freeze or holds that may be in place).

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

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

1.4 Security/Access/Sensitivity

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

This dataset is not sensitive and there are no restrictions on access to this data within the BLM. These data fall under the standard Records Access Category 2 - BLM Records Requiring a FOIA request.

There are no privacy issues or concerns associated with these data themes. A privacy impact assessment was signed for this dataset on April 29, 2025.

1.5 Keywords

Keywords that can be used to locate this dataset include:

- BLM Thesaurus: Disturbance, Energy, Geology, Geospatial
- Additional keywords: Management, Minerals, Trespass, Unauthorized use, Noncompliance, Facilities
- ISO Thesaurus: environment, structure

1.6 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 - Data Administration
- 9167 - Geographic Information System (GIS)
- 9230 - Trespass

2 Dataset Overview

2.1 Usage

This dataset is used to display potential unauthorized use activities or sites on maps for field verification and briefings. The spatial features can be combined with other spatial datasets to assess impact to resources and for reporting purposes.

2.2 Sponsor/Affected Parties

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

A site is sometimes located on non-BLM land or under some other jurisdiction and may require some coordination, otherwise it is not necessary to share or match these data with other agency datasets.

2.3 Relationship to Other Datasets, Databases, or Files

This dataset may be related to the Structures dataset to the extent that a feature in the Structures dataset may also be found in this dataset if it is considered an unauthorized use. Structures installed as protective or warning devices (e.g., fence or sign) are noted here in attribute PROT_DEVICE, but the feature itself is found in the Structures dataset. Likewise, if the unauthorized use is a Right-Of-Way (ROW) infraction, there will be a relationship to the ROW feature in the Easements and Rights-Of-Way dataset and to the road or trail feature in the Ground Transportation dataset (both described under a different data standard).

This dataset contains the spatial location for realty trespass cases and includes linking fields with the realty Mineral and Land Records System (MLRS) (CSE_NR).

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.

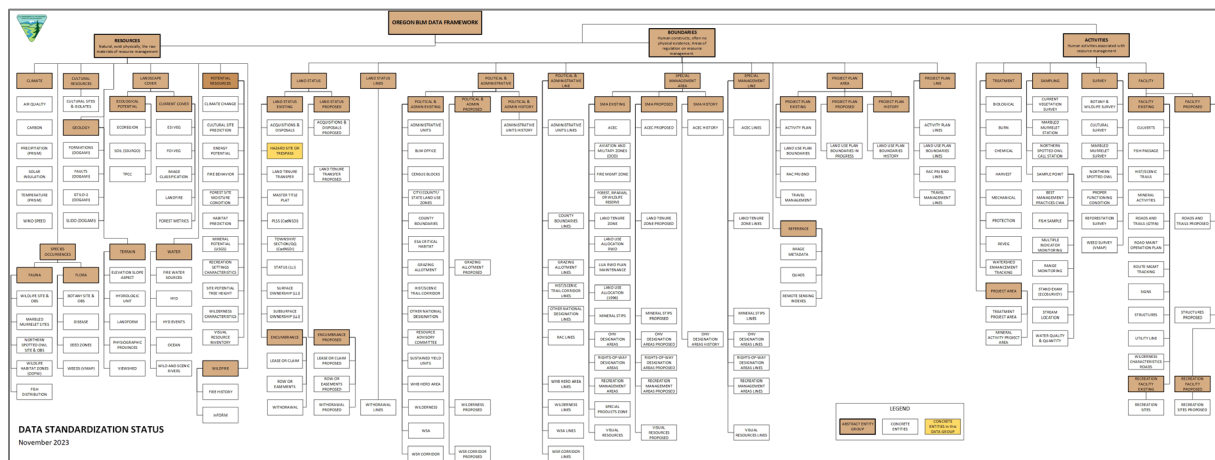


Figure 1 Oregon Data Framework Overview

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 PUU 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, PUU is considered a Boundary and categorized as follows:

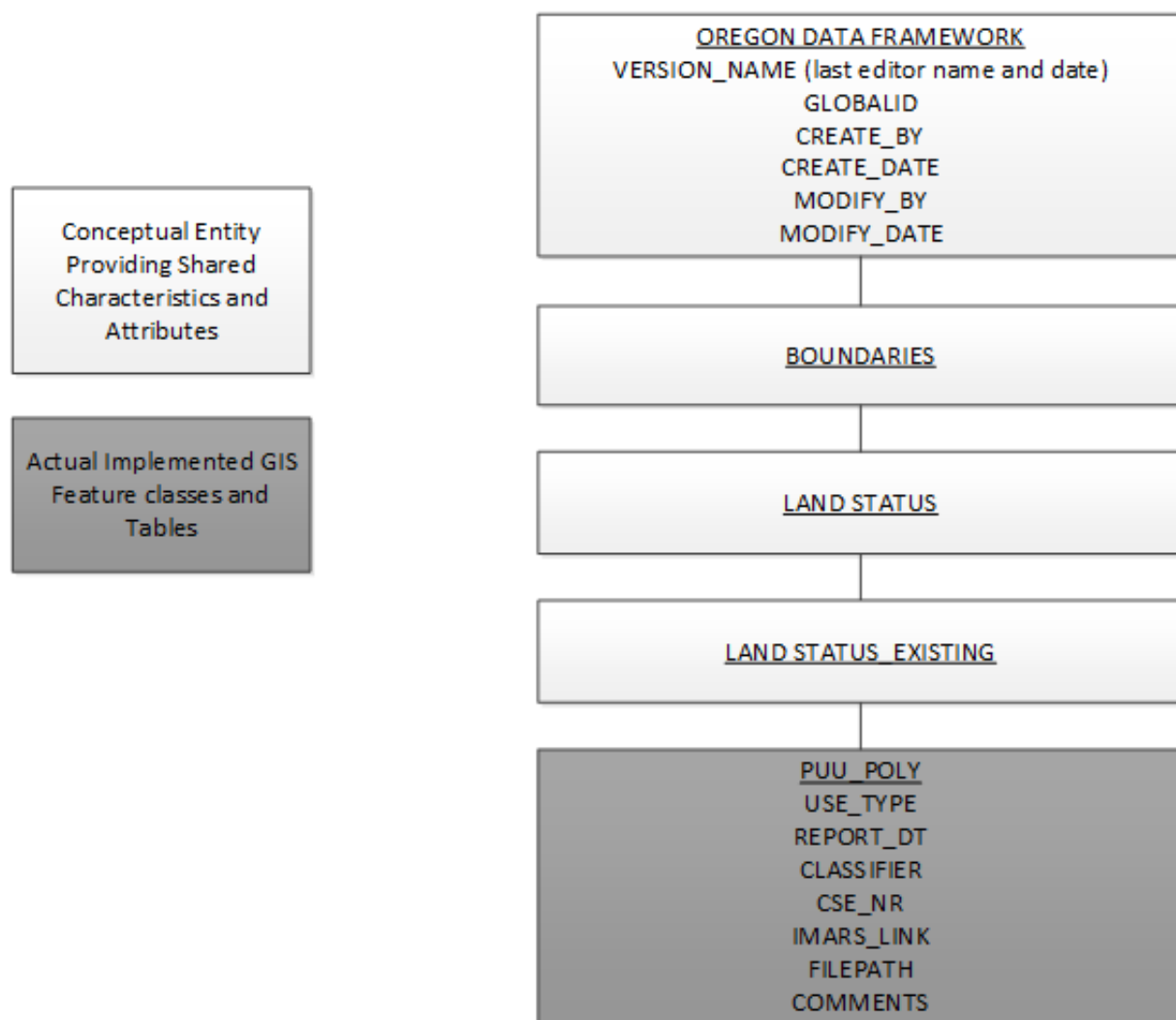


Figure 2 Data Organization Structure

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 requires the highest possible accuracy to accurately locate and map the extent of unauthorized. Required attributes should have an accuracy and completeness of at least 95 percent.

3.2 Collection, Input, and Maintenance Protocols

Initial coordinates for a potential unauthorized use area come from a variety of sources including:

- GPS coordinates
- Paper site maps
- Public supplied coordinates
- Legal descriptions

The initial coordinates are for either a single point, a line, or polygon. If the initial coordinates are point or line, a polygon is created using the supplied width or radius or using a default Euclidean planar buffer of 1 meter. Once a polygon is created, whether provided initially or from a default buffer, the feature is overlaid on aerial imagery to refine the boundary, if the feature is visible. The imagery must be as current as possible, correctly ground-rectified and projected, and with a minimum half-meter resolution. The attribute REPORT_DT is filled in with the initial report date.

The mobile GIS data collection application used to collect PUU_POLY features allows photos to be attached to the polygon feature. The photos are stored as geodatabase "attachments" at the time of collection or editing, which utilizes a "relate table" that is linked to the spatial record. This table is managed by the ArcGIS software, not by GIS editors directly. When the collected data is finalized as corporate data, the attachments are removed from the edit environment and relocated to a network repository. The FILEPATH field in PUU_POLY will store the location of where the attachments of interest exist.

When a realty trespass case is closed, the spatial entity can be retained, if desired, with CSE_DISP= "Closed" and the CSE_DISP_DT filled in.

3.3 Update Frequency and Archival Protocols

Data is updated on an on-going basis. It is archived annually at the end of the fiscal year.

It is the responsibility of district specialists (minerals, realty, law enforcement, GIS) to ensure that the spatial features and attributes in PUU_POLY are correct and agree with any external database.

3.4 Statewide Monitoring

The state data steward for realty trespass ensures consistency with MLRS. This monitoring is conducted at least annually.

The State Data Steward, assisted by the GIS Technical Lead, are responsible for checking consistency across districts for the theme. The State Data Steward is responsible for coordinating the response to national BLM and interagency data calls.

Each year, the geospatial staff of the BLM Division of Resources, Lands, and Minerals meets with each State Data Seward 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 approvals of the datasets reviewed. These approvals are then added to the corporate metadata.

4 Potential Unauthorized Use 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 PUU_POLY Feature Class (Potential Unauthorized Use 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
USE_TYPE	String	40		No	dom_PUU_USE_TYPE
REPORT_DT	Date		1/1/4000	Yes	
CLASSIFIER	String	30		Yes	
CSE_NR	String	17		No	
IMARS_LINK	String	10		No	
FILEPATH	String	150		No	
COMMENTS	String	1000		No	
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

4.2 PUU_MLRS_TBL Table (Potential Unauthorized Use MLRS Table)

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		No	
CSE_NR	String	17		Yes	
BLM_PROD_CD	String	7		Yes	dom_MLRS_BLM_PROD_CD_PUU
BLM_PROD	String	100		Yes	dom_MLRS_BLM_PROD_PUU

Attribute Name	Data Type	Length	Default Value	Required	Domain
CSE_DISP	String	10		Yes	dom_MLRS_CSE_DISP_PUU
CSE_DISP_DT	Date			No	
USE_TYPE_MLRS	String	255		No	
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
GLOBALID	GUID			Yes *	

* 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

- PUU_POLY
 - Description: Instance of ODF boundaries category, existing land status sub-category.
 - Geometry: Polygon only. Sites are scattered and relatively small. There might be many polygons in a small area, and they can overlap in whole or part.
 - Topology: No topology enforced.
 - Integration Requirements: Features should be snapped to existing corporate data when applicable. Examples are Ground Transportation, Ownership, etc.

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 Facility
Alias Name	BLM Org Code
Feature Class Use/Entity Table	MIN_ACTY_PROJ_AREA_POLY, MIN_ACTY_POLY, MIN_ACTY_ARC, MIN_ACTY_PT
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. This field applies particularly when a spatial entity crosses resource area or district boundaries, and the administrative responsibility is assigned to one or the other rather than splitting the spatial unit. Another agency or individual may have the physical management responsibility for the on-the-ground entity. Similarly, OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, and California and vice versa. When appropriate, the office can be identified only to the district or state level rather than to the resource area level.
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 BLM product code in text format.
Required/Optional	Required
Domain (Valid Values)	dom_MLRS_BLM_PROD_PUU
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_PUU
Data Type	String (7)

7.4 CLASSIFIER

Geodatabase Name	CLASSIFIER
BLM Structured Name	Classifier_Name
Inheritance	Not Inherited
Alias Name	Reporter Name
Feature Class Use/Entity Table	PUU_POLY
Definition	Name (mixed case, first and last) of the subject matter specialist most knowledgeable about the site. The contact person. Multiple names should be comma delimited, full names should be mixed case and include first and last names.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: Mary Smith, John Doe
Data Type	String (30)

7.5 COMMENTS

Geodatabase Name	COMMENTS
BLM Structured Name	Comments_Text
Inheritance	Not Inherited
Alias Name	Comments
Feature Class Use/Entity Table	PUU_POLY
Definition	Additional comments about the record.
Required/Optional	Optional
Domain (Valid Values)	No domain.

Data Type	String (1000)
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7.6 CREATE_BY

Geodatabase Name	CREATE_BY
BLM Structured Name	Record_Created_By_Text
Inheritance	Inherited by entity ODF
Alias Name	Created By
Feature Class Use/Entity Table	PUU_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)

7.7 CREATE_DATE

Geodatabase Name	CREATE_DATE
BLM Structured Name	Record_Created_Date
Inheritance	Inherited by entity ODF
Alias Name	Created Date
Feature Class Use/Entity Table	PUU_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

7.8 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	PUU_MLRS_TBL
Definition	The current case disposition as stated in the MLRS case.
Required/Optional	Required
Domain (Valid Values)	dom_MLRS_CSE_DISP_PUU
Data Type	String (20)

7.9 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	PUU_MLRS_TBL
Definition	Disposition date is the date of the last case disposition change, based on case actions entered to case in MLRS.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Date

7.10 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	Case Name
Feature Class Use/Entity Table	PUU_MLRS_TBL
Definition	Identifying name for the feature or the project it is part of.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	String (100)

7.11 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	PUU_POLY, PUU_MLRS_TBL
Definition	Case number assigned by the MLRS database.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: OROR200005541, WAOR200153830
Data Type	String (17)

7.12 FILEPATH

Geodatabase Name	FILEPATH
BLM Structured Name	Filename_Path_Text
Alias	File Path
Inheritance	Inherited from SAMPLING
Feature Class Use/Entity Table	PUU_POLY
Definition	Computer storage location for a photo file (e.g., jpg), Word document, spreadsheet, or another associated document. The value in this field serves as a hyperlink to that location and the file it opens. Could also be a directory or dataset that opens for further browsing (where multiple files are being referenced).
Required/Optional	Optional
Domain (Valid Values)	No domain.
Data Type	String (150)

7.13 GLOBALID

Geodatabase Name	GLOBALID
BLM Structured Name	Global_Unique_Identifier
Inheritance	Inherited from entity ODF
Alias Name	None
Feature Class Use/Entity Table	PUU_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

7.14 IMARS_LINK

Geodatabase Name	IMARS_LINK
BLM Structured Name	IMARS_Database_Foreign_Key
Inheritance	Not Inherited
Alias Name	IMARS Link
Feature Class Use/Entity Table	PUU_POLY
Definition	Linking field to the Incident Management, Analysis, and Reporting Systems (IMARS) database. Law enforcement database with information about

	illegal activities. IMARS is not viewable except by law enforcement officers. Standardized field format: first 2 characters are a code for type of incident, e.g., "LM" for "Land Management", next 2 digits are the year and the remaining 6 comprise a sequential number, left-filled with zeroes.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: LM14000001
Data Type	String (10)

7.15 MODIFY_BY

Geodatabase Name	MODIFY_BY
BLM Structured Name	Record_Last_Modified_By_Text
Inheritance	Inherited by entity ODF
Alias Name	Modified By
Feature Class Use/Entity Table	PUU_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)

7.16 MODIFY_DATE

Geodatabase Name	MODIFY_DATE
BLM Structured Name	Record_Last_Modified_Date
Inheritance	Inherited by entity ODF
Alias Name	Modified Date
Feature Class Use/Entity Table	PUU_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

7.17 REPORT_DT

Geodatabase Name	REPORT_DT
BLM Structured Name	Site_Discovery_Reporting_Date
Inheritance	Not Inherited

Alias Name	Discovery Reporting Date
Feature Class Use/Entity Table	PUU_POLY
Definition	Full date the case was officially opened/updated. From the LR2000 Case File or Project Lead if no Case File.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 6/22/2013, 11/1/2014
Data Type	Date

7.18 USE_TYPE

Geodatabase Name	USE_TYPE
BLM Structured Name	Trespass_Use_Type_Code
Inheritance	Not Inherited
Alias Name	Type of Unauthorized Use
Feature Class Use/Entity Table	PUU_POLY
Definition	Category of potential unauthorized facilities or disturbances observed.
Required/Optional	Optional
Domain (Valid Values)	dom_PUU_USE_TYPE
Data Type	String (40)

7.19 USE_TYPE_MLRS

Geodatabase Name	USE_TYPE_MLRS
BLM Structured Name	MLRS_Trespass_Use_Type_Text
Inheritance	Not Inherited
Alias Name	Type of Unauthorized Use (MLRS)
Feature Class Use/Entity Table	PUU_MLRS_TBL
Definition	Category of potential unauthorized facilities or disturbances observed from the Mineral and Lands Record System (MLRS). There may be more than one use type listed in the MLRS system for the case. In those instances, values from MLRS will appear in this field as a concatenated string.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "Occupancy; Right of Way; Enclosures; Commercial Vending; Road Use", "Agriculture; Timber; Other"
Data Type	String (255)

7.20 VERSION_NAME

Geodatabase Name	VERSION_NAME
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BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from entity ODF
Alias Name	Version Name
Feature Class Use/Entity Table	PUU_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 last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation. Example: sfrazier.FIRE_POLY-121210-111034 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

An internal publication dataset will be created that meets these requirements:

- Remove fields used for edit tracking: VERSION_NAME, CREATE_BY, CREATE_DATE, MODIFY_BY, MODIFY_DATE.
- Extract the attributes identified in the table [4.2 PUU_MLRS_TBL Table \(Potential Unauthorized Use MLRS Table\)](#) from the national Mineral and Lands Record System (MLRS) and join the table to the PUU_POLY feature class using the CSE_NR field.

An external publication dataset will NOT be created for this dataset. However, if a FOIA request is received, remove the following fields from the internal publication dataset before sharing the data:

- Remove fields that reference staff names: CLASSIFIER.
- Remove fields with possible sensitive data or internal file system resources: COMMENTS, FILEPATH.

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.

Layer files for edit and publication should be symbolized on the Use Type (USE_TYPE) field.

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.
- Species Occurrence Group: These are distinct sites defined by species and time. A different species creates a new polygon which may overlap another site in whole or part. A change in time (new visit date) will create a new polygon if it is desired that the old spatial extent and date is retained (as historic). Additionally, for wildlife, a different season/type of use (e.g., winter range vs. spring breeding) will create new polygon that may overlap others. Examples: WEEDS_POLY, GB_FLORA_SITE.
- Survey Group: Within each feature class a new survey is created only for a new date. This group might also include proposed surveys in separate feature classes. Examples: GB_SURVEY, Archeological Survey (CULT_SURV).
- Treatment Activity Group: Within each feature class (BURN, HARV, MECH, CHEM, BIO, REVEG, PROT), an overlapping treatment area is created only for a new date, and sometimes for a different method (if it is not possible to SPLIT the treatment area by method and it is important to capture more than one method applied to the same area on the same day). This group also includes proposed treatments which could overlap existing treatments and have additional overlap created by different treatment alternatives.
- Recreation Site Polygons (RECSITE_POLY): An overlapping site polygon is created only for different name, type, or development level.
- 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 SOURCE 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 that all date fields contain valid dates in MM/DD/YYYY format. If an attribute has a domain, check for invalid values. The values must be exact.

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 Vertical Integration

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

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

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

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

When arcs are copied from one boundary dataset to another, DEF_FEATURE may need to be changed. For example, a Resource Area Boundary (RAB) polyline might be defined as "SUBDIVISION", but when it is copied

to Plan Area Boundary (PLANBDY) the plan boundary is defined by Resource Area and DEF_FEATURE should be changed to "BLM_ADMIN". It is important that boundary lines copied from other themes NOT be merged, even though the attributes are all the same. The splits in the original source theme should be retained to retain exact coincidence and facilitate future updates.

9.4 Theme Specific Guidance

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

9.4.1 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.

9.4.2 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.

- Case Number (CSE_NR) – a warning will be presented to the editor on version check-in if this field is null (empty). This warning will not prevent the version from being submitted. It is strongly recommended this field is filled out because it is needed to link to the MLRS database to create the publication data.

10 Abbreviations and Acronyms

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

Table 1 Abbreviations/Acronyms Used

Abbreviations	Descriptions
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
FOIVEG	Forest Operations Inventory
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
GTRN	Ground Transportation GIS dataset
IDP	Interdisciplinary
MLRS	Mineral and Land Records System
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
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

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

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_PUU

MLRS Product Code for Potential Unauthorized Use. The MLRS product code with a subset of values related to this dataset.

dom_MLRS_BLM_PROD_CD_PUU	dom_MLRS_BLM_PROD_PUU
281009	UNAUTHORIZED ACTIVITY ROAD
284009	UNAUTHORIZED ACTIVITY RAILROAD
285009	UNAUTHORIZED ACTIVITY POWER LINE
286009	UNAUTHORIZED ACTIVITY COMMUNICATION SITE
286209	UNAUTHORIZED ACTIVITY TELEPHONE & TELEGRAPH
287009	UNAUTHORIZED ACTIVITY WATER FACILITY
288009	UNAUTHORIZED USE PIPELINE/FACILITY
288102	UNAUTHORIZED ACTIVITY OIL AND GAS PIPELINES/FACILITIES
288105	UNAUTHORIZED SALT WATER DISPOSAL
289009	UNAUTHORIZED ACTIVITY OTHER
292801	UNAUTHORIZED USE
292802	UNAUTHORIZED DEVELOPMENT
292803	UNAUTHORIZED OCCUPANCY
923000	TRESPASS

A.3 dom_MLRS_BLM_PROD_PUU

MLRS Product for Potential Unauthorized Use. The MLRS Product with a subset of values related to this dataset.

dom_MLRS_BLM_PROD_CD_PUU	dom_MLRS_BLM_PROD_PUU
281009	UNAUTHORIZED ACTIVITY ROAD
284009	UNAUTHORIZED ACTIVITY RAILROAD
285009	UNAUTHORIZED ACTIVITY POWER LINE
286009	UNAUTHORIZED ACTIVITY COMMUNICATION SITE
286209	UNAUTHORIZED ACTIVITY TELEPHONE & TELEGRAPH
287009	UNAUTHORIZED ACTIVITY WATER FACILITY
288009	UNAUTHORIZED USE PIPELINE/FACILITY
288102	UNAUTHORIZED ACTIVITY OIL AND GAS PIPELINES/FACILITIES
288105	UNAUTHORIZED SALT WATER DISPOSAL
289009	UNAUTHORIZED ACTIVITY OTHER
292801	UNAUTHORIZED USE
292802	UNAUTHORIZED DEVELOPMENT
292803	UNAUTHORIZED OCCUPANCY
923000	TRESPASS

A.4 dom_MLRS_CSE_DISP_PUU

MLRS Case Disposition Code. The MLRS Case Disposition Code with a subset of values related to the Potential Unauthorized Use Dataset.

Code	Description
Authorized	Authorized - Approved
Closed	Closed - No further action on this case is probable
Interim	Interim - Cancelled, expired, terminated, relinquished, or awaiting a decision
Pending	Pending - Waiting BLM approval

A.5 dom_PUU_USE_TYPE

Potential Unauthorized Use Type Code.

Code	Description
Agriculture	Agriculture
Apiary	Apiary
Archaeological	Archaeological
Commercial Vending	Commercial Vending
Enclosures	Enclosures
Filming	Filming
Fire	Fire

Code	Description
Grazing	Grazing
Hazardous Materials	Hazardous Materials
Minerals	Minerals
Occupancy	Occupancy
Other	Other
Recreation	Recreation
Right of Way	Right of Way
Road Use	Road Use
Special Forest and Range Products	Special Forest and Range Products
Timber	Timber
Turpentine	Turpentine
Water	Water