Oregon/Washington Bureau of Land Management

Resource Area Boundaries

SPATIAL DATA STANDARD

The Resource Area Boundaries (RAB) defines the BLM administrative boundaries within the BLM "State" of Oregon that includes both Oregon and Washington.

Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	03/10/2017	Kyler Diershaw	Updated contact information for State Data Steward, GIS Technical Lead, State Data Administrator, State Records Administrator. Added Document Revision Table.	Section 1.1, 2.5, 2.6, 4.0, Appendix This page.
1.1	03/17/2017	Kyler Diershaw	Added automatic TOC Updated BLM_ORG_CD Updated Records Retention Schedule	TOC A.1 1.3
1.2	5/8/2017	Micah Babinski	Updated graphic on cover page	Cover page.
1.2	6/26/2017	Eric Hiebenthal	Updated spelling, and formatting throughout the document.	All.
2.0	3/06/2018	Al Thompson	Reformat and rewrite	All
2.0	3/26/2018	Eric Hiebenthal	Updated information about layer files	Section 8.2

Table of Contents

1. General Information

The Resource Area Boundaries (RAB) data standard contains requirements for administrative boundaries within the Oregon/Washington (OR/WA) Bureau of Land Management (BLM). The OR/WA BLM State Office jusrisdiction consists of Districts sub-divided into Resource Areas.

The OR/WA BLM administrative jurisdiction encompasses the entire political States of Oregon and Washington. A BLM District or Resource Area may cross the political boundary between those States. The RAB dataset includes boundary lines depicting official BLM District boundaries, as approved by the Washington Office, and those depicting administrative BLM Resource Area boundaries, as approved by the OR/WA BLM State Director, where the boundary lines are not coincident with the official District line.

Example of where the Resource Area is not completely within the District are; The RAB at the southernmost portion of the boundary between the Coos Bay and Medford Districts, crosses the official District boundary. The Medford's Grants Pass Resource Area manages a portion of Coos Bay District.

Coastline and Ocean islands, needed for a variety of queries and analyses, will be stored in a separate feature class and are not included in the RAB dataset. See the

Boundary definitions reference features or positions depicted in other GIS layers. Copied data from those layers creates the RAB layer. Maintaining vertical integration with other layers will ensure the most accurate representation.

- Dataset (Theme) Name: Resource Area Boundaries
- Dataset (Feature Class): RAB_POLY, RAB_ARC
- FOIA CATEGORY: Public

1.1. Roles and Responsibilities

You can find the current personnel assigned these Roles at the following link: https://www.blm.gov/about/data/oregon-data-management.

Table 1 Roles and Responsibilities (Continued)

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.

Table 1 Roles and Responsibilities (Continued)

Roles	Responsibilities
State Data Administrator	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State Records Administrator	The State Records Administrator assists the state data steward to identify any privacy issues related to spatial data. The state records administrator also provides direction and guidance on data release and fees. The state records administrator classifies data under the proper records retention schedule and determines the appropriate Freedom of Information Act category.

1.2. Records Retention Schedule (s)

The DRS/GRS/BLM Combined Records Schedule under Schedule 20/52a3 (Electronic Records/Geographic Information Systems) lists Resource Area Boundaries as s significant system-centric theme that must be permanently retained for the Bureau of Land Management's (BLM) mission.

"PERMANENT. Cutoff at the end of each Fiscal Year (FY), or, before and after making significant changes and additions. Use BLM 20/52a. Transfer to the National Archives every three years after cutoff. Under the instruction in 36 CFR 1235.44-50, or whichever guidance is in place at the time of the transfer. Submissions are full datasets and are in addition to, not replacements, of earlier submissions."

According to the DRS/GRS/BLM Records Schedules, Schedule 20 Item 52a3, the National Operations Center (NOC) is responsible for transfer to the National Archives and Records Administration (NARA).

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."

1.3. Security/Access/Sensitivity

The RAB set of themes do not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the OR/WA BLM).

This data is not sensitive and there are no restrictions on access to this data from either within the BLM or external to the BLM.

There are no privacy issues or concerns associated with these data themes.

1.4. Keywords

Keywords used to locate this dataset include:

- BLM Thesaurus Keywords: Treatment, vegetation treatment, land treatment, range improvement, timber management, timber harvest, vegetation cutting, seeding, planting, biological treatment, chemical application, prescribed fire, burn treatment, fuels management, vegetation protection, exclosure, resource improvements, soil preparation, cultivation, and vegetation clearing.

- ISO Thesaurus Keywords: Biota, economy, environment, location, farming.

- Additional Keywords: Monitoring, Utilization, Grazing, Livestock, Animal, Ranching, Resource Area, District, Boundaries, RAB, DOB, SOB, and State Office.

1.5. Subject Function Codes

BLM Subject Function codes that describe this dataset include:

- 1283 - Data Administration
- 9160 – Mapping Sciences

2.   Dataset Overview

2.1. Usage

Use this data set to depict the RAB on maps. Use the DISTRICT_NAME attribute to dissolve RABs to form District boundaries. Use the Polygons created from the data for various analytical purposes, including clipping data and calculating acreage. A derived layer handles modification of the boundary for cartographic display (smoothing of convoluted coast or river lines). See Layer Files (Publication Views) section for how they will be combined with RABs for analytical and display purposes.

Carefully document modification of the boundary for analysis. You will find planning area boundaries in a separate feature class, Plan Area Boundary, and described by that data standard.

Usually large plan areas, such as Resource Management Plan (RMP), are based on RAB with adjustments. Because it represents the extent of BLM administration units, RAB is one of the most used and most important themes in the BLM GIS database.

2.2. Sponsor/Affected Parties

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

District/RABs are defined by, and specific to, BLM. Matching interagency data across the landscape is not necessary. The RAB effects our non-governmental partners and the public to the extent that RAB indicates management responsibility on BLM lands

2.3. Relationship to Other Datasets

Use RAB, and its derivatives, (see Section 9 – Layer Files) extensively for mapping and analysis of other datasets.

Include District and Resource Area names associated with the BLM RAB data sets in the Geographic Names Information System (GNIS).

The RAB data standard is within the national BLM data standard for Administrative Units (ADMU). The RAB datasets are made available for inclusion into the national dataset on a regular basis or for specific data calls.

RAB is related to BLM Administrative Unit Codes. A set of codes based on Federal Personnel Payroll System (FPPS) Organization Codes, the authoritative source for organization codes, but is not limited to those codes.

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 Overview a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The ODF utilizes the concept of inheritance to define specific instances of data. The ODF divides all OR/WA resource-related data into three general categories:

- Activities
- Resources
- Boundaries

These general categories are broken into subcategories that inherit spatial characteristics and attributes from their parent categories. These subcategories may be further broken into groups that are more specific until you get to a basic dataset. Those basic datasets inherit all characteristics of all groups/categories above them and cannot be subdivided. Physical data populates the basic datasets. The 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. For additional information about the ODF, contact the State Data

Administrator.

Figure 1   **Oregon Data Framework Overview**
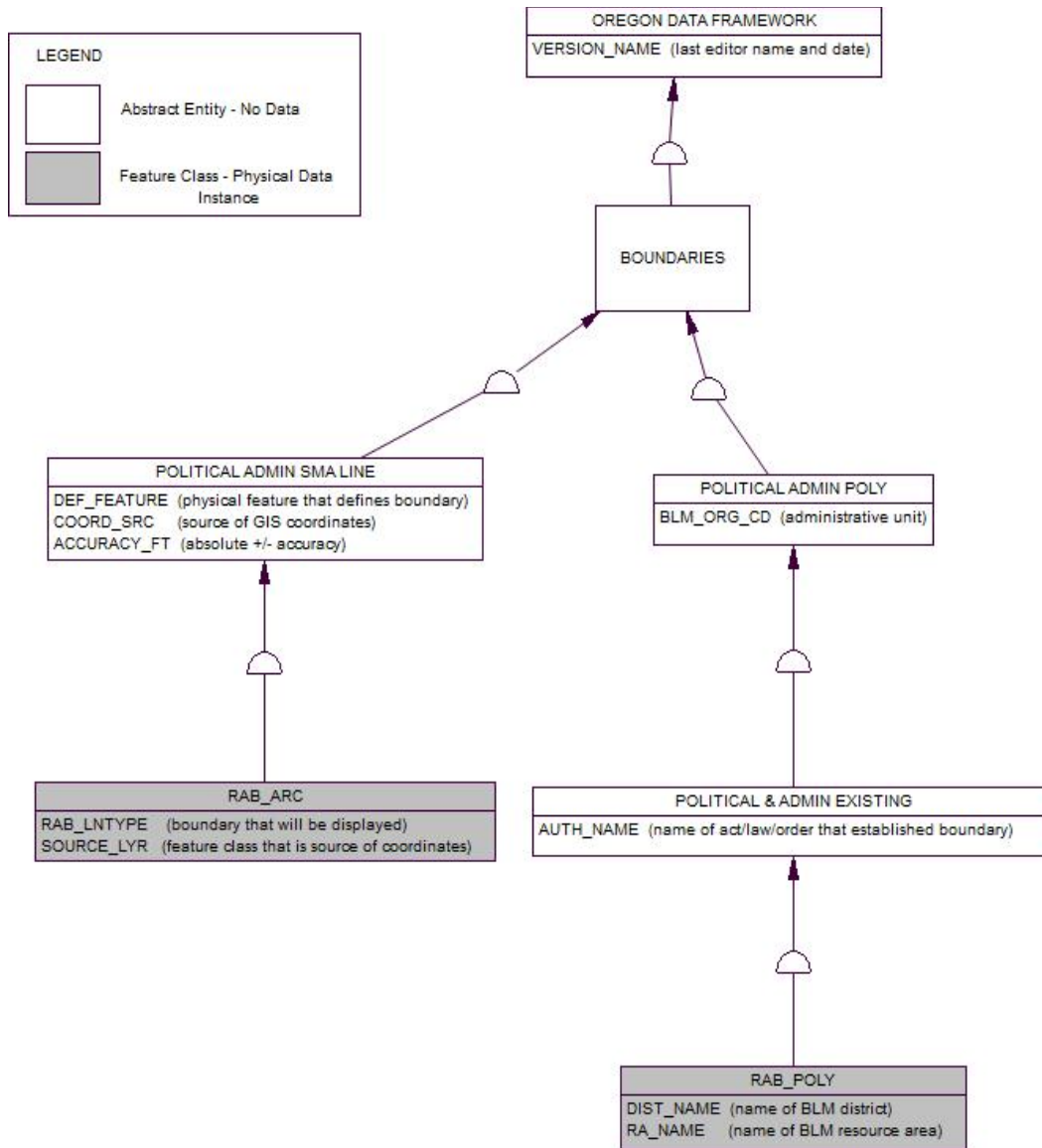
Figure 2   Data Organization Structure

For each feature class of the RAB group, the categories/groups it is part of are:

BLM Resource Area Polygon:

       Oregon Data Framework

          Boundaries

            Political & Admin

               Political & Admin Existing

                  RAB_POLY

BLM Resource Area Line:

Oregon Data Framework

Boundaries

PoliticalAdministrativeSpecialManagementAreaLine

RAB_ARC

2.5.   DOI Enterprise Architecture − Data Resource Model Relationship

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

- Data Subject Area: Geospatial

- Information Class: Location

For a complete list of all DOI Data Subject Areas and Information Classes, contact: For additional information about the ODF, contact the State Data Administrator.

3.   Data Management Protocols

3.1.   Accuracy Requirements

Legal descriptions define RABs following natural or man-made features and survey positions. The spatial data representing the features are refined over time to capture accurately their intended position. RAB will include the most accurate data available.

3.2.   Collection, Input, and Maintenance Protocols

The State Data Steward determines the correct boundary description and work with District Data Stewards and GIS Coordinators to obtain the best GIS data. The most common definition of Resource Area lines is section lines or subdivisions and, therefore, the most common GIS coordinate source is Cadastral National Spatial Data Infrastructure (CADNSDI). Other sources are National Hydrography Dataset (NHD) where the boundary follows stream or water body center-lines. In some cases RAB follow county boundary line data. In addition, the boundary dividing Resource Areas within a District may follow pasture lines in which case the GIS coordinate source will be the Grazing Allotment and Pasture theme (GRA). The GIS coordinate source would be Ground Transportation (GTRN) where the boundary follows road center-lines. The west boundary of the westernmost Districts is officially the 3-mile coastal waters boundary. Once the RAB boundaries are precisely defined, GIS line-work from the appropriate GIS theme is segmented as necessary and imported. Where lines from different GIS themes come together, the less precise boundary is snapped to the more precise. CADNSDI-based lines take precedence over other coordinate sources. Where a county (or state) boundary defines the RAB boundary segment, the county dataset provides the lines because it is already sourced to the best coordinates.

Once created, the RAB theme is the responsibility of the State Data Steward to ensure that it themes remain current. It is the responsibility of District Data Stewards and GIS Coordinators to keep the State Data Steward apprised of improvements to the GIS source data and to assist with updates. Provide proposed changes to the State Data Steward for inclusion in the theme. Incorporated any changes occurring in the data affecting the District Boundary after Washington Office approval.

3.3.   Update Frequency and Archival Protocols

The unit of processing for updating the RAB theme is the State. The editors will initiate transactions at the State Office. RAB lines change very infrequently, but data that is more accurate can become available at any time for other themes used to depict the boundaries. Rebuild the RAB to incorporate any newer data.

It is also the responsibility of the Data Steward to ensure that any database external to the Corporate GIS remains current. Since RAB is used in the majority of BLM management plans, analysis acres reported in planning documents will be inconsistent with acres calculated using an updated RAB. The District Planners and District Data Stewards determine when a plan amendment is warranted.

3.4.   Statewide Monitoring

The State Data Steward, the GIS Technological Lead and the District Data Stewards are responsible for reviewing the RAB theme across the state at least once per year.

4.   Resource Areas Boundaries (RAB) Schema

Attributes are listed in the order they appear in the geodatabase feature class. The order is indicative of the importance of the attribute for theme definition and use. List required core attributes first. List non-core adjacent to related attributes to avoid confusion in the GIS tables. List and fully describe attributes alphabetically in the Attribute Data Dictionary. There are no aliases unless specifically noted. Domains used in this data standard can be found in the Appendix. These are the domains at the time the data standard was approved. Domains can be changed without reissue of the data standard, so those shown in the Appendix may not be current. For additional information about the ODF, contact the State Data Administrator.

4.1.   RAB_POLY (Resource Area Boundary [RAB] polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
AUTH_NAME	String	80			
BLM_**ORG_CD**	String	5		Yes	dom_BLM_ORG_CD
DIST_NAME	String	20		Yes	dom_DIST_NAME
RA_NAME	String	20		Yes	dom_**RA_NAME**
VERSION_**NAME**	String	50	InitialLoad	Yes*	

*Automatically generated.

4.2.   RAB_ARC (Resource Area Boundry [RAB] Lines)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
DEF_FEATURE	String	25	UNKNOWN	Yes	dom_DEF_FEATURE
COORD_SRC	String	7	UNK	Yes	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
SOURCE_LYR	String	15		Yes	
RAB_**LNTYPE**	String	10		No	dom_**RAB_LINTYPE**
VERSION_**NAME**	String	50	InitialLoad	Yes*	

*Automatically generated.

5. Projection and Spatial Extent

All feature classes and feature datasets are in Geographic, NAD83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands in OR/WA. See the metadata for this data set for more precise description of the extent.

6. Spatial Entity Characteristics

6.1. Resource Area Boundaries Polygon (RAB_POLY)

Description:	Instance of Political & Admin Existing group.
Geometry:	Polygons that form a continuous "wall-to-wall" cover across OR/WA with no gaps or overlaps.
Topology:	Yes. RAB_POLY lines are coincident with RAB_ARC lines and together make the feature dataset, RAB.
Integration Requirements:	RAB arcs are commonly imported to create other GIS boundary themes (see RAB_ARC Integration Requirements below). If, instead, the RAB poly is imported then the DEF_FEATURE attribute on the corresponding RAB arc features must be transferred to the DEF_FEATURE of the receiving theme, unless "BLM_ADMIN" is more appropriate.

6.2. Resource Area Boundaries Line (RAB_ARC)

Description:	Instance of Existing Political Admin SMA Line group.
Geometry:	Simple, non-overlapping lines that are split between endpoints as needed.
Topology:	Yes. RAB_POLY lines are coincident with RAB_ARC lines and together make the feature dataset, RAB.
Integration Requirements:	RAB_ARC lines must remain coincident with the source data indicated by attributes DEF_FEATURE and COORD_SRC through either duplication or snapping. RAB arcs are commonly imported to create other GIS boundary themes. The DEF_FEATURE attribute is transferred to the receiving arc feature class except where "BLM_ADMIN" is the appropriate choice for DEF_FEATURE. In general, the lowest level defining feature (e.g. "SUBDIVISION" rather than "BLM_ADMIN") should be shown in the DEF_FEATURE attribute, but sometimes the boundary segment in the receiving feature class is truly defined as "Resource Area Boundary" not "subdivision" and, in that case, "BLM_ADMIN" is the appropriate choice. Any GIS theme with a DEF_FEATURE of BLM_ADMIN must be updated whenever RAB is updated.

7.   Attribute Characteristics and Definitions

In alphabetical order.

7.1.   **ACCURACY_FT**

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

7.2.   **AUTH_NAME**

Geodatabase Name	AUTH_NAME
BLM Structured Name	Authority_Text
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	RAB_POLY
Definition	The complete official name of the act/law/order/instruction that established or changes the boundary, e.g. "Steens Mountain Cooperative Management and Protection Act of 2000, Public Law 106-399". The authorizing entity and the effective date are required.
Required/Optional	Optional
Domain (Valid Values)	No domain.
Data Type	Variable Characters (80)

7.3. **BLM_ORG_CD**

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	Administrative_Unit_Organization_Code
Alias Name	None
Inheritance	Inherited from Entity SPECIAL MANAGEMENT AREA
Feature Class Use/Entity Table	RAB_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 resource area 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 resource area level.
Required/Optional	Required
Domain (Valid Values)	dom_BLM_ORG_CD Domain is a subset of the BLM national domain for organization codes. Only positions three thru seven of the national code are used (leading LL and trailing zeros are dropped).
Data Type	Characters (5)

7.4. **COORD_SRC**

Geodatabase Name	COORD_SRC
BLM Structured Name	Coordinate_Source_Code
Alias Name	None
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE
Feature Class Use/Entity Table	RAB_ARC
Definition	The actual source of the GIS coordinates for the polylines. If the line is copied from another theme, and already has COORD_SRC, it should be reviewed and may need to be changed for use in this dataset.
Required/Optional	Required
Domain (Valid Values)	dom_COORD_SRC
Data Type	Variable Characters (7)

7.5. DEF_FEATURE

Geodatabase Name	DEF_FEATURE
BLM Structured Name	Defining_Feature_Code
Alias Name	None
Inheritance	Inherited from Entity POLITICAL ADMIN SMA LINE
Feature Class Use/Entity Table	RAB_ARC
Definition	Physical feature that forms the boundary.
Required/Optional	Required
Domain (Valid Values)	dom_DEF_FEATURE
Data Type	Variable characters (25)

7.6. DIST_NAME

Geodatabase Name	DIST_NAME
BLM Structured Name	District_Name
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	RAB_POLY
Definition	Name of the BLM District that the Resource Area is a part of. Domain is a subset of the District Names associated with the BLM Organization Code master domain.
Required/Optional	Required
Domain (Valid Values)	dom_DIST_NAME
Data Type	Variable Characters (20)

7.7. RA_NAME

Geodatabase Name	RA_NAME
BLM Structured Name	BLM_Resource_Area_Name
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	RAB_POLY
Definition	Name of the Resource Area that the polygon represents.
Required/Optional	Required
Domain (Valid Values)	dom_RA_NAME
Data Type	Variable Characters (20)

7.8. **RAB_LNTYPE**

Geodatabase Name	RAB_LNTYPE
BLM Structured Name	Cartographic_Linetype_Code
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	RAB_ARC
Definition	The "highest" level boundary that will be displayed when more than one type of boundary coincide.
Required/Optional	Required
Domain (Valid Values)	dom_**RAB_LINTYPE**
Data Type	Variable Characters (10)

7.9. **SOURCE_LYR**

Geodatabase Name	SOURCE_LYR
BLM Structured Name	Source_Layer_Name
Alias Name	None
Inheritance	Not inherited
Feature Class Use/Entity Table	RAB_ARC
Definition	The name of the feature class from which features are duplicated. Required if COOR_ SOURCE is SOURCEL. Otherwise field is blank.
Required/Optional	Required (if applicable)
Domain (Valid Values)	No domain.
Data Type	Variable Characters (15)

7.10. **VERSION_NAME**

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Alias Name	None
Inheritance	Inherited from Entity OREGON DATA FRAMEWORK
Feature Class Use/Entity Table	RAB_POLY, RAB_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 last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation. Example: sfrazier.RAB-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	Variable Characters (50)

8. Layer Files (Publication Views)

8.1. General

Master corporate feature classes/datasets maintained in the edit database (currently ORSOEDIT) are "published" to the user database (currently ORSOVCTR) in several ways:

- Copied completely with no changes (replicated).

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

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

Layer files are not new data requiring storage and maintenance but point to existing data. They have appropriate selection and symbolization for correct use and display of the data. They provide the guidance for data published on the web. Layer files are created by simple, documented processes, and can be deleted and recreated at any time.

8.2. Specific to this Dataset

The layer files that have been developed as of the date of this standard are listed below. Additional ones may be added in the future.

- District Land.lyr – OR/WA BLM Districts to the coastline. Does not include the 3-mile limit (official State extent into the ocean) or islands in the ocean.

- RA Land.lyr – OR/WA BLM Resource Areas to the coastline. Does not include the 3-mile limit or islands in the ocean.

- State DOB.lyr – OR/WA and District boundaries including the 3-mile extent into the ocean and the ocean islands.

- State DOB RAB.lyr – OR/WA, District, Resource Areas boundaries including the 3-mile limit extent into the ocean and the ocean island.

Publication feature datasets are derivative products of the core master data (in this case RAB_Arc and RAB_Poly). They may also be combined with other feature classes to create this derivative product. In this case the following publication layer are created;

- SOB_POLY – The state office boundary created by dissolving all of the polygons. None of the attributes are retained. One new attribute is created; "SOB", with value "OR".

- DOB_POLY – The district office boundaries created by dissolving RAB_POLY on DOB_ORG_CD. Following attributes are retained; DIST_NAME, DOB_ORG_CD.

- DOB_LAND_POLY – The district office boundaries created by dissolving RAB_POLY on DOB_ORG_CD, intersecting OCEAN_POLY, and appending named islands. Following attributes are retained; DIST_NAME, DOB_ORG_CD, ISLAND_NAME.

- RAB_LAND_POLY – The resource area boundaries created by intersecting OCEAN_POLY, and appending named islands. Following attributes are retained; DIST_NAME, DOB_ORG_CD, DIST_NAME, RA_NAME, AUTH_NAME, ISLAND_NAME.

Additional steps may be required to attribute resource areas that are managed by the adjacent district office.

These feature classes contains all polygons pertinent to Resource Area and District Boundary query for display and analysis needs and will be the source pointed to by a variety of layer files.

All layers may be published to the public.

For mapping purposes, when lines coincide (State Boundaries, District Boundaries, Resource Boundaries) only the

highest level boundary is shown. A layer file may be created to standardize this representation by using the RAB_LNTYPE attribute on RAB_ARC.

9.   Editing Procedures

9.1. Managing Overlap

"Overlap" means there is, 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**.

The POLY/ARC feature dataset means that there is a polygon feature class with an arc feature class that represents the perimeter of the polygon and must be kept coincident with the polyline.

In this discussion, a polygon feature may consist of more than one polygon and an arc feature may consist of more than one arc. The feature would have multiple records in the spatial table (with identical attributes). Multipart features are not allowed. Multipart 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 multipart features. Multipart features can be more difficult to edit, query, and select, and can adversely impact overall performance.

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

- Overlapping Polygons, where polygons are part of a POLY/ARC feature dataset. Topology rules apply only to the POLY/ARC relationship. (Polylines in the POLY feature class covered by arcs in the ARC feature class and vice versa; arcs must not have dangles, intersect, self-overlap, or overlap adjacent arcs) In the ODF, this occurs only in AVY_PLAN, where any number of projects or plans might overlap, or in proposed boundary datasets (like ACEC_P). Where a portion of a new activity plan or a proposed boundary is the same as another, the same line segment(s) are used for both polygons. In other words, one line, not duplicate lines on top of each other. In AVY_PLAN, a new PLANID creates a new polygon which may overlap an existing activity plan. In proposed boundary datasets, different alternatives might create polygons that overlap each other.

- Overlapping Polygons where polygons are a stand-alone feature class. There are no topology rules for this situation. Examples from the ODF include:

  o Species Occurrence Group: These are distinct sites defined by species and time. A different species create 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.

  o 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.

  o Treatment Activity Group: Within each feature class, an overlapping treatment area is always created for a new date. 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, then an overlapping treatment area is created. This group also includes proposed treatments which could overlap existing treatments and have additional overlap created by different treatment alternatives.

  o Land Status Encumbrances Group: A new polygon is created for a change in case file number even if it is the same area.

- Overlapping Arcs, where arcs are a stand-alone feature class. There are no topology rules for this situation. In the ODF, this only occurs in feature class ESMTROW_ARC.

- Overlapping Points. Not generally a problem because they have no spatial extent, but still should be checked, and duplicates points deleted.

9.2. Editing and Quality Control Guidelines

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

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."

If the dissolve tool is used on polygons or arcs, the "Create multipart features" should be unchecked.

9.3. Snapping Guidelines

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:

1. Landlines Layer (CADNSDI points/lines),

2. DLG or other SOURCEL,

3. DEM,

4. MAP .

 When snapping to the data indicated in COORD_SRC (as opposed to duplicating with copy/paste), be sure there are exactly the same number of vertices in the target and source theme arcs. Tracing arc or polygon segments automatically reproduces all vertices.

 When the DEF_FEATURE is "SUBDIVISION," trace arc or polygon segments, or snap the line segment to CADNSDI points and make sure there are the same number of vertices in the line as CADNSDI points.

On themes with ACCURACY_FT, but no COORD_SRC or DEF_FEATURE, the line with better ACCURACY_FT is kept unaltered.

10. Abbreviations and Acronyms Used

Does not include abbreviations/acronyms used as codes for particular data attributes

Table 2 Abbreviations/Acronyms Used

Abbreviations	Descriptions
BLM	Bureau of Land Management
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
DOB	BLM District Office Boundary
FOIA	Freedom of Information Act
GIS	Geographic Information System
GNIS	Geographic Names Information System
IDP	Interdisciplinary
NAD	North American Datum
NARA	National Archives and Records Administration
NOC	National Operations Center
ODF	Oregon Data Framework
OR/WA	Oregon /Washington
RA	Resource Area
RAB	BLM Resource Area Boundary
RMP	Resource Management Plan
SDE	Spatial Data Engine
SMA	Special Management Area
SOB	BLM OR/WA State Office Boundary

A. APPENDIX: DOMAINS (VALID VALUES)

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

A.1. dom_BLM_ORG_CD

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

Code	Value
OR000	Oregon/Washington BLM
ORB00	Burns District Office
ORB05	Three Rivers Field Office
ORB06	ORB06 − Andrews Field Office
ORC00	ORC00 − Coos Bay District Office
ORC03	ORC03 − Umpqua Field Office
ORC04	ORC04 − Myrtlewood Field Office
ORL00	ORL00 − Lakeview District Office
ORL04	ORL04 − Klamath Falls Field Office
ORL05	ORL05 − Lakeview Field Office
ORM00	ORM00 − Medford District Office
ORM05	ORM05 − Butte Falls Field Office
ORM06	ORM06 − Ashland Field Office
ORM07	ORM07 − Grants Pass Field Office
ORN00	ORN00 − Northwest Oregon District Office
ORN01	ORN01 − Cascades Field Office
ORN02	ORN02 − Marys Peak Field Office
ORN03	ORN03 − Siuslaw Field Office
ORN04	ORN04 − Tillamook Field Office
ORN05	ORN05 − Upper Willamette Field Office

Code	Value
ORP00	ORP00 − Prineville District Office
ORP04	ORP04 − Central Oregon Field Office
ORP06	ORP06 − Deschutes Field Office
ORR00	ORR00 − Roseburg District Office
ORR04	ORR04 − Swiftwater Field Office
ORR05	ORR05 − South River Field Office
ORV00	ORV00 − Vale District Office
ORV04	ORV04 − Malheur Field Office
ORV05	ORV05 − Baker Field Office
ORV06	ORV06 − Jordan Field Office
ORW00	ORW00 − Spokane District Office
ORW02	ORW02 − Wenatchee Field Office
ORW03	ORW03 − Border Field Office

A.2. dom_COORD_SRC

Coordinate Source Code. The source of the geographic coordinates (lines, points, polygons).

Code	Value
CADNSDI	CADNSDI – Lines from or snapped to the CADNSDI dataset
CFF	CFF – Lines duplicated or buffered from Cartographic Feature Files
DEM	DEM − Digital Elevation Model (30m or better accuracy) used for creation of contours
DLG	DLG − Lines duplicated or buffered from (24K scale accuracy) USGS Digital Line Graphs Typical Accuracies: 40 feet
DIS	DIS – Lines generated to connect discontinuous features
DLG	DLG – Lines duplicated or buffered from USGS Digital Line Graphs
DOQ	DOQ – Screen digitized linework over Digital Orthoquad backdrop
DRG	DRG − Screen digitized linework over Digital Raster Graphic (USGS) backdrop

Code	Value
GCD	GCD − Lines snapped to Geographic Coordinate Database Points
GPS	GPS − Lines obtained from a Global Positioning System device
IMG	IMG – Linework derived from interpretation of non-photographic imagery
MAP	MAP − Digitized line work from hardcopy map
MTP	MTP − Lines duplicated from Digital Master Title Plat
SOURCEL	SOURCEL − Source layer from BLM GIS
SRV	SRV − Survey methods were used to create the linework
TIGER	TIGER – Tiger data
TRS	TRS – Coordinates only given as a legal description (township, range, section)
UNK	UNK − Unknown coordinate source
WOD	WOD – WODDB (Western Oregon Digital Database) Photogrammetric

A.3. dom_DEF_FEATURE

Defining Feature Code. Physical features or administrative lines that define an official boundary.

Code	Value
BLM_ADMIN	BLM_ADMIN − Bureau of Land Management administrative boundary
COUNTY	COUNTY − County boundary
FOREST_SERVICE_ADMIN	FOREST_SERVICE_ADMIN − Forest Service administrative boundaries
GRAZING_BOUNDARY	GRAZING_BOUNDARY − Pasture or other administrative grazing boundary
HU	HU – Hydrologic Unit
NLCS_BOUNDARY	NLCS_BOUNDARY − Wilderness, Wild and Scenic River, Historic District or other NLCS designation boundary
POINT-TO-POINT	POINT-TO-POINT − Boundary defined by a straight line segment between two points
POWERLINE	POWERLINE − Power transmission line
RIDGE	RIDGE − Ridge

Code	Value
RIGHT-OF-WAY	RIGHT-OF-WAY − A legal right of way forms boundary
ROAD	ROAD − Routes managed for use by low or high-clearance (4WD) vehicles, but not ATV's
ROAD_OFFSET	ROAD_OFFSET − Boundary is offset from a road (not a consistent buffer)
SHORELINE	SHORELINE − Lake, pond, reservoir, bay or ocean shoreline or meander line
SUBDIVISION	SUBDIVISION − Public Land Survey System derived aliquot (1/2's, 1/4's) parts and lots
UNKNOWN	UNKNOWN − Defining feature is unknown
WATERCOURSE	WATERCOURSE − Stream, river, ditch, canal or drainage centerline
WATERCOURSE_OFFSET	WATERCOURSE_OFFSET – Boundary is offset from a watercourse (not a consistent buffer)

A.4. dom_DIST_NAME

District Name. The name of OR/WA BLM districts.

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

A.5. dom_RA_NAME

BLM Resource Area Name. The name of Resource Areas (management units) within OR/WA BLM.

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

A.6. dom_RAB_LINTYPE

Cartographic Linetype Code. Highest level boundary displayed when more than one type coincide.

Code	Value
DOB	DOB - District Boundary
DOBEXT	DOBEXT - Coast Extension for District Boundary
RAB	RAB - Resource Area Boundary
RABEXT	RABEXT - Coast Extension for Resource Area Boundary
SOB	SOB - OR/WA State Office Boundary
SOBOCEAN	SOBOCEAN - 3 mile Offshore Boundary for State Office Boundary