

RESOURCE AREA BOUNDARIES

SPATIAL DATA STANDARD REVISION



RESOURCE AREA BOUNDARIES**TABLE OF CONTENTS**

SECTION	TITLE	PAGE
1	General Information	4
1.1	Roles and Responsibilities	4
1.2	FOIA Category	5
1.3	Records Retention Schedule	5
1.4	Security/Access/Sensitivity	5
1.5	Keywords	5
2	Data Set Overview	5
2.1	Description	5
2.2	Usage	6
2.3	Sponsor/Affected Parties	6
2.4	Relationship to Other Datasets	6
2.5	Data Category/Architecture Link	6
2.6	Relationship to the Department of the Interior Enterprise Architecture – Data Resource Model	7
2.7	RAB Data Organization/Structure	8
3	Data Management Protocols	9
3.1	Accuracy Requirements	9
3.2	Collection, Input, and Maintenance Protocols	9
3.3	Update Frequency and Archival Protocols	9
3.4	Statewide Monitoring	10
4	RAB Schema (Simplified)	10
4.1	Resource Area Boundary Polygon (RAB_POLY)	10
4.2	Resource Area Boundary Lines (RAB_ARC)	10
5	Projection and Spatial Extent	11
6	Spatial Entity Characteristics	11
7	Attribute Characteristics and Definitions	12
7.1	ACCURACY_FT	12
7.2	AUTH_NAME	12
7.3	BLM_ORG_CD	13
7.4	COORD_SRC	13
7.5	DEF_FEATURE	14
7.6	DIST_NAME	14

7.7	RA_NAME	14
7.8	RAB_LNTYPE	15
7.9	SOURCE_LYR	15
7.10	VERSION_NAME	15
8	Associated Files or Databases	16
9	Layer Files (Publication Views)	16
9.1	General Background	16
9.2	Specific to this Dataset	16
10	Editing Procedures	17
10.1	Managing Overlap	17
10.2	Editing and Quality Control Guidelines	18
10.3	Snapping Guidelines	19
11	Oregon/Washington Data Framework Overview	20
12	Abbreviations and Acronyms Used in this Standard	21
Appendix A	Domains (Valid Values)	22
A.1	BLM_ORG_CD	22
A.2	COORD_SRC	23
A.3	DEF_FEATURE	23
A.4	DIST_NAME	24
A.5	RA_NAME	24
A.6	RAB_LNTYPE	25

1. GENERAL INFORMATION

Dataset (Theme) Name: Resource Area Boundaries
 Dataset (Feature Class): RAB_POLY, RAB_ARC

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Stewards	The State Data Steward, Corey Plank at 503-808-6145, is responsible for approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential privacy issues and ensuring that data is managed 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 also reviews geospatial metadata for completeness and quality.
Lead GIS Specialist	The Lead GIS Specialist, Corey Plank at 503-808-6145, 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 specialist coordinates with system administrators and GIS coordinators to manage the GIS databases. The lead GIS specialist works with data editors to make sure data is being input into the Spatial Data Engine (SDE) consistently and in accordance with the established data standard. The Lead GIS Specialist is also a resource for the editors when they have questions or when they are new to editing a particular data set, and can help answer questions about how to query and display the data set for mapping and analysis.
State Data Administrator	The State Data Administrator, Stanley Frazier at 503-808-6009, provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures that defined processes for development of data standards and metadata are followed, and that they are consistent and complete. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator also coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State Records Administrator	The acting State Records Administrator, Jan McCormick at 503-808-6675, 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 also ensures that data has been classified under the proper records retention schedule and determines appropriate Freedom of Information Act category.

Table 1 Role and Responsibilities

1.2 FOIA CATEGORY

Public

1.3 RECORDS RETENTION SCHEDULE

GRS BLM 20/52 (Electronic Records/Geographic Information Systems)

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).

1.4 SECURITY/ACCESS/SENSITIVITY

The Resource Area Boundaries (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 Oregon/Washington (OR/WA) Bureau of Land Management (BLM)).

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

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

1.5 KEYWORDS

Keywords that can be used to locate this dataset include: Resource Area, District, Boundaries, RAB, DOB, SOB, State Office.

2. DATASET OVERVIEW

2.1 DESCRIPTION

The Resource Area Boundaries (RAB) data standard contains requirements for BLM administrative boundaries within the BLM “State” of Oregon which includes both Oregon and Washington. BLM Resource Areas are nested within BLM Districts* which are nested within the BLM State. The BLM Oregon State Office encompasses the entire political jurisdiction of the States of Oregon and Washington. A single BLM District may cross the political boundary between Oregon and Washington. 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 Oregon State Director where the boundary lines are not coincident with the official District line.

Coastline and Ocean islands (needed for a variety of queries and analyses) will be stored in a separate feature class and not included in the RAB dataset. See the Publication Layers section for how they will be included with Resource Area Boundaries for analytical and display purposes.

Boundary definitions reference features or positions depicted in other GIS layers. The data from those layers is copied to create the Resource Area Boundary layer. Vertical integration with other layers will be maintained to ensure the most accurate representation.

* There is one place where the Resource Area is not nested within the District. At the southernmost portion of the boundary between the Coos Bay and Medford District a portion of Coos Bay is managed by Medford's Grants Pass Resource Area. In other words, the administrative Resource Area boundary crosses the official District boundary.

2.2 USAGE

This data set is used for depicting the Resource Area Boundary on maps. Resource Area boundaries are dissolved to form District boundaries by using the DISTRICT_NAME attribute. Polygons created from the data are used for various analytical purposes, including clipping data and calculating acreage. Modification of the boundary for cartographic display (smoothing of convoluted coast or river lines) is handled by a derived layer (see PUBLICATION VIEWS). Modification of the boundary for analysis must be carefully documented. Planning area boundaries will be found in a separate feature class, Plan Area Boundary, and described by that data standard. Large plan areas such as Resource Management Plan (RMP) areas are usually based on RAB, but 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.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this data set is the Deputy State Director, Management Services. District/Resource Area Boundaries are defined by and specific to BLM. Matching interagency data across the landscape is not necessary. Our non-governmental partners and the general public are affected to the extent that RAB indicates management responsibility on BLM lands

2.4 RELATIONSHIP TO OTHER DATASETS

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

2.5 DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the Oregon Data Framework (ODF). The ODF utilizes the concept of inheritance to define specific instances of data. All OR/WA resource-related data are divided into three general categories: Activities, Resources, and 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 a 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 that all data of that type must follow). See the ODF Overview (figure 2) for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The RAB entities are highlighted. For additional information about the ODF, contact:

Stan Frazier
OR/WA State Data Administrator
Bureau of Land Management
P.O. Box 2965
Portland, OR 97208
503-808-6009

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

2.6 RELATIONSHIP TO THE DEPARTMENT OF THE INTERIOR ENTERPRISE ARCHITECTURE - DATA RESOURCE MODEL

The DOI's 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

For a complete list of all DOI Data Subject Areas and Information Classes, contact:

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503-808-6009

2.7 RAB DATA ORGANIZATION / STRUCTURE

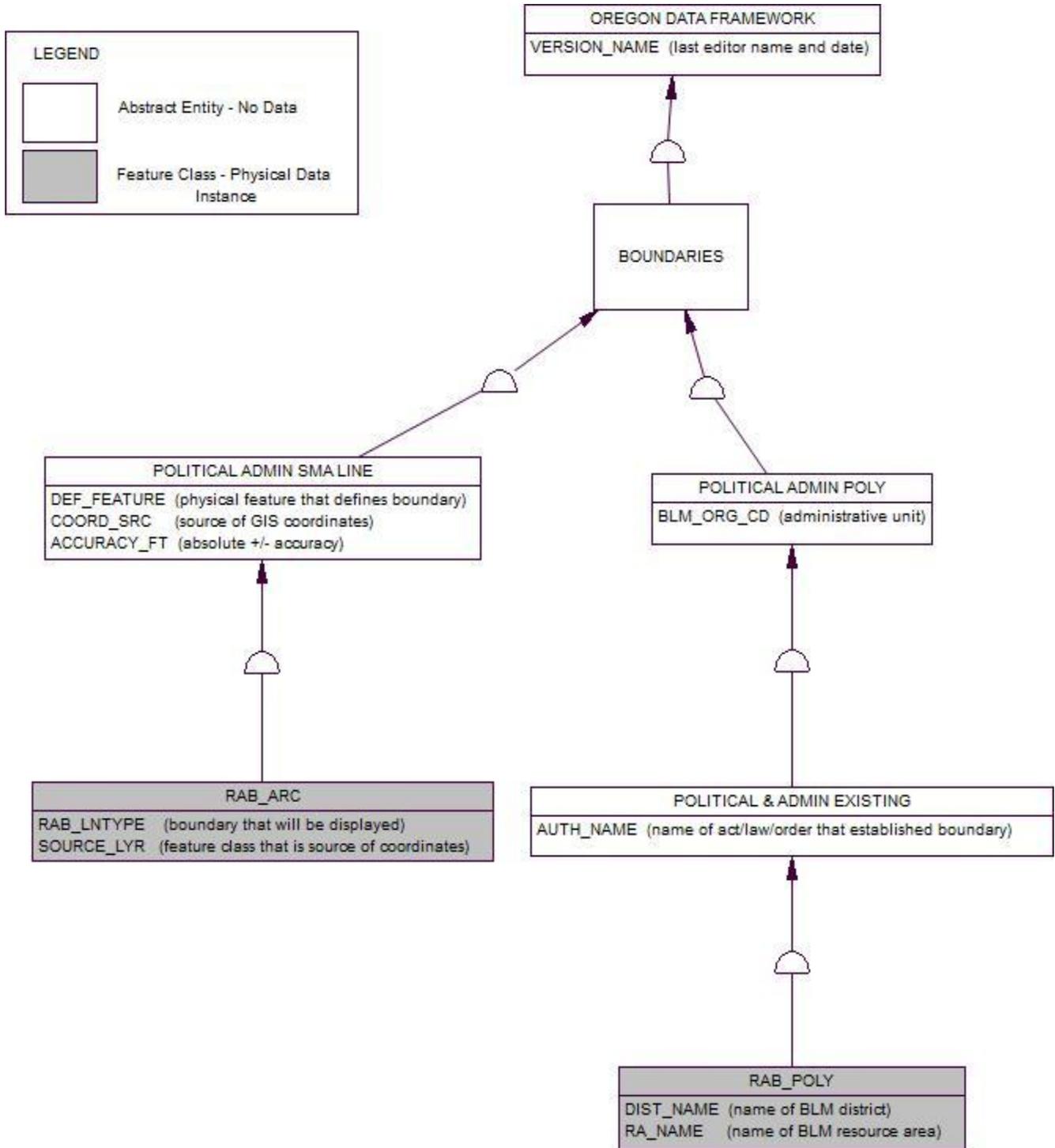


Figure 1 Data Organization Structure

3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

Resource Area Boundaries are defined by legal descriptions following natural or man-made features and survey positions. The spatial data representing the features are refined over time to more accurately capture their intended position. Resource Area Boundaries will include the most accurate data available.

3.2 COLLECTION, INPUT, AND MAINTENANCE PROTOCOLS

The State Data Steward will determine 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 watercourse data where the boundary follows stream or water body center lines or 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 linework 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 the RAB theme has been created, it 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. Proposed changes will be provided to the State Data Steward for inclusion in the theme. Any changes occurring in the data affecting the District Boundary will be incorporated after Washington Office approval.

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

The unit of processing for updating the RAB theme is the State. Transactions will be initiated by editors at the State Office. RAB lines are expected to change very infrequently. However, more accurate data may become available at any time for other themes used to depict the boundaries. Resource Area Boundaries will be rebuilt 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. It is the responsibility of District Planners and District Data Stewards to determine when a plan amendment is warranted.

3.4 STATEWIDE MONITORING

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

4. RAB 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. In general, core, required attributes are listed first, but non-core may be listed adjacent to related attributes to avoid confusion in the GIS tables. Attributes are listed alphabetically, and more fully described in the Attribute Data Dictionary, starting on page 12. 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 re-issue of the data standard, so those shown in the Appendix may not be current. Contact the OR/WA State Data Administrator for the current lists.

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4.1 RAB_POLY (RAB polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
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
AUTH_NAME	String	80			
VERSION_NAME	String	50	InitialLoad	Yes*	

*Automatically generated.

4.2 RAB_ARC (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_LINTYPE	String	10		No	dom_RAB_LNTYPE
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 the states of Oregon and Washington. See the metadata for this data set for more precise description of the extent.

6. SPATIAL ENTITY CHARACTERISTICS

RESOURCE AREA BOUNDARIES POLYGON (RAB_POLY)

Description: Instance of Political & Admin Existing group.

Geometry: Polygons that form a continuous “wall-to-wall” cover across Oregon and Washington 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).

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 either through 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 DEFINITION (In alphabetical order)

7.1 ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	Accuracy_Feet_Measure
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE
Feature Class Use	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
Inheritance	Not inherited
Feature Class Use	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
Inheritance	Inherited from Entity SPECIAL MANAGEMENT AREA
Feature Class Use	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, and 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
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE
Feature Class Use	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
Inheritance	Inherited from Entity POLITICAL ADMIN SMA LINE
Feature Class Use	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
Inheritance	Not inherited
Feature Class Use	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
Inheritance	Not inherited
Feature Class Use	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
Inheritance	Not inherited
Feature Class Use	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_LNTYPE
Data Type	Variable Characters (10)

7.9 SOURCE_LYR

Geodatabase Name	SOURCE_LYR
BLM Structured Name	Source_Layer_Name
Inheritance	Not inherited
Feature Class Use	RAB_ARC
Definition	The name of the feature class from which features are duplicated. Required if COOR_SOURCE is SOURCECEL. 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
Inheritance	Inherited from Entity OREGON DATA FRAMEWORK
Feature Class Use	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. ASSOCIATED FILES OR DATABASES

District and Resource Area names associated with the BLM Resource Area Boundary data sets must be included in the Geographic Names Information System (GNIS).

9. LAYER FILES (PUBLICATION VIEWS)

9.1 General

Master corporate feature classes/datasets maintained in the edit database (currently orsoedit) are “published” to the user database (currently orsovctr) in several ways:

- A. Copied completely with no changes (replicated).
- B. Copied with no changes except to omit one or more feature classes from a feature dataset.
- C. 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.

9.2 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 Publication data for RAB will be a replication of the RAB dataset plus a feature class called RAB_OCEAN created by merging RAB_POLY and OCEAN_POLY (described in a separate data standard). This second feature class contains all polygons pertinent to Resource Area/District Boundary query, display and analysis needs and will be the source pointed to by a variety of layer files.

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.

10. EDITING PROCEDURES

10.1 MANAGING OVERLAP (General Guidance)

“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). 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, 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:

- A. 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.
- B. Overlapping Polygons where polygons are a stand-alone feature class. There are no topology rules for this situation. Examples from the ODF include:
1. 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.
 2. 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.
 3. 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.
 4. Land Status Encumbrances Group: A new polygon is created for a change in case file number even if it is the same area.
- C. 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.
- D. Overlapping Points. Not generally a problem because they have no spatial extent, but still should be checked, and duplicates points deleted.

10.2 Editing and Quality Control Guidelines

Checking for **undesired** duplicates is critical. Polygons or arcs that are 100 percent duplicate can be easily 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.

10.3 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 Landlines Layer (CADNSDI points/lines) first, with DLG or other 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 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.

11. OREGON DATA FRAMEWORK OVERVIEW

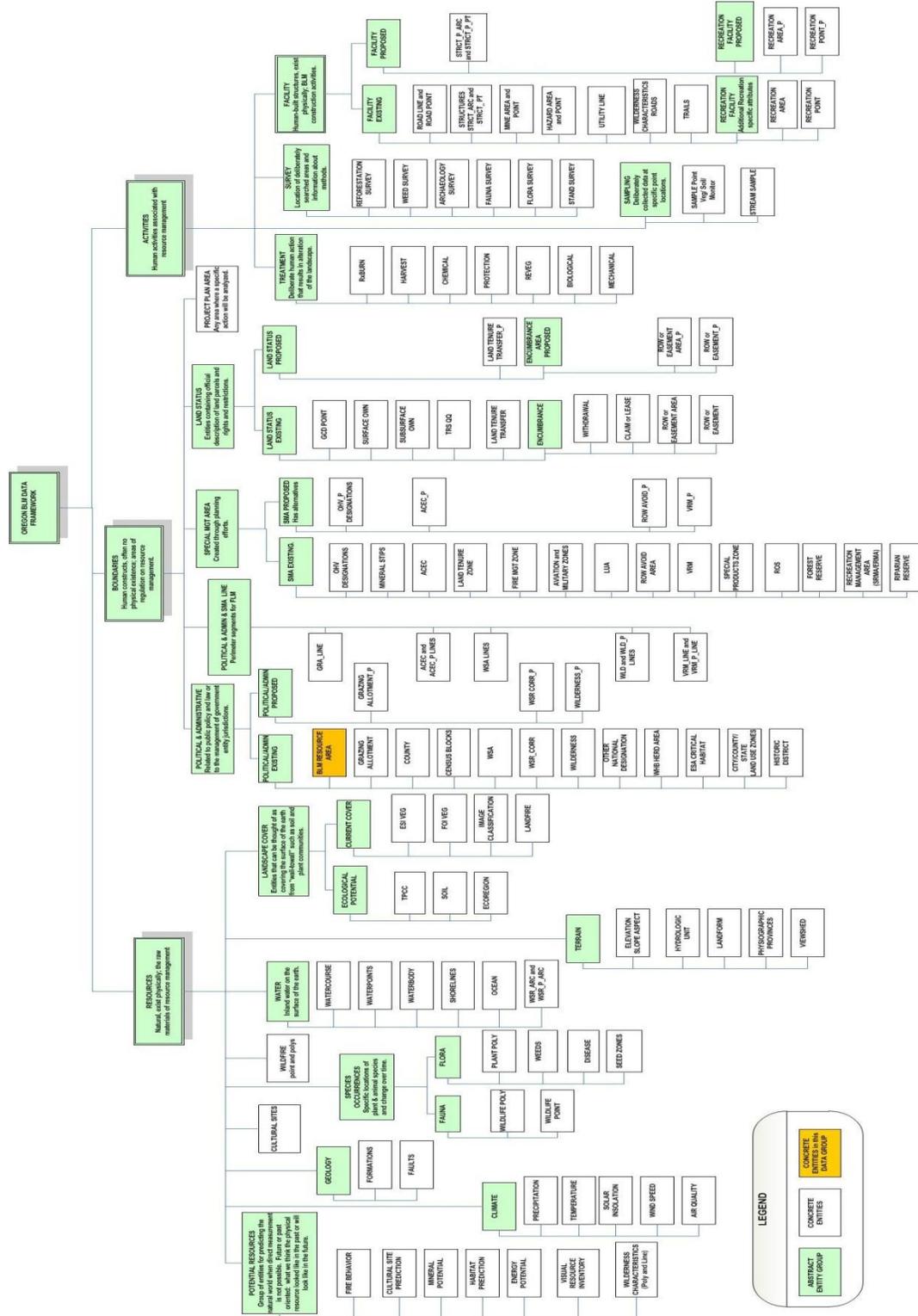


Figure 2 Oregon Data Framework Overview

12. ABBREVIATIONS AND ACRONYMS USED

(does not include abbreviations/acronyms used as codes for particular data attributes)

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
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

Table 2 Abbreviations/Acronyms Used

APPENDIX A: DOMAINS (VALID VALUES)

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

Stanley Frazier
 OR/WA State Data Administrator
 Bureau of Land Management
 P.O. Box 2965
 Portland, OR 97208
 503-808-6009

A.1 BLM_ORG_CD

OR000	OR000 – Oregon/Washington BLM
ORB00	ORB00 – Burns District Office
ORB05	ORB05 – Three Rivers Field Office
ORB06	ORB06 – Andrews Field Office
ORC00	ORC00 – Coos Bay District Office
ORC03	ORC03 – Umpqua Field Office
ORC04	ORC04 – Myrtlewood Field Office
ORE00	ORE00 – Eugene District Office
ORE05	ORE05 – Siuslaw Field Office
ORE06	ORE06 – Upper Willamette 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
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
ORS00	ORS00 – Salem District Office
ORS04	ORS04 – Cascades Field Office
ORS05	ORS05 – Marys Peak Field Office
ORS06	ORS06 – Tillamook 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 COORD_SRC

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
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 DEF_FEATURE

BLM_ADMIN	BLM_ADMIN – Bureau of Land Management administrative
COUNTY	COUNTY – County boundary
FOREST_SERVICE_ADMIN	FOREST_SERVICE_ADMIN – Forest Service administrative
GRAZING_BOUNDARY	GRAZING_BOUNDARY – Pasture or other administrative grazing
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
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 DIST_NAME

Burns District	Burns District
Coos Bay District	Coos Bay District
Eugene District	Eugene District
Lakeview District	Lakeview District
Medford District	Medford District
Prineville District	Prineville District
Roseburg District	Roseburg District
Salem District	Salem District
Spokane District	Spokane District
Vale District	Vale District

A.5 RA_NAME

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 RAB_LINTYPE

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