

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

SPATIAL DATA STANDARD REVISION



Honeycombs Research Natural Area

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1. GENERAL INFORMATION

Dataset (Theme) Name: Areas of Critical Environmental Concern

Dataset (Feature Class): ACEC_POLY, ACEC_ARC, ACEC_P_POLY, ACEC_P_ARC

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Stewards	The State Data Steward, Mark Mousseux at 541-618-2232, 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 reviews geospatial metadata for completeness and quality.
Lead GIS Specialist	The Lead GIS Specialist, Pamela Keller at 541-573-4486, 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. This person is a resource for the editors when they have questions or when they are new to editing a particular data set. In addition, the lead GIS specialist 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 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 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 Areas of Critical Environmental Concern (ACEC) 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. A Privacy Impact Assessment has been completed.

1.5 KEYWORDS

Keywords that can be used to locate this dataset include: Areas of Critical Environmental Concern, ACEC, Outstanding Natural Area, ONA, Research Natural Area, and RNA.

2. DATASET OVERVIEW

2.1 DESCRIPTION

The ACEC are designated areas where special management attention is needed to protect important historic, cultural and scenic values, fish or wildlife resources, or other natural systems or processes; or to protect human life and safety from natural hazards. The ACECs are proposed in BLM Resource Management Plans. Approval by the BLM State Director, of the plan or plan amendment officially designates ACECs.

This ACEC data standard contains the definition and requirements for the ACEC geospatial data themes. It contains ACEC including Research Natural Areas (RNAs), and Outstanding Natural Areas (ONAs) in BLM OR/WA. It describes the design standard for both existing (ACEC) and proposed or potential (ACEC_P). To be considered as a potential ACEC, the area must require special management attention and also meet the criteria of relevance and importance established in the BLM Manual 1613. The ACECs may be proposed by organizations outside of BLM. The RNAs, in particular, are created in cooperation with the Oregon Natural Heritage Program. As described in the manual, proposed ACECs

that meet relevance and importance criteria, and require special management attention, will be placed under interim management until an Resource Management Plan (RMP) or RMP Amendment determines designation.

2.2 USAGE

The Federal Land Policy and Management Act require the BLM to give priority to designation and protection of ACECs. The ACECs may place restrictions on use of BLM lands. Even a potential ACEC may require temporary management considerations. The ACEC boundaries are frequently used in geospatial analysis for natural resource management planning. The ACEC management prescriptions and restrictions apply only to BLM lands and “inholdings” are not uncommon. It is important that these non-BLM polygons be appropriately excluded in analysis. The ACEC polygons should only capture BLM lands. Inholdings, either federal or private, should not be part of the polygon.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this data set is the Deputy State Director, Resource Planning, Use and Protection. The ACECs are defined by and specific to the BLM. Matching interagency data across the landscape is not necessary. Our non-governmental partners and the general public are affected to the extent that ACECs are a land allocation on federal lands that determine BLM management of those lands. Implementation of an RMP that includes ACEC designations, may preclude certain activities within the designation and in surrounding federal lands because of potential impact to the ACEC. Our partners who were involved in the creation and designation of ACECs, have an interest in accurate maintenance of the GIS themes. Accurate representation and maintenance of RNA boundaries is especially important to the Oregon Natural Heritage Program and other research entities.

2.4 RELATIONSHIP TO OTHER DATASETS

Five RNAs in OR/WA are also Instant Study Areas (ISAs) found on the Wilderness Study Area dataset. The ISA boundary may not be identical to the current RNA, boundary which may have changed since the ISA designation.

2.5 DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the 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 you get to a basic data set that cannot be further subdivided. 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 ACEC 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 ACEC group, the categories/groups it is part of are:

ACEC_POLY

ODF

Boundaries

Special Management Areas

Special Management Areas Existing

ACEC_POLY

Special Management Areas Proposed

ACEC_P_POLY

ACEC_ARC

ODF

Boundaries

Political Admin SMA Line

ACEC_ARC

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

2.7 ACEC DATA ORGANIZATION / STRUCTURE

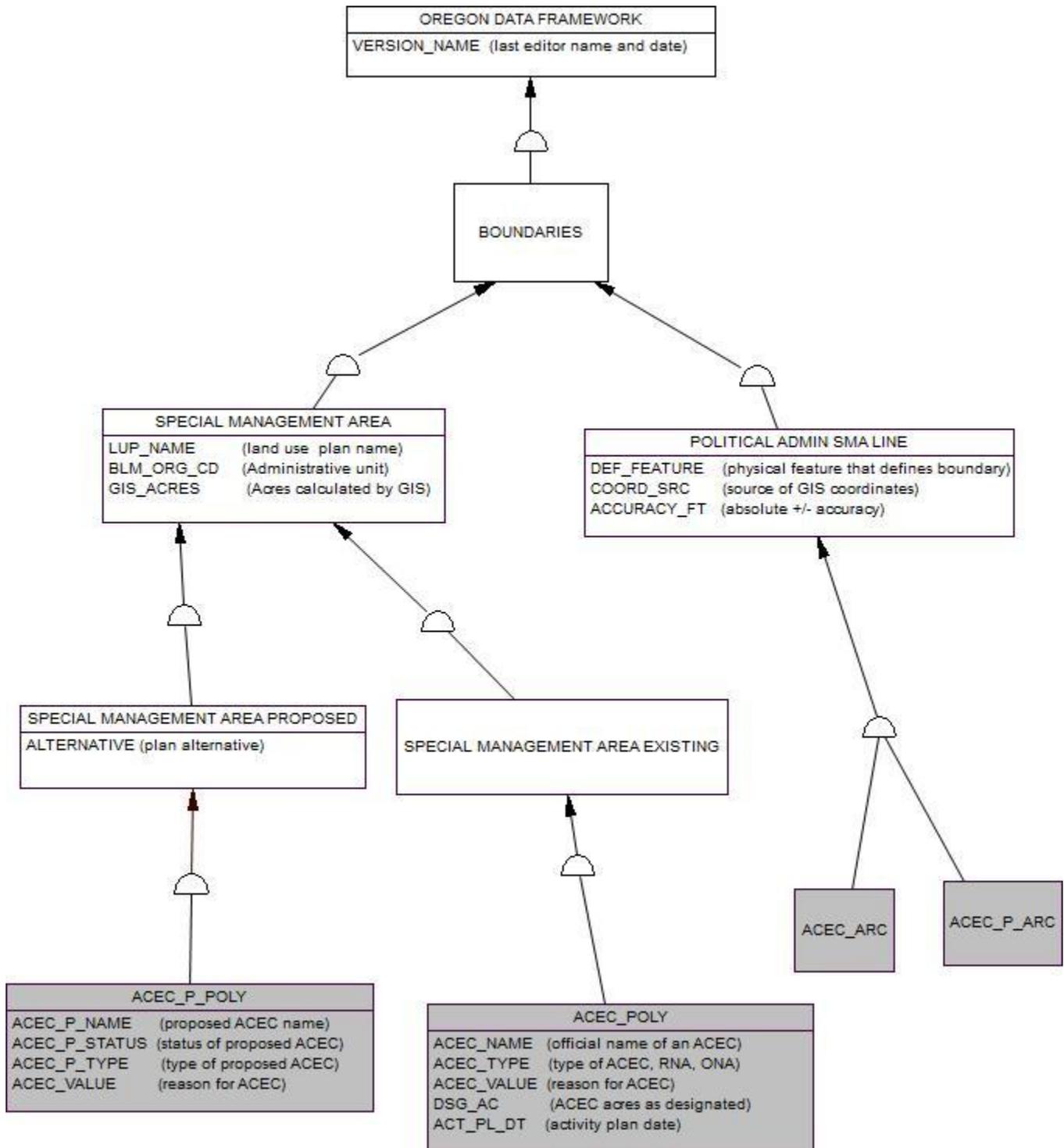


Figure 1 Data Organization Structure

3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

Boundary themes (ACEC is a boundary theme) require a higher level of accuracy than other themes. This is because those boundaries often divide very different management and regulation. Some boundaries can by their nature or definition, be accurately located and others cannot. Special Management Areas (including ACEC) and Political and Administrative boundary perimeter lines must be defined and segmented accordingly. Individual boundary segment attributes (Feature Level Metadata) provide the information needed to answer questions about why a boundary line is where it is and how accurately it is located. These theme groups, therefore, require feature class pairs (feature datasets), polygons for the area, and lines for the perimeter.

The ACEC boundaries are, in general, very accurately defined and represented in GIS. Boundary definition (DEF_FEATURE) is critical. The GIS representation (COORD_SRC and ACCURACY_FT) of the boundary is a combination of sources and dependent on the accuracy of these components, but should be maintained at the highest accuracy practical.

3.2 COLLECTION, INPUT, AND MAINTENANCE PROTOCOLS

The district Data Steward will define the ACEC boundary and work with the GIS specialist to ensure that the appropriate GIS coordinate sources are used and that only federal land is included. The most common method of ACEC line capture is to import, create buffers from or snap to existing GIS data, especially Cadastral National Spatial Data Infrastructure (CADNSDI) parcels. Other methods are to manuscript boundary lines using large-scale paper maps or orthophoto background for orientation.

The ACEC_P (proposed or potential ACEC) is developed during the RMP planning process but nomination and consideration can happen at any time. Nominations are often received from organizations outside the BLM. There will likely be different boundaries proposed for different RMP alternatives. The proposed boundaries may overlap each other (distinguished by different value in the ALTERNATIVE attribute), but should not overlap existing designated ACECs. Once the RMP is signed, ACEC is created from ACEC_P using the selected alternative and the attributes (name, value(s), designated acres, etc.) finalized. The ACEC_P is then archived along with the rest of the RMP development data and ACEC is maintained in the corporate SDE.

The line feature class pair for ACEC polygons is required, but existing ACEC data for OR/WA districts will be loaded into SDE, without populating the attributes. Future ACEC update and capture will require populating the line attributes.

The ACEC polygons do not cover all BLM lands and are often relatively small making maintenance easier. Except for minor adjustments, ACECs change only through an RMP or RMP Amendment. Minor changes are small boundary line adjustments resulting from better digital data or corrections. Boundary segment lines should be replaced with more accurate representations of the boundary defining feature as these become available (for example, updated CADNSDI). Minor changes like these will change the ACEC polygon acres in GIS, but the DSG_AC (designated acres) attribute should not be

changed. Wording in the RMP may allow for other minor updates. Other boundary changes are not allowed without an RMP Plan Amendment. Any change to the boundary segments must be approved by the district Data Steward and, if appropriate, State Data Steward.

Proposed ACECs (ACEC_P) are more dynamic and need to be checked for currency throughout the nomination, consideration and proposal process. If designated, the relevant ACEC polygons and associated boundary arcs are moved from ACEC_P to ACEC. Former ACECs (both designated and proposed) are found in the regular corporate database archives.

It is also the responsibility of the Data Steward to ensure that any database external to the GIS remains current. The district GIS Coordinator will approve update processes and provide assistance and oversight. At this time, there are no digital databases associated with ACEC, but this responsibility extends to paper records. Reports or tables containing GIS-derived ACEC acres may need to be updated to reflect the current GIS theme.

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

The unit of processing for updating the ACEC theme is the individual ACEC. Each ACEC is managed as a unit and matching across districts is not required. Transactions will be initiated by editors within the districts to update the themes. Editors will “check-out” their district’s ACEC theme features. They will then add, delete, or modify the features prior to “check-in.” The district GIS Coordinator will approve update processes and provide assistance and oversight.

Once the ACEC theme has been created for a district, it is the responsibility of the district Data Steward to ensure that it remains current. The ACEC themes are relatively static.

3.4 STATEWIDE MONITORING

The State Data Steward in conjunction with the Lead GIS Specialist and district Data Stewards are responsible for reviewing the ACEC theme across the state at least once per year. For ACEC all that is required is a relatively quick check for completeness and correct attributes.

4. ACEC 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 13. 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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 Portland, OR 97208
 503-808-6009

4.1 AREAS_OF_CRITICAL_ENVIRONMENTAL_CONCERN_FEATURE_DATASET

4.1.1 ACEC_POLY (ACEC polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
ACEC_NAME	String	50		Yes	dom_ACEC_NAME
ACEC_TYPE	String	10	ACEC	Yes	dom_ACEC_TYPE
ACEC_VALUE	String	35		Yes	dom_ACEC_VALUE
BLM_ORG_CD	String	5	OR000	Yes	dom_BLM_ORG_CD
LUP_NAME	String	100		Yes	dom_LUP_NAME
DSG_AC	Decimal	10.2		No	
GIS_ACRES	Decimal	12,6		Yes*	
ACT_PL_DT	String	8		No	
VERSION_NAME	String	50	InitialLoad	Yes*	

*Automatically generated.

4.1.2 ACEC_ARC (ACEC 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	
VERSION_NAME	String	50	InitialLoad	Yes*	

*Automatically generated.

4.2 AREAS_OF_CRITICAL_ENVIRONMENTAL_CONCERN_PROPOSED_FEATURE_DATASET

4.2.1 ACEC_P_POLY (ACEC Proposed Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
ACEC_P_NAME	String	50		Yes	
ACEC_P_TYPE	String	10	ACEC	Yes	dom_ACEC_TYPE
ACEC_P_STATUS	String	20		Yes	dom_ACEC_P_STATUS
ACEC_VALUE	String	35		Yes	dom_ACEC_VALUE

BLM_ORG_CD	String	5	OR000	Yes	dom_BLM_ORG_CD
LUP_NAME	String	100		No	dom_LUP_NAME
ALTERNATIVE	String	2		No	
GIS_ACRES	Decimal	12,6		Yes*	
VERSION_NAME	String	50	InitialLoad	Yes*	

*Automatically generated

4.2.2 ACEC_P_ARC (ACEC Proposed 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	
VERSION_NAME	String	50	InitialLoad	Yes*	

*Automatically generated.

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 OR/WA, but only a small percentage of BLM lands are designated ACECs. See the metadata for this data set for more precise description of the extent.

6. SPATIAL ENTITY CHARACTERISTICS

AREA OF CRITICAL ENVIRONMENTAL CONCERN POLYGON (ACEC_POLY)

Description: Instance of Special Management Area Existing group. The ACECs are designated by an RMP.

Geometry: Polygons do not form a continuous “wall-to-wall” cover across BLM lands. Polygons do not overlap, but may have gaps and donut holes.

Topology: The ACEC_POLY lines are coincident with ACEC_ARC lines and together make the feature dataset, Areas_of_Critical_Environmental_Concern.

Integration Requirements: The ACEC is created from merging together many different input themes.

Attributes on the ACEC_ARC provide the information needed to update lines using the correct sources (either by replacement or snapping) and maintain integration across feature classes.

AREA OF CRITICAL ENVIRONMENTAL CONCERN LINE (ACEC_ARC)

Description: Instance of Political Admin Surface Management Agency (SMA) Line group. Lines making up the area perimeters of ACEC polygons and segmented as needed to indicate a change in either what defines the section of boundary and/or the source of the actual GIS coordinates.

Geometry: Simple, non-overlapping lines that are split between endpoints as needed.

Topology: The ACEC_POLY lines are coincident with ACEC_ARC lines and together make the feature dataset, Areas_of_Critical_Environmental_Concern.

Integration Requirements: Line segments must be coincident with the source data indicated by attributes DEF_FEATURE and COORD_SRC either through duplication or snapping.

AREA OF CRITICAL ENVIRONMENTAL CONCERN PROPOSED POLYGON (ACEC_P_POLY)

Description: Instance of Special Management Area Proposed group. Proposed ACECs as defined are finalized in the RMP planning process.

Geometry: Polygons may overlap other ACEC_P polygons. Proposed ACEC removals (rare) may overlap ACEC polygons. Gaps and donut holes are allowed.

Topology: The ACEC_P_POLY lines are coincident with ACEC_P_ARC lines and together make the feature dataset, Areas_of_Critical_Environmental_Concern_Proposed.

Integration Requirements: The ACEC_P is created from merging together many different input themes. Attributes on the ACEC_P_ARC provide the information needed to update lines using the correct sources (either by replacement or snapping) and maintain integration across feature classes.

AREA OF CRITICAL ENVIRONMENTAL CONCERN PROPOSED LINE (ACEC_P_ARC)

Description: Instance of Political Admin SMA Line group. Lines making up the area perimeters of ACEC_P and segmented as needed to indicate a change in either what defines the section of boundary and/or the source of the actual GIS coordinates.

Geometry: Simple, non-overlapping lines that are split between endpoints as needed.

Topology: The ACEC_P_POLY lines are coincident with ACEC_P_ARC lines and together make the feature dataset, Areas_of_Critical_Environmental_Concern_Proposed.

Integration Requirements: Line segments must be coincident with the source data indicated by attributes DEF_FEATURE and COORD_SRC either through duplication or snapping.

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	ACEC_ARC, ACEC_P_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 ACEC_NAME

Geodatabase Name	ACEC_NAME
BLM Structured Name	ACEC_Name
Inheritance	Not inherited
Feature Class Use	ACEC_POLY
Definition	The official name of the ACEC. It may contain spaces, plus a combination of upper and lowercase alpha characters. Polygons of non-BLM land surrounded by BLM land within the ACEC should be labeled "Inholding." The ACEC names must be unique within OR/WA.
Required/Optional	Required
Domain (Valid Values)	dom_ACEC_NAME
Data Type	Variable Characters (50)

7.3 ACEC_P_NAME

Geodatabase Name	ACEC_P_NAME
BLM Structured Name	ACEC_Proposed_Name
Inheritance	Not inherited
Feature Class Use	ACEC_P_POLY
Definition	The official name of the proposed ACEC. It may contain spaces, plus a combination of upper and lowercase alpha characters. Polygons of non-BLM land surrounded by BLM land within the proposed ACEC should be labeled "Inholding" (and not included in any GIS acres calculations).
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	Variable Characters (50)

7.4 ACEC_P_STATUS

Geodatabase Name	ACEC_P_STATUS
BLM Structured Name	ACEC_Proposed_Status_Code
Inheritance	Not inherited
Feature Class Use	ACEC_P_POLY

Definition	The status or phase of the ACEC proposal. The progression of a proposal is from nomination to consideration to designation. An ACEC might be nominated but not considered and, if considered, may or may not meet the relevance and importance or the management requirement. And, even if it has been considered and “meets,” it may not be designated. If designated, the ACEC polygon(s) and corresponding arcs move to the ACEC_POLY/ARC dataset. An ACEC or portion of an ACEC might also be proposed for removal.
Required/Optional	Required
Domain (Valid Values)	dom_ACEC_P_STATUS
Data Type	Variable Characters (20)

7.5 ACEC_P_TYPE

Geodatabase Name	ACEC_P_TYPE
BLM Structured Name	ACEC_Proposed_Type_Code
Inheritance	Not inherited
Feature Class Use	ACEC_P_POLY
Definition	The type of ACEC proposed designation for this area. Types include primary ACEC, ONA, and RNA.
Required/Optional	Required
Domain (Valid Values)	dom_ACEC_TYPE
Data Type	Variable Characters (10)
Domain (Valid Values)	dom_ACEC_TYPE
Data Type	Variable Characters (10)

7.6 ACEC_TYPE

Geodatabase Name	ACEC_TYPE
BLM Structured Name	ACEC_Type_Code
Inheritance	Not inherited
Feature Class Use	ACEC_POLY
Definition	The type of ACEC designation for this area. Types include primary ACEC, ONA, and RNA.
Required/Optional	Required
Domain (Valid Values)	dom_ACEC_TYPE
Data Type	Variable Characters (10)

7.7 ACEC_VALUE

Geodatabase Name	ACEC_VALUE
BLM Structured Name	ACEC_Value_Code
Inheritance	Not inherited
Feature Class Use	ACEC_POLY, ACEC_P_POLY
Definition	<p>Values requiring special management attention that factored into the area being designated an ACEC. The potential values are: SCEN (Scenic), CULT (Cultural), HIST (Historical), BOT (Botanical), GEOL (Geological), FW (Fish and Wildlife), NAT ("generic" natural processes if BOT, GEOL, FW not specified), CELL (Oregon Natural Heritage Program ecosystem "Cell"), or HAZ (natural hazards).</p> <p>More than one value can be present and concatenated together with a "/" separator.</p>
Required/Optional	Required
Domain (Valid Values)	dom_ACEC_VALUE
Data Type	Variable Characters (35)

7.8 ACT_PL_DT

Geodatabase Name	ACT_PL_DT
BLM Structured Name	Activity_Plan_Date
Inheritance	Not inherited
Feature Class Use	ACEC_POLY
Definition	The date of the monitoring or activity plan (if any) for the particular ACEC. Use YYYYMMDD format. Provide as much date information as is available but must include, at a minimum, the year (YYYY).
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Variable Characters (8)

7.9 ALTERNATIVE

Geodatabase Name	ALTERNATIVE
BLM Structured Name	Alternative_Text
Inheritance	Inherited from entity SPECIAL MANAGEMENT AREA PROPOSED
Feature Class Use	ACEC_P_POLY
Definition	Identifier for the Special Management Area alternative during the planning process (e.g., A, B, C, D, E). Free choice values for different plans, but no

	more than two characters
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Variable Characters (2)

7.10 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	ACEC_POLY, ACEC_P_POLY
Definition	A combination of the BLM administrative state and field office which has administrative responsibility for the spatial entity. This includes which office covers the entity for planning purposes and which office is the lead for GIS edits. Another agency or individual may have the physical management responsibility for the on-the-ground entity. This field applies particularly when a spatial entity crosses 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)

7.11 COORD_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	Coordinate_Source_Code
Inheritance	Inherited from entity POLITICAL ADMIN SMA LINE
Feature Class Use	ACEC_ARC, ACEC_P_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)
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7.12 DEF_FEATURE

Geodatabase Name	DEF_FEATURE
BLM Structured Name	Defining_Feature_Code
Inheritance	Inherited from Entity POLITICAL ADMIN SMA LINE
Feature Class Use	ACEC_ARC, ACEC_P_ARC
Definition	Physical feature that forms the boundary.
Required/Optional	Required
Domain (Valid Values)	dom_DEF_FEATURE
Data Type	Variable characters (25)

7.13 DSG_AC

Geodatabase Name	DSG_AC
BLM Structured Name	Designation_Acres_Measure
Inheritance	Not inherited
Feature Class Use	ACEC_POLY
Definition	The official designated acres of the ACEC as recorded in the Federal Register. This is not the GIS derived acres and does not change.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Decimal (10,2)

7.14 GIS_ACRES

Geodatabase Name	GIS_ACRES
BLM Structured Name	GIS_Acres_Measure
Inheritance	Inherited from entity SPECIAL MANAGEMENT AREA
Feature Class Use	ACEC_POLY, ACEC_P_POLY
Definition	The area of a polygon as calculated by GIS in acres. Must be recalculated with every edit submission. The acres will be automatically calculated when the feature classes are published. The BLM_ORG_CD will be used to determine the appropriate projection.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	Decimal (12,6)

7.15 LUP_NAME

Geodatabase Name	LUP_NAME
BLM Structured Name	Land_Use_Planning_Boundary_Name_Text
Inheritance	Inherited from Entity SPECIAL MANAGEMENT AREA
Feature Class Use	ACEC_POLY, ACEC_P_POLY
Definition	The official name of the land use plan that originally created the Special Management Area.
Required/Optional	Required. Optional in “Proposed” feature class
Domain (Valid Values)	dom_LUP_NAME
Data Type	Variable Characters (100)

7.16 VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from Entity ODF
Feature Class Use	All feature classes
Definition	<p>Name of the corporate geodatabase version previously used to edit the record.</p> <p>InitialLoad = feature has not been edited in ArcSDE.</p> <p>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.</p> <p>Example: sfrazier.ACEC-121210-111034</p> <p>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.</p>
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	Variable Characters (50)

8. ASSOCIATED FILES OR DATABASES

There are no external files or databases currently associated with the ACEC data sets. Restrictions on activities within ACECs (harvest, minerals, OHV, etc.) may be found in the designating RMP document and/or by overlaying relevant GIS themes. These restrictions might be saved in a table associated (linked) to ACEC.

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 ACEC and ACEC_P do not need to be clipped to BLM lands for display, but this is often desirable. The display label can either be a concatenation of ACEC_NAME and ACEC_TYPE or just ACEC_NAME with the type indicated by different symbology.

10. EDITING PROCEDURES

10.1 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.**

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. 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 (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 when there is 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 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. No topology rules. 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 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.

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 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 harder, 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 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.

When the DEF_FEATURE is “SUBDIVISION,” 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 MODEL OVERVIEW

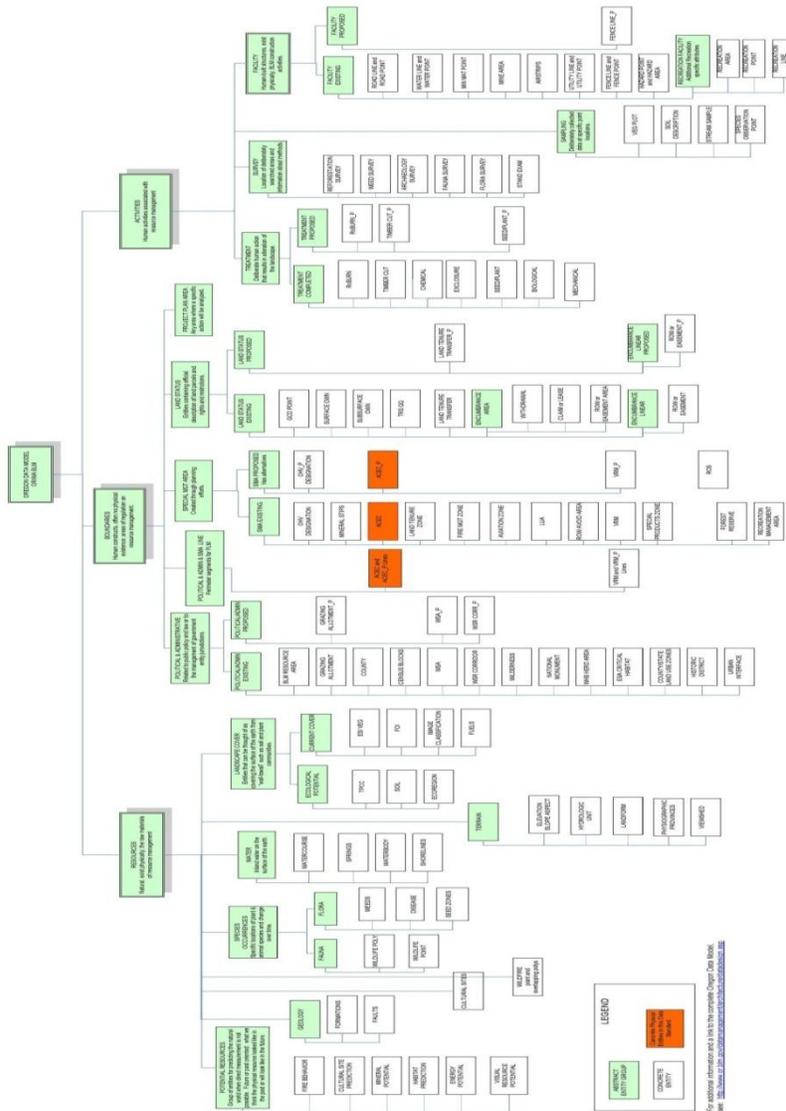


Figure 2 Oregon Data Framework Overview

12. ABBREVIATIONS AND ACRONYMS USED

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

Abbreviations	Descriptions
ACEC	Area of Critical Environmental Concern
BLM	Bureau of Land Management
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
GIS	Geographic Information System
IDP	Interdisciplinary
NAD	North American Datum
NARA	National Archives and Records Administration
ODF	Oregon Data Framework
OHV	Off-Highway Vehicle
ONA	Outstanding Natural Area
OR/WA	Oregon /Washington
RMP	Resource Management Plan
RMPA	Resource Management Plan Amendment
RNA	Research Natural Area
ROD	Record of Decision
SDE	Spatial Data Engine

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 ACEC_NAME

Too lengthy to list; Contact the State Data Administrator for a copy.

A.2 ACEC_P_STATUS

NOMINATED	NOMINATED – An area that has been nominated to be an ACEC.
NOM_NOT_CONS	NOM_NOT_CONS – An area that was nominated to be an ACEC but not considered during the planning process.
CONSIDERED	CONSIDERED – An area that is being considered for designation as an
CONS_NOT_DSG	CONS_NOT_DSG – Considered but not designated as an ACEC.
PROPOSED_REMOVAL	PROPOSED_REMOVAL – An ACEC that is being proposed to be removed from ACEC status.
UNKNOWN	UNKNOWN – ACEC status is not known.

A.3 ACEC_TYPE

ACEC	ACEC – Primary Area of Critical Environmental Concern
ONA	ONA – Outstanding Natural Area
RNA	RNA – Research Natural Area

A.4 ACEC_VALUE

BOT	Botanical
CELL	Oregon Natural Heritage Program
CULT	Cultural
FW	Fish and Wildlife
GEOL	Geological
HAZ	Natural Hazards
HIST	Historical
NAT	Generic natural processes of BOT, GEOL, FW not specified
SCEN	Scenic

A.5 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.6 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.7 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
SHORELINE	SHORELINE – Lake, pond, reservoir, bay or ocean shoreline or
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.8 LUP_NAME

Andrews Management Unit RMP 2005	Andrews Management Unit RMP 2005
Baker RMP 1989	Baker RMP 1989
Brothers/LaPine RMP 1989	Brothers/LaPine RMP 1989
Cascade-Siskiyou National Monument RMP - 2008	Cascade-Siskiyou National Monument RMP 2008
Coos Bay District RMP 1995	Coos Bay District RMP 1995
Coos Bay RMP - 2008	Coos Bay RMP 2008
Eugene District RMP - 2008	Eugene District RMP 2008
Eugene District RMP 1995	Eugene District RMP 1995
John Day Resource Area RMP 1985	John Day Resource Area RMP 1985
Klamath Falls Resource Area RMP -	Klamath Falls Resource Area RMP 2008
Klamath Falls Resource Area RMP 1995	Klamath Falls Resource Area RMP 1995
Lakeview Resource Area RMP 2003	Lakeview Resource Area RMP 2003
Lower Deschutes River Management Plan 1993	Lower Deschutes River Management Plan 1993
Medford District RMP - 2008	Medford District RMP 2008
Medford District RMP 1995	Medford District RMP 1995
NW Forest Plan 1994	NW Forest Plan 1994
Roseburg District RMP - 2008	Roseburg District RMP 2008
Roseburg District RMP 1995	Roseburg District RMP 1995
Salem District RMP - 2008	Salem District RMP 2008
Salem District RMP 1995	Salem District RMP 1995
Southeastern Oregon RMP 2002	Southeastern Oregon RMP 2002
Spokane District RMP 1992	Spokane District RMP 1992
Steens Mountain Cooperative Management and Protection Area RMP	Steens Mountain Cooperative Management and Protection Area RMP 2005
Three Rivers Resource Area RMP 1992	Three Rivers Resource Area RMP 1992
Two Rivers Resource Area RMP 1986	Two Rivers Resource Area RMP 1986
Upper Deschutes Resource Area RMP	Upper Deschutes Resource Area RMP 2005
Upper Klamath Basin-Wood River Ranch RMP 1995	Upper Klamath Basin-Wood River Ranch RMP 1995