PLAN AREA BOUNDARY SPATIAL DATA STANDARD



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1. GENERAL INFORMATION

Dataset (Theme) Name: PLAN AREA BOUNDARY Dataset Abbreviations: AVY_PLAN, LUP_CRNT, LUP_PRGS, LUP_HIST Dataset Feature Classes: AVY_PLAN_POLY, AVY_PLAN_ARC, LUP_CRNT_POLY, LUP_CRNT_ARC, LUP_PRGS_POLY, LUP_PRGS_ARC, LUP_HIST_POLY, LUP_HIST_ARC

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Steward	For the Plan Area Boundary group of themes, the State Data Steward is Leslie Frewing, Program Analyst, Branch of Planning, Science and Resource Information at 503-808-6088. The State Data Steward is responsible for approving data standards and business rules, developing Quality Assurance/Quality Control procedures, 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, Arthur Miller at 503-808-6113, 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 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 Data Administrator is responsible for making data standards and metadata accessible to all users. The 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 503-808-6655, is responsible for identifying any privacy issues related to spatial data. The Records Administrator also provides direction and guidance on data release and fees. The Records Administrator ensures that data has been classified under the proper records retention schedule and determines the appropriate Freedom of Information Act category.

1.2 FOIA CATEGORY

Public

1.3 RECORDS RETENTION SCHEDULE

20/52c (Electronic Records/Geographic Information Systems) TEMPORARY. Delete when no longer needed for administrative, legal, audit, or other operational purposes.

1.4 SECURITY/ACCESS/SENSITIVITY

The Plan Boundary Area set of themes does 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. To avoid any potential privacy issues, the attribute VERSION_NAME is only maintained in the edit version of the dataset.

1.5 KEYWORDS

Keywords that can be used to locate this dataset include: planning, activity plans, land use plans, resource management plans, land use plan amendments, and resource management plan amendments.

2. DATASET OVERVIEW

2.1 DESCRIPTION

This dataset represents Plan Area Boundaries. These are boundaries established for various Land Use Planning activities including Resource Management Plans (RMPs), Resource Management Plan Amendments (RMPA), and activity plans. This data set refers to areas defining BLM management direction and does not refer to areas of interest that may be used for evaluation during planning activities. Plan Area Boundaries often follow existing administrative lines such as resource areas or grazing allotments, but may also follow watersheds, roads, special management areas, ownership, or other legally defined or on-the-ground features. The data set includes Land Use Plans (LUPs) such as RMPs, large landscape plans (like watershed analyses), activity plans (resource or program specific) and smaller, individual project plan boundaries (e.g., a timber sale). Activity plans are defined as being strategic plans that are multi-year in timeframe and usually involve multiple actions over time. Polygons in Plan Area Boundaries delineate the areas that have either a determined or a proposed management direction. The polygons do not delineate areas of actual, on-the-ground treatments or other action (although they may be coincident) but areas that have gone through a planning process (usually, but not necessarily, a National Environmental Policy Act (NEPA) process). If a plan is associated with an area identical to a feature in another data set (for example, Wild and Scenic River or Wilderness Area management plans), that feature may be duplicated onto the Plan Area Boundaries dataset.

The use of the terms "Active" and "Current" within Plan Area Boundaries refer to plan stage/status and are synonymous. The terms refer to plans currently directing BLM management actions. The term "In Progress" refers to LUPs that are in development and are not yet active plans. In progress plans can have a range of plan stage values, such as "Draft" and "Final."

The Plan Area Boundaries theme group consists of four feature datasets, each with a POLY and an ARC feature class. The ARC features are coincident with the perimeters (polylines) of the POLY features.

The LUP_CRNT dataset contains active (or current) LUPs, usually RMP and RMPA (those with a signed Record of Decision (ROD)), and extends to the adjacent Plan Area Boundaries, wall-to-wall, with no gaps or overlaps.

The LUP_PRGS dataset contains LUPs that are in progress. There should not be more than one LUP in progress in a particular area. If, upon completion, an in progress LUP will spatially alter the boundaries of a neighboring active LUP, a special, in-progress version (showing the altered boundaries) of the affected neighboring LUP should be created and given a status (stage) of PENDCHNG (pending change). When an RMP or RMPA changes from in progress to active, the polygons and arcs are added to LUP_CRNT and removed from LUP_PRGS. At this time, if there is an affected neighboring LUP with PENDCHNG status, it also should be used to replace its associated previously active LUP boundary and removed from LUP_PRGS. Once an LUP becomes active, it must integrate with other active LUPs so that there will continue to be no gaps or overlaps in active LUPs.

The AVY_PLAN dataset contains activity plan boundaries of wide-ranging size and purpose. They may overlap multiple LUP_CRNT areas, but they do not need to cover all BLM lands, and there may be multiple, overlapping activity plans in any particular area. This dataset can include boundaries for activity plans in various stages from "Pre-Draft" to "Active," but should only contain one boundary per activity plan (one version per plan). The boundary should be entered concurrently with identification of the proposed project area during scoping or upon release of the Environmental Assessment (EA)/Environmental Impact Statement (EIS). Maintenance to a boundary should be done as needed as projects are updated and final decisions are made.

The LUP_HIST (historic) dataset contains LUPs that have been superseded by newer LUPs or features of active LUPs that have since been replaced in LUP_CRNT through maintenance to more accurate features. There may be multiple, overlapping historic LUPs in any particular area. Superseded or dropped LUPs in progress or Activity Plan Boundaries are not retained on a special archive dataset, but can be found in normal data archives.

See Section 3 (Data Management Protocols) and Section 10 (Editing Procedures) for further details on editing and maintenance of the datasets.

2.2 USAGE

This dataset is used for depicting Plan Area Boundaries on maps. Polygons created from the data are used for various analytical purposes, including clipping data and calculating acreage. The dataset is also used simply to see what plans apply to a particular area.

Active RMP or RMPA boundary polygons found in LUP_CRNT are non-overlapping and wall-to-wall (no gaps). All BLM-managed lands should fall under one, and only one, of these plans. The LUP_CRNT feature dataset is the appropriate feature class to use with analysis of resources under current management direction.

The LUP_PRGS feature dataset comes into play when a new RMP or RMPA is begun. It is the appropriate feature class to use for the alternatives and cumulative effects analysis required by NEPA.

The LUP_HIST feature dataset is used mainly as an historic record of previous land use plan direction and change over time.

The AVY_PLAN dataset provides the planning or project boundary for strategic management that may include multiple actions over multiple years in a potentially large area, and may include programmatic plans covering multiple, active LUPs in the LUP_CRNT feature dataset. It shows the over-arching boundary for actual, on-the-ground treatments, tying them together within a larger area.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this dataset is the Deputy State Director, Resource Use, Planning and Protection. A Plan Area Boundary is defined by and specific to the BLM. Matching interagency planning boundaries across the landscape is not necessary. Our non-governmental partners and the general public are affected to the extent that PLANBDY indicates areas of management responsibility and activities on BLM lands and occasionally adjacent, intermingled, non-BLM lands.

2.4 RELATIONSHIP TO OTHER THEMES

Source Features: Planning Area Boundaries often follow existing administrative lines such as resource areas or grazing allotments, but may also follow watersheds, roads, special management areas, ownership, or other legally defined or on-the-ground features. The defining features for Planning Area Boundaries should be acquired from these varied, existing datasets and imported as line data, with sources documented in the DEF_FEATURE and COORD_SRC attribute fields. Significant changes to the source features may lead to the need for data quality-based updates to planning area boundaries.

Treatments: Treatments are associated with a plan or project which authorizes them, often an activity plan. This can be captured in the treatments attribute "PLANID" in the data standard. Typically, a Planning Area Boundary contains multiple treatment areas which may be implemented over multiple years. Treatments are described in a separate data standard.

Special Management Areas: There are a number of special management areas defined or designated by LUPs. These include Areas of Critical Environmental Concern (ACEC); Visual Resource Management Classes (VRM); Off-Highway Vehicle Designations (OHV_DSG); Right-of-Way Corridor; Avoidance or Exclusion (ROW_DSG); Locatable, Leasable, and Salable Minerals Stipulations (MINSTIP); Land Tenure (acquisition/disposal) Zones (LTZ); and Special or Extensive Recreation Management Areas (RMA). All BLM lands must be covered by VRM, OHV_DSG, ROW_DSG, MINSTIP, and LTZ, but ACECs and RMAs are specific areas covering only a portion of BLM land. All are associated with a plan or project which authorizes them. This can be captured in the attribute "PLANID" in the data standard. Special management areas are described more fully in separate data standards.

National BLM Data Standard: Two datasets, LUP_CRNT and LUP_HIST, coincide with the national standard, and the State Office Data Steward for Plan Area Boundaries determined that OR/WA would make the adjustments needed to meet this standard. Several issues have arisen because of this.

In several plans, the planning boundary as shown in the ROD, while encompassing all BLM surface, is smaller than the administrative boundary and would result in gaps if utilized. To meet the national data standard, offices were directed to "snap" the boundary outward to create wall-to-wall coverage. Typically, this is a resource area, forest, or county boundary. This creates a situation which depicts lands as covered by a plan that does not provide any specific direction for those lands. In most instances, this is acceptable since no BLM-managed lands are added by this data maintenance action. It does, however, create a question about sub-surface management direction and plan amendments.

Issue 1, subsurface management: Most plans in the OR/WA BLM provide only limited direction for subsurface management where the surface is managed by others. Plans typically refer to the various legal authorities and requirements and deferring to the surface managing agency for resource protection requirements. The extension of the planning boundaries raises the question as to whether these various requirements also apply to lands within the extended boundary.

Issue 1, resolution: The OR/WA BLM is taking the position that the data maintenance action will extend boundaries but cannot and does not extend resource allocations or restrictions beyond those areas specified in the ROD.

Issue 2, future programmatic plan amendments: The OR/WA BLM anticipates that the revised plan boundary data layer will be utilized to identify plans to be amended in the future. The outcome is that certain plans will be amended to include an area of greater spatial extent than that identified in the ROD. Because this additional area will not include additional BLM-managed surface, amended direction will only apply to subsurface actions and connected actions under the BLM's jurisdiction. This is a subtle nuance, but it would be inappropriate to have a national programmatic amendment on a single issue amend individual plans to extend the area to which the existing ROD applies.

Issue 2, resolution: The OR/WA BLM is taking the position that future plan amendments will amend the existing plans to apply a group of allocations and restrictions to both the area depicted in the ROD and the extended area.

Issue 3, partial spatial amendments: The RMPAs might be initiated to address a single issue (OHV, wildlife, recreation, etc.) or to change an RMP boundary. In addition, there is at least one instance in the OR/WA BLM where an RMPA amended only a portion of the original planning area.

Issue 3, resolution: The RMPA is considered to be a replacement of the original RMP as a whole, and partial spatial amendments will be discouraged. The new RMPA identifier (attribute LUPA_ID) and date replaces the original RMP information in LUP_CRNT_POLY. The original LUP name (PLANID) would remain but with the word "Amendment" added. In the rare cases where there is a spatial change, the superseded LUP is added to LUP_HIST and removed from LUP_CRNT.

2.5 DATA CATEGORY/ARCHITECTURE LINK

This data theme is a portion of the Oregon Data Framework (ODF). 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, and Boundaries. These general categories are broken into sub-categories that inherit spatial characteristics and attributes from their parent categories. These sub-categories may be further broken into more specific groups until arriving at a basic dataset that cannot be further sub-divided. Those basic datasets inherit all characteristics of all groups/categories above them. Physical data is populated in the basic datasets (those groups/categories above them do not contain actual data but set parameters that all data of that type must follow).

See the ODF, Figure 2, for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The monitoring and sample points entity is highlighted. For additional information about the ODF, contact:

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

For Plan Area Boundaries, the categories/groups that the dataset is part of are:

Plan Area Boundary Polygon ODF Boundaries Project/Plan Area AVY_PLAN_POLY LUP_CRNT_POLY LUP_PRGS_POLY LUP_HIST_POLY Plan Area Boundary Line ODF Boundaries PoliticalAdministrativeSpecialManagementAreaLine AVY_PLAN_ARC

LUP_CRNT_ARC LUP_PRGS_ARC LUP_HIST_ARC

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

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. 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 dataset, these are as follows:

- Data Subject Area: Geospatial
- Information Class: Location

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

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

2.7 PLAN AREA BOUNDARIES DATA ORGANIZATION/STRUCTURE





3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

A high level of positional and attribute accuracy is required for the Plan Area Boundary dataset. Much of the BLM's management hinges on accurate boundaries for planning areas. Boundary features are defined, input, and maintained with the highest level of accuracy possible short of surveying. Boundaries are defined segment-by-segment according to the official legal description or designating instrument and the definition captured in the attribute DEF_FEATURE. Except where DEF_FEATURE = "UNKNOWN," the value in DEF_FEATURE is correct at least ninety percent of the time. Values of "UNKNOWN" will be eliminated over time and are not allowed with new data entry. Spatial data is captured using the most accurate coordinate sources readily available as described in Collection and Input Protocols and recorded in the COORD_SRC and ACCURACY_FT attributes on the arc feature classes. Required polygon attributes will be correct at least ninety percent of the time. Editing cluster tolerance is set to the smallest possible value, 0.000002 degrees.

3.2 COLLECTION, INPUT, AND MAINTENANCE PROTOCOLS

Boundaries are captured in GIS using reference maps and the most accurate GIS themes available (current cadastral national spatial data infrastructure (CADNSDI) for parcel segments; 24K scale or better source data for roads and streams; Global Positioning System (GPS) coordinates; 24K scale United States Geologic Survey (USGS) topographic map backdrop for heads-up digitizing of contours, fences, power lines; 10 meter Digital Elevation Model (DEM) for digital contours; 24K scale, 1 meter or better resolution Digital Ortho Quads backdrop for disturbances like mines). Boundary segments for AVY_PLAN often coincide with the overarching LUP for the area. In these cases, AVY_PLAN_ARC should be duplicated from LUP_CRNT_ARC.

Both polylines (polygon perimeters) and arcs (coincident with the perimeters) are created. The arcs are segmented as necessary to represent the different defining features of the boundary, for example, "SUBDIVISION," "ROAD," or "HU" (Hydrologic Unit). Existing boundaries or portions of boundaries should be used if possible to avoid slivering and gaps. Arcs are not duplicated, but rather the same arc should be used by more than one boundary polygon if appropriate. Arcs are created first and polygons are created from the arcs. An individual plan area may consist of multiple unattached polygons. Such plan boundary polygon pieces should be stored as individual records with common attribute values, not as multi-part polygons.

It is the responsibility of the State Data Steward to ensure that the boundaries in LUP_CRNT, LUP_PRGS, and programmatic AVY_PLAN boundaries which apply to more than one LUP_CRNT planning area remain current and accurate and the required attributes are filled in. It is the responsibility of the 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 and Lead GIS Specialist for inclusion in the theme. The State Data Steward and Lead GIS Specialist are also responsible for maintenance of the LUP_HIST dataset. It is also the responsibility of the State Data Steward and Lead GIS Specialist to maintain the LUPA_ID and PLANID domains. District Data Stewards and GIS coordinators inform them of needed additions, deletions, and changes. The LUPA_ID is generated according to the national data standard process. The PLANID, however, is up to OR/WA BLM to maintain. It contains the official names of all plans, LUP, and activity. It is expected that this domain will be updated frequently. The PLANID domain is used in a number of other corporate datasets which may necessitate additional maintenance.

It is the responsibility of the district Data Steward (generally the Planning Coordinator) to ensure that the AVY_PLAN dataset is kept current and accurate. The district Data Steward and GIS Coordinator work together to check and update the dataset on a regular basis. When planning activities progress from stage to stage, the district Data Steward provides the necessary attributes. When plans are finalized, the final name is placed in PLANID, the decision date in PLAN_DATE, and the NEPA_ID filled in.

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

The unit of processing for the LUP_CRNT dataset is the full theme due to the wall-to-wall coverage requirement. The unit of processing for the LUP_PROG and AVY_PLAN datasets is the individual plan boundaries.

When an active plan in LUP_CRNT is superseded by a new plan, the superseded plan's unique polygon and associated arc features are moved to the LUP_HIST dataset. If an active plan's boundary is changed or updated for any reason, the replaced polygons and associated arcs must also go through this archive procedure. Only arc features that are not already associated with an archived plan should be placed into the archive arc dataset, and only arc features that are not still associated with a current plan should be removed from the plan boundary arc dataset. Changes to plan boundaries for in-progress plans (LUP_PRGS) and to activity plans (AVY_PLAN) do not require the creation of archive features.

For both current LUPs and current activity plans, associated arcs remain in their respective datasets. However, there are slightly different protocols for LUP polygons versus activity plan polygons. The LUP polygons are moved from the LUP_PRGS to the LUP_CRNT dataset once they become official, and the polygons and arcs are removed from LUP_PRGS. For activity plans, features remain in the AVY_PLAN dataset but the status is updated in the attribute PLAN_STAGE to reflect that they are now "active" plans.

Changes to the LUP datasets are infrequent since Land Use Planning efforts are normally only undertaken every 15 to 20 years. However, every year there are new LUPs, revisions, or amendments initiated. Plan boundaries are only created for official planning efforts. The creation of a new plan or change of a plan to active status requires updates to plan boundary attribute domains.

During an LUP planning process, in-progress plans will have more frequent edits to attributes as the status of a plan progresses. Other updates to correct or improve locational accuracy of active plans are done at the discretion of the steward and should be done sparingly due the potential impact to neighboring plan boundaries.

There is the potential for very frequent updates to the AVY_PLAN dataset depending on the complexity and scope of planning on a particular district. There may be many smaller plan areas with single-issue focus or fewer large plan areas with a broad spectrum of issues.

At a minimum, an annual review of the data by the Data Steward is appropriate; however, updates can be done at any time and do not need to be done only annually.

4. PLAN AREA BOUNDARIES GEODATABASE SCHEMA (Simplified)

General Information: Attributes are listed in the order they appear in the geodatabase feature class. The order is an indication of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. An alphabetical listing of the attributes with additional information is found in the Attribute Characteristics and Definitions section. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. For a complete list of domains, contact:

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

4.1 AVY_PLAN Feature Dataset

4.1.1 AVY_PLAN_POLY (Activity Plan Area Boundary Polygon)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
PLANID	String	100		Yes (if plan	dom_PLANID
				is active)	
PLAN_DATE	String	8		Yes (if plan	
				is active)	
NEPA_ID	String	30		No	
DRAFT_PLANID	String	100		No	
PLAN_STAGE	String	10		Yes	dom_PLAN_STAGE

PLAN_SUBUNIT	String	60		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.1.2 AVY_PLAN_ARC (Activity Plan Area Boundary Arcs)

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			No	
	Integer				
VERSION_NAME	String	50	InitialLoad	Yes	

4.2 LUP_CRNT Feature Dataset

4.2.1 LUP_CRNT_POLY (Current Land Use Plan Area Boundary Polygon)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
LUP_NAME	String	100		Yes	dom_LUP_NAME
LUPA_ID	String	10		Yes	dom_LUPA_ID
PLAN_DATE	String	8		Yes	
NEPA_ID	String	30		No	
PLAN_SUBUNIT	String	60		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.2.2 LUP_CRNT_ARC (Current Land Use Plan Area Boundary Arcs)

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			No	
	Integer				
VERSION_NAME	String	50	InitialLoad	Yes	

4.3 LUP_PRGS Feature Dataset

4.3.1 LUP_PRGS_POLY (In Progress Land Use Plan Area Boundary Polygon)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
LUP_NAME	String	100		Yes	dom_LUP_NAME
LUPA_ID	String	10		Yes	dom_LUPA_ID
PLAN_DATE	String	8		Yes	

Plan Area Boundary

NEPA_ID	String	30		No	
DRAFT_PLANID	String	100		No	
PLAN_STAGE	String	10		Yes	dom_PLAN_STAGE
PLAN_SUBUNIT	String	60		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.3.2 LUP_PRGS_ARC (In Progress Land Use Plan Area Boundary Arcs)

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			No	
	Integer				
VERSION_NAME	String	50	InitialLoad	Yes	

4.4 LUP_HIST Feature Dataset

4.4.1 LUP_HIST_POLY (Archived Land Use Plan Area Boundary Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
LUP_NAME	String	100		Yes	dom_LUP_NAME
LUPA_ID	String	10		Yes	dom_LUPA_ID
PLAN_DATE	String	8		Yes	
NEPA_ID	String	30		No	
PLAN_SUBUNIT	String	60		No	
LUP_INACTV_DT	String	8		No	
BNDY_INACTV_DT	String	8		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.4.2 LUP_HIST_ARC (Archived Land Use Plan Area Boundary Arcs)

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			No	
	Integer				
VERSION_NAME	String	50	InitialLoad	Yes	

5. PROJECTION AND SPATIAL EXTENT

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM in OR/WA. See the metadata for this dataset for a more precise description of the extent. In order to maintain consistent reporting of acres, Plan Area Boundary polygons should be projected into the appropriate system for each district for the acres calculation.

6. SPATIAL ENTITY CHARACTERISTCS

ACTIVITY PLAN AREA BOUNDARY (AVY_PLAN_POLY and AVY_PLAN_ARC)

Geometry: Polygons do not cover the landscape nor do they cover all BLM lands continuously. In addition, there may be islands ("donut holes") of non-planning areas surrounded by planning areas. An individual plan area may consist of multiple, unattached polygons. Such plan boundary polygon pieces should be stored as individual records with common attribute values, not as multi-part polygons. There are potentially many plans covering the same area, so there will be overlapping polygons. Arcs are simple, non-overlapping lines that are split between endpoints as needed.

Topology: The AVY_PLAN_POLY lines are coincident with AVY_PLAN_ARC lines and together make the feature dataset AVY_PLAN. The AVY_PLAN_ARC lines are not duplicated for an overlapping polygon sharing the same boundary segment; instead, the same, single line is used for both polygons.

Integration Requirements: Line segments must be coincident with the source data indicated by attributes DEF_FEATURE and COORD_SRC either through duplication or snapping. The AVY_PLAN_ARC should be exactly coincident with the corresponding LUP_CRNT_ARC for the associated LUP in areas where the lines are shared.

CURRENT LAND USE PLAN AREA BOUNDARY (LUP_CRNT_POLY and LUP_CRNT_ARC)

Geometry: Polygons cover the landscape and all BLM lands continuously. There will be no overlapping polygons, and there should be no gaps between polygons. An individual plan area may consist of multiple unattached polygons. Such plan boundary polygon pieces should be stored as individual records with common attribute values, not as multi-part polygons. Arcs are simple, non-overlapping lines that are split between endpoints as needed.

Topology: The LUP_CRNT_POLY polygons do not overlap, have no gaps, and LUP_CRNT_POLY lines are coincident with LUP_CRNT_ARC lines. Together they make the feature dataset LUP_CRNT.

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

IN_PROGRESS LAND USE PLAN AREA BOUNDARY (LUP_PRGS_POLY and LUP_PRGS_ARC)

Geometry: Polygons do not cover the landscape nor do they cover all BLM lands continuously. There are potentially more than one in-progress LUP or amendment covering the same area, so there may be overlapping polygons. An individual plan area may consist of multiple unattached polygons. Such plan boundary polygon pieces should be stored as individual records with common attribute values, not as multi-part polygons. Arcs are simple, non-overlapping lines that are split between endpoints as needed.

Topology: The LUP_PRGS_POLY lines are coincident with LUP_PRGS_ARC lines and together make the feature dataset LUP_PRGS. The LUP_PRGS_ARC lines are not duplicated for an overlapping polygon sharing the same boundary segment; instead, the same, single line is used for both polygons.

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

HISTORIC LAND USE PLAN AREA BOUNDARY (LUP_HIST_POLY and LUP_HIST_ARC)

Geometry: Polygons may not cover the landscape or all BLM lands continuously until a complete set of current LUP polygons have been archived. There are potentially many historic LUPs covering the same area, so there will be overlapping polygons. An individual plan area may consist of multiple unattached polygons. Such plan boundary polygon pieces should be stored as individual records with common attribute values, not as multi-part polygons. Arcs are simple, non-overlapping lines that are split between endpoints as needed.

Topology: The LUP_HIST_POLY lines are coincident with LUP_HIST_ARC lines and together make the feature dataset LUP_HIST. The LUP_HIST_ARC lines are not duplicated for an overlapping polygon sharing the same boundary segment; instead, the same, single line is used for both polygons.

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 DEFINITIONS (In alphabetical order)

7.1 ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	ACCURACY_FEET_MEASURE
Description	Inherited from Entity POLITICAL ADMIN SMA LINE
	Used in Feature Classes:
	AVY_PLAN_ARC
	LUP_CRNT_ARC
	LUP_PRGS_ARC
	LUP_HIST_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 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 (DLG),
	CADNSDI, and 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 USGS
	24K topo map), 200
Data Type	Short Integer

7.2 BNDY_INACTV_DT

Geodatabase Name	BNDY_INACTV_DT
BLM Structured Name	LAND_USE_PLAN_BOUNDARY_MODIFICATION_DATE
Description	Not Inherited
	Used in Feature Classes:
	LUP_HIST_POLY
	Definition
	The date the plan boundary was modified, while maintaining the same plan
	guidance (YYYYMMDD format).
Required/Optional	Optional
Domain (Valid Values)	No Domain.
Data Type	Variable Characters (8)

7.3 COORD_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	COORDINATE_SOURCE_CODE
Description	Inherited from Entity POLITICAL ADMIN SMA LINE
	Used in Feature Classes:
	AVY_PLAN_ARC
	LUP_CRNT_ARC
	LUP_PRGS_ARC
	LUP_HIST_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)

7.4 DEF_FEATURE

Geodatabase Name	DEF_FEATURE
BLM Structured Name	DEFINING_FEATURE_CODE
Description	Inherited from POLITICAL ADMIN SMA LINE
	Used in Feature Classes:
	AVY_PLAN_ARC
	LUP_CRNT_ARC
	LUP_PRGS_ARC
	LUP_HIST_ARC
	Definition
	The physical or legal feature that defines the boundary according to the legal
	boundary description. In general, the lowest level defining feature, but it depends
	on how the boundary segment is actually defined. For example, SUBDIVISION
	rather than COUNTY, unless the boundary segment is specifically defined as
	following the COUNTY boundary. If the line is copied from another theme and
	already has DEF_FEATURE, it should be reviewed and may need to be changed
	for use in this dataset.
Required/Optional	Required
Domain (Valid Values)	dom_DEF_FEATURE
Data Type	Variable Characters (25)

7.5 DRAFT_PLANID

Geodatabase Name	DRAFT_PLANID
BLM Structured Name	DRAFT_PLAN_NAME_TEXT
Description	Inherited from PROJECT PLAN AREA
	Used in Feature Classes: AVY_PLAN_POLY LUP_PRGS_POLY
	<u>Definition</u> The name of the Project Plan Area for the plan associated with an activity when in draft stages. The RMPA should consist of the original RMP name plus the word "Amendment." Once finalized, the final name is added to the PLANID domain and placed in PLANID, the decision date in PLAN_DATE, the NEPA_ID filled in and LUPA_ID filled in (for RMP).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: John Day RMP, Baker RMP, Chalk Juniper Cut, and Dry Lake Allotment Ecological Restoration Project.
Data Type	Variable Characters (100)

7.6 LUPA_ID

Geodatabase Name	LUPA_ID
BLM Structured Name	LAND_USE_PLANNING_BOUNDARY_NUMBER
Description	Inherited from PROJECT PLAN AREA
	Used in Feature Class:
	LUP_CRNT_POLY
	LUP_PRGS_POLY
	LUP_HIST_POLY
	Definition
	A ten-character identifier that is an arbitrary serial identifier. All OR/WA RMP's
	are numbered between LUPA1801 and LUPA2000. These identifiers distinguish
	a unique occurrence of a BLM Land Use Plan. These numbers are assigned by the
	State Planning Lead and only apply to RMPs. For RMP's, LUPA_ID's can be
	associated with either completed plans (PLANID) or plans in progress
	(DRAFT_PLANID).
Required/Optional	Required for LUP_CRNT and LUP_HIST
Domain (Valid Values)	dom_LUPA_ID
Data Type	Variable Characters (10)

7.7 LUP_INACTV_DT

Geodatabase Name	LUP_INACTV_DT
BLM Structured Name	LAND_USE_PLAN_ARCHIVED_DATE
Description	Not Inherited
	Used in Feature Class: LUP_HIST_POLY
	Definition
	The date the plan was superseded (YYYYMMDD format).
Required/Optional	Required
Domain (Valid Values)	No Domain.
Data Type	Variable Characters (8)

7.8 LUP_NAME

Geodatabase Name	LUP_NAME
BLM Structured Name	LAND_USE_PLANNING_BOUNDARY_NAME_TEXT
Description	Inherited from entity PROJECT PLAN AREA
	Used in Feature Class:
	LUP_CRNT_POLY
	LUP_PRGS_POLY
	LUP_HIST_POLY
	Definition
	The official name of the LUP, whether final, in progress, or historic. The
	PLAN_DATE is filled at the same time along with NEPA_ID and LUPA_ID. The
	LUP names are a subset of the larger PLANID domain. Final plans should have
	the year of the ROD at the end of the name. The RMPA should consist of the
	original RMP name plus the word "Amendment."
Required/Optional	Optional [Required only when PLAN_STAGE=FINAL, ACTIVE, or
	PENDCHNG]
Domain (Valid Values)	dom_LUP_NAME
Data Type	Variable Characters (100)

7.9 NEPA_ID

Geodatabase Name	NEPA_ID
BLM Structured Name	NEPA_IDENTIFICATION_TEXT
Description	Inherited from entity PROJECT PLAN AREA
	Used in Feature Class:
	AVY_PLAN_POLY
	LUP_CRNT_POLY

	LUP_PRGS_POLY
	LUP_HIST_POLY
	<u>Definition</u> The BLM's numbering convention for any new document developed to comply with the NEPA. Convention established by Instruction Memorandum 2008-199, Change 1 (12/18/2008).
	Format: DDC-ADC-AD-CCDC-FIYR-NDSN-TYP DDC: Department Designation Code; three-letter code used to identify the name of the department within the Government (example: DOI = Department of the Interior).
	ADC: Agency Designation Code; three-letter code used to identify the agency or bureau with the Government (example: BLM = Bureau of Land Management).
	AD: Administrative Designation Code; two-letter code used to identify the highest administrative unit involved (state, center, office, or Washington Office) at the time the NEPA document is created (example: OR = Oregon).
	CCDC: Cost Center Designation Code; four-digit code used to identify the secondary administrative unit involved at the time the NEPA document is created. This is compatible with the FBMS (Fiscal and Business Management System) numbering convention and equates to positions five through eight in the FBMS Cost Center code structure (Examples: M050 = Butte Falls (Medford) Field Office; P060 = Deschutes (Prineville) Field Office).
	FIYR: Project Start Fiscal Year Date; four-digit code that identifies the 12- month period the Federal Government designates for the use of its funds (October through September) at the time the NEPA document is created.
	NDSN: The NEPA Document Sequence Number; four-digit chronological number identifying each NEPA document assigned within an Administrative Unit or Office Designation and beginning at 001 each fiscal year.
	TYP: The NEPA Type Code; two or three letter code used to identify the category of document used to comply with the NEPA (CX = Categorical Exclusion, EA = Environmental Assessment, DNA = Determination of NEPA Adequacy, EIS = Environmental Impact Statement)
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: DOI-BLM-OR-M050-2009-001-EIS
	DOI-BLM-OR-P060-2009-010-EA
Data type	Variable Characters (30)

7.10 PLAN_DATE

Geodatabase Name	PLAN_DATE
BLM Structured Name	PLAN_DECISION_DATE
Description	Inherited from entity PROJECT PLAN AREA
	Used in Feature Classes:
	AVY_PLAN_POLY
	LUP_CRNT_POLY
	LUP_PRGS_POLY
	LUP_HIST_POLY
	Definition
	The date the plan was implemented (YYYYMMDD format).
Required/Optional	Required if plan is or was active.
Domain (Valid Values)	No Domain.
Data Type	Variable Characters (8)

7.11 PLAN_STAGE

Geodatabase Name	PLAN_STAGE	
BLM Structured Name	LAND_USE_PLAN_STAGE_CODE	
Description	Inherited from entity PROJECT PLAN AREA	
	Used in Feature Classes:	
	AVY_PLAN_POLY	
	LUP_PRGS_POLY	
	Definition	
	The status (or stage) of the plan that authorizes (or will authorize) the activity. A	
	plan in Active stage must have PLANID and PLAN_DATE filled in and	
	NEPA_ID and LUPA_ID filled in if applicable.	
	Examples:	
	PRE-DRAFT – Scoping, Analysis of the Management Situation	
	DRAFT – Draft EIS, Other Plan	
	SUPPDRAFT – Supplemental Draft EIS	
	FINAL – Final EIS, Other Plan	
	SUPPFINAL – Supplemental Final EIS	
	ACTIVE – Plans for which a ROD has been signed.	
	PENDCHNG – Active LUPs with pending boundary changes due to	
	neighboring in-progress plans (used in LUP_PRGS_POLY only).	
	The EA's are either DRAFT or FINAL.	
Required/Optional	Required	
Domain (Valid Values)	dom_PLAN_STAGE	
Data Type	Variable Characters (10)	

7.12 PLAN_SUBUNIT

Geodatabase Name	PLAN_SUBUNIT	
BLM Structured Name	PLAN_SUBUNIT_ID	
Description	Inherited from entity PROJECT PLAN AREA	
	Used in Feature Class:	
	AVY_PLAN_POLY	
	LUP_CRNT_POLY	
	LUP_PRGS_POLY	
	LUP_HIST_POLY	
	Definition Unit identifier if the plan/project area is divided into subunits, usually only for activity plans (but not all activity plans are subdivided into subunits). The subunits may not comprise the entire plan area. The subunits may be disjoint and widely separated with no surrounding polygon. The PLAN_SUBUNIT may be a simple number or letter and is only meaningful in context with the PLANID or DRAFT_PLANID (for example, there may be three polygons with PLAN_SUBUNIT's of "1," "2," and "3" and each having the same DRAFT_PLANID of "Chalk Juniper Cut"). The "Geographical Management Units" are examples PLAN_SUBUNITS for LUPs.	
Required/Optional	Optional	
Domain (Valid Values)	No Domain	
Data Type	Variable Characters (60)	

7.13 PLANID

Geodatabase Name	PLANID	
BLM Structured Name	PLAN_NAME_TEXT	
Description	Inherited from entity PROJECT PLAN AREA	
	Used in Feature Class:	
	AVY_PLAN_POLY	
	Definition	
	The official name of a land use plan or activity plan. These names are filled in	
	when the plan is final. The PLAN_DATE is filled at the same time along with	
	NEPA_ID and LUPA_ID if applicable. The PLANIDs for RMPs contain the year	
	of the ROD at the end of the name. Activity plans generally do not contain a year	
	within the name. The RMPA PLANID consists of the original RMP name plus	
	the word "Amendment." In the Plan Area Boundary theme group, the full	
	PLANID domain is used only for activity plans (AVY_PLAN). A subset domain,	
	LUP_NAME, is used with LUP_CRNT, LUP_PRGS and LUP_HIST.	
Required/Optional	Optional [Required only when PLAN_STAGE=FINAL, ACTIVE, or	
	PENDCHNG]	
Domain (Valid Values)	dom_PLANID	
Data Type	Variable Characters (100)	

Plan Area Boundary

7.14 VERSION_NAME

Geodatabase Name	VERSION_NAME	
BLM Structured Name	GEODATABASE_VERSION_TEXT	
Description	Inherited from Entity ODF.	
	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.	
	Used in Feature Classes:	
	AVY_PLAN_POLY	
	AVY_PLAN_ARC	
	LUP_CRNT_POLY	
	LUP_CRNT_ARC	
	LUP_PRGS_POLY	
	LUP_PRGS_ARC	
	LUP_HIST_POLY	
	LUP_HIST_ARC	
	Definition	
	Name of the corporate geodatabase version previously used to edit the record.	
	Name of the corporate geodatabase version previously used to east 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	
Required/Optional	Required (automatically generated)	
Domain (Valid Values)	No Domain. Example: sfrazier.GRA-121211-111034	
Data Type	Variable Characters (50)	

8. ASSOCIATED FILES OR DATABASES

None at this time, but all plans have an associated report with many dependent tables.

9. LAYER FILES (PUBLICATION VIEWS)

9.1 GENERAL BACKGROUND

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 names. 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 re-created at any time.

All datasets are published externally, with the attribute VERSION_NAME removed (because it has no meaning outside of the BLM environment).

9.2 SPECIFIC TO PLAN AREA BOUNDARIES

Plan Area Boundaries are replicated to the user database and to the web. Due to the range of plan boundary types and status, a range of layer files will be provided, including the following:

- In Progress RMPs (LUP_PRGS_POLY)
- Current/Active RMPs (LUP_CRNT_POLY)
- Activity Plan Areas (AVY_PLAN_POLY)
- Northwest Forest Plan Area Boundary (LUP_HIST_POLY) (PLANID = NW Forest Plan 1994)

• Western Oregon Plan Revision Boundary (LUP_HIST_POLY) (PLANID = Western Oregon Plan Revisions – 2008)

The ARC feature classes are not replicated to the user database or to the web. This data is used primarily for editing and can be found in the edit database. If needed, this data is provided on an as-requested basis.

Only a limited number of features (necessary to create layers for the Northwest Forest Plan and the Western Oregon Plan Revision) from LUP_HIST dataset will be replicated to the user database or to the web. This data is used primarily as reference and can be found in the edit database. If needed, the data is provided on an as-requested basis and/or layer files provided in addition to those listed above.

10. EDITING PROCEDURES

10.1 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. 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 are 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 as well as 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, when there is a change in spatial extent, there is always a new feature created which may overlap an existing feature. In addition, there are certain attributes that will result in a new feature even if there is no spatial change. The feature classes (and the one feature dataset) that allow overlap, and the attributes that lead to a new, possibly overlapping feature, are described below.

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 AVY_PLAN, any number of plans or projects might overlap. A new PLANID creates a new polygon.

B. Overlapping Polygons where polygons are a stand-alone feature class. No topology rules. Examples from the Oregon Data Framework include:

1. Species Occurrence Group: These are distinct sites defined by species and time. A different species creates a new polygon which may overlap another site in whole or part. A change in time (new visit date) will create a new polygon if it is desired that the old spatial extent and date is retained (as historic). Additionally, for wildlife, a different season/type of use (e.g., winter range vs. spring breeding) will create a 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 are not generally a problem because they have no spatial extent, but they 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 duplicated 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." Lines resulting from a buffer have vertices too close together, especially around the end curves. They should be generalized to thin the vertices.

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

The GPS linework is often messy and should always be checked and cleaned up as necessary. Multi-part polygons are sometimes inadvertently created when GPS files with vertices too close together or crossing lines or spikes are brought into ArcGIS. Tiny, unwanted polygons are created but are "hidden" because they are in a multi-part. It is critical to generalize and clean up GPS lines and to find and explode multi-part polygons.

Check any features that have "0" or a very small Shape Area or Shape Length. If a feature has "0" geometry and you cannot zoom to it, it is probably an inadvertently created "Null" feature and should be deleted. Very, very small features may also be unintended, resulting from messy linework.

10.3 SNAPPING GUIDELINES

Where line segments with different COORD_SRCs 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 Information (CADNSDI) first, with DLG or SOURCEL next, then DEM, and MAP last.

When snapping to the data indicated in COORD_SRC (as opposed to duplicating with copy/paste), be sure there are 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.

10.4 EDITING GUIDANCE AND QUALITY CONTROL CHECKLIST (Specific to Land Use Plan Boundaries)

The matrix in Table 2 provides guidance on "Active" and "Historic" (previously "Active") status RMP plan boundaries found in LUP_CRNT_POLY and LUP_HIST_POLY feature classes. The LUPA_ID is what uniquely identifies an RMP Planning Area Boundary. If an active Planning Area Boundary changes for any reason, a new LUPA_ID will be created in the LUP_CRNT_POLY feature class and the old one will be moved to the LUP_HIST_POLY feature class. A new LUP document gets a new LUPA_ID, LUP_NAME and PLAN_DATE whereas an amendment only receives a new PLAN_DATE. With the exception of initial "snaps" of the boundary outward to close gaps, if only the LUP boundary is changed (no new document), then there is a new LUPA_ID, but LUP_NAME and PLAN_DATE stay the same.

The PLAN_ID is what uniquely identifies the ROD giving management guidance for an area.

There are three different date fields related to LUP boundaries. The PLAN_DATE field in LUP_CRNT_POLY represents the ROD date of an active plan or the ROD date of an amendment to an active plan. This date does not represent the date of maintenance changes to LUP boundaries or changes due to new plans superseding portions of an active LUP boundary.

The LUP_INACTV_DT field in LUP_HIST_POLY represents the date at which the historic plan or portion of an historic plan was replaced by a new plan ROD (PLAN_DATE) in LUP_CRNT_POLY.

The BNDY_INACTV_DT field in LUP_HIST_POLY represents the date at which the LUP boundary features in LUP_CRNT_POLY for a ROD were modified. These modified features retain their PLAN_DATE and PLANID since it is not a change in guidance but a change in the spatial area or representation covered by that guidance. The LUP_HIST_POLY features are those that were replaced on BNDY_INACTV_DT by the features in LUP_CRNT_POLY for that PLANID.

Situation	LUP_CRNT_POLY		LUP_HIST_POLY		
RMP or RMPAs					
	LUPA_ID , PLANID	PLAN_DATE	LUPA_I D	LUP_ INACTV_DT	BNDY_ INACTV_DT
New Land Use Plan replaces Old Land Plan	New Polygon with new LUPA_ID and new PLANID	The ROD date from new LUP	Existing LUPA_I D	The ROD date from new LUP	Blank
New LUP (X) replaces part of another LUP (Y)	X gets new polygon with new LUPA_ID and new PLANID	X gets New ROD date	Existing LUPA_I D	New LUP X ROD DT	Blank
	Y gets new polygon with new LUPA_ID, keeps original PLANID	Y keeps its ROD date for remaining area	Existing LUPA_I D	Blank	Use LUP X new ROD date
The LUP is amended or revised, and boundary not changed	No change	New ROD date	No record		
The LUP is amended or revised, and boundary changes	New Polygon with new LUPA_ID, new PLANID	New ROD date	Existing LUPA_I D	New LUP ROD date	Blank
Maintenance (correction) to LUP changes boundary	New Polygon with new LUPA_ID, keeps original PLANID	Existing ROD date	Existing LUPA_I D	Blank	Maintenance date

 Table 2
 RMP Boundary and Archive Business Rules Matrix

10.5 EDITING ACCESS GROUPS

The four Plan Area Boundary feature datasets are divided into two different edit access groups with different group memberships. The LUP_CRNT, LUP_PRGS, and LUP_HIST are included in a single Land Use Plan boundary edit group that will have a restricted number of editors due to the potential impact of any edits to adjacent features. The AVY_PLAN will have a separate activity plan boundary edit group allowing less restrictive edit access.

11.0 OREGON DATA FRAMEWORK OVERVIEW



Figure 2 Oregon Data Framework Overview

12.0 ABBREVIATIONS AND ACRONYMS USED IN THIS STANDARD

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
DEM	Digital Elevation Model
DLG	Digital Line Graphs
DOQ	Digital Orthophoto Quad
DRG	Digital Raster Graphic
EA	Environmental Assessment
EIS	Environmental Impact Assessment
FOIA	Freedom of Information Act
GCD	Geographic Coordinate Database
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
IDP	Interdisciplinary
LUP	Land Use Plan
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
ODF	Oregon Data Framework
OR/WA	Oregon/Washington
PLANBDY	Plan Boundary
RMP	Resource Management Plan
RMPA	Resource Management Plan Amendment
ROD	Record of Decision
SDE	Spatial Data Engine
VRM	Visual Resource Management

Table 3 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 currents lists:

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

Note that domain CODE, as seen in the geodatabase, is added to the DESCRIPTION. For example, the domain CODE "ORB00" has the DESCRIPTION of "ORB00 – Burns District Office."

A.1 COORD_SRC [BACK]

CADNSDI	CADNSDI – Lines from or snapped to the cadastral national spatial data infrastructure
CFF	CFF – Lines duplicated or buffered from Cartographic Feature Files (USFS)
DEM	DEM – Digital Elevation Model (30m or better accuracy) used for creation of contours
DIS	DIS – Lines generated to connect discontinuous features
DLG	DLG – Lines duplicated or buffered from (24K scale accuracy) USGS Digital Line Graphs
DOQ	DOQ – Screen digitized linework over Digital Orthoquad backdrop
DRG	DRG – Screen digitized linework over Digital Raster Graphic 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 satellite or other non-photographic imagery
MAP	MAP – Digitized linework 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 (e.g., COGO)
TIGER	TIGER – Tiger Data
TRS	TRS – Coordinates only given as a legal description (township, range, section)
UNK	UNK – Unknown coordinate source
WOD	WOD – WODDB Photogrammetric

A.2 DEF_FEATURE [BACK]

BLM_ADMIN	BLM_ADMIN – Bureau of Land Management administrative boundary	
COUNTY	COUNTY – County boundary	
FOREST_SERVICE_ADMIN	IN FOREST_SERVICE_ADMIN – Forest Service administrative boundaries	
GRAZING_BOUNDARY GRAZING_BOUNDARY - Pasture or other administrative grazing bounda		

Plan Area 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	
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.3 LUPA_ID [BACK]

LUPA001801	LUPA001801 – Andrews MFP 1982
LUPA001802	LUPA001802 – High Desert MFP 1982
LUPA001803	LUPA001803 – John Day RMP 1985
LUPA001804	LUPA001804 – Two Rivers RMP 1986
LUPA001805	LUPA001805 – Baker RMP 1989
LUPA001806	LUPA001806 – Brothers/LaPine RMP 1989
LUPA001807	LUPA001807 – Spokane RMP 1992
LUPA001808	LUPA001808 – Three Rivers RMP 1992
LUPA001809	LUPA001809 – Coos Bay RMP 1995
LUPA001810	LUPA001810 – Eugene RMP 1995
LUPA001811	LUPA001811 – Klamath Falls RMP 1995
LUPA001812	LUPA001812 - Medford RMP 1995
LUPA001813	LUPA001813 – Roseburg RMP 1995
LUPA001814	LUPA001814 – Salem RMP 1995
LUPA001815	LUPA001815 – Upper Klamath Basin-Wood River Ranch RMP 1995
LUPA001816	LUPA001816 – Lakeview RA RMP 2003
LUPA001817	LUPA001817 – Southeastern Oregon RMP 2003
LUPA001818	LUPA001818 - Steens Mountain CMPA/Andrews Management Unit RMP 2005
LUPA001819	LUPA001819 – Upper Deschutes RMP 2005
LUPA001820	LUPA001820 – John Day RMP
LUPA001821	LUPA001821 – Baker RMP
LUPA001822	LUPA001822 – Andrews Management Unit RMP 2008

LUPA001823	LUPA001823 - Cascade-Siskiyou National Monument RMP 2008	
LUPA001824	LUPA001824 – West Eugene Wetlands RMP	
LUPA001825	LUPA001825 – Eastern Washington and San Juan Resource Management Plan RMP	
LUPA001826	LUPA001826 – Coos Bay RMP 2008	
LUPA001827	LUPA001827 – Eugene RMP 2008	
LUPA001828	LUPA001828 – Klamath Falls Resource Area RMP 2008	
LUPA001829	LUPA001829 – Medford District RMP 2008	
LUPA001830	330 LUPA001830 – Roseburg District RMP 2008	
LUPA001831	LUPA001831 – Salem District RMP 2008	

A.4 LUP_NAME [BACK]

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 - 2008	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	Steens Mountain Cooperative Management and Protection
Protection Area RMP 2005	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 2005	Upper Deschutes Resource Area RMP 2005
Upper Klamath Basin-Wood River Ranch RMP	Upper Klamath Basin-Wood River Ranch RMP 1995

A.5 PLAN_STAGE [BACK]

PRE-DRAFT	Plans that are in the Scoping or Analysis of the Management Situation (or equivalent) stage
DRAFT	Plans that are in the Draft stage
SUPP_DRAFT	Supplemental Draft EIS
FINAL	Plans that are in the Final stage
SUPP_FINAL	Supplemental Final EIS
ACTIVE	Plans for which a Record of Decision or Decision Record has been signed
PENDCHNG	Active plans with pending boundary changes due to neighboring in progress plans

A.6 PLANID [BACK]

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

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