

Wilderness Study Area Data Standard

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WILDERNESS STUDY AREA

Name Abbreviation Notes	<p>WILDERNESS STUDY AREA</p> <p>WSA</p> <p>RESPONSIBILITIES</p> <p>State Data Steward - The State Data Steward is responsible for approving data standards and business rules for data themes they are responsible for, for 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, GIS Coordinators, and with national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality.</p> <p>Lead GIS Specialist - The Lead GIS Specialist works with data stewards to interpret 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.</p> <p>State Data Administrator - The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures 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.</p> <p>State Records Administrator - The State Records Administrator 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 assures that data has been classified under the proper records retention schedule and determine appropriate Freedom of Information Act (FOIA) category.</p> <p>FOIA CATEGORY</p> <p>Public</p> <p>RECORDS RETENTION SCHEDULE(s)</p> <p>20/52c (Geographic Information Systems)</p> <p>20/53c (Electronic Records Inventory and Survey File)</p> <p>PERMANENT. Cutoff EOFY in which the layer is created or significantly altered by the BLM. Transfer copy of data to NARA (National Archives and Records Administration) at the EOFY.</p>
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SECURITY/ACCESS/SENSITIVITY

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

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

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

DATA SET DESCRIPTION

This data set represents Wilderness Study Area (WSA) boundaries as inventoried in the mid-1980's and defined in the October 1991 "Wilderness Study Report". WSA's are essentially roadless areas under BLM jurisdiction. WSAs have special management restrictions and priorities.

USAGE

This data set is used for depicting the Wilderness Study Area on maps. Polygons created from the data are used for various analytical purposes, including clipping data and calculating acreage.

SPONSOR/AFFECTED PARTIES

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

DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the Oregon Data Framework (ODF). The ODF utilizes the concept of inheritance to define specific instances of data. The Framework 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 category. These sub-categories may be further broken into more specific groups until you get to a basic data set that cannot be further sub-divided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated (those groups/categories above them do not contain actual data but set parameters that all data of that type must follow).

See the [Oregon Data Framework Overview](#) section for a simplified schematic of the entire Oregon Data Model showing the overall organization and entity inheritance. The Wilderness Study Area entities are highlighted. A PDF version (which is more readable) can be found at:

http://web.or.blm.gov/datamanagement/standards/Model-Mini_WSA.pdf.

For additional information and a link to the entire Oregon Data Framework, see:

<http://web.or.blm.gov/datamanagement/architecture/datadesign.asp>.

WILDERNESS STUDY AREA DATA ORGANIZATION / STRUCTURE

For Wilderness Study Area, the categories/groups that the data set is part of are:

BLM Wilderness Study Area Polygon:

Oregon Data Framework

Boundaries

Political & Admin

Political & Admin Existing

WSA_POLY

BLM Wilderness Study Area Line:

Oregon Data Framework

Boundaries

PoliticalAdministrativeSpecialManagementAreaLine

WSA_ARC

Relationship to the Department of the Interior Enterprise Architecture - Data Resource Model

The Department of the Interior'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, these are as follows:

Data Subject Area: Recreation

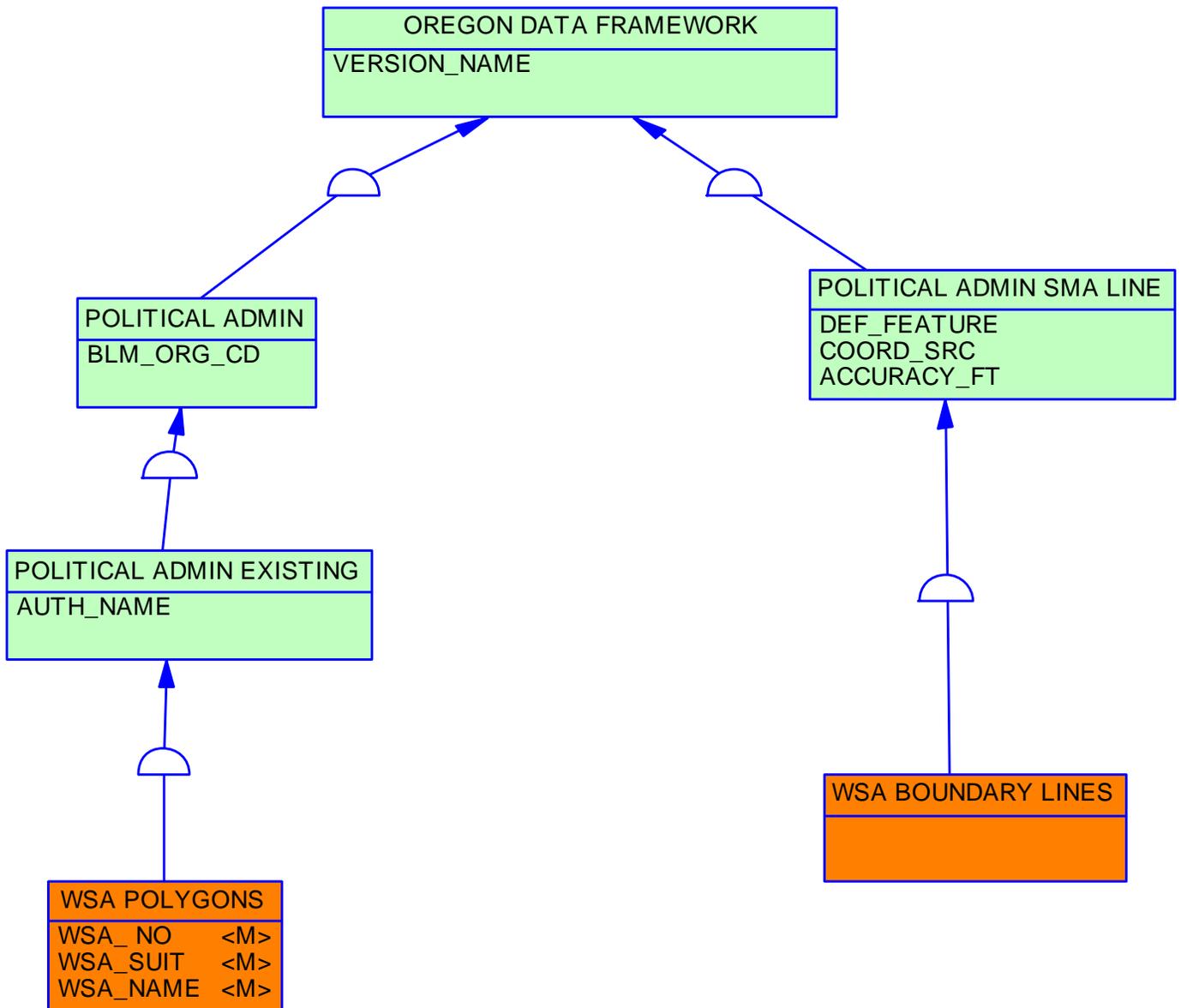
Information Class: Recreation Inventory

A complete list of all DOI Data Subject Areas and Information Classes can be found at:

http://dear.nbc.gov/reports/documents/CORE/DOI_DRM_2.html

[Non-Dept. of the Interior personnel may request a copy from the OR/WA State Data Administrator, Bureau of Land Management, P.O. Box 2965, Portland, OR 97208]

DATA ORGANIZATION / STRUCTURE



LEGEND

	Abstract Entity - No Data
	Feature Class - Physical Data Instance

DATA MANAGEMENT PROTOCOLS

Accuracy Requirements: A high level of positional and attribute accuracy is required for the WSA theme. Much of BLM's management hinges on accurate boundaries for their special management areas, especially WSAs. Boundary features are input and maintained with the highest level of accuracy possible short of surveying.

Collection and Input Protocols: WSAs were inventoried in the late 1970's and early 1980's and no large scale re-inventory of WSAs is expected in the future. Additional WSAs could be designated in the future using new inventory and study guidelines. Existing WSAs are essentially static data until Congress passes legislation designating WSAs as wilderness or releasing them from further wilderness consideration. There is no established deadline for Congressional action on wilderness recommendations. WSA boundaries were manuscripted onto USGS 7.5 minute quads. The lines were annotated with their associated source feature (e.g. "PARCEL" or "RIDGELINE"). Boundaries were captured in GIS using these reference maps and the most accurate GIS themes available (GCDB for parcel segments; 24K DLG for roads and streams; DRG backdrop for heads-up digitizing of contours, fences, powerlines; DOQ backdrop for disturbances like mines). The Wilderness Study Report was also used as a reference for boundary descriptions as well as the draft report which has slightly larger scale maps than the final. Polygons and arcs were attributed according to the reference maps and documents. Many boundaries follow road disturbance rather than road centerline. Where a road right-of-way is defined, this is used as the boundary. Most roads had no defined right-of-way and so an assumed disturbance of 10 feet from center was used. Road segments from the GIS layer were buffered in ARC to the disturbance radius and the inside buffer line used for the WSA boundary.

Update Transactions and Frequency: The unit of processing for the WSA theme is the full theme. Updates should be rare and fall into one of three scenarios:

1. New localized inventory. Boundaries should be manuscripted onto 7.5 minute quads using the same process as original inventory.
2. Replacement of boundary linework when more accurate GIS themes become available.
3. Congressional wilderness legislation which designates wilderness areas from WSAs, or release WSAs from future wilderness consideration.

QUALITY ASSURANCE

Because the WSA theme is relatively static data, the main quality assurance work has been completed. Any changes to the WSA theme need to be directed through the State Data Steward for approval. District WSA Stewards should make changes on a copy of the corporate WSA theme and send to the State Data Steward (who will be responsible for the actual update to the corporate theme). Regular review of the WSA theme is not needed since there will be close review at the time of any change.

It will be the responsibility of the State Data Steward to provide Oregon's WSA theme to the Washington Office (Denver) in the proper format for inclusion in the national WSA theme.

WILDERNESS STUDY AREA 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. Spreadsheets for the domains can be accessed at:

<http://web.or.blm.gov/datamanagement/metadata/domains.asp>

WILDERNESS STUDY AREA DATASET**WSA_Poly (Wilderness Study Area Polygons)**

Attribute Name	Data Type	Length	Default Value	Required?	Domain
WSA_NAME	String	50		Yes	dom_WSA_NAME
WSA_NO	String	10		Yes	dom_WSA_NO
WSA_SUIT	String	1		Yes	dom_EVAL
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
AUTH_NAME	String	80			
VERSION_NAME	String	50	InitialLoad	Yes*	

WSA_Arc (Wilderness Study Area Lines)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
DEF_FEATURE	String	25		Yes	dom_DEF_FEATURE
COORD_SRC	String	7		Yes	dom_COORD_SRC
ACCURACY_FT	Short Integer				
VERSION_NAME	String	50	InitialLoad	Yes*	

* Values automatically generated

PROJECTION AND SPATIAL EXTENT

All feature classes and feature datasets are in Geographic, NAD83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands in the states of Oregon and Washington. See the metadata for this data set for more precise description of the extent. In order to maintain consistent acres reporting, WSA should be projected into UTM in the appropriate zone for acres calculation.

SPATIAL ENTITY CHARACTERISTICS**WILDERNESS STUDY AREA POLYGON (WSA_POLY)**

Description: Instance of Political & Admin Existing group.

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-WSA surrounded by WSA.

Topology: Yes. WSA_POLY lines are coincident with WSA_ARC lines and together make the feature dataset, WSA.

Integration Requirements: None

WILDERNESS STUDY AREA LINE (WSA_ARC)

Description: Instance of Existing Political Admin SMA Line group.

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

Topology: Yes. WSA_POLY lines are coincident with WSA_ARC lines and together make the feature dataset, WSA.

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

ATTRIBUTE CHARACTERISTICS AND DEFINITIONS

(in alphabetical order)

Attribute: ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	ACCURACY_FEET_MEASURE
Notes	Inherited from Entity POLITICAL ADMIN SMA LINE
	Used in Feature Classes: WSA_ARC
Domain	<None>
Data Type	SI
Length	
Precision	

Description

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_SOURCE is another GIS theme (DLG, GCD, DEM) because the accuracy is determined by that theme. If COORD_SOURCE is MAP or GPS, however, 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.

Attribute: AUTH_NAME

Geodatabase Name	AUTH_NAME
BLM Structured Name	AUTHORITY_TEXT
Notes	Inherited from Entity POLITICAL & ADMIN EXISTING
	Used in Feature Class: WSA_POLY
Domain	<None>
Data Type	VA80
Length	80
Precision	

Description

The complete official name of the act/law/order/instruction that established or changes the boundary, e.g. "Steens Mountain Cooperative Management and Protection Act of 2000, Public Law 106-399". The authorizing entity and the effective date are required.

Attribute: BLM_ORG_CD

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	ADMINSTRATIVE_UNIT_ORGANIZATION_CODE
Notes	Inherited from Entity POLITICAL AND ADMIN Domain is a subset of the BLM national domain for organization codes. Only the first five characters of the national code are used. To see the complete list go to: http://ilmniop3ap6/datashopper/ENT_ELEM_detail.asp?tid=100118&entnm=ENT+ELEM&eid=258899673&name=ORGANIZATION+CODE Used in Feature Classes: WSA_POLY
Domain	dom_BLM_ORG_CD
Data Type	A5
Length	5
Precision	

Description

[Required]

Combination of the BLM State, District and Field Office which has administrative responsibility. One District may have administrative responsibility over a WSA that is partially located in a neighboring District.

Examples:

OR015 Lakeview Resource Area, Lakeview District, OR/WA BLM
 OR025 Three Rivers Resource Area, Burns District, OR/WA BLM
 OR085 Marys Peak Resource Area, Salem District, OR/WA BLM
 OR020 Burns District, OR/WA BLM

Attribute: COORD_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	COORDINATE_SOURCE_CODE
Notes	Inherited from Entity POLITICAL ADMIN SMA LINE
	Used in Feature Classes: WSA_ARC
Domain	dom_COORD_SRC
Data Type	A7
Length	7
Precision	

Description

[Required]

The actual source of the GIS coordinates for the line segments.

Examples: GCD, DEM, DLG, SOURCEC, MAP

Attribute: DEF_FEATURE

Geodatabase Name	DEF_FEATURE
BLM Structured Name	DEFINING_FEATURE_CODE
Notes	Inherited from Entity POLITICAL ADMIN SMA LINE
	Used in Feature Classes: WSA_ARC
Domain	dom_DEF_FEATURE
Data Type	VA25
Length	25
Precision	

Description

[Required]

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. By far the most common defining features for WSA boundaries are SUBDIVISION and ROAD_OFFSET.

Examples: SUBDIVISION, POINT-TO-POINT, WATERCOURSE, RIDGE, SHORELINE, FENCE, RIGHT-OF-WAY, ROAD_OFFSET, ROAD, POWERLINE, LAVA, MINERAL DISTURBANCE

Attribute: VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	GEODATABASE_VERSION_TEXT
Notes	Inherited from Entity Oregon Data Framework. 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: WSA_POLY WSA_ARC
Domain	<None>
Data Type	VA50
Length	50
Precision	

Description

[Required]

Name of the corporate geodatabase version previously used to edit the record.

InitialLoad = feature has not been edited in ArcSDE.

Format: username.XXX-mmddyy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation.

Attribute: WSA_NO

Geodatabase Name	WSA_NO
BLM Structured Name	WILDERNESS_STUDY_AREA_NO
Notes	Not Inherited Used in Feature Class: WSA_POLY
Domain	dom_WSA_NO
Data Type	VA10
Length	10
Precision	

Description

[Required]

A unique identifier for each Wilderness Study Area. These identifiers are unique within each BLM administrative state. This attribute also provides information about areas within a WSA that are not part of the wilderness study area for some reason. Possible reason may include roads that have been excluded (cherry-stemmed), private lands, other lands that do not exhibit wilderness characteristics.

Attribute: WSA_NAME

Geodatabase Name	WSA_NAME
BLM Structured Name	WILDERNESS_STUDY_AREA_NAME
Notes	Not Inherited
Domain	Used in Feature Class: WSA_POLY
Data Type	dom_WSA_NAME
Length	A50
Precision	50

Description

[Required]

The name used to identify the wilderness study area. Non-WSA islands are not attributed with a name, but private and State inholdings are labeled with "inholding".

Attribute: WSA_SUIT

Geodatabase Name	WSA_SUIT
BLM Structured Name	WILDERNESS_SUITABILITY_CODE
Notes	Not Inherited
Domain	Used in Feature Class: WSA_POLY
Data Type	dom_EVAL
Length	A1
Precision	1

Description

[Required]

Identifies whether the wilderness study area is recommended suitable for wilderness designation.

Y - The unit meets criteria.

N - The unit does not meet criteria.

X - The unit was not evaluated because it was not applicable.

U - Criteria was not evaluated.

ASSOCIATED FILES OR DATABASES

None

LAYER FILES (PUBLICATION VIEWS)

Layer files will be created through scripts that can be automatically executed. Layer files do not require storage and maintenance of additional data and can be deleted and recreated at any time. Layer files (since they are derivative products) are not master corporate data (they can be easily rebuilt if necessary). Layer files may be added in the future without documenting them in this document.

EDITING PROCEDURES (TO BE ADDED LATER)

Cluster Tolerance – Must be very small, equivalent to one foot.

Topology Rules

Allowed Exceptions

Reference Themes and Tables

Editing Symbology

Editing Workflow

Snapping Guidelines

 Ranks

 Tolerances

"Do's and Don'ts"

QC Checklist

ABBREVIATIONS AND ACRONYMS USED IN THIS STANDARD

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

BLM - Bureau of Land Management
DEM - Digital Elevation Model
DLG - Digital Line Graphs
FOIA - Freedom of Information Act
GCD - Geographic Coordinate Database
GIS - Geographic Information System
GNIS - Geographic Names Information System
IDP - Interdisciplinary
NAD - North American Datum
NARA - National Archives and Records Administration
ODF - Oregon Data Framework
OR/WA - Oregon / Washington
RMP - Resource Management Plan
SDE - Spatial Data Engine
SMA - Special Management Area
WSA - Wilderness Study Area