

# Oregon/Washington Bureau of Land Management



## Sustained Yield Units

### Spatial Data Standard



*Photo of log loader at the Rowell Creek Timber Sale located nine miles southwest of Willamina, Oregon. Photo taken on June 1, 2018 by Michael Campbell, BLM.*

## Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	8/9/2021	Dana Baker-Allum, Carolina Hooper	Initial Release	All

**Navigation**



Navigation

This document uses hyperlinks to display additional information on topics. External links are displayed with an underline. Internal links are blue text, not underlined. After clicking on an internal link, press the **Alt**  **+left arrow**  keys to return to the original location from the target location.

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# 1 General Information

This dataset represents Sustained Yield Unit boundaries. According to Title 43 of the Code of Federal Regulations part 5040 "BLM is authorized under the O. and C. Lands Act and the Federal Land Policy and Management Act, to divide the lands it manages in western Oregon into sustained-yield forest units. [...] BLM establishes units that contain enough forest land to provide, insofar as practicable, a permanent source of raw materials to support local communities and industries, giving due consideration to established forest products operations."

For more information on O&C lands and sustained yield, see: *O&C Sustained Yield Act: The Land, the Law, the Legacy 1937-1987*. USDI, BLM. Retrieved from: [https://www.blm.gov/or/files/OC\\_History.pdf](https://www.blm.gov/or/files/OC_History.pdf).

- Dataset (Theme) Name: Sustained Yield Units
- Dataset (Feature Class): SYU\_POLY

## 1.1 Roles and Responsibilities

Table 1 Roles and Responsibilities

Roles	Responsibilities
<a href="#">State Data Steward</a>	The State Data Steward responsibilities include approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential Privacy issues, and managing that data as a corporate resource. The State Data Steward coordinates with field office data stewards, the State Data Administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality.
<a href="#">GIS Technical Lead</a>	The GIS Technical Lead works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the development of data standards. The GIS technical lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS technical lead works with data editors to ensure the consistency and accordance with the established data standards of data input into the enterprise Spatial Database Engine (SDE) geodatabase. The GIS technical lead provides technical assistance and advice on GIS analysis, query, and display of the dataset.
<a href="#">State Data Administrator</a>	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
<a href="#">State Records Administrator</a>	The State Records Administrator assists the state data steward to identify any privacy issues related to spatial data. The state records administrator also provides direction and guidance on data release and fees. The state records administrator classifies data under the proper records retention schedule and determines the appropriate Freedom of Information Act category.

## 1.2 FOIA Category

Category 1(A) - BLM Records that do not contain protected information and can be released in whole.

## 1.3 Records Retention Schedule

The DRS/GRS/BLM Combined Records Schedule, under Schedule 20/52a2 (Electronic Records/Geographic Information Systems), lists Political and Administrative boundaries themes as one of the system-centric themes that are significant for BLM's mission that must be permanently retained.

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

Oregon/Washington (OR/WA) Bureau of Land Management (BLM) Guidebook for Management of Geospatial Data (v1) Section 15.2 - Corporate Data Online Archives prescribes:

"Vector annual archives are retained online for 12 years. Each year, data that has reached 12 years old is copied off-line, to be retained until no longer needed (determined by data stewards and program leads), with format and readability maintained in a five (5) year "tech refresh" update cycle."

## 1.4 Security/Access/Sensitivity

The Sustained Yield Units theme does 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 has no restrictions on access from either within the BLM or external to the BLM.

There are no privacy issues or concerns associated with these data themes. A privacy impact assessment was completed on 8/9/2021.

## 1.5 Keywords

Keywords that can be used to locate this dataset include:

- BLM Thesaurus: Forest, Management, Vegetation
- Additional keywords: Sustained Yield Units, O&C Lands, Forestry, Silviculture
- ISO Thesaurus: boundaries, biota

## 1.6 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 - Data Administration
- 5043 - Sustained Yield Forest Units
- 9167 - Geographic Information System (GIS)

## **2 Dataset Overview**

### **2.1 Usage**

This data is primarily used as the basic unit for calculating and declaring the allowable sale quantity (ASQ) for Western Oregon BLM as required in the O&C Act of 1937. The SYU forms the boundary in which all harvest scheduling and grown and yield projections will be calculated. This is often done in conjunction with the development of a Resource Management Plan (RMP) but may be done independently.

### **2.2 Sponsor/Affected Parties**

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

There are no affected parties for this dataset.

### **2.3 Relationship to Other Datasets, Databases, or Files**

The Sustained Yield Units dataset is related to the Administrative Units (ADMU) dataset. In most cases the SYU boundaries are derived from the ADMU polygons, however, it is not a requirement that the SYU be coincident with ADMU.

## 2.4 Data Category/Architecture Link

This data theme is a portion of the Oregon Data Framework (ODF) shown in Figure 1, Oregon Data Framework (ODF) Overview on page 9. The illustration is a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The ODF utilizes the concept of inheritance to define specific instances of data. The ODF divides all OR/WA resource-related data into three general categories:

- Activities
- Resources
- Boundaries

These general categories are broken into sub-categories that inherit spatial characteristics and attributes from their parent category. These sub-categories may be further broken into more specific groups until the basic data set cannot be further sub-divided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated. Those groups/categories above them do not contain actual data but set parameters which all data of that type must follow.

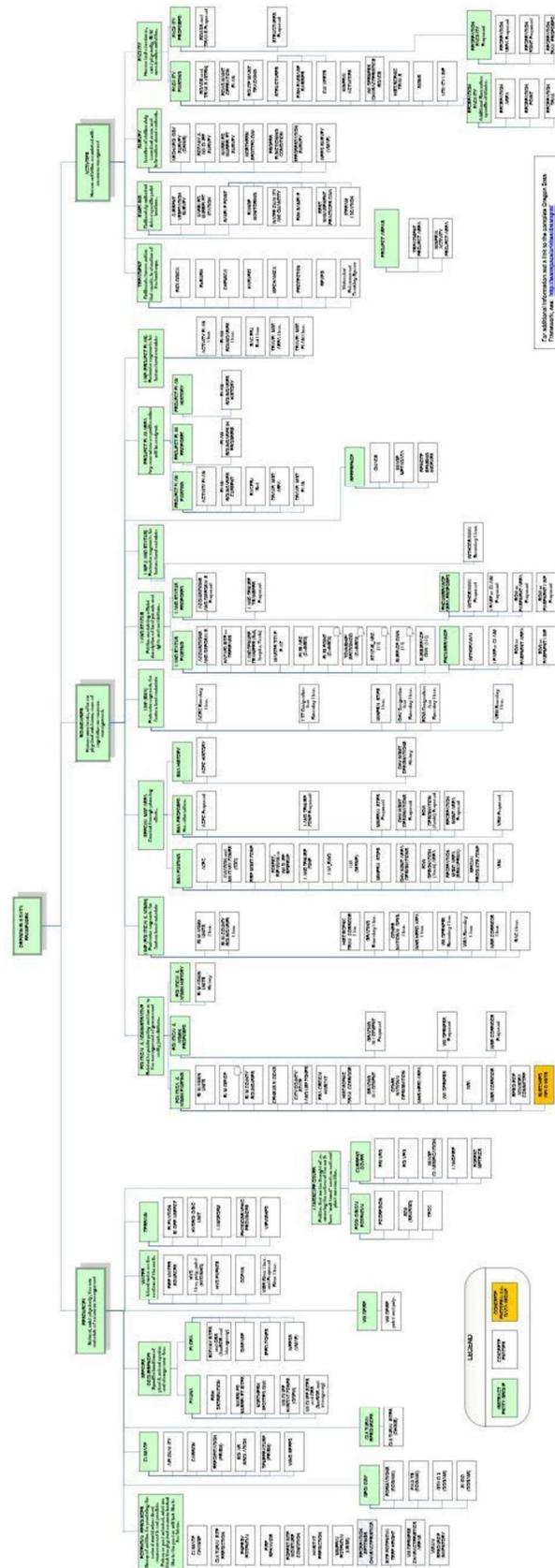


Figure 1 Oregon Data Framework Overview

Physical data is populated in the basic data sets. Those groups/categories above them do not contain actual data but set parameters that all data of that type must follow. See Figure 2, Data Organization Structure for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The Sustained Yield Unit entities are highlighted. For additional information about the ODF, contact the [State Data Administrator](#). The State Data Administrator’s contact information can be found at the following link:

<https://www.blm.gov/about/data/oregon-data-management>

In the ODF, SYU is considered a boundary and categorized as follows:

ODF

Boundaries

Political & Administrative

Political & Administrative Existing

SYU\_POLY

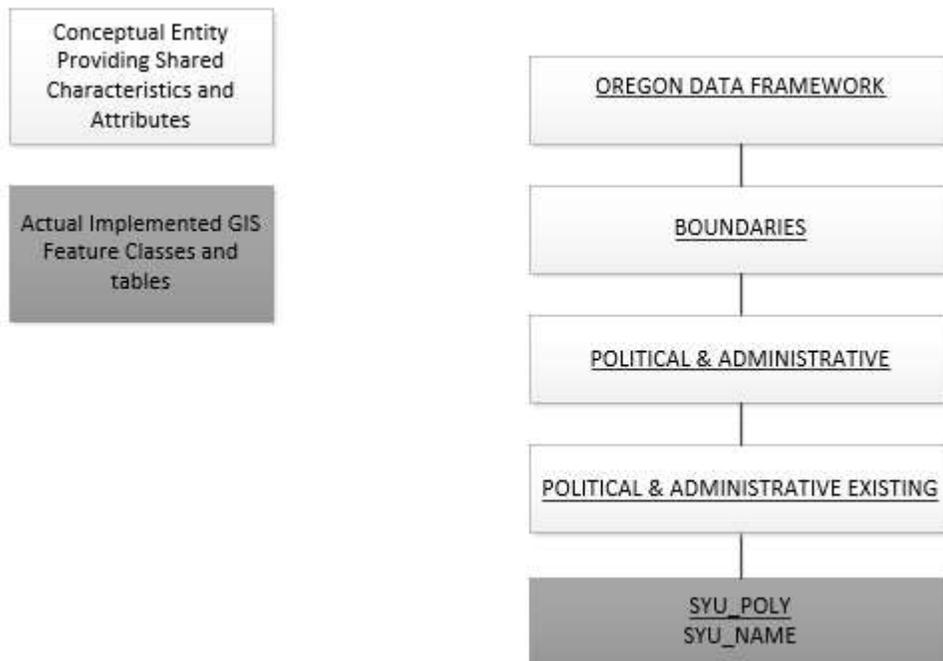


Figure 2 Data Organization Structure

## 2.5 Relationship to DOI Enterprise Architecture Data Resource Mode

The Department of the Interior (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 data set, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

## **3 Data Management Protocols**

### **3.1 Accuracy Requirements**

The data in SYU\_POLY is derived from data in the Administrative Units (ADMU) dataset. The ADMU accuracy requirements are: Legal descriptions define ADMUs following natural or man-made features and survey positions. The spatial data representing the features are refined over time to capture accurately their intended position. ADMU will include the most accurate data available.

### **3.2 Collection, Input, and Maintenance Protocols**

The data in SYU\_POLY is derived from data in the Administrative Units (ADMU) dataset. Detailed collection and maintenance guidance is available in the ADMU data standard.

### **3.3 Update Frequency and Archival Protocols**

The SYU\_POLY dataset is refreshed whenever edits are made to the ADMU dataset or when the BLM decides to make changes to the SYU boundaries. The BLM has the discretion to change the SYU boundaries, via a formal administrative process and a Federal Registry notice. The last time the SYU boundaries were changed administratively was in 2006.

Data is archived annually at the end of the fiscal year.

### **3.4 Statewide Monitoring**

The State Data Stewards, assisted by the GIS Technical Lead, are responsible for checking consistency across districts for the theme. The State Data Steward is responsible for coordinating the response to national BLM and interagency data calls.

## 4 Sustained Yield Units 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. 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. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: <https://www.blm.gov/about/data/oregon-data-management>

For domains not listed at that site contact: [State Data Administrator](#).

### 4.1 SYU\_POLY Feature Class (Sustained Yield Units Polygons)

For domain and default values, see Section 7, [Attribute Characteristics and Definition](#) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
SYU_NAME	String	40		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 OR/WA in Western Oregon. See the metadata for this data for a more precise description of the extent.

## 6 Spatial Entity Characteristics

- Sustained Yield Units Polygons (SYU\_POLY)
  - Description: Instance of Political & Administrative Existing group.
  - Geometry: Polygons that form a continuous "wall-to-wall" cover across Western Oregon with no gaps or overlaps.
  - Topology: No
  - Integration Requirements: Data is derived from ADMU\_OFC\_POLY.

## 7 Attribute Characteristics and Definition (In alphabetical order)

### 7.1 SYU\_NAME

Geodatabase Name	SYU_NAME
BLM Structured Name	Sustained_Yield_Unit_Name
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	SYU_POLY
Definition	The name of the designated sustained yield unit.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: "Salem", "Medford"
Data Type	String (40)

## 8 Layer Files (Publication Views)

### 8.1 General

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

- Copied completely with no changes (replicated).
- Copied with no changes except to omit one or more feature classes from a feature dataset.
- Minor changes made (e.g., clip, dissolve, union with ownership) to make the data easier to use. Feature classes that have been changed are indicated by “PUB” in their name. They are created through scripts that can be automatically executed and are easily rebuilt from the master (ORSOEDIT) data whenever necessary.

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

### 8.2 Specific to This Dataset

The following steps are currently used to create the SYU\_POLY publication dataset:

SYU\_POLY publication dataset, perform the following steps:

- Select the polygons from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD IN( 'ORC03000' , 'ORC04000' ). Add these polygons to SYU\_POLY and assign the SYU\_NAME: "Coos Bay".
- Select the polygons from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD = 'ORM07000' and PARENT\_CD = 'ORC00000'. Add this polygon to SYU\_POLY and assign the SYU\_NAME: "Coos Bay".
- Select the polygon from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD = 'ORL04000'. Cut the result polygon with U.S. Highway 97 and only include the area west of U.S. Highway 97. Assign the SYU\_NAME: "Klamath Falls".
- Select the polygons from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD IN ('ORM05000', 'ORM06000', 'ORM07000') and PARENT\_CD <> 'ORC00000'. Add these polygons to SYU\_POLY and assign the SYU\_NAME: "Medford".
- Select the polygons from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD IN ( 'ORN05000' 'ORN03000' ). Add these polygons to SYU\_POLY and assign the SYU\_NAME: "Eugene".
- Select the polygons from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD IN ( 'ORN01000', 'ORN02000', 'ORN04000' ). Add these polygons to SYU\_POLY and assign the SYU\_NAME: "Salem".
- Select the polygons from ADMU\_OFC\_POLY where the ADM\_UNIT\_CD IN ('ORR04000', 'ORR05000'). Add these polygons to SYU\_POLY and assign the SYU\_NAME: "Roseburg".
- Dissolve the polygons on the SYU\_NAME field.

## 9 Editing Procedures

This dataset is not editable. If edits are needed, they must be made to the ADMU dataset.

## 10 Abbreviations and Acronyms

Does not include abbreviations/acronyms used as codes for data attributes or domain values.

**Table 2** Abbreviations/Acronyms Used

Abbreviations	Descriptions
ARC	GIS line feature
BLM	Bureau of Land Management, U.S. Department of the Interior
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
FOIVEG	Forest Operations Inventory
GIS	Geographic Information System
GPS	Global Positioning System
GTRN	Ground Transportation GIS dataset
IDP	Interdisciplinary
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
POLY	GIS polygon feature
PUB	Publication
RMP	Resource Management Plan
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
USFS	United States Forest Service, U.S. Department of Agriculture
USGS	United States Geological Survey, U.S. Department of the Interior
SDE	Spatial Database Engine
WEB	Worldwide Web (internet)
WODDB	Western Oregon Digital Database