

STRUCTURES SPATIAL DATA STANDARD



STRUCTURES DATA STANDARD**TABLE OF CONTENTS**

SECTION	TITLE	PAGE
1	General Information	4
1.1	Roles and Responsibilities	4
1.2	FOIA Category	4
1.3	Records Retention Schedule	5
1.4	Security/Access/Sensitivity	5
1.5	Keywords	5
2	Dataset Overview	5
2.1	Description	5
2.2	Usage	5
2.3	Sponsor/Affected Parties	6
2.4	Relationship to Other Datasets	6
2.5	Data Category/Architecture Link	8
2.6	Relationship to the Department of the Interior Enterprise Architecture-Data Resource Model	9
2.7	Structures Data Organization/Structure	10
3	Data Management Protocols	11
3.1	Accuracy Requirements	11
3.2	Collection, Input and Maintenance Protocols	11
3.3	Update Frequency and Archival Protocols	11
3.4	Statewide Monitoring	11
4	Structures Schema (Simplified)	12
4.1	STRCT_PT (Structure Points)	12
4.2	STRCT_P_PT (Structure Proposed Points)	13
4.3	STRCT_ARC (Structure Lines)	14
4.4	STRCT_P_ARC (Structure Proposed Lines)	15
5	Projection and Spatial Extent	16
6	Spatial Entity Characteristics	16
7	Attribute Characteristics and Definitions	17
7.1	ACCURACY_FT	17
7.2	ARCH_CLEAR	17
7.3	BENEFIT	18
7.4	BENEFIT2	18
7.5	BLM_ORG_CD	19
7.6	BOT_CLEAR	19
7.7	BUDGET_CD	20
7.8	CARTO	20
7.9	CLASSIFIER	20
7.10	COMPLT_DT	21
7.11	CONDITON	21
7.12	COORD_SRC	21
7.13	CURRENT_CD	22
7.14	ELEVATION_FT	22
7.15	FAC_ADMIN	22
7.16	FAMSKEY	23
7.17	GIS_MILES	23

7.18	INITIATIVE	23
7.19	LOCAL_LINK	24
7.20	MAINT_DT	24
7.21	NHD_REACHCODE	24
7.22	PLANID	25
7.23	PROJ_NAME	25
7.24	RADMETER	25
7.25	RIPSKEY	26
7.26	SIDEMETER	26
7.27	START_DT	26
7.28	STATUS_P	27
7.29	STRCT_ARC_TYPE	27
7.30	STRCT_ID	28
7.31	STRCT_MAT	28
7.32	STRCT_NAME	29
7.33	STRCT_P_ARC_TYPE	29
7.34	STRCT_P_NAME	30
7.35	STRCT_PT_TYPE	30
7.36	STRCT_P_PT_TYPE	31
7.37	SYM_ROTATE	31
7.38	TRTLINK	31
7.39	VERSION_NAME	32
7.40	WILD_CLEAR	32
7.41	WORKAGENT	32
8	Associated Files or Databases	33
9	Layer Files (Publication Views)	33
10	Editing Procedures	33
11	Oregon/Washington Data Framework Overview	35
12	Abbreviations and Acronyms Used in this Standard	36
Appendix A	Domains (Valid Values)	37
A.1	BENEFIT	37
A.2	BLM_ORG_CD	38
A.3	CONDITION	39
A.4	COORD_SRC	39
A.5	CURRENT_CD	39
A.6	INITIATIVE	40
A.7	JURIS_CODE	40
A.8	PLANID	41
A.9	STATUS_P	41
A.10	STRCT_ARC_TYPE	41
A.11	STRCT_P_ARC_TYPE	42
A.12	STRCT_PT_TYPE	42
A.13	STRCT_P_PT_TYPE	44
A.14	WORKAGENT	45

1. GENERAL INFORMATION

Dataset (Theme) Name: Structures

Dataset (Feature Class): STRCT_PT, STRCT_P_PT, STRCT_ARC, STRCT_P_ARC

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Steward	<p>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. For the structures group of themes, there are several State Data Stewards including:</p> <ul style="list-style-type: none"> • Patrick Keady for Engineering, at 503-808-6407 • Robert Hopper for Range, at 503-808-6117 • Scott Lightcap for Fisheries, at 541-464-3325 • Anna K. Smith for Hydrography, at 541-416-6747 • Dale Guenther for Fire, at 503-808-2188
Lead GIS Specialist	<p>The Lead GIS Specialist, Pamela Keller at 541-573-4486, works with Data Stewards to convert business needs into GIS applications, and derives data requirements, and participates in the development of data standards. The Lead GIS specialist coordinates with system administrators and GIS coordinators to manage the GIS databases.</p>
State Data Administrator	<p>The State Data Administrator, Stanley Frazier at 503-808-6009, provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures that defined processes for development of data standards and metadata are followed and that they are consistent and complete. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.</p>
State Records Administrator	<p>The Acting State Records Administrator, Jan McCormick at 503-808-6655, is responsible for identifying any privacy issues related to spatial data. The State Records Administrator also provides direction and guidance on data release and fees. The State Records Administrator ensures that data has been classified under the proper records retention schedule and determines appropriate Freedom of Information Act category.</p>

Table 1 Roles and Responsibilities

1.2 FOIA CATEGORY

Public

1.3 RECORDS RETENTION SCHEDULES

General Records Schedule 20/52c (Electronic Records/Geographic Information Systems)

General Records Schedule 20/53c (Electronic Records Inventory and Survey File)

TEMPORARY. Delete when no longer needed for administrative, legal, audit, or other operational purposes.

1.4 SECURITY/ACCESS/SENSITIVITY

The structures 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) 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.

1.5 KEYWORDS

Keywords that can be used to locate this dataset include: structures, construction, improvements, range improvements, and resource improvements.

2. DATASET OVERVIEW

2.1 DESCRIPTION

This dataset represents constructed features called structures. Structures are discrete, physically existing things that are built. Structures are things created to support treatment, recreation, or other management activities. The attributes unique to structures have a construction focus including materials, condition and maintenance. Structures are line or point features (building blocks, so to speak). A fixed buffer width (added as an attribute to the point or line) is sufficient for determining acres as needed. There are four feature classes for structures: STRCT_ARC and STRCT_PT for existing structures and STRCT_P_ARC and STRCT_P_PT for the proposed structures. Structures might be associated with one or more of several databases including the Range Improvement Project System (RIPS), Facility Assets Management System (FAMS), Ground Transportation (GTRN), Recreation Management Information System (RMIS), Aquatic Resources Information Management System (ARIMS), Interagency Restoration Database Application (IRDA), interagency National Hydrography Dataset (NHD), United States Geological Survey (USGS) Geographic Names Information System (GNIS), and State of Oregon databases.

2.2 USAGE

This dataset is used for depicting structures on maps, for providing information useful to the maintenance of structures on the ground, and for reporting on construction activity. The BLM, as a public land management agency, is required to identify land-altering actions including construction. Proposed structures have to undergo planning at some level. Both completed and proposed structures must be accounted for in National Environmental Protection Act cumulative effects analysis. Structures are usually counted rather than measured for reporting purposes, although linear structures are often tallied by mile. Structures are often combined (spatial overlay) with polygon feature classes for a variety of analytical purposes. For example: miles of fence in a particular watershed or the number of erosion control devices in a Resource Area.

Non-BLM structures (structures under the control of another agency or private party) can be included in this data set when necessary for cartographic or analytical purposes. Care must be taken to clearly identify non-BLM features when they are shown.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this dataset is the Deputy State Director, Resource Planning, Use and Protection. This dataset represents BLM structures, and matching interagency data across the landscape is not necessary.

2.4 RELATIONSHIP TO OTHER DATASETS

Structures are primarily defined as constructed features and may have links to the FAMS application database. In addition, structures often have meaning outside of being constructed things. Structures might be built to support rangeland management (fences, water developments) and need links to RIPS. They might be infrastructure for a recreation site. The structure itself is not a recreation site, but may be associated with a recreation site feature (RECSITE). If the structure was built to support a land area treatment they can be linked to that treatment with TRTLINK. It is important to consider the relationships between structures and associated **areas** treated or potentially treated because it may not be immediately obvious. These treated area polygons are captured on one of the treatment feature classes (BURN, REVEG, HARV, MECH, CHEM, BIO, and PROT). However, some structures function as treatments all by themselves; so, the core attributes for PLANID, BENEFIT, and INITIATIVE is included.

There should be a large amount of coincidence between STRCT_ARC and the polylines (arc) of Grazing Allotments and Pastures (GRA) and/or polylines of PROT (protection feature class from treatments). If GRA arcs have DEF_FEATURE = "FENCE," there should be a corresponding arc on STRCT_ARC with TYPE = "Fence." However, it is important to note that fences on STRCT_ARC might be slightly different (longer or shorter extent) than the polylines of GRA or PROT. Also, there will be more fences in STRCT_ARC than are found in GRA or PROT. The STRCT_ARC represents the true physical location of a fence; GRA and PROT represent areas that may include boundary segments other than fences.

Structures that are related to water must be linked to the relevant physical water feature in the NHD. The NHD_REACHCODE is the linking field and it must be filled in for the appropriate structures. The NHD does not include the attribute information needed for BLM water structure management, use, and planning purposes. The ARIMS database application has some of these and the connection is again via the NHD_REACHCODE. Other attributes are found only in the structures dataset. More detail can be found in Section 3.2 Collection, Input, and Maintenance Protocols.

Another existing database application is the IRDA. Even though IRDA allows for the creation of GIS spatial features within the application, it is not recommended because IRDA is not the master location for spatial features. Features from ARIMS, NHD, structures, treatments, GTRN or other GIS master datasets, can be copied into the IRDA and attributes attached. Spatial features with a riparian or water restoration benefit can be selected from structures using the BENEFIT or BENEFIT2 attributes.

Even though roads, railroads, and trails are constructed features, the OR/WA corporate GTRN dataset will continue to serve as master data for these spatial features. Point features, like gates and cattleguards, however, are found in STRCT_PT. Road closure devices are indicated by BENEFIT = "Road Access Restriction" with a STRCT_PT_TYPE of Gate, Road Barrier, or Sign. The STRCT_MAT provides the physical material of the road closure or blockage.

Power, communication (phone, optic, cable), and gas lines are generally not BLM owned or managed entities. Utility lines are acquired from other agencies, but OR/WA BLM often needs to make modifications to reduce the complexity of lines, as well as, customize attributes. As such, these data fall into the OR/WA corporate data category of external source (value-added), and are stored in a separate feature class. Structures do, however, allow inclusion of these entity types for when OR/WA BLM is the appropriate creator and maintainer of the data.

There is considerable duplication between STRCT_PT, NHD, ARIMS, RECSITE and the USGS point layer GNIS. The GNIS is simply points for cartographic display and includes all kinds of locations. The GNIS contains point locations for recreation sites (RECSITE) like parks and campgrounds, as well as, constructed features such as offices, towers, wells, dams, bridges and many more. These are not completed nor intended to be. They are map label locations and, more importantly, the official names of natural features. The GNIS also contains cartographic locations for landform labels (peaks, valleys, flats, etc.). To avoid duplication with other OR/WA BLM corporate data, GNIS is considered the master spatial data location only for the landform label points. There should be regular synchronization of point locations from the other themes to GNIS and, conversely, GNIS provides the official name for relevant spatial features (notably water features). There is often an additional "local" name necessary for data differentiation and linkage to other databases.

All of the above are examples of "one-to-many" relationships where there may be many structures related to one treatment polygon, one recreation site polygon or recreation site point, one range improvement project, or one "facility" in FAMS. It may **also** be necessary to go from one structure to many smaller structures. For example, one pipeline might have many valves, one wind tower might have details about support points, and one campground might have many water spigots and toilets. These details, if necessary, can be kept in separate tables that are linked to structures with STRCT_ID and/or to recreation sites or other facilities with FAMSKEY and/or to treatments with TRTLINK. These tables can have simple XY coordinates for mapping. Examples of such small structure locations that could be kept in a separate XY table:

- Small Signs (Boundary/Information/Fire Prevention/Fee)
- Power Pole/Box, Communication Pole/Box
- Water Spigot/Valve/Vent/Pump/Drain
- Sewage Sump, Propane Tank
- Traffic Counter Road/Trail
- Fire Ring, Picnic Table
- Fence Gate/Stile/Jack
- Fence Pull Pile
- Claim Marker

What is considered a recreation "Site," a "Structure," and a "Small Structure" associated item attempts to follow the FAMS logic for what is considered a "Site," an "Asset," and an "Optional Asset." All

structures should create an entity on STRCT_PT or STRCT_ARC (with possible association to treatment feature classes or to Recreation Sites). The small structures stored in a separate table, if they are even needed, may have only minimal additional information or a great deal of detailed information.

The relationship to Sampling Points (described in the SAMPLE_PT data standard) is defined by intent or purpose of the entity. Structures are defined mainly by their construction characteristics. Sampling Points are defined mainly by their purpose which is resource measurement and monitoring at a specific point and time (often repeatedly). Things like mineral drill holes, geothermal test wells, and seismic test stations might be thought of as small structures, but they are inherently Sampling Points.

2.5 DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the Oregon Data Framework (ODF). The ODF utilizes the concept of inheritance to define specific instances of data. 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 you get to a basic dataset that cannot be further sub-divided. Those basic datasets inherit all characteristics of all groups/categories above them. Physical data gets 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 Overview (Figure 2) for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The structure entities are highlighted. For additional information about the ODF, contact:

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

For each feature class of the structures group, the categories/groups it is part of are:

ODF

Activities

Completed Structure

STRCT_PT

STRCT_ARC

Proposed Structure

STRCT_P_PT

STRCT_P_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 in the section on attribute descriptions. Data context is addressed in 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 STRUCTURES DATA ORGANIZATION/STRUCTURE

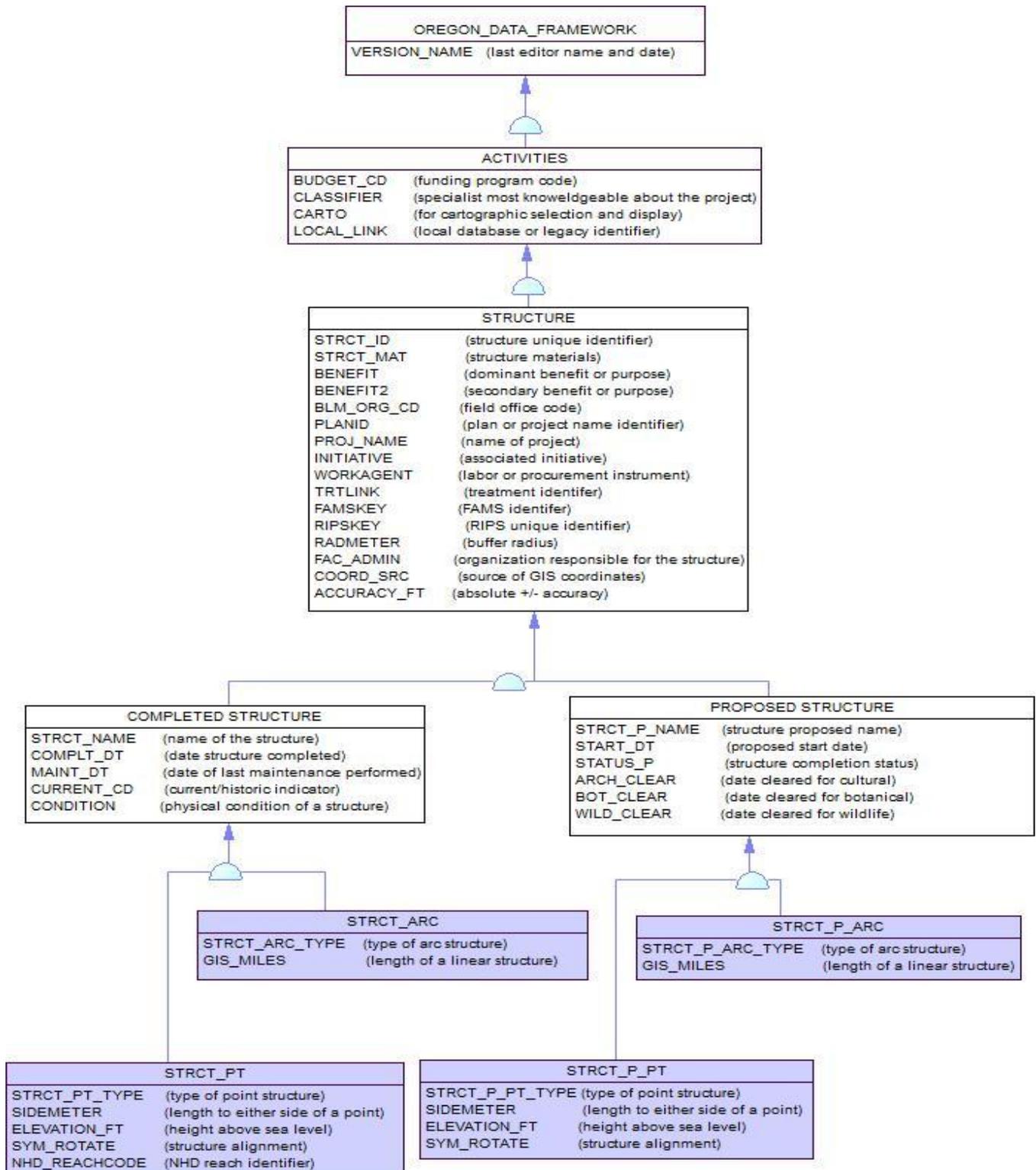


Figure 1 Data Organization Structure

3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

Since structures have a physical existence on the ground, it is possible to map their locations with a high degree of accuracy. Accuracy is, however, variable because of a wide variety of sources. The claimed +/- range is captured in the attribute ACCURACY_FT. Over time, the accuracy will continue to improve as structure locations are noted using the Global Positioning System (GPS) or carefully mapped.

3.2 COLLECTION, INPUT, AND MAINTENANCE PROTOCOLS

Most structures are input from GPS coordinates or by using Digital Orthophoto Quad backdrops for heads-up digitizing. Some are copied from existing digital data. Some are digitized from paper maps. The source of the coordinates is captured in the attribute COORD_SRC. It is possible, and likely, that there will be multiple structure points in the same location, so it is important to check for unintentional duplicates. Structures that are associated with a treatment should have the TRT_ID from the relevant treatment feature class and BENEFIT filled in.

Structures that are associated with a physical water feature found in NHD must fill in NHD_REACHCODE with the appropriate reach unique identifier, making sure there is an exact match. The same reach code can be used on more than one structure. Sometimes the physical water feature has not yet been added to NHD. The feature must be added to NHD and NHD_REACHCODE filled in as soon as possible.

There are three kinds of **proposed** structures: new construction, reconstruction, and removal. For the water-related structures, only new construction does not require an NHD_REACHCODE.

When proposed structures are built, they are copied to STRCT_PT or STRCT_ARC and deleted from the STRCT_P_PT or STRCT_P_ARC feature class. The final constructed shape and location might be different from the proposed. The appropriate linking fields (especially NHD_REACHCODE and RIPSKEY) are filled in and other attributes adjusted as needed.

When a proposal is no longer valid, the relevant features are deleted from the _P themes (retrievable from the archives).

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

Updates are potentially frequent but usually involve only a few structures. District resource specialists should check the themes frequently for spatial and attribute accuracy within their districts and inform the GIS editor when features are ready to move from proposed to completed.

3.4 STATEWIDE MONITORING

The State Data Stewards are responsible for checking consistency and completeness across districts for the theme(s) that is relevant to their programs.

4. STRUCTURES 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. In general, core, required attributes are listed first, but non-core attributes may be listed adjacent to related attributes to avoid confusion in the GIS tables. Attributes are listed alphabetically, and more fully described in the Attribute Data Dictionary, starting on page 15. There are no aliases unless specifically noted. The domains used in this data standard can be found in the data dictionary. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard, so those shown in the Appendix may not be current. Contact the OR/WA State Data Administrator for the current lists.

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

4.1 STRCT_PT (Structure Points)

Attribute Name	Data Type	Length	Default	Required?	Domain
STRCT_ID	Integer	Long		Yes	
STRCT_NAME	String	40		Yes	
STRCT_PT_TYPE	String	30		Yes	dom_STRCT_PT_TYPE
PROJ_NAME	String	100		No	
COMPLT_DT	String	8		Yes	
MAINT_DT	String	8		No	
CONDITION	String	20		No	dom_CONDITION
STRCT_MAT	String	30		No	
BENEFIT	String	30		Yes	dom_BENEFIT
BENEFIT2	String	30		No	dom_BENEFIT
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
FAC_ADMIN	String	3	UN	Yes	dom_JURIS_CODE
CLASSIFIER	String	30		No	
PLANID	String	100		No	dom_PLANID
INITIATIVE	String	20		No	dom_INITIATIVE
BUDGET_CD	String	10		No	
WORKAGENT	String	40		No	dom_WORKAGENT
TRTLINK	Integer	Long		No	
FAMSKEY	String	8		No	
RIPSKEY	String	6		No	
NHD_REACHCODE	String	14		No	Required for some types
CURRENT_CD	String	1	C	Yes	dom_CURRENT_CD
CARTO	String	20		No	
ELEVATION_FT	Integer	Short		No	

SIDEMETER	Double	16,2		No	
RADMETER	Double	16,2		No	
SYM_ROTATE	Integer	Short		No	dom_Degree0to359
LOCAL_LINK	String	30		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
VERSION_NAME*	String	50	InitialLoad	Yes	

* Values automatically generated

4.2 STRCT_P_PT (Structure Proposed Points)

Attribute Name	Data Type	Length	Default	Required?	Domain
STRCT_ID	Integer	Long		Yes	
STRCT_P_NAME	String	40		Yes	
STRCT_P_PT_TYPE	String	30		Yes	dom_STRCT_P_PT_TYPE
PROJ_NAME	String	100		No	
START_DT	String	8		Yes	
STRCT_MAT	String	30		No	
BENEFIT	String	30		Yes	dom_BENEFIT
BENEFIT2	String	30		No	dom_BENEFIT
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
FAC_ADMIN	String	3	UN	Yes	dom_JURIS_CODE
CLASSIFIER	String	30		No	
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	10		No	
INITIATIVE	String	20		No	dom_INITIATIVE
WORKAGENT	String	40		No	dom_WORKAGENT
TRTLINK	Integer	Long		No	
FAMSKEY	String	8		No	
RIPSKEY	String	6		No	
STATUS_P	String	12		Yes	dom_STATUS_P
CARTO	String	20		No	
ELEVATION_FT	Integer	Short		No	
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
SIDEMETER	Double	16,2		No	
RADMETER	Double	16,2		No	
LOCAL_LINK	String	30		No	
SYM_ROTATE	Integer	Short		No	dom_Degree0to359
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
VERSION_NAME*	String	50	InitialLoad	Yes	

* Values automatically generated

4.3 STRCT_ARC (Structure Lines)

Attribute Name	Data Type	Length	Default	Required?	Domain
STRCT_ID	Integer	Long		Yes	
STRCT_NAME	String	40		Yes	
STRCT_ARC_TYPE	String	30		Yes	dom_STRCT_ARC_TYPE
PROJ_NAME	String	100		No	
COMPLT_DT	String	8		Yes	
CONDITION	String	20		No	dom_CONDITION
MAINT_DT	String	8		No	
STRCT_MAT	String	30		No	
BENEFIT	String	30		Yes	dom_BENEFIT
BENEFIT2	String	30		No	dom_BENEFIT
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
FAC_ADMIN	String	3	UN	Yes	dom_JURIS_CODE
CLASSIFIER	String	30		No	
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	10		No	
INITIATIVE	String	20		No	dom_INITIATIVE
WORKAGENT	String	40		No	dom_WORKAGENT
TRTLINK	Integer	Long		No	
FAMSKEY	String	8		No	
RIPSKEY	String	6		No	
CURRENT_CD	String	1	C	Yes	dom_CURRENT_CD
CARTO	String	20		No	
GIS_MILES*	Decimal	12,6		Yes	
RADMETER	Double	16,2		No	
LOCAL_LINK	String	30		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
VERSION_NAME*	String	50	InitialLoad	Yes	

*Values automatically generated

4.4 STRCT_P_ARC (Structure Proposed Lines)

Attribute Name	Data Type	Length	Default	Required?	Domain
STRCT_ID	Integer	Long		Yes	
STRCT_P_NAME	String	40		Yes	
STRCT_P_ARC_TYPE	String	30		Yes	dom_STRCT_P_ARC_TYPE
PROJ_NAME	String	100		No	
START_DT	String	8		Yes	
STRCT_MAT	String	30		No	
BENEFIT	String	30		Yes	dom_BENEFIT
BENEFIT2	String	30		No	dom_BENEFIT
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
FAC_ADMIN	String	3	UN	Yes	dom_JURIS_CODE
CLASSIFIER	String	30		No	
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	10		No	
INITIATIVE	String	20		No	dom_INITIATIVE
WORKAGENT	String	40		No	dom_WORKAGENT
TRTLINK	Integer	Long		No	
FAMSKEY	String	8		No	
RIPSKEY	String	6		No	
STATUS_P	String	12		Yes	dom_STATUS_P
CARTO	String	20		No	
GIS_MILES*	Decimal	12,6		Yes	
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
RADMETER	Double	16,2		No	
LOCAL_LINK	String	30		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
VERSION_NAME*	String	50	InitialLoad	Yes	

*Values automatically generated

5. PROJECTION AND SPATIAL EXTENT

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM in OR/WA, but it is not “wall-to-wall” and may cover only a small percentage of the total. Total coverage will not increase greatly over time. See the metadata for this dataset for more precise description of the extent.

6. SPATIAL ENTITY CHARACTERISTICS

STRCT_PT

Description: Instance of Structures Existing group.

Geometry: Simple point features.

Topology: No topology rules enforced.

Integration Requirements: None.

STRCT_P_PT

Description: Instance of Structures Proposed group.

Geometry: Simple point features.

Topology: No topology rules enforced.

Integration Requirements: None.

STRCT_ARC

Description: Instance of Structures Existing group.

Geometry: Simple line features.

Topology: No topology rules enforced.

Integration Requirements: None.

STRCT_P_PT

Description: Instance of Structures Proposed group.

Geometry: Simple line features.

Topology: No topology rules enforced.

Integration Requirements: None.

7. ATTRIBUTE CHARACTERISTICS AND DEFINITIONS (In alphabetical order)

7.1 ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	Accuracy_Feet_Measure
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
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 Graphs, Cadastral National Spatial Data Infrastructure and Digital Elevation Model) 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 ARCH_CLEAR

Geodatabase Name	ARCH_CLEAR
BLM Structured Name	Archaeological_Clearance_Date
Inheritance	Inherited from entity PROPOSED STRUCTURE
Feature Class Use	STRCT_P_PT, STRCT_P_ARC
Definition	Date the proposed structure area received archaeological clearance. Use YYYYMMDD or YYYYMM or YYYY format.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.3 BENEFIT

Geodatabase Name	BENEFIT
BLM Structured Name	Primary_Benefiting_Resource_Text
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	The intended main or primary benefiting entity (resource) for the structure. Only benefits that are officially acknowledged and recognized for a particular type of treatment should be considered, and BENEFIT will contain only the most important. A secondary benefit can be listed in BENEFIT2. Some choices are more general, and the most specific choice should be used (e.g., sage-grouse rather than birds-general). It is expected that specific species of concern will be added, as needed.
Required/Optional	Required
Domain (Valid Values)	dom_BENEFIT
Data Type	Variable Characters (30)

7.4 BENEFIT2

Geodatabase Name	BENEFIT2
BLM Structured Name	Secondary_Benefiting_Resource_Text
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	A secondary benefiting resource (“reason” for the structure). Only benefits that are officially acknowledged and recognized for a particular type of structure should be considered. Additional benefits (same domain) can be listed in a linked table. Some choices are more general and the most specific choice should be used (e.g., birds-listed rather than birds-general).
Required/Optional	Optional
Domain (Valid Values)	dom_BENEFIT
Data Type	Variable Characters (30)

7.5 BLM_ORG_CD

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	Administrative_Unit_Organization_Code
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	A combination of the BLM administrative state and field office which has administrative responsibility for the spatial entity. This includes which office covers the entity for planning purposes and which office is the lead for GIS edits. Another agency or individual may have the physical management responsibility for the on-the-ground entity. This field applies particularly when a spatial entity crosses resource area or district boundaries and the administrative responsibility is assigned to one or the other rather than splitting the spatial unit. Similarly, OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, and California and vice versa. When appropriate, the office can be identified only to the district or even the state level rather than to the resource area level.
Required/Optional	Required
Domain (Valid Values)	dom_BLM_ORG_CD
Data Type	Character (5)

7.6 BOT_CLEAR

Geodatabase Name	BOT_CLEAR
BLM Structured Name	Botanical_Clearance_Date
Inheritance	Inherited from entity PROPOSED STRUCTURE
Feature Class Use	STRCT_P_PT, STRCT_P_ARC
Definition	Date the proposed structure area received botanical clearance. Use YYYYMMDD, YYYYMM, or YYYY format.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.7 BUDGET_CD

Geodatabase Name	BUDGET_CD
BLM Structured Name	Funding_Program_Code
Inheritance	Inherited from entity ACTIVITIES
Feature Class Use	All feature classes
Definition	Primary funding program activity for a structure.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 1020, 1040, 1220, 1060MX
Data Type	Variable Characters (10)

7.8 CARTO

Geodatabase Name	CARTO
BLM Structured Name	Cartographic_Text
Inheritance	Inherited from entity ACTIVITIES
Feature Class Use	All feature classes
Definition	Free text field for each office to use as desired for cartographic (selection and display) purposes. Blanks and special characters not advised.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: Major, Minor, 1, 2, 3, Show, NoShow, and Private
Data Type	Variable Characters (20)

7.9 CLASSIFIER

Geodatabase Name	CLASSIFIER
BLM Structured Name	Classifier_Name
Inheritance	Inherited from entity ACTIVITIES
Feature Class Use	All feature classes
Definition	Name (mixed case, first and last) of the subject matter specialist most knowledgeable about the construction project (contact). Simple name of a person has been determined to not be a privacy issue so these attribute values is published with the web-based downloadable data.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: Mary Smith, John Doe
Data Type	Variable Characters (30)

7.10 COMPLT_DT

Geodatabase Name	COMPLT_DT
BLM Structured Name	Structure_Completion_Date
Inheritance	Inherited from entity COMPLETED STRUCTURE
Feature Class Use	STRCT_PT, STRCT_ARC
Definition	Date the structure was completed. Use YYYYMMDD, YYYYMM, or YYYY format.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.11 CONDITION

Geodatabase Name	CONDITION
BLM Structured Name	Physical_Condition_Code
Inheritance	Inherited from entity COMPLETED STRUCTURE
Feature Class Use	STRCT_PT, STRCT_ARC
Definition	General physical condition of a structure.
Required/Optional	Optional
Domain (Valid Values)	dom_CONDITION
Data Type	Variable Characters (20)

7.12 COORD_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	Coordinate_Source_Code
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
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	Optional
Domain (Valid Values)	dom_COORD_SRC
Data Type	Variable Characters (7)

7.13 CURRENT_CD

Geodatabase Name	CURRENT_CD
BLM Structured Name	Feature_Current_Code
Inheritance	Inherited from entity COMPLETED STRUCTURE
Feature Class Use	STRCT_PT, STRCT_ARC
Definition	Whether the structure is currently existing or historic. Only meaningful for existing structure feature classes, not applicable to proposed structure. Whether an entity is considered historic depends on the type of structure. Date/age does not determine this but whether the entity is now removed, obsolete, replaced, or erased in some sense.
Required/Optional	Required (default value "C")
Domain (Valid Values)	dom_CURRENT_CD
Data Type	Character (1)

7.14 ELEVATION_FT

Geodatabase Name	ELEVATION_FT
BLM Structured Name	Elevation_Feet_Measure
Inheritance	Not Inherited
Feature Class Use	STRCT_PT, STRCT_P_PT
Definition	Height of the ground above mean sea level.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 3200, 425, 10067
Data Type	Short Integer

7.15 FAC_ADMIN

Geodatabase Name	FAC_ADMIN
BLM Structured Name	Facility_Administration_Code
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	Broad governmental or private organization with administrative responsibility for the structure.
Required/Optional	Required
Domain (Valid Values)	dom_JURIS_CODE
Data Type	Variable Characters (5)

7.16 FAMSKEY

Geodatabase Name	FAMSKEY
BLM Structured Name	FAMS_Identifier
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	The FAMS equipment or asset number.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: L1512888, L1513406
Data Type	Variable Characters (8)

7.17 GIS_MILES

Geodatabase Name	GIS_MILES
BLM Structured Name	GIS_Miles_Measure
Inheritance	Not inherited
Feature Class Use	STRCT_ARC, STRCT_P_ARC
Definition	Length of a linear feature in miles. Must be recalculated with every edit submission. The acres will be automatically calculated when the feature classes are published. The BLM_ORG_CD will be used to determine the appropriate projection.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	Decimal (12,6)

7.18 INITIATIVE

Geodatabase Name	INITIATIVE
BLM Structured Name	Structure_Initiative_Name
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	The initiative, priorities, or plan objective the structure falls under.
Required/Optional	Optional
Domain (Valid Values)	dom_INITIATIVE
Data Type	Variable Characters (20)

7.19 LOCAL_LINK

Geodatabase Name	LOCAL_LINK
BLM Structured Name	Local_Database_Identifier
Inheritance	Inherited from entity ACTIVITIES
Feature Class Use	All feature classes
Definition	District or other agency legacy identifier or database link for a structure (other than RIPS and FAMS).
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 127UB, 35-1, 4102
Data Type	Variable Characters (30)

7.20 MAINT_DT

Geodatabase Name	MAINT_DT
BLM Structured Name	Structure_Last_Maintenance_Date
Inheritance	Inherited from entity EXISTING STRUCTURE
Feature Class Use	STRCT_PT, STRCT_ARC
Definition	The last date maintenance or inspection was performed on the structure. Use YYYYMMDD, YYYYMM, or YYYY format.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.21 NHD_REACHCODE

Geodatabase Name	NHD_REACHCODE
BLM Structured Name	National_Hydrography_Reach_Code
Inheritance	Inherited from EXISTING STRUCTURE
Feature Class Use	STRCT_PT
Definition	The 14 digit unique reach identifier assigned in the NHD. It is the linking field for databases like ARIMS and structures to the related physical water feature stored in the NHD.
Required/Optional	Required if STRCT_PT_TYPE is "Reservoir," "Waterhole," or "Spring Development."
Domain (Valid Values)	No domain, but must match the NHD reachcode exactly. Examples: 17100309003866, 18010206003913
Data Type	Variable Characters (14)

7.22 PLANID

Geodatabase Name	PLANID
BLM Structured Name	Plan_Name_Text
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	The official name/identifier for the plan or project authorizing the action. Provides link to project or planning area boundary polygon.
Required/Optional	Optional
Domain (Valid Values)	dom_PLANID
Data Type	Variable Characters (100)

7.23 PROJ_NAME

Geodatabase Name	PROJ_NAME
BLM Structured Name	Project_Name_Text
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	District-assigned name for a project that encompasses several structure types and/or structure features. It is not the same as the plan or project authorizing the action (PLANID,) and there may be many PROJ_NAME for one PLANID.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: Diamond Pipeline, Silvies Wildlife Habitat
Data Type	Variable Characters (100)

7.24 RADMETER

Geodatabase Name	RADMETER
BLM Structured Name	Buffer_Radius_Measure
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	Buffer radius, if applicable, for creating an area from the structure point or line.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Decimal (16,2)

7.25 RIPSKEY

Geodatabase Name	RIPSKEY
BLM Structured Name	RIPS_Identifier
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	The RIPS Key. Currently six characters, all digits, but this may change. Links to RIPS database application.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 716308, 716184, 004132
Data Type	Character (6)

7.26 SIDEMETER

Geodatabase Name	SIDEMETER
BLM Structured Name	Side_Meter_Measure
Inheritance	Not inherited
Feature Class Use	STRCT_PT, STRCT_P_PT
Definition	Length in meters to either side of the point for creating a line from a point, if applicable.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Decimal (16,2)

7.27 START_DT

Geodatabase Name	START_DT
BLM Structured Name	Structure_Start_Date
Inheritance	Inherited from entity PROPOSED STRUCTURE
Feature Class Use	STRCT_P_PT, STRCT_P_ARC
Definition	The planned starting date of the proposed structure. Use YYYYMMDD, YYYYMM, or YYYY format.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.28 STATUS_P

Geodatabase Name	STATUS_P
BLM Structured Name	Facility_Proposed_Status_Code
Inheritance	Inherited from PROPOSED STRUCTURE
Feature Class Use	STRCT_P_PT, STRCT_P_ARC
Definition	Status of the proposed structure.
Required/Optional	Required
Domain (Valid Values)	dom_STATUS_P
Data Type	Variable Characters (12)

7.29 STRCT_ARC_TYPE

Geodatabase Name	STRCT_ARC_TYPE
BLM Structured Name	Structure_Line_Type_Text
Inheritance	Not inherited
Feature Class Use	STRCT_ARC
Definition	Type of structure. There are different domains for Line (ARC) and Point (PT) feature classes and for existing and proposed structures.
Required/Optional	Required
Domain (Valid Values)	dom_STRCT_ARC_TYPE
Data Type	Variable Characters (30)

7.30 STRCT_ID

Geodatabase Name	STRCT_ID
BLM Structured Name	Structure_Identifier
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	Unique number identifier for the structure entity. Multiple units of a structure are given unique STRCT_IDs. The STRCT_ID is unique across all structure feature classes. Multiple units or phases of a structure project are tied together by STRCT_NAME and PLANID, as applicable. Can be used to link to a table with detailed information and/or additional structures associated with this structure, if needed. For example, individual water spigots, valves, pumps, utility boxes, dumpsters, fire rings, boat docks, fence stiles or rock jacks, vehicle counters, etc. The associated table can include XY coordinates for detail maps, if necessary, but are all tied to the one STRCT_ID (or FAMSKEY) location. Each line segment on STRCT_ARC has a unique STRCT_ID so a single pipeline, for example, might have many STRCT_ID. Fill empty STRCT_ID using the “Unique ID Generator” tool and check for duplicate IDs with the “Unique ID QA/QC” tool. See UniqueIDGenerator_UserGuide.docx under the arcgistools SharePoint site.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	Long Integer

7.31 STRCT_MAT

Geodatabase Name	STRCT_MAT
BLM Structured Name	Structure_Materials_Text
Inheritance	Inherited from STRUCTURE
Feature Class Use	All feature classes
Definition	Materials/methods used in the structure. Appropriate value depends on structure type. For example, materials used for road closure devices have standard values of Cable (for gates), Earth Berm, Boulder, Concrete, Guard Rail, Log, Brush Pile, and Living Vegetation.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Variable Characters (30)

7.32 STRCT_NAME

Geodatabase Name	STRCT_NAME
BLM Structured Name	Structure_Name
Inheritance	Inherited from COMPLETED STRUCTURE
Feature Class Use	STRCT_PT, STRCT_ARC
Definition	Free text name that identifies the structure, preferably with a place reference, and structure type reference. The name is one-to-one with STRCT_ID and the two together provide stronger identification as long as neither is changed. Naming conventions need to be standardized by programs and offices and enforced to avoid confusion and loss of information.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: Leemann Pipeline, Hunter Ranch Fire Fence, Pass Creek Riparian Fence, High Horse Spring, Stonehouse Peak Cattleguard, Sand Valley Well, and Skidoo Spring Trough.
Data Type	Variable Characters (40)

7.33 STRCT_P_ARC_TYPE

Geodatabase Name	STRCT_P_ARC_TYPE
BLM Structured Name	Structure_Proposed_Line_Type_Text
Inheritance	Not inherited
Feature Class Use	STRCT_P_ARC
Definition	Type of structure proposed. There are different domains for ARC and PT feature classes and for existing and proposed structures. Most, but not all, proposed structure types include choices for proposed removal and proposed reconstruction.
Required/Optional	Required
Domain (Valid Values)	dom_STRCT_P_ARC_TYPE
Data Type	Variable Characters (30)

7.34 STRCT_P_NAME

Geodatabase Name	STRCT_P_NAME
BLM Structured Name	Structure_Proposed_Name
Inheritance	Inherited from PROPOSED STRUCTURE
Feature Class Use	STRCT_P_PT, STRCT_P_ARC
Definition	Free text name that identifies the proposed structure, preferably with a place reference and structure type reference. The name is one-to-one with STRCT_ID and the two together provide stronger identification as long as neither is changed. Naming conventions need to be standardized by programs and offices and enforced to avoid confusion and loss of information.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: Leemann Pipeline, Hunter Ranch Fire Fence, Pass Creek Riparian Fence, and High Horse Spring.
Data Type	Variable Characters (40)

7.35 STRCT_PT_TYPE

Geodatabase Name	STRCT_PT_TYPE
BLM Structured Name	Structure_Point_Type_Text
Inheritance	Not inherited
Feature Class Use	STRCT_PT
Definition	Type of structure. There are different domains for ARC and PT feature classes and for existing and proposed structures.
Required/Optional	Required
Domain (Valid Values)	dom_STRCT_PT_TYPE
Data Type	Variable Characters (30)

7.36 STRCT_P_PT_TYPE

Geodatabase Name	STRCT_P_PT_TYPE
BLM Structured Name	Structure_Proposed_Point_Type_Text
Inheritance	Not inherited
Feature Class Use	STRCT_P_PT
Definition	Type of structure. There are different domains for ARC and PT feature classes and for existing and proposed structures. Most, but not all, proposed structure types include choices for proposed removal and proposed reconstruction.
Required/Optional	Required
Domain (Valid Values)	dom_STRCT_P_PT_TYPE
Data Type	Variable Characters (30)

7.37 SYM_ROTATE

Geodatabase Name	SYM_ROTATE
BLM Structured Name	Symbol_Rotation_Degree_Number
Inheritance	Not inherited
Feature Class Use	STRCT_PT, STRCT_P_PT
Definition	This field defines the on-the-ground alignment of the structure, used for more accurate cartographic representation, if desired.
Required/Optional	Optional
Domain (Valid Values)	dom_DEGREE0TO359
Data Type	Short Integer

7.38 TRTLINK

Geodatabase Name	TRTLINK
BLM Structured Name	Treatment_Identifier
Inheritance	Inherited from STRUCTURE
Feature Class Use	All feature classes
Definition	Links the structure to an associated treatment, if any. The TRTLINK is the unique TRT_ID of the treatment feature.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Long Integer

7.39 VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from entity ODF
Feature Class Use	All feature classes
Definition	Name of the corporate geodatabase version previously used to edit the record. InitialLoad = feature has not been edited in ArcSDE. Format: username.XXX-mmddy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation. Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain. Examples: sfrazier.GRA-121211-11034
Data Type	Variable Characters (50)

7.40 WILD_CLEAR

Geodatabase Name	WILD_CLEAR
BLM Structured Name	Wildlife_Clearance_Date
Inheritance	Inherited from entity PROPOSED STRUCTURE
Feature Class Use	STRCT_P_PT, STRCT_P_ARC
Definition	Data the proposed structure area received wildlife clearance. Use YYYYMMDD, YYYYMM, or YYYY format.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.41 WORKAGENT

Geodatabase Name	WORKAGENT
BLM Structured Name	Workagent_Text
Inheritance	Inherited from entity STRUCTURE
Feature Class Use	All feature classes
Definition	Who did the work (or the type of procurement instrument)?
Required/Optional	Optional
Domain (Valid Values)	dom_WORKAGENT
Data Type	Variable Characters (40)

8. ASSOCIATED FILES OR DATABASES

Structures have many associated files, tables, databases, and applications. Currently, the most important related applications are Micro*Storms, National Fire Plan Operations and Reporting System, ARIMS (via NHD), FAMS and RIPS. The linking field is understood for these applications. Other applications which may need to upload spatial features from the structures feature classes are Timber Sale Information System, Stewardship Contracting Information Database, and IRDA. Linkage to these systems is not yet determined. Information about small structures that can always be represented as points is kept in separate tables that can be linked to STRCT_PT or STRCT_ARC with STRCT_ID.

9. LAYER FILES (PUBLICATION VIEWS)

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 a simple documented process, and can be deleted and recreated at any time.

Structures are published externally with the attribute VERSION_NAME removed (because it has no meaning outside of the internal editing environment).

10. EDITING PROCEDURES

Checking for undesired duplicates is critical. Arcs or points that are 100 percent duplicated can be found by looking for identical attributes in the same location and, for arcs, identical length. Check for “null” points accidentally created.

Fill empty STRCT_ID using the “Unique ID Generator” tool with structures. The UniqueIDGenerator_UserGuide.docx under the ArcGIS tools SharePoint site explains how to use the tool. Use the “Unique ID QA/QC” tool to check for duplicate IDs. The STRCT_ID values can be manually changed by editors so duplicates may result when new IDs are generated. The duplicates need to be inspected by the editor to determine if the original record or the new record needs to be given a new, unique ID.

Required fields cannot have <null> or blank. Replace with an appropriate value. "UNKNOWN" is allowed for date fields.

Check COMPLT_DT or START_DT for valid values. Formats YYYY, YYYYMM, or YYYYMMDD or UNKNOWN (upper case) are allowed. Examples are 1990 (if all that is known is the year), 199006 (June, 1990), and 19900612 (June 12, 1990). The format must be four digit years, two digit month and two digit days, and have no spaces, no slashes, and no leading or trailing blanks. The "String Date QC" tool under ArcToolbox--OR_Tools--Data Prep can be used to check valid dates.

12. ABBREVIATIONS AND ACRONYMS USED IN THIS STANDARD

Does not include abbreviations/acronyms used as codes for particular data attributes.

Abbreviations	Descriptions
ARIMS	Aquatic Resources Information Management System
BLM	Bureau of Land Management
DEM	Digital Elevation Model
DOQ	Digital Orthophoto Quad
DRG	Digital Raster Graphic
FAMS	Facility Assets Management System
FOI	Forest Operations Inventory (Western Oregon districts)
FOIA	Freedom of Information Act
GCD	Geographic Coordinate Database
GIS	Geographic Information System
GPS	Global Positioning System
GRA	Grazing Allotments and Pastures (OR/WA BLM GIS dataset)
IRDA	Interagency Restoration Database Application
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Protection Act
NHD	National Hydrography Database
NISIMS	National Invasive Species Information Management System
NFP	National Fire Plan
NFPORS	National Fire Plan Operations and Reporting System
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
RIPS	Range Improvement Project System
RMIS	Recreation Management Information System
SCID	Stewardship Contracting Information Database
SDE	Spatial Data Engine
USGS	United States Geological Survey

Table 2 Abbreviations/Acronyms Used

APPENDIX A: DOMAINS (VALID VALUES)

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

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

Note that domain CODE, as seen in the geodatabase, is added to the DESCRIPTION. For example, the domain CODE has the description of “ADMIN” and the DESCRIPTION is “ADMIN–Access only for BLM administrative purposes.”

A.1 BENEFIT

Aspen	Aspen – Action protects or improves health of Aspen
Bald Eagle	Bald Eagle – Action benefits Bald Eagle
Biomass Value	Biomass Value – Commodity production
Birds-General	Birds-General – Habitat improve, restore, or protect
Cultural	Cultural – Protection of cultural resources
EDRR	EDRR – Early Detection Rapid Response
Fire Rehab	Fire Rehab – Restoration after fire
Fish-General	Fish-General – Habitat improve, restore, or protect
Forest Stand	Forest Stand – Improve, restore, or protect
Fuels Reduction	Fuels Reduction – Ladder, Surface, Canopy
Human Safety	Human Safety – Health and safety measures
Invasives Control	Invasives Control – Remove or contain invasive species
Livestock	Livestock – Commodity production
Log Value	Log Value – Commodity production
Post-Treat Cleanup	Post-Treat Cleanup – Pile, Burn
Pre-Treat Prep	Pre-Treat Prep – Soil/site preparation
Rangeland Veg	Rangeland Veg – Improve, restore, or protect
Recreation Use	Recreation Use – Benefits recreation use
Research	Research – Study area
Riparian Veg	Riparian Veg – Improve, restore, or protect
Road Access Restriction	Road Access Restriction – Road closure or blockage
Sage-grouse	Sage-grouse – Action benefits Sage-grouse
Sensitive Fish	Sensitive Fish – Protect or improve specific fish populations or habitat
Sensitive Plants	Sensitive Plants – Protect or improve specific plant populations or habitat
Slope Stability	Slope Stability – Erosion control
Streambank Stability	Streambank Stability – Erosion control
Unknown	Unknown – Benefiting resource not specifically identified
Water Quality	Water Quality – Watershed improve, restore, or protect
Water Use	Water Use – Water source and flow management
Wetlands	Wetlands – Improve, restore, or protect

Wilderness Character	Wilderness Character – Protection measure
Wildhorses	Wildhorses – Action benefits Wild horses
Wildlife-General	Wildlife-General – Habitat improve, restore, or protect

A.2 BLM_ORG_CD

OR000	OR000 – Oregon/Washington BLM
ORB00	ORB00 – Burns District Office
ORB05	ORB05 – Three Rivers Field Office
ORB06	ORB06 – Andrews Field Office
ORC00	ORC00 – Coos Bay District Office
ORC03	ORC03 – Umpqua Field Office
ORC04	ORC04 – Myrtlewood Field Office
ORE00	ORE00 – Eugene District Office
ORE05	ORE05 – Siuslaw Field Office
ORE06	ORE06 – Upper Willamette Field Office
ORL00	ORL00 – Lakeview District Office
ORL04	ORL04 – Klamath Falls Field Office
ORL05	ORL05 – Lakeview Field Office
ORM00	ORM00 – Medford District Office
ORM05	ORM05 – Butte Falls Field Office
ORM06	ORM06 – Ashland Field Office
ORM07	ORM07 – Grants Pass Field Office
ORP00	ORP00 – Prineville District Office
ORP04	ORP04 – Central Oregon Field Office
ORP06	ORP06 – Deschutes Field Office
ORR00	ORR00 – Roseburg District Office
ORR04	ORR04 – Swiftwater Field Office
ORR05	ORR05 – South River Field Office
ORS00	ORS00 – Salem District Office
ORS04	ORS04 – Cascades Field Office
ORS05	ORS05 – Marys Peak Field Office
ORS06	ORS06 – Tillamook Field Office
ORV00	ORV00 – Vale District Office
ORV04	ORV04 – Malheur Field Office
ORV05	ORV05 – Baker Field Office
ORV06	ORV06 – Jordan Field Office
ORW00	ORW00 – Spokane District Office
ORW02	ORW02 – Wenatchee Field Office
ORW03	ORW03 – Border Field Office

A.3 CONDITION

Excellent	Excellent
Good	Good
Fair	Fair
Poor	Poor
Non-Functional	Non-Functional
Unknown	Unknown

A.4 COORD_SRC

CFF	CFF – Lines duplicated or buffered from Cartographic Feature Files (USFS)
DEM	DEM – Digital Elevation Model (30 m 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 paper 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.5 CURRENT_CD

C	C – Entity is still present on the ground
H	H – Entity is obsolete, obliterated or removed
N	N – Not applicable, entity still proposed

A.6 INITIATIVE

HLI	HLI – Healthy Lands Initiative
ESR	ESR – Emergency Stabilization and Rehabilitation
BARR	BARR – Burned Area Rehabilitation and Restoration
HFI	HFI – Healthy Forests Initiative
WUI	WUI – Wildland-Urban Interface
HFR	HFR – Hazardous Fuels Reduction
STEW	STEW – Stewardship Contracting
ARRA	ARRA – American Recovery and Reinvestment Act of 2009
CWPP	CWPP – Community Wildfire Protection Plan
JFS	JFS – Joint Fire Science
SRSA	SRSA – Secure Rural Schools (County Payments)

A.7 JURIS_CODE

BL	BL – Bureau of Land Management
BP	BP – Bonneville Power Administration
BR	BR – Bureau of Reclamation
CE	CE – Corps of Engineers
CG	CG – U.S. Coast Guard
DA	DA – U.S. Dept. of Agriculture (except the Forest Service)
DD	DD – U.S. Dept. of Defense (except the Corps of Engineers)
FS	FS – U.S. Forest Service
FA	FA – Federal Aviation Administration
FC	FC – Federal Energy Regulatory Commission
FW	FW – U.S. Fish and Wildlife Service
GS	GS – U.S. Geological Survey
GSA	GSA – General Services Administration
IA	IA – Bureau of Indian Affairs and Tribal Units
LG	LG – Local Government
PN	PN – National Park Service
PV	PV – Private Lands
PVI	PVI – Private, Industrial
PVN	PVN – Private, NonIndustrial
PVU	PVU – Private, Urban
ST	ST – State Managed Lands
STF	STF – State Forests
STL	STL – State Division of Lands
SDT	SDT – State Transportation Department
STP	STP – State Parks
STW	STW – State Wildlife Refuges
UN	UN – Undetermined

A.8 PLANID

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

A.9 STATUS_P

Initial	Initial – Scoping, action not yet started
Active	Active – Project underway
Suspended	Suspended – Activity halted
Rejected	Rejected – Considered and found unsuitable
Relinquished	Relinquished – Proposal relinquished by the proponent

A.10 STRCT_ARC_TYPE

Dike	Dike
Ditch	Ditch
Drift Fence	Drift Fence
Fence	Fence
Firebreak-Perm	Firebreak-Perm – Firebreak Permanent
Firebreak-Temp	Firebreak-Temp – Firebreak Temporary
Gas Pipeline	Gas Pipeline
Other	Other
Phoneline	Phoneline – includes fiber optic
Powerline	Powerline
Snow Fence	Snow Fence
Unknown	Unknown
Water Pipeline	Water Pipeline

A.11 STRCT_P_ARC_TYPE

Dike	Dike
Ditch	Ditch
Drift Fence	Drift Fence
Fence	Fence
Fence-Reconstruct	Fence-Reconstruct
Fence-Remove	Fence-Remove
Firebreak-Perm	Firebreak-Perm – Firebreak Permanent
Firebreak-Temp	Firebreak-Temp – Firebreak Temporary
Gas Pipeline	Gas Pipeline
Other	Other
Phoneline	Phoneline – includes fiber optic
Pipeline-Reconstruct	Pipeline-Reconstruct
Powerline	Powerline
Snow Fence	Snow Fence
Unknown	Unknown
Water Pipeline	Water Pipeline

A.12 STRCT_PT_TYPE

Airport	Airport
Airstrip	Airstrip – Small, fixed wing
Bridge	Bridge
Building-Hospital	Building-Hospital
Building-Occupied	Building-Occupied – other than offices, schools, and hospitals
Building-Office	Building-Office
Building-School	Building-School
Building-Unoccupied	Building-Unoccupied
Cattleguard	Cattleguard
Corral	Corral
Culvert	Culvert
Dam	Dam – Barrier across a watercourse
Erosion Structure	Erosion Structure – Streambank, headcut, or slope stabilization
Fence-Gate	Fence-Gate
Fence-Tie	Fence-Tie – Crib, Rock Jack, Rim, Tree
Fire Guard Station	Fire Guard Station
Fuel Tank	Fuel Tank
Gas Fixture	Gas Fixture – Propane tank, Meter, Valve
Gate-Locked	Gate-Locked – Road gate, locked, or need key
Gate-Open	Gate-Open
Gate-Pedestrian	Gate-Pedestrian
Gate-Seasonal	Gate-Seasonal – Road gate, seasonally locked, or unknown
Gate-Unlocked	Gate-Unlocked – Road gate, not locked

Guzzler	Guzzler
Heliport	Heliport
Helispot	Helispot
Locale	Locale – A place, not just a building, and not necessarily with buildings
Mine-Active	Mine-Active
Mine-Historic	Mine-Historic
Mineral Pit or Pile	Mineral Pit or Pile
Nest Platform	Nest Platform
Other	Other
Pipeline Fixture	Pipeline Fixture – Vent, Valve, Spigot
Power Fixture	Power Fixture – Pole, Transformer, Box
Reservoir	Reservoir - Includes ponds
Road Barrier	Road Barrier – Includes roads closed naturally by vegetation, excludes gates
Sediment Trap	Sediment Trap – includes silt basins
Shelter	Shelter
Sign	Sign
Slash Pile	Slash Pile – Wood or other debris pile
Spring Development	Spring Development
Staging/Parking	Staging/Parking
Toilet	Toilet
Tower-Communication	Tower-Communication – includes repeaters
Tower-Fire Lookout	Tower-Fire Lookout
Tower-Wind	Tower-Wind
Tower-Lighthouse	Tower-Lighthouse
Town	Town
Trough	Trough
Unknown	Unknown
Water Diversion	Water Diversion
Water Fixture	Water Fixture – Vent, Valve, Spigot
Water Tank	Water Tank
Waterhole	Waterhole – includes ponds, dugouts
Weather Station	Weather Station – RAWS
Well	Well

A.13 STRCT_P_PT_TYPE

Airport	Airport
Airstrip	Airstrip – Small, fixed wing
Bridge	Bridge
Building-Hospital	Building-Hospital
Building-Occupied	Building-Occupied – other than offices, schools, and hospitals
Building-Office	Building-Office
Building-School	Building-School
Building-Unoccupied	Building-Unoccupied
Cattleguard	Cattleguard
Cattleguard-Reconstruct	Cattleguard-Reconstruct
Cattleguard-Remove	Cattleguard-Remove
Corral	Corral
Culvert	Culvert
Culvert-Reconstruct	Culvert-Reconstruct
Culvert-Remove	Culvert-Remove
Dam	Dam – Barrier across a watercourse
Erosion Structure	Erosion Structure – Streambank, headcut, or slope stabilization
Fence-Gate	Fence-Gate
Fence-Tie	Fence-Tie – Crib, Rock Jack, Rim, Tree
Fire Guard Station	Fire Guard Station
Fuel Tank	Fuel Tank
Gate-Locked	Gate-Locked – Road gate, locked, need key
Gate-Open	Gate-Open
Gate-Pedestrian	Gate-Pedestrian
Gate-Seasonal	Gate-Seasonal – Road gate, sometimes closed
Guzzler	Guzzler
Guzzler-Reconstruct	Guzzler-Reconstruct
Guzzler-Remove	Guzzler-Remove
Heliport	Heliport
Helispot	Helispot
Locale	Locale – A place, not just a building, and not necessarily with buildings
Mine-Active	Mine-Active
Mine-Historic	Mine-Historic
Mineral Pit or Pile	Mineral Pit or Pile
Nest Platform	Nest Platform
Other	Other
Pipeline Fixture	Pipeline Fixture – Vent, Valve, Spigot
Power Fixture	Power Fixture – Pole, Transformer, Box
Reservoir	Reservoir
Reservoir-Reconstruct	Reservoir-Reconstruct
Reservoir-Remove	Reservoir-Remove

Road Barrier	Road Barrier - Includes roads closed naturally by vegetation, excludes gates
Sediment Trap	Sediment Trap – Includes silt basins
Shelter	Shelter
Sign	Sign
Slash Pile	Slash Pile – wood or other debris pile
Spring Development	Spring Development
Spring Development-Reconstruct	Spring Development-Reconstruct
Spring Development-Remove	Spring Development-Remove
Staging/Parking	Staging/Parking
Toilet	Toilet
Tower-Communication	Tower-Communication – includes repeaters
Tower-Fire Lookout	Tower-Fire Lookout
Tower-Wind	Tower-Wind
Tower-Lighthouse	Tower-Lighthouse
Town	Town
Trough	Trough
Trough-Reconstruct	Trough-Reconstruct
Trough-Remove	Trough-Remove
Unknown	Unknown
Water Diversion	Water Diversion
Water Tank	Water Tank
Waterhole	Waterhole – Includes ponds, dugouts
Waterhole-Reconstruct	Waterhole-Reconstruct
Weather Station	Weather Station – RAWS
Well	Well
Well-Reconstruct	Well-Reconstruct

A.14 WORKAGENT

Coop Agreement	Coop Agreement – ODFW, ODA, County, etc.
Force Account	Force Account – Federal labor force
Grantee	Grantee
IDIQ Contract	IDIQ Contract – non-Stewardship
Landowner	Landowner
Permittee	Permittee
Service Contract	Service Contract
Stewardship Contract	Stewardship Contract
Timber Sale Purchaser	Timber Sale Purchaser
Unknown	Unknown
Volunteer	Volunteer