

Treatments Spatial Data Standard



TREATMENTS DATA STANDARD

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1. GENERAL INFORMATION

Dataset (Theme) Name: Treatments

Dataset (Feature Classes): BIO_POLY, BURN_POLY, CHEM_POLY, HARV_POLY, MECH_POLY, PROT_POLY, REVEG_POLY

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Steward	<p>The State Data Steward is responsible for approving data standards and business rules, 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, Geographic Information System (GIS) Coordinators, and with national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality. For the treatments group of themes, there are several State Data Stewards:</p> <ul style="list-style-type: none"> • Daniel Couch for Forestry, Micro*Storms (M*S), at 541-464-3215. • Leanne Mruzik for Fuels, National Fire Plan Operations and Reporting System (NFPORS), at 503-808-6592. • Jeanne Standley for Weeds National Invasive Species Information Management System (NISIMS), at 541-751-4283. • Robert Hopper for Range, Range Improvement Project System (RIPS), at 503-808-6118. • Scott Lightcap for Fisheries, Interagency Restoration Database Application (IRDA) and Aquatic Resources Information Management System (ARIMS), at 503-808-6067.
Lead GIS Specialist	<p>The Lead GIS Specialist, Stacy Fenton at 541-573-4499, works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the development of data standards. The GIS specialist coordinates with system administrators and GIS coordinators to manage the GIS databases. The lead GIS specialists works with data editors to make sure data is being input into Spatial Data Engine consistently and in accordance with the established data standard. This person is a resource for the editors when they have questions or when they are new to editing a particular data set. In addition, the lead GIS specialist can help answer questions about how to query and display the data set for mapping and analysis.</p>
Application Manager	<p>Implementation of the Treatments data standard includes a redesign of the Forestry Operations Inventory (FOI) GIS layer and associated M*S application. The Application Manager, Daniel Couch at 541-464-3215, works with data stewards and the Lead GIS specialist for on-going maintenance and management of the updated application.</p>
State Data Administrator	<p>The acting State Data Administrator, Pamela Keller at 503-808-6009, provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator</p>

	ensures that defined processes for development of data standards and metadata are followed and that they are consistent and complete. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State Records Administrator	The acting State Records Administrator, Janice Johnson at 503-808-6430, 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.

Table 1 Roles and Responsibilities

1.2 FOIA CATEGORY

Public

1.3 RECORDS RETENTION SCHEDULE(s)

General Records Schedule 20/52c (Electronic Records/Geographic Information Systems)
 General Records Shedule 20/53c (Electronic Records Inventory and Survey File)
 PERMANENT. Cutoff the end of the fiscal year (EOFY) in which the layer is created or significantly altered by the Bureau of Land Management (BLM). Transfer copy of data to National Archives and Records Administration at the EOFY.

1.4 SECURITY/ACCESS/SENSITIVITY

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

2. DATASET OVERVIEW

2.1 DESCRIPTION

This dataset represents land treatments. Treatments are human alterations to the landscape for the purpose of natural resource management, including use, enhancement, and protection. A treatment creates something new; it creates a new physical entity on the landscape. This distinguishes treatments from attributes or information about treatments. Treatments are areas (polygons), zones of alteration. Sometimes a point or line is thought of as a treatment, but the area treated must be what is captured. To reduce complexity, make editing easier and more accurate, treatments were split into separate feature classes according to “major” treatment type. “Major” treatment types had to have the following characteristics:

- Easily defined and intuitively understood.
- Mutually exclusive (no ambiguity about which feature class a treatment belongs to).
- Significantly different methods.
- Significantly different effects.

The seven major treatment types (feature classes) are:

1. Prescribed fire (BURN). Deliberate burning of wildland fuels in either their natural or modified state, and under specified environmental conditions (The Dictionary of Forestry, 1998). A linking field to NFPORS is provided.

2. Biological (BIO). Introduction of foraging species, predators or parasites to control plant or animal pests, or to selectively suppress or remove vegetation (National Fire Plan definition).

Biological treatments are characterized by a release point (represented by a one acre polygon), and a larger, possibly expanding affected area (which extent may be difficult to determine and subjective).

3. Chemical (CHEM). Application of herbicide or pesticide, to control or kill pests, or fertilizer to enhance plant growth. Chemical treatments have complex reporting requirements. Thus, additional attributes are necessary such as chemical application, quantity, active pounds applied, and target species for each chemical in the mix.

4. Mechanical (MECH). Includes both machine and manual methods of area treatment. Includes pulling, piling, chopping, grinding, or mowing treatments to consolidate, reduce or clear live or dead vegetation (might be grass, brush, small trees, stump removal), as well as, “Cut-Leave” of trees, and soil preparation such as plowing or ripping.

5. Revegetation (REVEG). Planting or seeding. A linking field to RIPS is provided.

6. Harvest (HARV). Trees or Biomass are cut and removed. The contract number will be included

for linking to detailed information. The legacy FOI numbers will be retained on a separate theme (FOIVEG) with stand-based current vegetation.

7. Enclosure/protection (PROT). Fenced enclosures or application of protective devices on trees or soil surface. The entire area is considered “treated” with protection measures. The individual structures or devices used may or may not be captured on a separate theme (STRCT_ARC and/or STRCT_PT).

Both existing (completed) treatments and proposed (planned) treatments are included. Planning and completion status is clearly identified.

ATTRIBUTE SUMMARY

The attributes of treatments answer the basic “who,” “what,” “when,” “where,” “why,” and “how” questions:

- The feature class (BURN, REVEG, CHEM, etc.) name describes the “what” with additional detail provided by the “type” field of each feature class. In addition, there are attributes for the “target” of the treatment, and “method” which give even more information on “what” and “how.” These are specific to each feature class and each have different lists of valid values (domains).
- The WORKAGENT attribute provides information on “who” did the treatment.
- The attributes REASON, BUDGET_CD, and INITIATIVE describes “why” a treatment is done. The domains are identical across all the feature classes so that comparisons and aggregations can be made.
- “When” is provided by the completion or planned date.
- “Where” is intrinsic to GIS.

Treatments are identified by a unique number (TRT_ID), a name (TRT_NAME), and (perhaps) a linking field to an external database (RIPSKEY, NFPORS_TRTID, NISIMS_ID, MS_ID). Planning or completion status of the treatment is identified in TRT_STATUS.

2.2 USAGE

This dataset is the spatial corporate repository for land management treatments. The data standard and the GIS data are the spatial foundation for the Range, Forestry, and Fire programs, and their program specific applications. This corporate approach manages core data across resource programs to portray a comprehensive record of treatments for the BLM lands. This dataset is used for district, state, and regional needs for management and query of land management treatment.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this dataset is the Deputy State Director, Resource Planning, Use, and Protection. This dataset represents BLM treatments. Since no interagency data standard exists, this data standard is not implemented beyond BLM although BLM treatments may extend onto other ownerships where a

cooperative agreement exists.

2.4 RELATIONSHIP TO OTHER DATASETS, DATABASES or FILES

Plan or Project Area Boundaries: Treatments are associated with a plan or project which authorizes them. This can be captured in the attribute “PLANID” in the data standard. Planning or Project Area boundaries are found on a separate feature class (PLANBDY) under a separate data standard. It is important to distinguish between treatment areas which are the extent of on-the-ground alteration, and Plan/Project Area Boundary which is the area under a particular management direction. Typically, a planning area boundary contains multiple treatment areas which may be implemented over multiple years.

Special Product Zones: Areas set aside for collection of forest products such as boughs, mushrooms, and firewood are areas of regulation that have attributes like number of permits and total quantity of product. These areas are found on a separate theme in the “Boundaries” group of the Oregon Data Framework (ODF). Even though they can be thought of as a “Harvest,” unlike HARV (and treatments, in general) we don’t know and don’t need to know where, specifically, the harvest is occurring within these special areas.

Structures: Treatments may have some associated construction (called facilities or structures in the ODF) such as fences. These structures are maintained on a separate feature class, and related as necessary to the treatment areas through the TRT_ID, and/or PLANID. Structures are line or point features. A fixed buffer is sufficient for determining acres, if needed. Think of structures as discrete things that are built, like building blocks. Structures have meaning outside of “treatment,” and not all structures are related to treatment. In other words, treatment entities may or may not have associated structures, and structures may or may not have associated treatments; treatments and structures have meaning independent of each other. Structures are given a “treatment” identity by linking to a treatment entity via TRT_ID and/or using the REASON attribute. A separate data standard will be issued for structures (STRCT_ARC and STRCT_PT feature classes).

Realty: There are other GIS spatial entities that can be interpreted as serving the same purpose or benefit as a treatment, e.g., a conservation easement (a land status GIS theme) protects land just as an enclosure protects land. Similarly, there are natural features that may serve the same purpose or function as a treatment, e.g., a natural barrier versus a man-made barrier for erosion control. These other GIS features are not duplicated as treatment entities. Additional attributes or linked tables can be applied to the other GIS feature classes to capture the treatment interpretations needed for query and analysis.

Vegetation: Treatment entities affect vegetation, changing it in some way. Vegetation is a landscape, wall-to-wall entity, and treatments are isolated patches. Changes to vegetation resulting from a treatment have to be incorporated using the attributes and protocols meaningful for vegetation in order to retain consistency across the landscape. Vegetation polygons can be updated with treatments using simple GIS union of treatment(s) with vegetation followed by appropriate changes to the vegetation attributes. Vegetation will always represent the current vegetative landscape cover. It can be updated concurrently with treatments entities, but will be updated, at least annually. Historic vegetation will be maintained with simple annual archives that can be retrieved for change over time analysis.

There will be more than one vegetation layer. The ESIVEG will initially contain the current vegetation from the Ecological Site Inventory. The FOIVEG will initially contain the original FOI polygons and

legacy FOI key. Both will be updated, as necessary, to reflect completed treatment activities.

Survey: Surveys are areas searched for particular plants, animals or cultural sites according to particular protocols. The actual searched area is captured on the appropriate feature class in the survey group of themes (not described in this data standard). The treatments group of themes, however, has “clearance” attributes (ARCH_CLEAR, BOT_CLEAR and WILD_CLEAR) that relate to surveys. One of the reasons a survey might be initiated is to “clear” proposed treatment projects. The survey area might be identical with, or smaller or larger than the treatment area. The treatment area polygon is attributed with the date cleared, but to see the actual surveyed area and survey-related attributes, it is necessary to look at the survey feature class(es).

Monitoring: Monitoring is done on treatment entities, but also on resources in their natural state and on management actions that are outside of the definition of treatment (such as monitoring special management designations). Monitoring information for GIS treatment entities can be captured in several ways:

A. The attribute TRT_MONI on each feature class provides a way to record the results of a treatment. Multiple monitoring polygons can be created for a treatment, if it is monitored more than once, **and** it is necessary to retain more than one monitor result. In this case, xxx_TYPE is filled with “Monitor.” The domain for TRT_MONI is simply Acceptable/Mixed Results/Unacceptable. **And/Or**

B. A simple table can be created that has multiple records for each treatment (TRT_ID and TRT_NAME), and different dates monitored, and monitoring results. This is how on-going monitoring can be tracked over time. **And/Or**

C. There may be sample points where specific measurements (possibly just a photo) were taken. These sample points are maintained in a separate, distinct GIS feature class (SAMPLE_PT). **And/Or**

D. Sometimes an area is surveyed, in addition to, or instead of, simple measurement sample points. These areas would also be kept in a separate GIS feature class (SURVEY group).

M*S: The MicroStorms (M*S) database application manages attributes of the forest stand treatments for Western Oregon BLM Districts. Treatment polygons are to be entered and maintained in the Treatments feature classes. Legacy polygons will be migrated from FOI (pre 1995) and the Timber Sale Inventory (TSI). Core attributes from M*S will also be entered and maintained in Treatments. The Timber Sale Information System (TSIS) manages the detailed information about Timber Sales and values in Treatments HARV may be overwritten by TSIS. The M*S redesign will allow direct input into the ODF Treatment feature classes. Reporting will be from the ODF feature classes combined with tables maintained in the M*S application. More information will be provided as the redesign progresses.

ARIMS: The ARIMS GIS database application manages treatment information tied to hydrologic features. Treatments with a strong linear stream reference are entered into ARIMS. Area treatments are entered in one of the treatments feature classes discussed in this data standard.

IRDA: The IRDA GIS database application stores spatial features and attributes associated with water restoration reporting requirements for OR/WA and certain federal agencies. The spatial features in IRDA are largely copied from other GIS datasets, in particular, ARIMS, treatments (described in this data standard), and structures (described in a separate data standard).

RIPS: The RIPS national BLM database contains information about fences, water developments and other rangeland projects. Most of the spatial features associated with these projects are found on the structures theme group, described in a separate data standard. Some spatial features are found in the treatments theme group. A linking field, RIPSKEY, is provided.

NFPORS: The NFPORS national interagency database contains information about prescribed fire and related treatments. The spatial entities will be maintained in the treatments theme group and uploaded on request to NFPORS. A linking field, NFPORS_PROJID plus NFPORS_TRT_ID, are provided.

NISIMS: The NISIMS national BLM database contains information about chemical, biological, mechanical and other treatments for invasive species, in particular weeds. Weed treatment polygons and attributes must be entered into NISIMS first. A download and cross-walk from NISIMS to Treatments is performed automatically on a regular basis. Cross-walks are generally one-to-one, but the cross-walk for mechanical type and method is a little more complex. That cross-walk is provided below for informational purposes.

NISIMS Manual_Component_Name:	MECH_TYPE	MECH_METH
DIGGING	Pull/Dig/Wrench	Manual-Handtools
HAND CUTTING	Lop and Leave	Manual-Handtools
HOEING	Pull/Dig/Wrench	Manual-Handtools
LOPPING	Lop and Leave	Manual-Handtools
PULLING	Pull/Dig/Wrench	Manual-Handtools
PUSH MOWER	Mastication/Mowing	Manual-Mechanized
WRENCHING	Pull/Dig/Wrench	Manual-Handtools
NISIMS Mechanical_Component_Name:		
BLADING	Blading	Machine-Unspecified
BOILING WATER	Boiling Water	Machine-Unspecified
BULLDOZER	Clearing	Bulldozer
CHAINING	Clearing	Chaining
CHAINSAW	Cutting	Chainsaw
CHIPPING	Chipping	Machine-Unspecified
CULTIVATION	Plowing	Disk/Plow
DISKING	Plowing	Disk/Plow
PLOWING	Plowing	Disk/Plow
RIDING MOWER	Mastication/Mowing	Mower-Riding
ROOT PLOWING	Plowing	Disk/Plow

Other Program Application Databases: This data standard is cross-program, but allows for an easy cross-walk to existing and future program-specific databases and applications. Often, all that is needed is the related application's primary key for linking the two databases. Treatments can be associated with a particular program (e.g., Weeds, Fuels or Restoration) using the REASON, BUDGET_CD and/or INITIATIVE attributes. Many existing applications were reviewed in preparation for developing this data standard including NFPORS, RIPS, ARIMS, IRDA, Pacific Coast Salmon Recovery Fund, U.S. Forest Service Forest Activities Tracking System, Interagency Landscape Fire and Resource Management Planning Tools, National Wildfire Coordination Group Fuels, Bureau Enterprise Architecture Treatment Data Model, Forest Vegetation Information System, Service Contracting

Information Database (SCID), Timber Sale Information System (TSIS), State of Oregon Aquatic Restoration Categories, Oregon Department of Fish and Wildlife fish barrier database, American Recovery and Restoration Act categories, and the proposed BLM national NISIMS and Vegetation Treatment data standards. Primary keys from NFORS, RIPS, M*S and NISIMS are included in this data standard.

2.5 DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the ODF. The ODF utilizes the concept of inheritance to define specific instances of data. 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 category. 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. The basic datasets are where physical data gets populated (those groups/categories above them do not contain actual data but set parameters that all data of that type must follow).

See the ODF Overview (Figure 2), for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The treatment entities are highlighted. For additional information about the ODF, contact:

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

2.6 TREATMENTS DATA ORGANIZATION/STRUCTURE

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

ODF

Activities

Treatments

BIO_POLY
BURN_POLY
CHEM_POLY
HARV_POLY
MECH_POLY
PROT_POLY
REVEG_POLY

2.7 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 Structure portion 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, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

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

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

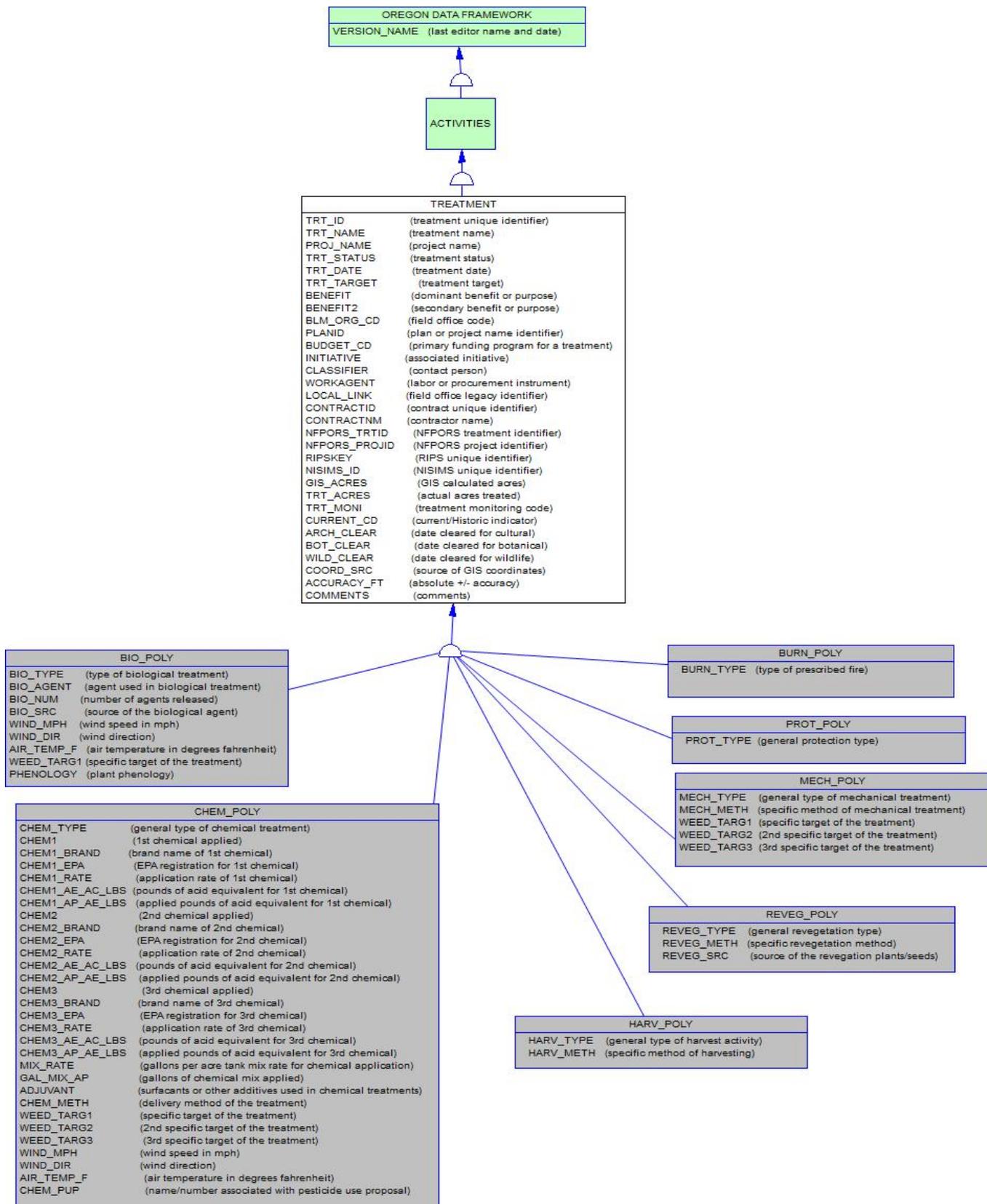


Figure 1 Data Organization Structure (see Sections 4 and 7 for Version 2 schema changes)

3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

Treatment unit boundary accuracy is determined by the programmatic requirements for the treatment. These data have a wide range of accuracies. Locational accuracy is specified in the attribute ACCURACY_FT, but there are many instances where the value is unknown. Many features were imported from the legacy data and the attributes are very incomplete. However, newer features will have more complete information and over time the dataset will become more accurate. A high degree of accuracy is not required for land treatments because the specific individual perimeters are not as important as the aggregation of treatments. Acreage reports that are rounded to the nearest acre, 10 acres or even 100 acres is often sufficient. Also, the nature of land treatments (burning, seeding, etc.) does not lend itself to precise boundaries.

3.2 COLLECTION, INPUT AND MAINTENANCE PROTOCOLS

Creating Treatment Entities: A new treatment entity is always created if it occurs on a different date or if it falls under a different feature class. These treatments can overlap (occupy the same footprint space) in whole or part.

A new treatment entity **may** be created, if there is a significantly different type, method or target, even if the date and feature class are the same. In this case, however, the new entity will **not** overlap, but will either **split** a treatment entity or fall in a different location. There are exceptions to this rule, especially for mechanical treatments, where it may be important to have separate (and overlapping) polygons for two treatment types that occur on the same date.

Other attributes (the “who” and “why,” for example) are attached to a treatment entity and do not drive creation of new entities. Treatment entities are defined by “what” was done, and “when.”

Said another way, overlapping polygons (polys covering the same acre of ground) is common **across** feature classes, but it is minimized and controlled **within** a feature class. In general, only a new treatment date results in potential overlap. Significant differences in type, method, or target for the same date might **split** a polygon, but not overlap the same area on the same date. The split polygons will each get their own TRT_ID.

Example 1: A seeding polygon has one area that was drill seeded and the rest was broadcast. It was done on the same day or within a short enough time period to be considered one treatment date. The polygon is split with no overlap. The two polygons have different (unique) TRT_ID, but the same COMPLT_DT.

Example 2: A seeding polygon has one area that was drill seeded on one day and some time later a broadcast seeding was applied. The two polygons have different (unique) TRT_ID and different COMPLT_DT. The second polygon may overlap the first.

Treatment Name and ID: A new treatment entity is given a new TRT_ID that is unique across all features classes. The TRT_ID identifies the smallest treatment units and are unique polygons. In other words, every polygon has a unique TRT_ID. There is an ArcMap tool to get the next available TRT_ID. It is important to not overwrite existing TRT_ID, unless the treatment is being completely removed or replaced with another Identification (ID), and all linking databases and tables have been updated

accordingly. The TRT_NAME identifies the individual treatment entity. Treatment entities can be associated (within or across treatment feature classes) using PROJ_NAME and/or PLANID, and/or CONTRACTID. These are all ways to tie individual treatment units together as a “project.” There can be many TRT_ID with the same PROJ_NAME and there can be many PROJ_NAME for the same PLANID. Simple polygons, not multi-part, are used.

Example 1: For the “NoName” burn project, there are three separate polygons. The PROJ_NAME is “NoName” for all three, but each gets a unique TRT_ID (e.g., 1006, 1007 and 1008), and TRT_NAME might be “NoName1,” “NoName2,” and “NoName3” or “Tom,” “Dick,” and “Harry.” The individual treatment polygons might be on the same feature class or different ones.

Example 2: For the “NoName” weed spray contract, there are numerous small polygons, and it is not important to identify each by name. The PROJ_NAME is “NoName” for all polygons, but each gets a unique TRT_ID (e.g., 1006, 1007, 1008, 1009, 1010, 1011, 1012, etc.). Since TRT_NAME really doesn't matter, it can be default filled with PROJ_NAME plus TRT_ID: NoName1006, NoName1007, NoName1008, etc.

Digitizing Treatments: Treatment polygons can be collected and input in a variety of ways including manuscripting on maps and digitizing, Global Positioning System (GPS), on-screen digitizing using a Digital Orthophoto Quad or Digital Raster Graphic backdrop, duplicating lines from ownership, roads or stream layers, or a combination of these. Treatment boundaries that are based on identifiable physical features such as roads, ridgelines, streams, or on ownership changes should utilize those source line features to illustrate the cartographic relationship.

The coordinate source of the polylines is documented in COORD_SRC, and the claimed +/- accuracy (total of all input errors) of the GIS representation compared to actual location is stored in ACCURACY_FT.

Linking Fields: Linking fields are provided to relate the core treatments data to resource specific applications such as the RIPS (RIPSKEY), and the NFPORS (NFPORS_PROJID plus NFPORS_TRTID). The contract number potentially has the ability to be used to link other data sources such as the TSIS and the SCID. Linking fields are filled in when a new Treatment entity (new TRT_ID) is created.

Proposed vs. Completed: As proposed treatments move from initial concept to active proposals to completed, the value in TRT_STATUS are changed. Adjustments to the treatment perimeter are likely to occur as the treatment moves through the process. It is up to the district data steward to determine whether it is necessary to retain past boundaries. It is important to be able to show the progression of treatments applied to the land from year to year. It is also important to be able to go back to previously proposed, but dropped treatments. For this reason, the treatment feature classes will be copied to historical (readily retrievable) archives, at regular and frequent intervals, or upon request. Besides this, however, the district data steward might decide it is necessary to split treatment polygons as they move through the process of implementation. For example, to show proposed but not implemented areas or to show areas as they become completed within a larger proposed treatment unit. In these scenarios, the split off polygons will receive a new TRT_ID, and linkage to the overall project will be through PROJ_NAME.

A publication layer that combines all treatments will be created. This will make it possible to easily see,

analyze, and report on **all** treatments over time for a particular area. Publication layers will separate proposed from completed treatments.

More information about editing is found in the “Editing Procedures” section. Details about attributes are found in the “Attribute Characteristics and Definitions” section.

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

The State Data Steward and/or the program lead will establish the policy for update frequency and completeness for the treatments framework data and the associated resource specific applications. Updates are potentially very frequent. District resource specialists should check the themes frequently for spatial and attribute accuracy, and keep the themes up-to-date with treatment activity, planning and implementation. Specialists might include Range, Fuels, Fire, Timber, Silviculture, Botany, Riparian, Weeds, Wildlife and others. Depending on the program, updates might be weekly, monthly, or quarterly. Resource specialists work with GIS specialists to accomplish the updates. District specialists are responsible for ensuring that the records in NFPORS, RIPS and other database applications agree with the data in the treatments themes.

3.4 STATEWIDE MONITORING

The State Data Stewards are responsible for checking consistency across districts for the theme(s) that are relevant to their programs. The State Data Stewards are responsible for coordinating the response to national BLM and interagency data calls for treatments data. State Office GIS specialists will work with the State Data Stewards to appropriately select and compile the data from the relevant treatments theme(s).

3.5 ATTRIBUTE DESIGN CONSIDERATIONS

Each of the general types (feature classes) has an attribute (xxx_TYPE) for more specific types within the overall treatment category, e.g., “Tree Planting,” “Tree Seeding,” and “Seeding” for REVEG_TYPE. The difference between treatment “type” and treatment “method” is subtle and can be confusing. In general, it is a matter of detail. The highest, most general, category of treatments is represented by the separate feature classes (BURN, BIO, CHEM, MECH, REVEG, HARV, and PROT). The next level of detail is represented by new polygons or by splitting polygons within the feature class for different specific treatment types (xxx_TYPE attribute). If necessary, even more detail about the treatment is split out by the attribute xxx_METH. We use the word “method” to get at the more specific methods, tools and materials used for the particular treatment type. The level of detail necessary and domain of choices varies by treatment type.

Each treatment entity is uniquely identified by a number (TRT_ID) and a name (TRT_NAME or PROJ_NAME plus TRT_NAME). There are frequently multiple treatment components for a treatment. There may be multiple components of one type or multiple components of different types associated with each other. It is up to the Data Steward creating the treatment entity to decide which polygons on which feature classes should be associated with each other. To provide that flexibility, TRT_ID/TRT_NAME is unique across all feature classes, but PROJ_NAME can be duplicated on different feature classes. For this reason, and because of the need to track treatments over time, it is critical that each district have standard naming conventions. Naming conventions should be established by programs or offices, and enforced at that level. For example, PROJ_NAME might be “Big Creek” on four polygons with TRT_NAMES of “Unit 1,” “Unit 2,” “Unit 3,” and “Unit 4.” In this case, PROJ_NAME **plus**

TRT_NAME provide the unique, one-to-one relationship to TRT_ID. The PROJ_NAME is not required, however, the unique, one-to-one relationship to TRT_ID can be provided by TRT_NAME alone: TRT_NAME = “Big Creek 1,” “Big Creek 2,” “Big Creek 3,” and “Big Creek 4.”

Treatment components can also be associated to each other through PLANID, NFPORS_PROJID or CONTRACTID.

The TRT_ID can also be used for linking to external tables and databases containing more detailed or program-specific information about the treatments if a program-specific linking field is not available.

Treatments are undertaken with an intended benefiting resource. This is captured in the REASON attribute(s). The treatment action might be tied to (accountable to) a particular initiative (INITIATIVE attribute) or program code (BUDGET_CD attribute). It is important to understand the distinction between attribute entities such as REASON and spatial entities. New treatment polygons (spatial entities) are only created if there is a spatial difference that needs to be tracked. A single treatment polygon can have multiple benefits. Only benefits that are officially acknowledged and recognized for a particular treatment should be considered. REASON will contain the most important, primary benefit, and a secondary benefit can be listed in REASON2. If needed, additional benefits can be listed in a simple table linked by TRT_ID. A single domain of choices is used for REASON on all treatment feature classes so that valid comparisons and summary statistics are possible. Likewise, there is one domain for INITIATIVE used across all feature classes, and BUDGET_CD will have common entries. All domains can be added to with due consideration for prior usage.

The “target” of a treatment action is the thing (generally species) directly impacted by application of the treatment. This is usually not the same as the benefiting species. For example, targeting juniper in order to benefit sage-grouse or targeting (seeding) grass to benefit livestock use. The target might be a specific species or a seed mix or a more general term like “Weeds.” A single domain of choices is used for TRT_TARG.

4. TREATMENTS 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 Characteristics (Section 7), starting on page 29. There are no aliases unless specifically noted. The domains used in this data standard can be found in the Appendix. These are the domains at the time the data standard was approved. Domains can be changed without 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:

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

Attributes in bold type are unique to the feature class. The rest are common to all feature classes.

*Autopopulated by SDE version management

**Autopopulated by M*S Application

4.1 BURN_POLY (Burn Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
BURN_TYPE	String	30		Yes	dom_BURN_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
TRT_TARG	String	30		No	dom_TRT_TARG
PHENOLOGY	String	30		No	dom_PHENOLOGY
COVER_PCT	Integer	Short		No	dom_PCT100
REASON	String	30		Yes	dom_REASON
REASON2	String	30		No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	
INITIATIVE	String	20		No	dom_INITIATIVE
INITIATIVE2	String	20		No	dom_INITIATIVE
CLASSIFIER	String	30		No	
WORKAGENT	String	40		Yes	dom_WORKAGENT
LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	
NFPORS_PROJID	Integer	Long		No	
RIPSKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
TRT_MONI	String	20		No	dom_TRT_MONI
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	

COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.2 BIO_POLY (Biological Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required ?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
BIO_TYPE	String	30		Yes	dom_BIO_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
BIO_AGENT	String	20		Yes	dom_BIO_AGENT
BIO_NUM	Integer	Long		No	
BIO_SRC	String	30		No	
WIND_MPH	Integer	Short		No	
WIND_DIR	String	3		No	dom_COMPASS_DIR
AIR_TEMP_F	Integer	Short		No	
TRT_TARG	String	30		No	dom_TRT_TARG
WEED_TARG1	String	8		No	dom_WEEDS_PlantSpeciesCode
PHENOLOGY	String	30		No	dom_PHENOLOGY
COVER_PCT	Integer	Short		No	dom_PCT100
REASON	String	30		Yes	dom_REASON
REASON2	String	30		No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	
INITIATIVE	String	20		No	dom_INITIATIVE
INITIATIVE2	String	20		No	dom_INITIATIVE
CLASSIFIER	String	30		No	
WORKAGENT	String	40		Yes	dom_WORKAGENT
LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	
NFPORS_PROJID	Integer	Long		No	

RIPSKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
TRT_MONI	String	20		No	dom_TRT_MONI
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.3 CHEM_POLY (Chemical Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
CHEM_TYPE	String	30		Yes	dom_CHEM_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
CHEM1	String	20		No	dom_CHEMICAL
CHEM1_BRAND	String	40		No	dom_CHEM_BRAND
CHEM1_EPA	String	20		No	dom_CHEM_EPA
CHEM1_QTY	Double	16,4		No	
CHEM1_UNIT	String	20		No	Chemical_Agent_UOM_Type_Name
CHEM1_AE_AC_LBS	Double	16,4		No	
CHEM1_AP_AE_LBS	Double	16,6		No	
CHEM2	String	20		No	dom_CHEMICAL
CHEM2_BRAND	String	40		No	dom_CHEM_BRAND
CHEM2_EPA	String	20		No	dom_CHEM_EPA
CHEM2_QTY	Double	16,4		No	
CHEM2_UNIT	String	20		No	Chemical_Agent_UOM_Type_Name
CHEM2_AE_AC_LBS	Double	16,4		No	
CHEM2_AP_AE_LBS	Double	16,6		No	
CHEM3	String	20		No	dom_CHEMICAL

CHEM3_BRAND	String	40		No	dom_CHEM_BRAND
CHEM3_EPA	String	20		No	dom_CHEM_EPA
CHEM3_QTY	Double	16,4		No	
CHEM3_UNIT	String	20		No	Chemical_Agent_UOM_Type_Name
CHEM3_AE_AC_LBS	Double	16,4		No	
CHEM3_AP_AE_LBS	Double	16,6		No	
MIX_RATE	String	10		No	dom_MIX_RATE
DILUENT	String	15		No	Chemical_Component_Carrier_Type_Name
GAL_MIX_AP	Number	10,2		No	
ADJUVANT	String	40		No	
CHEM_METH	String	20		No	dom_CHEM_METH
TRT_TARG	String	30		No	dom_TRT_TARG
WEED_TARG1	String	8		No	dom_WEEDS_PlantSpecies Code
WEED_TARG2	String	8		No	dom_WEEDS_PlantSpecies Code
WEED_TARG3	String	8		No	dom_WEEDS_PlantSpecies Code
PHENOLOGY	String	30		No	dom_PHENOLOGY
COVER_PCT	Integer	Short		No	dom_PCT100
WIND_MPH	Integer	Short		No	
WIND_DIR	String	3		No	dom_COMPASS_DIR
AIR_TEMP_F	Integer	Short		No	
WTRDIST_TX	String	30		No	Treatment_Distance_To_Water
REASON	String	30		Yes	dom_REASON
REASON2	String	30		No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
CHEM_PUP	String	20		No	
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	
INITIATIVE	String	20		No	dom_INITIATIVE
INITIATIVE2	String	20		No	dom_INITIATIVE
CLASSIFIER	String	30		No	
WORKAGENT	String	40		Yes	dom_WORKAGENT
LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	

NFPORS_PROJID	Integer	Long		No	
RIPSKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
TRT_MONI	String	20		No	dom_TRT_MONI
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.4 HARV_POLY (Harvest Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
UNIT_NUM	Double	16,4		Yes	
HARV_TYPE	String	30	Commercial-Timber	Yes	dom_HARV_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
SALE_DATE	String	8		Yes**	
SALE_FY	String	4		Yes**	
HARV_RX	String	30		Yes	dom_HARV_RX
HARV_METH	String	30		Yes	dom_HARV_METH
TRT_TARG	String	30	Conifers	No	dom_TRT_TARG
REASON	String	30	Forest Stand	Yes	dom_REASON
REASON2	String	30	Log Value	No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	
INITIATIVE	String	20		No	dom_INITIATIVE
INITIATIVE2	String	20		No	dom_INITIATIVE
CLASSIFIER	String	30		No	
WORKAGENT	String	40	Timber Sale	Yes	dom_WORKAGENT

LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	
NFPORS_PROJID	Integer	Long		No	
RIPKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.5 MECH_POLY (Mechanical Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required ?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
MECH_TYPE	String	30		Yes	dom_MECH_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
MECH_METH	String	20		No	dom_MECH_METH
TRT_TARG	String	30		No	dom_TRT_TARG
WEED_TARG1	String	8		No	dom_WEEDS_PlantSpeciesC
WEED_TARG2	String	8		No	dom_WEEDS_PlantSpeciesC
WEED_TARG3	String	8		No	dom_WEEDS_PlantSpeciesC
PHENOLOGY	String	30		No	dom_PHENOLOGY
COVER_PCT	Integer	Short		No	dom_PCT100
REASON	String	30		Yes	dom_REASON
REASON2	String	30		No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	

INITIATIVE	String	20		No	dom_INITIATIVE
INITIATIVE2	String	20		No	dom_INITIATIVE
CLASSIFIER	String	30		No	
WORKAGENT	String	40		Yes	dom_WORKAGENT
LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	
NFPORS_PROJID	Integer	Long		No	
RIPKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
TRT_MONI	String	20		No	dom_TRT_MONI
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialL	Yes	

4.6 PROT_POLY (Protection Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
PROT_TYPE	String	30		Yes	dom_PROT_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
TRT_TARG	String	30		No	dom_TRT_TARG
REASON	String	30		Yes	dom_REASON
REASON2	String	30		No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	
INITIATIVE	String	20		No	dom_INITIATIVE
INITIATIVE2	String	20		No	dom_INITIATIVE

CLASSIFIER	String	30		No	
WORKAGENT	String	40		Yes	dom_WORKAGENT
LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	
NFPORS_PROJID	Integer	Long		No	
RIPKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
TRT_MONI	String	20		No	dom_TRT_MONI
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialLoad	Yes	

4.7 REVEG_POLY (Revegetation Treatment Polygons)

Attribute Name	Data Type	Length	Default Value	Required?	Domain
TRT_ID	Integer	Long		Yes	
TRT_NAME	String	60		Yes	
PROJ_NAME	String	100		No	
REVEG_TYPE	String	30		Yes	dom_REVEG_TYPE
TRT_STATUS	String	12		Yes	dom_TRT_STATUS
TRT_DATE	String	8		Yes	
TRT_FY	String	4		Yes**	
REVEG_METH	String	20		Yes	dom_REVEG_METH
TRT_TARG	String	30		No	dom_TRT_TARG
REVEG_SRC	String	30		No	
REASON	String	30		Yes	dom_REASON
REASON2	String	30		No	dom_REASON
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
PLANID	String	100		No	dom_PLANID
BUDGET_CD	String	50		No	
INITIATIVE	String	20		No	dom_INITIATIVE

INITIATIVE2	String	20		No	dom_INITIATIVE
CLASSIFIER	String	30		No	
WORKAGENT	String	40		Yes	dom_WORKAGENT
LOCAL_LINK	String	30		No	
CONTRACTID	String	50		No	
CONTRACTOR	String	30		No	
MS_ID	Text	40		No**	
NFPORS_TRTID	Integer	Long		No	
NFPORS_PROJID	Integer	Long		No	
RIPSKEY	String	6		No	
NISIMS_ID	GUID			No	
GIS_ACRES	Double	16,4		Yes*	
TRT_ACRES	Double	16,4		No	
TRT_MONI	String	20		No	dom_TRT_MONI
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Integer	Short		No	
COMMENTS	String	100		No	
VERSION_NAME	String	50	InitialLoad	Yes	

5. PROJECTION AND SPATIAL EXTENT

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

6. SPATIAL ENTITY CHARACTERISTICS

BURN_POLY (Same for HARV, REVEG, MECH, BIO, CHEM and PROT)

Description: Instance of Treatments Existing group.

Geometry: Polygons may overlap entirely or in part.

Topology: No.

Integration Requirements: None, although polygons that represent the same extent should be duplicated to avoid slivering (see Editing Procedures section).

7. ATTRIBUTE CHARACTERISTICS AND DEFINITIONS

In alphabetical order.

7.1 ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	ACCURACY_FEET_MEASURE
Description	<p>Inherited from Entity TREATMENT Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> 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 (DLG), Geographic Coordinate Database (GCD), Digital Elevation Model (DEM)) because the accuracy is determined by that theme. However, if COORD_SRC is MAP (digitized from a paper map) or GPS, a value of “0” indicates a missing value that should be filled in either with a non-zero number or “-1.” A value of “-1” indicates that the accuracy is unknown and no reliable estimate can be made.</p>
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 3 (for high accuracy GPS), 40 (best possible for USGS 24K topo map), 200
Data Type	Short Integer

7.2 ADJUVANT

Geodatabase Name	ADJUVANT
BLM Structured Name	Chemical_Adjuvant_Text
Description	<p>Not Inherited Used in Feature Class: CHEM_POLY</p> <p><u>Definition</u> Free text field for entering adjuvants (surfactants or other additives)</p>

Required/Optional	used in chemical treatments, if desired. Optional
Domain (Valid Values)	None. Examples: Phase, Syltac, R11, MSO_Silicone
Data Type	Variable Characters (40)

7.3 AIR_TEMP_F

Geodatabase Name	AIR_TEMP_F
BLM Structured Name	Air_Temperature_Fahrenheit_Measure
Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY CHEM_POLY <u>Definition</u> Air temperature at the time of a biological or chemical treatment, in degrees Fahrenheit.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 55, 70
Data Type	Short Integer

7.4 ARCH_CLEAR

Geodatabase Name	ARCH_CLEAR
BLM Structured Name	Archaeological_Clearance_Date
Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> Date the proposed treatment area received archaeological clearance. YYYYMMDD or YYYYMM or YYYY format or "UNKNOWN".
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 20091022, 200109, 1999

Data Type	Variable Characters (8)
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7.5 BIO_AGENT

Geodatabase Name	BIO_AGENT
BLM Structured Name	Biological_Agent_Code
Description	Not inherited Used in Feature Class: BIO_POLY <u>Definition</u> Specific agent used in the biological treatment.
Required/Optional	Required
Domain (Valid Values)	dom_BIO_AGENT
Data Type	Variable Characters (20)

7.6 BIO_NUM

Geodatabase Name	BIO_NUM
BLM Structured Name	Biological_Agent_Number
Description	Not inherited Used in Feature Class: BIO_POLY <u>Definition</u> Actual number of the biological agent released, collected or discovered. If monitoring a treatment, "0" means no agents were found, and "1" means some undetermined number was present.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 500, 1000, 100, 3200
Data Type	Integer

7.7 BIO_SRC

Geodatabase Name	BIO_SRC
BLM Structured Name	Biological_Agent_Source_Text
Description	Not inherited Used in Feature Class: BIO_POLY

	<u>Definition</u> Where the biological agent was collected or the company purchased from.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: Devine Cyn Nursery Site, Ladd Marsh, Umatilla Refuge, ODA-Coombs, APHIS-Fakesch
Data Type	Variable Characters (30)

7.8 BIO_TYPE

Geodatabase Name	BIO_TYPE
BLM Structured Name	Biological_Type_Code
Description	Not inherited Used in Feature Class: BIO_POLY <u>Definition</u> General type or phase of biological treatment.
Required/Optional	Required
Domain (Valid Values)	dom BIO_TYPE
Data Type	Characters (30)

7.9 BLM_ORG_CD

Geodatabase Name	BLM_ORG_CD								
BLM Structured Name	Administrative_Unit_Organization_Code								
Description	Inherited from entity TREATMENTS Used in Feature Classes: <table style="margin-left: 20px;"> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>HARV_POLY</td> </tr> <tr> <td>MECH_POLY</td> <td>PROT_POLY</td> </tr> <tr> <td>REVEG_POLY</td> <td></td> </tr> </table> <u>Definition</u> 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	BIO_POLY	BURN_POLY	CHEM_POLY	HARV_POLY	MECH_POLY	PROT_POLY	REVEG_POLY	
BIO_POLY	BURN_POLY								
CHEM_POLY	HARV_POLY								
MECH_POLY	PROT_POLY								
REVEG_POLY									

	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 state level rather than to the resource area level.
Required/Optional	Required
Domain (Valid Values)	dom BLM ORG CD
Data Type	Characters (5)

7.10 BOT_CLEAR

Geodatabase Name	BOT_CLEAR
BLM Structured Name	Botanical_Clearance_Date
Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY
	<u>Definition</u> Date the proposed treatment area received botanical clearance. YYYYMMDD or YYYYMM or YYYY format or "UNKNOWN".
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.11 BUDGET_CD

Geodatabase Name	BUDGET_CD
BLM Structured Name	Funding_Program_Code

Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> Primary funding program activity for a treatment.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 1020, 1040, 1220, 1060MX
Data Type	Variable Characters (50)

7.12 BURN_TYPE

Geodatabase Name BLM Structured Name	BURN_TYPE Burn_Type_Code
Description	Not Inherited Used in Feature Class: BURN_POLY <u>Definition</u> Type of prescribed fire treatment.
Required/Optional	Required
Domain (Valid Values)	dom_BURN_TYPE
Data Type	Variable Characters (30)

7.13 CHEM_METH

Geodatabase Name BLM Structured Name	CHEM_METH Chemical_Delivery_Method_Type_Code
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Specific delivery methods of chemical treatment.
Required/Optional	Optional
Domain (Valid Values)	dom_CHEM_METH

Data Type	Variable Characters (20)
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7.14 CHEM_PUP

Geodatabase Name	CHEM_PUP
BLM Structured Name	Pesticide_Use_Proposal_Area_Identifier
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Free text field for the name and/or number of the area associated with the Pesticide Use Proposal that is applicable to the particular chemical treatment.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 08-001, TRNW-10-007
Data Type	Variable Characters (20)

7.15 CHEM_TYPE

Geodatabase Name	CHEM_TYPE
BLM Structured Name	Chemical_Treatment_Type_Code
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> General type of chemical treatment.
Required/Optional	Required
Domain (Valid Values)	dom CHEM_TYPE
Data Type	Variable Characters (30)

7.16 CHEM1

Geodatabase Name	CHEM1
BLM Structured Name	First_Chemical_Name
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u>

	Name of the first chemical used.
Required/Optional	Optional
Domain (Valid Values)	dom_CHEMICAL
Data Type	Variable Characters (20)

7.17 CHEM1_AE_AC_LBS

Geodatabase Name	CHEM1_AE_AC_LBS
BLM Structured Name	First_Chemical_Acid_Equivalent_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Pounds of Acid Equivalent Per Acre for the first chemical. Calculated as the chemical Acid Equivalent (from the product label) multiplied by the rate of application (CHEM1_QTY plus CHEM1_UNIT).
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 0.5, 1.0, 0.95
Data Type	Decimal (8.4)

7.18 CHEM1_AP_AE_LBS

Geodatabase Name	CHEM1_AP_AE_LBS
BLM Structured Name	First_Chemical_Applied_Acid_Equivalent_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Total applied pounds Acid Equivalent for the first chemical. Calculated as the treated acres (TRT_ACRES) multiplied by the Per Acre pounds of Acid Equivalent (CHEM1_AE_AC_LBS).
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 0.00475, 0.8645, 1.254
Data Type	Decimal (10.6)

7.19 CHEM1_BRAND

Geodatabase Name BLM Structured Name	CHEM1_BRAND First_Chemical_Brand_Name
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Brand (trade) name of the first chemical used. Brand name plus Environmental Protection Agency (EPA) registration number are necessary to determine the product's pounds Acid Equivalent (Active Ingredient).
Required/Optional	Optional
Domain (Valid Values)	dom CHEM BRAND
Data Type	Variable Characters (40)

7.20 CHEM1_EPA

Geodatabase Name BLM Structured Name	CHEM1_EPA First_Chemical_EPA_Registration_Number
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> The EPA registration number for the first chemical used.
Required/Optional	Optional
Domain (Valid Values)	dom CHEM EPA
Data Type	Variable Characters (20)

7.21 CHEM1_QTY

Geodatabase Name BLM Structured Name	CHEM1_QTY First_Chemical_Quantity_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Quantity of first chemical used, attribute CHEM1_UNIT provides the units. Together these reflect the rate recommended on the chemical

	label, or some lesser quantity, and may not exceed BLM's maximum rate.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples 1, 20, 0.16
Data Type	Decimal (16.4)

7.22 CHEM1_UNIT

Geodatabase Name	CHEM1_UNIT
BLM Structured Name	First_Chemical_Quantity_Unit_of_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Units of measurement used for the quantity found in CHEM1_QTY. Together these reflect the rate recommended on the chemical label, or some lesser quantity, and may not exceed BLM's maximum rate. Units are always "per Acre".
Required/Optional	Optional
Domain (Valid Values)	Chemical_Agent_UOM_Type_Name
Data Type	Variable Characters (20)

7.23 CHEM2

Geodatabase Name	CHEM2
BLM Structured Name	Second_Chemical_Name
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Name of the second chemical used, if any.
Required/Optional	Optional
Domain (Valid Values)	dom CHEMICAL
Data Type	Variable Characters (20)

7.24 CHEM2_AE_AC_LBS

Geodatabase Name	CHEM2_AE_AC_LBS
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BLM Structured Name	Second_Chemical_Acid_Equivalent_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Pounds of Acid Equivalent Per Acre for the second chemical, if any . Calculated as the chemical Acid Equivalent (from the product label) multiplied by the rate of application (CHEM2_QTY and CHEM2_UNIT).
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 0.5, 1.0, 0.95
Data Type	Decimal (8.4)

7.25 CHEM2_AP_AE_LBS

Geodatabase Name BLM Structured Name	CHEM2_AP_AE_LBS Second_Chemical_Applied_Acid_Equivalent_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Total applied pounds Acid Equivalent for the second chemical, if any . Calculated as the treated acres (TRT_ACRES) multiplied by the Per Acre pounds of Acid Equivalent (CHEM2_AE_AC_LBS).
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 0.00475, 0.8645, 1.254
Data Type	Decimal (10.6)

7.26 CHEM2_BRAND

Geodatabase Name BLM Structured Name	CHEM2_BRAND Second_Chemical_Brand_Name
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Brand (trade) name of the second chemical used, if any . Brand name plus EPA registration number are necessary to determine the product's pounds Acid Equivalent (Active Ingredient).

Required/Optional	Optional
Domain (Valid Values)	dom CHEM BRAND
Data Type	Variable Characters (40)

7.27 CHEM2_EPA

Geodatabase Name	CHEM2_EPA
BLM Structured Name	Second_Chemical_EPA_Registration_Number
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> The EPA registration number for the second chemical used, if any .
Required/Optional	Optional
Domain (Valid Values)	dom CHEM EPA
Data Type	Variable Characters (20)

7.28 CHEM2_QTY

Geodatabase Name	CHEM2_QTY
BLM Structured Name	Second_Chemical_Quantity_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Quantity of second chemical (if any) used, attribute CHEM2_UNIT provides the units. Together these reflect the rate recommended on the chemical label, or some lesser quantity, and may not exceed BLM's maximum rate.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples 1, 20, 0.16
Data Type	Decimal (16.4)

7.29 CHEM2_UNIT

Geodatabase Name	CHEM2_UNIT
BLM Structured Name	Second_Chemical_Quantity_Unit_of_Measure

Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Units of measurement used for the quantity found in CHEM2_QTY. Together these reflect the rate recommended on the chemical label, or some lesser quantity, and may not exceed BLM's maximum rate. Units are always "per Acre".
Required/Optional	Optional
Domain (Valid Values)	Chemical_Agent_UOM_Type_Name
Data Type	Variable Characters (20)

7.30 CHEM3

Geodatabase Name BLM Structured Name	CHEM3 Third_Chemical_Name
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Name of the third chemical used, if any .
Required/Optional	Optional
Domain (Valid Values)	dom_CHEMICAL
Data Type	Variable Characters (20)

7.31 CHEM3_AE_AC_LBS

Geodatabase Name BLM Structured Name	CHEM3_AE_AC_LBS Third_Chemical_Acid_Equivalent_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Pounds of Acid Equivalent Per Acre for the third chemical, if any . Calculated as the chemical Acid Equivalent (from the product label) multiplied by the rate of application (CHEM3_QTY and CHEM3_UNIT).
Required/Optional	Optional

Domain (Valid Values)	None. Examples: 0.5, 1.0, 0.95
Data Type	Decimal (8.4)

7.32 CHEM3_AP_AE_LBS

Geodatabase Name	CHEM3_AP_AE_LBS
BLM Structured Name	Third_Chemical_Applied_Acid_Equivalent_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Total applied pounds Acid Equivalent for the third chemical, if any . Calculated as the treated acres (TRT_ACRES) multiplied by the Per Acre pounds of Acid Equivalent (CHEM3_AE_AC_LBS).
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 0.00475, 0.8645, 1.254
Data Type	Decimal (10.6)

7.33 CHEM3_BRAND

Geodatabase Name	CHEM3_BRAND
BLM Structured Name	Second_Chemical_Brand_Name
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Brand (trade) name of the third chemical used, if any . Brand name plus EPA registration number are necessary to determine the product's pounds Acid Equivalent (Active Ingredient).
Required/Optional	Optional
Domain (Valid Values)	dom_CHEM_BRAND
Data Type	Variable Characters (40)

7.34 CHEM3_EPA

Geodatabase Name	CHEM3_EPA
BLM Structured Name	Third_Chemical_EPA_Registration_Number
Description	Not Inherited

	Used in Feature Class: CHEM_POLY
	<u>Definition</u> The EPA registration number for the third chemical used, if any .
Required/Optional	Optional
Domain (Valid Values)	dom CHEM EPA
Data Type	Variable Characters (20)

7.35 CHEM3_QTY

Geodatabase Name	CHEM3_QTY
BLM Structured Name	Third_Chemical_Quantity_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Quantity of third chemical (if any) used, attribute CHEM3_UNIT provides the units. Together these reflect the rate recommended on the chemical label, or some lesser quantity, and may not exceed BLM's maximum rate.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples 1, 20, 0.16
Data Type	Decimal (16.4)

7.36 CHEM3_UNIT

Geodatabase Name	CHEM3_UNIT
BLM Structured Name	Third_Chemical_Quantity_Unit_of_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Units of measurement used for the quantity found in CHEM3_QTY. Together these reflect the rate recommended on the chemical label, or some lesser quantity, and may not exceed BLM's maximum rate. Units are always "per Acre".
Required/Optional	Optional
Domain (Valid Values)	Chemical_Agent_UOM_Type_Name

Data Type	Variable Characters (20)
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7.37 CLASSIFIER

Geodatabase Name	CLASSIFIER								
BLM Structured Name	Classifier_Name								
Description	<p>Inherited from entity TREATMENTS Used in Feature Classes:</p> <table> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>HARV_POLY</td> </tr> <tr> <td>MECH_POLY</td> <td>PROT_POLY</td> </tr> <tr> <td>REVEG_POLY</td> <td></td> </tr> </table> <p><u>Definition</u> Name (mixed case, first and last) of the subject matter specialist most knowledgeable about the treatment (contact).</p>	BIO_POLY	BURN_POLY	CHEM_POLY	HARV_POLY	MECH_POLY	PROT_POLY	REVEG_POLY	
BIO_POLY	BURN_POLY								
CHEM_POLY	HARV_POLY								
MECH_POLY	PROT_POLY								
REVEG_POLY									
Required/Optional	Optional								
Domain (Valid Values)	None. Examples: Mary Smith, John Doe								
Data Type	Variable Characters (20)								

7.38 COMMENTS

Geodatabase Name	COMMENTS								
BLM Structured Name	Comments_Text								
Description	<p>Inherited from entity TREATMENTS Used in Feature Classes:</p> <table> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>HARV_POLY</td> </tr> <tr> <td>MECH_POLY</td> <td>PROT_POLY</td> </tr> <tr> <td>REVEG_POLY</td> <td></td> </tr> </table> <p><u>Definition</u> Free text for comments.</p>	BIO_POLY	BURN_POLY	CHEM_POLY	HARV_POLY	MECH_POLY	PROT_POLY	REVEG_POLY	
BIO_POLY	BURN_POLY								
CHEM_POLY	HARV_POLY								
MECH_POLY	PROT_POLY								
REVEG_POLY									
Required/Optional	Optional								
Domain (Valid Values)	None								
Data Type	Variable Characters (100)								

7.39 CONTRACTID

Geodatabase Name	CONTRACTID
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BLM Structured Name	Contract_Identification_Number
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> Timber sale, stewardship, planting, weed control or other contract number. Might be the Task Order number if that is more relevant.
Required/Optional	Optional
Domain (Valid Values)	None
Data Type	Variable Characters (50)

7.40 CONTRACTOR

Geodatabase Name BLM Structured Name	CONTRACTOR Contractor_Name
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> Contractor name for the contract identified by CONTRACTID.
Required/Optional	Optional
Domain (Valid Values)	None
Data Type	Variable Characters (30)

7.41 COORD_SRC

Geodatabase Name BLM Structured Name	COORD_SRC COORDINATE_SOURCE_CODE
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY

	<p>CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> 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.</p>
Required/Optional	Optional
Domain (Valid Values)	dom_COORD_SRC
Data Type	Variable Characters (7)

7.42 COVER_PCT

Geodatabase Name	COVER_PCT
BLM Structured Name	FOLIAR_COVER_PERCENT_MEASURE
Description	<p>Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY MECH_POLY</p> <p><u>Definition</u> The percent foliar cover of the plants being treated.</p>
Required/Optional	Optional
Domain (Valid Values)	dom_PCT100
Data Type	Short Integer

7.43 DILUENT

Geodatabase Name	DILUENT
BLM Structured Name	CHEMICAL_COMPONENT_CARRIER_TYPE_NAME
Description	<p>Not Inherited Used in Feature Class: CHEM_POLY</p> <p><u>Definition</u> Carrier liquid (Oil, Water) for a chemical mixture. Substance used to dilute chemicals for application.</p>
Required/Optional	Optional

Domain (Valid Values)	Chemical_Component_Carrier_Type_Name
Data Type	Variable Characters (15)

7.44 GAL_MIX_AP

Geodatabase Name	GAL_MIX_AP
BLM Structured Name	Chemical_Applied_Measure
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Gallons (to nearest hundredth if known) of chemical mix applied. Chemical treated acres (TRT_ACRES) are calculated as total gallons applied (GAL_MIX_AP) divided by MIX_RATE.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 6175, 2400, 90, 22.5, 1.75
Data Type	Decimal(10.2)

7.45 GIS_ACRES

Geodatabase Name	GIS_ACRES														
BLM Structured Name	GIS_Acres_Measure														
Description	Inherited from entity TREATMENTS Used in Feature Classes: <table border="0" style="margin-left: 20px;"> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>HARV_POLY</td> </tr> <tr> <td>MECH_POLY</td> <td>PROT_POLY</td> </tr> <tr> <td>REVEG_POLY</td> <td></td> </tr> </table> <p>GIS_ACRES is calculated when the submitted polygon is approved for incorporation into the dataset. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating acres so the features are projected to one of three projections as determined by the BLM_ORG_CD of the record. These three projections all utilize linear units of meters, so the ESRI Geodatabase-controlled field SHAPE.AREA can be used to convert to acres with the factor based on the U.S. Survey Foot: GIS_ACRES = SHAPE.AREA * 0.0002471044</p> <table border="1" style="width: 100%; margin-top: 10px;"> <tr> <td>District indicated by BLM_ORG_CD:</td> <td>ESRI Projection used:</td> </tr> <tr> <td>Prineville</td> <td>NAD 1983 USFS R6 Albers</td> </tr> <tr> <td>Coos Bay, Eugene, Lakeview,</td> <td>NAD 1983 UTM Zone 10N</td> </tr> </table>	BIO_POLY	BURN_POLY	CHEM_POLY	HARV_POLY	MECH_POLY	PROT_POLY	REVEG_POLY		District indicated by BLM_ORG_CD:	ESRI Projection used:	Prineville	NAD 1983 USFS R6 Albers	Coos Bay, Eugene, Lakeview,	NAD 1983 UTM Zone 10N
BIO_POLY	BURN_POLY														
CHEM_POLY	HARV_POLY														
MECH_POLY	PROT_POLY														
REVEG_POLY															
District indicated by BLM_ORG_CD:	ESRI Projection used:														
Prineville	NAD 1983 USFS R6 Albers														
Coos Bay, Eugene, Lakeview,	NAD 1983 UTM Zone 10N														

	Medford, Roseburg, Salem	
	Burns, Spokane, Vale	NAD 1983 UTM Zone 11N
Required/Optional	Note: May not be relevant to Biological treatments. Required (automatically generated)	
Domain (Valid Values)	None	
Data Type	Decimal(16.6)	

7.46 HARV_METH

Geodatabase Name BLM Structured Name	HARV_METH Harvest_Method_Code
Description	Not Inherited Used in Feature Class: HARV_POLY <u>Definition</u> Yarding system (Cable, Ground based, Helicopter or combination) used in harvesting or manual/mechanized harvest tools.
Required/Optional	Required
Domain (Valid Values)	dom HARV METH
Data Type	Variable Characters (30)

7.47 HARV_RX

Geodatabase Name BLM Structured Name	HARV_RX Harvest_Prescription_Code
Description	Not Inherited Used in Feature Class: HARV_POLY <u>Definition</u> Term describing forest treatment designed to change stand structure to meet management goals.
Required/Optional	Required
Domain (Valid Values)	dom_HARV_RX
Data Type	Variable Characters (30)

7.48 HARV_TYPE

Geodatabase Name BLM Structured Name	HARV_TYPE Harvest_Type_Code
Description	Not Inherited Used in Feature Class: HARV_POLY <u>Definition</u> General type of harvest activity. Must look at TRT_STATUS to know whether the activity has occurred, will occur, or is deferred.
Required/Optional	Required
Domain (Valid Values)	dom HARV_TYPE
Data Type	Variable Characters (30)

7.49 INITIATIVE

Geodatabase Name BLM Structured Name	INITIATIVE Treatment_Primary_Initiative_Name
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> The first or primary initiative, priorities or plan objective the treatment falls under.
Required/Optional	Optional
Domain (Valid Values)	dom INITIATIVE
Data Type	Variable Characters (20)

7.50 INITIATIVE2

Geodatabase Name BLM Structured Name	INITIATIVE2 Treatment_Secondary_Initiative_Name
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY

	<p>CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> The second (if any) initiative, priorities or plan objective the treatment falls under.</p>
Required/Optional	Optional
Domain (Valid Values)	dom_INITIATIVE
Data Type	Variable Characters (20)

7.51 LOCAL_LINK

<p>Geodatabase Name BLM Structured Name</p>	<p>LOCAL_LINK Local_Database_Identifier</p>
Description	<p>Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> District legacy identifier or database link for a treatment (other than RIPS and NFPORS).</p>
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 127UB, 35-1, 4102
Data Type	Variable Characters (30)

7.52 MECH_METH

<p>Geodatabase Name BLM Structured Name</p>	<p>MECH_METH Mechanical_Method_Code</p>
Description	<p>Not Inherited Used in Feature Class: MECH_POLY</p> <p><u>Definition</u> Specific methods and tools used for mechanical (machine or manual) treatment.</p>

Required/Optional	Optional
Domain (Valid Values)	dom MECH METH
Data Type	Variable Characters (20)

7.53 MECH_TYPE

Geodatabase Name	MECH_TYPE
BLM Structured Name	Mechanical_Treatment_Type_Code
Description	Not Inherited Used in Feature Class: MECH_POLY <u>Definition</u> General type of mechanical (manual or machine) site treatment that alters the land surface or vegetation.
Required/Optional	Required
Domain (Valid Values)	dom MECH TYPE
Data Type	Variable Characters (30)

7.54 MIX_RATE

Geodatabase Name	MIX_RATE
BLM Structured Name	Chemical_Mix_Applied_Rate
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Gallons per acre tank mix rate for chemical application. Chemical treated acres (TRT_ACRES) are calculated as total gallons applied (GAL_MIX_AP) divided by MIX_RATE.
Required/Optional	Optional
Domain (Valid Values)	dom MIX_RATE
Data Type	Variable Characters (10)

7.55 MS_ID

Geodatabase Name	MS_ID
BLM Structured Name	MicroStorms_Identifier
Description	Inherited from entity TREATMENTS

	<p>Used in Feature Classes:</p> <p>BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> Linking field to the MicroStorms Application. Automatically generated by that application when necessary.</p>
Required/Optional	Optional
Domain (Valid Values)	None.
Data Type	Variable Characters (40)

7.56 NISIMS_ID

Geodatabase Name	NISIMS_ID
BLM Structured Name	NISIMS_Identifier
Description	<p>Inherited from entity TREATMENTS</p> <p>Used in Feature Classes:</p> <p>BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> INF_GUID from the National Invasive Species Information System (NISIMS). Linking field to the NISIMS database.</p>
Required/Optional	Optional
Domain (Valid Values)	None.
Data Type	GUID

7.57 NFPORS_PROJID

Geodatabase Name	NFPORS_PROJID
BLM Structured Name	NFPORS_Project_Identifier
Description	<p>Inherited from entity TREATMENTS</p> <p>Used in Feature Classes:</p> <p>BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY</p>

	REVEG_POLY
	<u>Definition</u> Ties different treatments for the same project together by giving them the same Project ID.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 3068948, 3050729
Data Type	Long Integer

7.58 NFPORS_TRTID

Geodatabase Name	NFPORS_TRTID
BLM Structured Name	NFPORS_Treatment_Identifier
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY
	<u>Definition</u> The NFPORS Treatment ID (integer 9). For existing (completed) and proposed treatments. This ID together with the NFPORS_PROJID creates unique identifiers that are one to one with TRT_ID.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 3218927, 3216263
Data Type	Long Integer

7.59 PHENOLOGY

Geodatabase Name	PHENOLOGY
BLM Structured Name	Plant_Phenology_Code
Description	Not Inherited Used in Feature Class: BIO_POLY BURN_POLY CHEM_POLY MECH_POLY
	<u>Definition</u> Phenological stage (or stages) of the plant being treated. For example, "Seedling," "Flowering." .Stages are combined (separated by "/") if

Required/Optional	meaningful for management, for example, “Bud/Flowering.” “Deaddormant” is used instead of “Dead” or “Dormant” because of the difficulty in declaring a plant dead. Optional
Domain (Valid Values)	dom PHENOLOGY
Data Type	Variable Characters (30)

7.60 PLANID

Geodatabase Name BLM Structured Name	PLANID Plan_Name_Text
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> 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)

7.61 PROJ_NAME

Geodatabase Name BLM Structured Name	PROJ_NAME Project_Name_Text
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> District-assigned name for a project that encompasses several treatment types and/or treatment units. It is not the same as the plan

Required/Optional	or project authorizing the action (PLANID) and there may be many PROJ_NAME for one PLANID. Optional
Domain (Valid Values)	None. Examples: Big Creek Juniper Cut, County Roads Weed Control
Data Type	Variable Characters (100)

7.62 PROT_TYPE

Geodatabase Name BLM Structured Name	PROT_TYPE Project_Type_Code
Description	Not Inherited Used in Feature Class: PROT_POLY <u>Definition</u> Type of treatment that protects the land surface or vegetation. Spatial extent is the area protected, not each individual protection structure or device.
Required/Optional	Required
Domain (Valid Values)	dom PROT_TYPE
Data Type	Variable Characters (30)

7.63 REASON

Geodatabase Name BLM Structured Name	REASON Primary_Reason_Benefiting_Resource_Text
Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> The intended main or primary reason for the action or benefiting resource. Only reasons or benefits that are officially acknowledged and recognized for a particular treatment should be considered, and REASON will contain only the most important. A secondary reason or benefit can be listed in REASON2. 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	Optional
Domain (Valid Values)	dom_REASON
Data Type	Variable Characters (30)

7.64 REASON2

Geodatabase Name	REASON2
BLM Structured Name	Secondary_Reason_Benefiting_Resource_Text
Description	<p>Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> A secondary reason for the treatment or benefiting resource. Only reasons or benefits that are officially acknowledged and recognized for a particular treatment should be considered. Additional reasons or 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. Sage-grouse rather than Birds-General.</p>
Required/Optional	Optional
Domain (Valid Values)	dom_REASON
Data Type	Variable Characters (30)

7.65 REVEG_METH

Geodatabase Name	REVEG_METH
BLM Structured Name	Revegetation_Method_Code
Description	<p>Not Inherited Used in Feature Class: REVEG_POLY</p> <p><u>Definition</u> Specific method (tools used) for revegetation.</p>
Required/Optional	Required

Domain (Valid Values)	dom_REVEG_METH
Data Type	Variable Characters (20)

7.66 REVEG_SRC

Geodatabase Name	REVEG_SRC
BLM Structured Name	Revegetation_Source_Code
Description	Not Inherited Used in Feature Class: REVEG_POLY <u>Definition</u> Where the revegetation plants or seeds were collected or the company purchased from.
Required/Optional	Optional
Domain (Valid Values)	None. Example: Granite Co., Western Reclamation, Landmark Co.
Data Type	Variable Characters (30)

7.67 REVEG_TYPE

Geodatabase Name	REVEG_TYPE
BLM Structured Name	Revegetation_Type_Code
Description	Not Inherited Used in Feature Class: REVEG_POLY <u>Definition</u> General type of revegetation treatment.
Required/Optional	Required
Domain (Valid Values)	dom_REVEG_TYPE
Data Type	Variable Characters (30)

7.68 RIPSKEY

Geodatabase Name	RIPSKEY
BLM Structured Name	RIPS_Identifier
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY

	MECH_POLY PROT_POLY REVEG_POLY
	<u>Definition</u> RIPS Key, if applicable. Currently six characters, all digits, but this may change. Links to RIPS database application.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 716308, 716184, 004132
Data Type	Characters (6)

7.69 SALE_DATE

Geodatabase Name BLM Structured Name	SALE_DATE Timber_Sale_Date
Description	Not Inherited Used in Feature Class: HARV_POLY <u>Definition</u> Date the timber sale became active or was completed or the planned start date. The TRT_STATUS provides the necessary information to know whether the treatment is completed or not. YYYYMMDD or YYYYMM, or YYYY format. UNKNOWN is an allowable entry.
Required/Optional	Required (automatically calculated)
Domain (Valid Values)	None. Examples: 20091022, 200109, 1999, UNKNOWN.
Data Type	Variable Characters (8)

7.70 SALE_FY

Geodatabase Name BLM Structured Name	SALE_FY TIMBER_SALE_FISCAL_YEAR
Description	Not Inherited Used in Feature Class: HARV_POLY <u>Definition</u> The BLM Fiscal year the timber sale was sold or is planned for sale.
Required/Optional	Required (automatically calculated)

Domain (Valid Values)	No Domain. Examples: 2010, 1999
Data Type	Variable Characters (7)

7.71 TRT_ACRES

Geodatabase Name BLM Structured Name	TRT_ACRES Treatment_Acres_Measure
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> These are actual acres treated or estimated acres proposed for treatment. Not derived from GIS but can be set to GIS_ACRES, if the entire polygon is considered treated. The TRT_ACRES may be substantially less than the total polygon acres, particularly for CHEM_POLY where treated acres (TRT_ACRES) is calculated as total gallons applied (GAL_MIX_AP) divided by MIX_RATE. May not be relevant to BIO or PROT treatments.
Required/Optional	Optional
Domain (Valid Values)	None
Data Type	Decimal (16.6)

7.72 TRT_DATE

Geodatabase Name BLM Structured Name	TRT_DATE Treatment_Date
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> Date the treatment was completed or planned start date. The TRT_STATUS provides the necessary information to know whether

	the treatment is completed or not.
	YYYYMMDD or YYYYMM, or YYYY format. UNKNOWN is an allowable entry.
Required/Optional	Required (for completed treatments)
Domain (Valid Values)	None. Examples: 20091022, 200109, 1999, UNKNOWN.
Data Type	Variable Characters (8)

7.73 TRT_FY

Geodatabase Name	TRT_FY								
BLM Structured Name	TREATMENTS_FISCAL_YEAR								
Description	Inherited from entity TREATMENTS Used in Feature Classes: <table border="0"> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>HARV_POLY</td> </tr> <tr> <td>MECH_POLY</td> <td>PROT_POLY</td> </tr> <tr> <td>REVEG_POLY</td> <td></td> </tr> </table> <p><u>Definition</u> The BLM Fiscal year the treatment occurred in or is planned for. Automatically calculated from TRT_DATE.</p>	BIO_POLY	BURN_POLY	CHEM_POLY	HARV_POLY	MECH_POLY	PROT_POLY	REVEG_POLY	
BIO_POLY	BURN_POLY								
CHEM_POLY	HARV_POLY								
MECH_POLY	PROT_POLY								
REVEG_POLY									
Required/Optional	Required (automatically calculated)								
Domain (Valid Values)	No Domain. Examples: 2010, 1999								
Data Type	Variable Characters (7)								

7.74 TRT_ID

Geodatabase Name	TRT_ID								
BLM Structured Name	Treatment_Identifier								
Description	Inherited from entity TREATMENTS Used in Feature Classes: <table border="0"> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>HARV_POLY</td> </tr> <tr> <td>MECH_POLY</td> <td>PROT_POLY</td> </tr> <tr> <td>REVEG_POLY</td> <td></td> </tr> </table> <p><u>Definition</u> Unique number identifier for the treatment entity. Multiple “units” of a treatment are given unique TRT_IDs and TRT_ID is unique across</p>	BIO_POLY	BURN_POLY	CHEM_POLY	HARV_POLY	MECH_POLY	PROT_POLY	REVEG_POLY	
BIO_POLY	BURN_POLY								
CHEM_POLY	HARV_POLY								
MECH_POLY	PROT_POLY								
REVEG_POLY									

	all treatment feature classes. Multiple units or phases of a treatment project are tied together by TRT_NAME, PLANID, NFPORS_PROJID or CONTRACTID as applicable.
Required/Optional	Required
Domain (Valid Values)	None
Data Type	Long Integer

7.75 TRT_MONI

Geodatabase Name	TRT_MONI						
BLM Structured Name	Treatment_Monitor_Code						
Description	<p>Not Inherited</p> <p>Used in Feature Classes:</p> <table> <tr> <td>BIO_POLY</td> <td>BURN_POLY</td> </tr> <tr> <td>CHEM_POLY</td> <td>MECH_POLY</td> </tr> <tr> <td>PROT_POLY</td> <td>REVEG_POLY</td> </tr> </table> <p><u>Definition</u></p> <p>Result as determined from post treatment inspection. Questions asked will be different for different treatment types. For prescribed BURN, these might include:</p> <ol style="list-style-type: none"> 1. Was consumption of the targeted fuels inadequate, adequate, or excessive? 2. Were targeted mortality levels inadequate, adequate, or excessive? 3. Was soil heating acceptable or unacceptable? 4. Did any unacceptable damage to non-targeted resources or resource values occur? <p>For CHEM treatment of weeds the question might be “Are there any weeds left?” For PROT, the question might be whether the targeted animals were effectively excluded. For REVEG, the questions might include:</p> <ol style="list-style-type: none"> 1. What was the germination percentage? 2. What percent survived one year? 3. What was the coverage? 	BIO_POLY	BURN_POLY	CHEM_POLY	MECH_POLY	PROT_POLY	REVEG_POLY
BIO_POLY	BURN_POLY						
CHEM_POLY	MECH_POLY						
PROT_POLY	REVEG_POLY						
Required/Optional	Optional						
Domain (Valid Values)	dom TRT_MONI						
Data Type	Variable Characters (20)						

7.76 TRT_NAME

Geodatabase Name BLM Structured Name	TRT_NAME Treatment_Name
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY
	<u>Definition</u> Free text name that identifies the treatment entity, preferably with a place reference and treatment type reference. The name is one-to-one with TRT_ID and the two together provide more reliable identification as long as neither is changed. Naming conventions need to be standardized by programs and/or offices and enforced in order to avoid confusion and loss of information.
Required/Optional	Required
Domain (Valid Values)	None. Examples: Foster Gulch ESR-5, Flat Top Seeding-8, Rome WUI-2, Juniper Spring-1, Irish Springs Fire Salvage-3, Goodrich Creek RX, Lava Ridge Seeding, Eagles Nest Mowing, Capehart Brushbeat-2, Big Stick Fire Break, West Butte-A, West Butte-J, Cricket2 PCT-4, Cherry Springs Juniper Cut, Lumsden PCT-1, Duncan Riparian.
Data Type	Variable Characters (60)

7.77 TRT_STATUS

Geodatabase Name BLM Structured Name	TRT_STATUS Treatment_Status_Code
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY
	<u>Definition</u> Status of the treatment action. Used in conjunction with TRT_DATE.
Required/Optional	Required

Domain (Valid Values)	dom_TRT_STATUS
Data Type	Variable Characters (12)

7.78 TRT_TARG

Geodatabase Name	TRT_TARG
BLM Structured Name	Treatment_Target_Code
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> Target (affected species) of the treatment action.
Required/Optional	Optional
Domain (Valid Values)	dom_TRT_TARG
Data Type	Variable Characters (30)

7.79 UNIT_NUM

Geodatabase Name	UNIT_NUM
BLM Structured Name	Harvest_Unit_Number_Identifier
Description	Not Inherited Used in Feature Class: HARV_POLY <u>Definition</u> The unique harvest unit identifying number matching the given unit number in the Timber Sale Information System (TSIS) and contract Exhibit A map.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples:
Data Type	Double (16.4)

7.80 VERSION_NAME

Geodatabase Name	VERSION_NAME
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BLM Structured Name	GEODATABASE_VERSION_TEXT
Description	<p>Inherited from Entity ODF Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.</p> <p>Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY</p> <p><u>Definition</u> Name of the corporate geodatabase version previously used to edit the record.</p> <p>InitialLoad = feature has not been edited in ArcSDE.</p> <p>Format: username.XXX-mmddyy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation</p>
Required/Optional	Required (automatically generated)
Domain (Valid Values)	None. Example: sfrazier.GRA-121211-111034
Data Type	Variable Characters (50)

7.81 WEED_TARG1

Geodatabase Name	WEED_TARG1
BLM Structured Name	Weed_First_Target_Code
Description	<p>Inherited from Entity TREATMENTS Used in Feature Classes: CHEM_POLY, MECH_POLY, BIO_POLY</p> <p><u>Definition</u> First target weed species of the vegetation treatment.</p>
Required/Optional	Optional
Domain (Valid Values)	dom WEEDS PlantSpeciesCode
Data Type	Variable Characters (8)

7.82 WEED_TARG2

Geodatabase Name BLM Structured Name	WEED_TARG2 Weed_Second_Target_Code
Description	Inherited from Entity TREATMENTS Used in Feature Classes: CHEM_POLY, MECH_POLY <u>Definition</u> Second target weed species of the vegetation treatment, if any .
Required/Optional	Optional
Domain (Valid Values)	dom WEEDS PlantSpeciesCode
Data Type	Variable Characters (8)

7.83 WEED_TARG3

Geodatabase Name BLM Structured Name	WEED_TARG3 Weed_Third_Target_Code
Description	Inherited from Entity TREATMENTS Used in Feature Classes: CHEM_POLY, MECH_POLY <u>Definition</u> Third target weed species of the vegetation treatment, if any .
Required/Optional	Optional
Domain (Valid Values)	dom WEEDS PlantSpeciesCode
Data Type	Variable Characters (8)

7.84 WILD_CLEAR

Geodatabase Name BLM Structured Name	WILD_CLEAR Wildlife_Clearance_Date
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY

	<u>Definition</u> Date the proposed treatment area received wildlife clearance. YYYYMMDD or YYYYMM or YYYY format or “UNKNOWN”.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 20091022, 200109, 1999
Data Type	Variable Characters (8)

7.85 WIND_DIR

Geodatabase Name	WIND_DIR
BLM Structured Name	Wind_Compass_Cardinal_Direction_Code
Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY CHEM_POLY <u>Definition</u> Wind direction at the time of a chemical or biological treatment. Expressed as one or two character cardinal direction (eight choices, starting at N).
Required/Optional	Optional
Domain (Valid Values)	dom_COMPASS_DIR
Data Type	Variable Characters (3)

7.86 WIND_MPH

Geodatabase Name	WIND_MPH
BLM Structured Name	Wind_Speed_Miles_Per_Hour_Measure
Description	Inherited from Entity TREATMENTS Used in Feature Classes: BIO_POLY CHEM_POLY <u>Definition</u> Wind speed, in miles per hour, at the time of a chemical or biological treatment.
Required/Optional	Optional

Domain (Valid Values)	None. Examples: 2, 10
Data Type	Short Integer

7.87 WORKAGENT

Geodatabase Name BLM Structured Name	WORKAGENT Workagent_Text
Description	Inherited from entity TREATMENTS Used in Feature Classes: BIO_POLY BURN_POLY CHEM_POLY HARV_POLY MECH_POLY PROT_POLY REVEG_POLY <u>Definition</u> “Who” did the work (or the type of procurement instrument).
Required/Optional	Required
Domain (Valid Values)	dom WORKAGENT
Data Type	Variable Characters (40)

7.88 WTRDIST_TX

Geodatabase Name BLM Structured Name	WTRDIST_TX Treatment_Distance_To_Water_Text
Description	Not Inherited Used in Feature Class: CHEM_POLY <u>Definition</u> Distance to water from the chemical treatment area.
Required/Optional	Optional
Domain (Valid Values)	Treatment_Distance_To_Water
Data Type	Variable Characters (30)

8. LAYER FILES (PUBLICATION VIEWS)

8.1 GENERAL BACKGROUND

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

- A. Copied completely with no changes (replicated).
- B. Copied with no changes except to omit one or more feature classes from a feature dataset.
- C. Minor changes made (e.g., clip, dissolve, union with ownership) in order to make the data easier to use.

These “Publication feature classes” are indicated by “PUB” in their name. They are created through scripts that can be 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 provide the guidance for data published on the web. Layer files are created by simple documented process and can be deleted and recreated at any time.

All datasets are published, both internally and externally, with the attribute VERSION_NAME removed (for privacy reasons).

8.2 SPECIFIC TO TREATMENTS:

It is very important to separate completed, existing on the ground, treatments from proposed treatments. Proposed treatments may never happen or with a very different extent. For that reason, only the “Completed” treatments are to be published to the public data download site on the OR/WA BLM internet (<http://www.blm.gov/or/gis/data.php>).

Seven publication feature classes (BIO, BURN, CHEM, HARV, MECH, PROT and REVEG) will be created for completed treatments (TRT_STATUS = “Completed”) and seven more for proposed treatments (TRT_STATUS < > “Completed”). The publication feature classes will be named BIO_P, BURN_P, CHEM_P, HARV_P, MECH_P, PROT_P, and REVEG_P. For analysis purposes, a publication feature class that is a GIS union of the seven feature classes may be provided (or can be created by the user). However, for simple map display and query, group layer files are sufficient, and will be provided. Layer files will be created to reduce the number of repeated attributes and symbolized to help see overlapping treatments. External tables with detailed information or multiple records per treatment entity can be added to the user database (orsovctr), and joined to specific feature classes with layer file views as requested. The CHEM, REVEG, and HARV are likely candidates for external table joins and special layer files.

9. EDITING PROCEDURES

9.1 MANAGING OVERLAP (General Guidance)

“Overlap” means there are potentially more than one feature in the same feature class that occupies the same space (“stacked” polygons). **Depending on the query, acres will be double-counted.**

The POLY/ARC feature dataset means that there is a polygon feature class with an arc feature class that represents the perimeter of the polygon, and must be kept coincident with the polyline.

In this discussion, a polygon feature may consist of more than one polygon, and an arc feature may consist of more than one arc. They would have multiple records in the spatial table (with identical attributes). Multi-part features are not allowed. Multi-part features are easily created inadvertently and not always easy to identify. If they are not consciously and consistently avoided, feature classes will end up with a mixture of single and multi-part features. Multi-part features can be more difficult to edit, query, and select, along with impacting overall performance.

Overlap is only allowed in the ODF in limited and controlled scenarios. In each case, the “cause” of the overlap (what attribute changes will “kick off” a new feature which may overlap an existing feature) is carefully defined and controlled. In other words, in feature classes that permit overlap when there is a change in spatial extent there is always a new feature created which may overlap an existing feature, but in addition there are certain attribute(s) that will result in a new feature even if there is no spatial change. The feature classes (and the one feature dataset) that allow overlap, and the attributes that lead to a new, possibly overlapping feature, are described below.

A. Overlapping Polygons where polygons are part of a POLY/ARC feature dataset.

Topology rules apply only to the POLY/ARC relationship (Polylines in the POLY feature class covered by arcs in the ARC feature class and vice versa; arcs must not have dangles, intersect, self-overlap or overlap adjacent arcs).

PLANBDY: Any number of plans or projects might overlap. A new PLANID creates a new polygon.

B. Overlapping Polygons where polygons are a stand-alone feature class.

No topology rules.

1. Species Occurrence Group: These are distinct sites defined by species and time. A different species create a new polygon which may overlap another site in whole or part. A change in time (new visit date) will create a new polygon if it is desired that the old spatial extent and date is retained (as historic). Additionally, for wildlife, a different season/type of use (e.g., winter range vs. spring breeding) will create new polygon that may overlap others.

- a. WEEDS
- b. GB_FLORA_SITES
- c. GB_FAUNA_SITES
- d. WILDSITE_POLY

2. Survey Group: Within each feature class a new survey is created only for a new date. This group might also include proposed surveys in separate feature classes. (WEED_P_SURV, etc.).

- a. WEED_SURV
- b. CULT_SURV
- c. FAUNA_SURV
- d. FLORA_SURV

3. Treatment Activity Group: Within each feature class, an overlapping treatment area is created only for a new date, and sometimes for a different method, if it is not possible to SPLIT the treatment area by method and it is important to capture more than one method applied to the same area on the same day. This group also includes proposed treatments which could overlap existing treatments and have additional overlap created by different treatment alternatives.

- a. BURN
- b. HARV
- c. MECH
- d. REVEG
- e. PROT
- f. BIO
- g. CHEM

4. Land Status Encumbrances Group: A new polygon is created for a change in casefile number even if it is the same area.

- a. ESMTROW_POLY
- b. WITHDWL

C. Overlapping Arcs where arcs are a stand-alone feature class.

There are no topology rules for this situation. This occurs in feature class ESMTROW_ARC.

D. Overlapping Points. Not nearly as big of a problem because they have no spatial extent, but still should be checked, and duplicates deleted.

9.2 EDITING AND QUALITY CONTROL GUIDELINES

Checking for undesired duplicates is critical. Polygons or arcs that are 100% duplicate can be easily found by searching for identical attributes along with identical Shape_Area and/or Shape_Length. Searching for partially overlapping arcs or polygons is harder, and each case must be inspected to determine if the overlap is desired or not.

Where polygons are created with the buffer tool, the correct option must be selected. The default option is “None,” which means overlap will be retained. Sometimes the overlap should be dissolved and the option changed to “All.” Lines resulting from buffer have vertices too close together, especially around the end curves. They should be generalized to thin the vertices.

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

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

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

9.3 SNAPPING GUIDELINES

Where line segments with different COORD_SRC meet, the most accurate or important (in terms of legal boundary representation) are kept unaltered, and other lines snapped to them. In general, the hierarchy of importance is Landlines Information (GCD points/lines) first, with DLG or SOURCE next, then DEM, and MAP last.

When snapping to the data indicated in COORD_SRC (as opposed to duplicating with copy/paste), be sure there are exactly the same number of vertices in the target, and source theme arcs.

When the DEF_FEATURE is “SUBDIVISION,” snap the line segment to GCD points, and make sure there are the same number of vertices in the line as GCD points.

9.4 EDITING GUIDANCE and QUALITY CONTROL CHECKLIST (Specific to Treatments)

Explode “multi-part” polygons. Check for “0” or very small Shape Area or Shape Length. See “Editing and Quality Control” guidance above on GPS linework and multi-part features.

Required attributes: TRT_ID, TRT_NAME, TRT_STATUS, TRT_DATE, xxxx_TYPE, REASON, BLM_ORG_CD, CURRENT_CD, BIO_AGENT, HARV_METH, CHEM1, GIS_ACRES.

Unique TRT_ID across all seven feature classes. Assign new TRT_IDs using the “Get Unique ID” tool.

Check that dates are valid in TRT_DATE (ARCH_CLEAR, BOT_CLEAR, WILD_CLEAR if used).

If an attribute has a domain, check for invalid values.

The GIS_ACRES calculated in the appropriate Universal Transverse Mercator zone.

Dependencies between attributes:

If TRT_STATUS = “Completed” then TRT_DATE cannot be future
 If TRT_STATUS <> “Completed” then question if TRT_DATE is NOT future
 If TRT_STATUS = “Completed” then CURRENT_CD = “C” or “H”
 If TRT_STATUS <> “Completed” then CURRENT_CD = “N”

If CHEM_TYPE = “Monitor” then all the chemical information fields (CHEMx, CHEMx_BRAND, CHEMx_EPA, CHEMx_RATE, etc.) should be blank, null or “Not Applicable.”

10. 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
EPA	Environmental Protection Agency
FACTS	Forest Activities Tracking 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
IRDA	Interagency Restoration Database Application
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Protection Act
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
RIPS	Range Improvement Project System
SCID	Stewardship Contracting Information Database
SDE	Spatial Data Engine
TSIS	Timber Sale Information System

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:

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 CODE “ORB00” has the DESCRIPTION of “ORB00–Burns District Office.”

A.1 BIO_AGENT

This is a lengthy list of domain values. The domain is available at the following web location:

<http://www.blm.gov/or/datamanagement/index.php>

A.2 BIO_TYPE

Insect-Release	Insect-Release - Biological agent released
Insect-Collect	Insect-Collect - Biological agent collected
Insect-Discover	Insect-Discover - Biological agent discovered
Insect-Monitor	Insect-Monitor - Monitoring of biological agent
Grazing	Grazing - Foraging animals release area
Pathogen	Pathogen - Release area
Arachnid	Arachnid - Release area
Nematodes	Nematodes - Release area
Monitor	Monitor - Previously treated area

A.3 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
ORM08	ORM08–Glendale 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.4 BURN_TYPE

Broadcast Burn	Broadcast Burn
Jackpot Burn	Jackpot Burn
Machine Pile Burn	Machine Pile Burn
Hand Pile Burn	Hand Pile Burn
Fire Use	Fire Use
No Action	No Action
Underburn	Underburn
Unknown	Unknown
Pile Burn	Pile Burn – (Not a valid choice for new data, use Machine Pile or Hand Pile)

A.5 CHEMICAL

2,4-D	2,4-D
2-4-Damine	2-4-Damine
2-4-Dester	2-4-Dester
Picloram	Picloram
Dicamba	Dicamba
Chlorsulfuron	Chlorsulfuron
Glyphosate	Glyphosate
Imazapic	Imazapic
Metsulfuron	Metsulfuron
Diuron	Diuron
Triclopyr	Triclopyr

Clopyralid	Clopyralid
Bromacil	Bromacil
Sulfometuron methyl	Sulfometuron methyl
Unknown	Unknown
Not Applicable	Not Applicable

A.6 Chemical_Agent_UOM_Type_Name

Fluid Ounces	Fluid Ounces
Pints	Pints
Quarts	Quarts
Gallons	Gallons
Ounces	Ounces
Pounds	Pounds
Grams	Grams
Liters	Liters
Milliliters	Milliliters

A.7 Chemical_Component_Carrier_Type_Name

WATER	WATER
OIL	OIL
WATER AND OIL	WATER AND OIL

A.8 CHEM_BRAND

This is a lengthy list of domain values. The domain is available at the following web location:

<http://www.blm.gov/or/datamanagement/index.php>

A.9 CHEM_EPA

62719-324	62719-324-Rodeo
524-512	524-512-Roundup Max
524-475	524-475-Roundup Pro
62719-2	62719-2-Tordon22K
264-2	264-2-Weedar64
2217-703	2217-703-HiDep
228-379	228-379-Diablo
7969-137	7969-137-Clarity
71368-11	71368-11-WeedoneLV6
228-145	228-145-Platoon
Unknown	Unknown
Not Applicable	Not Applicable

A.10 CHEM_METH

Backpack	Backpack -
ATV	ATV -

Handtools	Handtools -
Fixed-Wing	Fixed-Wing -
Helicopter	Helicopter -
Truck	Truck -
Horseback	Horseback -
UTV	UTV -
Hack-Squirt	Hack-Squirt -
Aerial	Aerial - Use Fixed-Wing or Helicopter if known

A.11 CHEM_TYPE

Fertilizer	Fertilizer
Herbicide	Herbicide
Insecticide	Insecticide
Fungicide	Fungicide
Rodenticide	Rodenticide
Monitor	Monitor

A.12 COMPASS_DIR

N	N–North
NW	NW–Northwest
W	W–West
SW	SW–Southwest
S	S–South
SE	SE–Southeast
E	E–East
NE	NE–Northeast

A.13 COORD_SRC

CADNSDI	CADNSDI - Coordinates from or snapped to the CADNSDI dataset.
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 (pre-CADNSDI) Geographic Coordinate Database Points
GPS	GPS - Lines obtained from a Global Positioning System device
IMG	IMG - Linework derived from interpretation of satellite or other non-photographic imagery
MAP	MAP - Digitized linework from hardcopy map
MTP	MTP - Lines duplicated from Digital Master Title Plat
SOURCEL	SOURCEL - Source Layer from BLM GIS

SRV	SRV - Survey methods were used to create the linework (e.g., COGO)
TIGER	TIGER - Tiger Data
TRS	TRS - Coordinates only given as a legal description (township, range, section)
UNK	UNK - Unknown coordinate source
WOD	WOD - WODDB Photogrammetric

A.14 HARV_METH

Cable	Cable – Cable yarding system
Ground	Ground – Ground-based yarding system
Heli	Heli – Helicopter yarding system
Cable/Ground	Cable/Ground – Yarding system combination of Cable and Ground-based
Ground/Heli	Ground/Heli – Yarding system combination of Ground-based and Helicopter
Cable/Heli	Cable/Heli – Yarding system combination of Cable and Helicopter
Cable/Ground/Heli	Cable/Ground/Heli – Yarding system combination of Cable, Ground-based and Helicopter
Manual-Handtools	Manual-Handtools – e.g. pick, shovel, hand cutters, hoe, pulaski, handsaw
Manual-Mechanized	Manual-Mechanized - Hand tools and/or chain saws or other mechanized, but hand-operated tools.
Unknown	Unknown -

A.15 HARV_RX

Clearcut	Clearcut - All target trees removed
Patch Cut	Patch Cut - Regeneration; all or most tree removed; residual trees are either dispersed or in clumps less than half an acre; use only for openings less than 5 acres in size.
Thin	Thin - Trees removed to reduce density retaining homogeneous stand densities (less than 30% variance in basal area).
Regeneration	Regeneration - All or most trees removed; residual trees are either dispersed or in clumps less than half an acre; use only for openings 5 acres in size or greater.
Variable Density Thin	Variable Density Thin - Trees removed to reduce density retaining variable stand densities (greater than 30% basal area variance).
Selective Cut	Selective Cut - Individual trees selected for removal, including individual scatter dead, dying or down trees.
Unknown	Unknown–Harvest method is unknown

A.16 HARV_TYPE

Commercial-Timber	Commercial-Timber
Biomass	Biomass–Removal of woody biomass
Woodcutting	Woodcutting–Domestic use

A.17 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
CWWR	CWWR – Clean Water and Watershed Restoration
SRSA	SRSA – Secure Rural Schools Act
PIPE	PIPE – Pipeline Initiative to aid timber sale readiness
RCIS	RCIS – Recission Act

A.18 MECH_METH

Bulldozer	Bulldozer -
Chainsaw	Chainsaw -
Disk/Plow	Disk/Plow -
Ripper	Ripper -
Trencher	Trencher -
Scalper	Scalper -
Machine-Unspecified	Machine-Unspecified -
Manual-Handtools	Manual-Handtools – non-motorized, e.g. pick, shovel, hand cutters, hoe, pulaski, handsaw
Manual-Mechanized	Manual-Mechanized - Hand tools or other mechanized, but hand-operated tools (may include chainsaws, lawn mower, weed eater).
Masticator	Masticator
Feller/Buncher	Feller/Buncher
Skidder/Yarder	Skidder/Yarder
Forwarder	Forwarder
Unknown	Unknown
Monitor	Monitor
Chaining	Chaining - Dragging heavy anchor chain between two bulldozers
Mower-Riding	Mower-Riding -
Yarder	Yarder -
Helicopter	Helicopter -

A.19 MECH_TYPE

Cutting	Cutting - Severing trees and leaving on site
Crushing	Crushing - Breakup and compact dead woody material already on the ground

Chipping	Chipping - Use of stationary machine for chipping small trees, limbs, and brush
Piling	Piling - Creating piles from sub-merchantable material on site
Lop and Scatter	Lop and Scatter - Cutting and spreading woody debris evenly over the ground
Mastication/Mowing	Mastication/Mowing - Chopping, grinding or mowing live material by mechanical means
Pruning	Pruning - Removal of lower crown branches from live tree to improve wood quality
Stump Removal	Stump Removal - Removal of stumps by mechanical means
Scarification	Scarification – Shallow soil disturbance, such as discing or harrowing that scratches the soil surface typically to improve seed contact.
Plowing	Plowing – Turning over or cultivating the soil, includes deep root plowing
Clearing	Clearing - Fire breaks or other land clearing
Girdling	Girdling -Cutting the cambium and leaving tree standing
Gross Yarding	Gross Yarding - Removing all sub-merchantable material from unit
Designated No Treatment	Designated No Treatment - A designated no treatment area
Monitor	Monitor - Treatment monitored for effectiveness
Lop and Leave	Lop and Leave - Cutting woody or herbaceous vegetation
Pull/Dig/Wrench	Pull/Dig/Wrench - Pulling, digging or wrenching out vegetation
Blading	Blading -
Boiling Water	Boiling Water -
PreComm Thin	PreComm Thin – Pre-Commercial Thin by severing trees
Hardwood/Shrub Cut	Hardwood/Shrub Cut - Severing hardwood trees and/or shrubs

A.20 MIX_RATE

50G/A	50G/A – 50 gallons per acre
25G/A	25G/A – 25 gallons per acre
20G/A	20G/A – 20 gallons per acre
30G/A	30G/A – 30 gallons per acre
40G/A	40G/A – 40 gallons per acre
100G/A	100G/A – 100 gallons per acre
10G/A	10G/A – 10 gallons per acre
15G/A	15G/A – 15 gallons per acre
5G/A	5G/A – 5 gallons per acre
4G/A	4G/A – 4 gallons per acre
1G/A	1G/A – 1 gallon per acre
Other	Other–A different mix rate used

A.21 PCT100

Range domain 0 to 100

A.22 PHENOLOGY

Seedling	Seedling
Rosette	Rosette
Bolting	Bolting
Bud	Bud
Flowering	Flowering
Seedset	Seedset
Deaddormant	Deaddormant
Seedling/Seedset	Seedling/Seedset
Bud/Flowering	Bud/Flowering
Rosette/Bolting	Rosette/Bolting
Rosette/Flowering	Rosette/Flowering
Seedling/Rosette	Seedling/Rosette
Flowering/Seedset	Flowering/Seedset
Rosette/Deaddormant	Rosette/Deaddormant

A.23 PLANID

This is a lengthy list of domain values. The domain is available at the following web location:

<http://www.blm.gov/or/datamanagement/index.php>

A.24 PROT_TYPE

Fencing	Fencing -
Tubing-Install	Tubing-Install - Tree protection
Tubing-Maint	Tubing-Maint - Tree protection
Tubing-Remove	Tubing-Remove -
Netting-Install	Netting-Install - Tree protection
Netting-Maint	Netting-Maint - Tree protection
Bud Capping	Bud Capping -
Ravel Cards-Install	Ravel Cards-Install -
Ravel Cards-Maint	Ravel Cards-Maint -
Shade Cards-Install	Shade Cards-Install -
Shade Cards-Maint	Shade Cards-Maint -
Shade Cards-Remove	Shade Cards-Remove -
Mulching	Mulching - Apply protective mulch, netting or mat on soil surface
Trapping	Trapping -
Repellent	Repellent -
Baiting	Baiting -
Unknown	Unknown -

A.25 REASON

Riparian Veg	Riparian Veg - Improve, restore or protect
Streambank Stability	Streambank Stability - Erosion control
Wetlands	Wetlands - Improve, restore or protect
Rangeland Veg	Rangeland Veg - Improve, restore or protect
Slope Stability	Slope Stability - Erosion control
Forest Stand	Forest Stand - Improve, restore or protect an established/accepted forest stand.
Biomass Value	Biomass Value - Commodity production
Log Value	Log Value - Commodity production
Wildlife-General	Wildlife-General - Habitat improve, restore or protect
Birds-General	Birds-General - Habitat improve, restore or protect
Sage-grouse	Sage-grouse - Action benefits Sage-grouse
Bald Eagle	Bald Eagle - Action benefits Bald Eagle
Livestock	Livestock - Commodity production
Wildhorses	Wildhorses - Action benefits Wildhorses
Water Quality	Water Quality - Watershed improve, restore or protect
Water Use	Water Use - Water source and flow management
Fuels Reduction	Fuels Reduction - Ladder, Surface, Canopy
Post-Treat Cleanup	Post-Treat Cleanup - Pile, Burn
Pre-Treat Prep	Pre-Treat Prep - Soil/site preparation
Human Safety	Human Safety - Health and safety measures
Invasives Control	Invasives Control - Remove or contain invasive species. Weed control must be entered into NISIMS first.
Recreation Use	Recreation Use - Manage or enhances recreation use
Wilderness Character	Wilderness Character - Protection measure
Cultural	Cultural - Protection of cultural resources
Research	Research - Study area
Aspen	Aspen - Action protects or improves health of Aspen
Fire Rehab	Fire Rehab - Restoration after fire
Sensitive Plants	Sensitive Plants - Protect or improve individual plants or habitat
Unknown	Unknown - Reason for the action or benefiting resource not specifically identified.
EDDR	EDDR - Early Detection Rapid Response
Forest Regeneration	Forest Regeneration - Action to improve, restore, or protect the establishment of a forest stand.
Stand Conversion	Stand Conversion - Conversion of hardwoods or non-commercial species to a commercial forest stand.
Tree Disease	Tree Disease - Action to limit the spread or define the extent of a particular tree disease.
Access	Access - Road rights limit ability to obtain legal access to certain units or portions of units.
Road Access Restriction	Road Access Restriction – Road or Trail closure or blockage
Operations	Operations - Harvest operation limitations prevent reaching certain units or portions of units.

MAMU	MAMU - Marbled Murrelet habitat improve, restore, or protect.
NSO	NSO - Northern Spotted Owl habitat improve, restore, or protect.
Fish-General	Fish-General – Habitat improve, restore or protect
Sensitive Fish	Sensitive Fish – Protect or improve specific fish populations or habitat
Restore Forest Growth	Restore Growth – Actions such as late precommercial thin to improve growth of a forest stand.

A.26 REVEG_METH

Aerial	Aerial
Broadcast	Broadcast
Harrow/Broadcast	Harrow/Broadcast
Drill	Drill
Jet Stinger	Jet Stinger
Manual-Unspecified	Manual-Unspecified
Manual-Bare Root	Manual-Bare Root
Manual-Container	Manual-Container
Manual-Plug	Manual-Plug
Manual-Seed	Manual-Seed
Unknown	Unknown

A.27 REVEG_TYPE

Tree Planting	Tree Planting -
Tree Seeding-Natural	Tree Seeding-Natural -
Tree Seeding-Artificial	Tree Seeding-Artificial -
Seeding	Seeding – Artificial seeding of grass and other non-tree species.
Shrub Planting	Shrub Planting -

A.28 Treatment_Distance_To_Water (NISIMS domain)

0 TO 10 FEET	0 TO 10 FEET
10 TO 25 FEET	10 TO 25 FEET
25 TO 100 FEET	25 TO 100 FEET
GREATER THAN 100 FEET	GREATER THAN 100 FEET

A.29 TRT_MONI

Acceptable	Acceptable
Mixed Result	Mixed Result
Unacceptable	Unacceptable
Unknown Result	Unknown Result

A.30 TRT_STATUS

Completed	Completed - Treatment action completed
Proposed	Proposed - Action not yet started

Active	Active - Treatment action underway
Deferred	Deferred - Treatment deferred; Reason for deferment is given in Reason.
Suspended	Suspended - Treatment action halted
Rejected	Rejected - Considered by BLM and found unsuitable

A.31 TRT_TARG

Juniper	Juniper -
Duff/Slash	Duff/Slash -
Cheatgrass	Cheatgrass -
Shrub	Shrub -
Bitterbrush	Bitterbrush -
Big Sagebrush	Big Sagebrush -
Mixed Sagebrush	Mixed Sagebrush -
Native Grass	Native Grass -
Native Grass/Forb	Native Grass/Forb -
Mixed Grass	Mixed Grass - Native and Non-native
Grass/Shrub	Grass/Shrub -
Ponderosa Pine	Ponderosa Pine -
Douglas Fir	Douglas Fir -
Pine/Fir Mix	Pine/Fir Mix -
Conifers	Conifers - Non Juniper
Conifers/Juniper	Conifers/Juniper -
Mixed Tree	Mixed Tree - Conifer/Hardwood
Hardwood	Hardwood -
Oak Woodland	Oak Woodland -
Hardwood/Shrub	Hardwood/Shrub -
All Vegetation	All Vegetation -
Weeds	Weeds -
Medusahead Rye	Medusahead Rye -
Crested Wheatgrass	Crested Wheatgrass -
Biomass	Biomass -
Livestock	Livestock -
Rodents	Rodents -
Big Game	Big Game -
Herbivore	Herbivore -
Rust Fungi	Rust Fungi -
None	None - For contingency or control area
Unknown	Unknown -

A.32 WEEDS_PlantSpeciesCode

This is a lengthy list of domain values. The domain is available at the following web location:

<http://www.blm.gov/or/datamanagement/index.php>

A.33 WORKAGENT

Federal Labor	Federal Labor -
Service Contract	Service Contract -
IDIQ Contract	IDIQ Contract - non-Stewardship
Stewardship Contract	Stewardship Contract -
Permittee	Permittee -
Coop Agreement	Coop Agreement - ODFW, ODA, County, etc.
Grantee	Grantee -
Volunteer	Volunteer -
Timber Sale	Timber Sale -
Landowner	Landowner -
Purchase Order	Purchase Order -
Unknown	Unknown -