# United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Oregon State Office
P.O. Box 2965
Portland, Oregon 97208


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EMS TRANSMISSION 03/21/2012
Instruction Memorandum No. OR-2012-039
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To: DMs, DSDs, Staff and Branch Chiefs

From: State Director, Oregon/Washington

Subject: Treatments Spatial Data Standard

**Program Area:** Multiple programs are involved in land treatments including, but not limited to, Fire, Forestry, Range, Weeds, and Fisheries.

**Purpose:** Establishes the Oregon/Washington (OR/WA) spatial data standard for land treatments. Treatments are human alterations to the landscape for the purpose of natural resource management. The data standard defines how this type of data is to be captured in a Geographic Information System (GIS), defines attributes used, and defines coding schemes (domains). This data standard consists of seven data sets, one for each major category of treatments (prescribed fire, biological, chemical, mechanical, revegetation, harvest, and exclosure/protection). These data sets have been added to the corporate spatial data editing system. The data can now be edited by approved field personnel following established procedures. This data is also now available for display and analytical purposes by all users.

**Policy/Action:** This data standard is to be followed for all spatial data about land treatments. These data sets have many relationships to other data sets and databases that are described in the data standard.

**Timeframe:** This data standard is effective immediately.

**Budget Impact:** None. All field offices are currently capturing treatment data in a variety of ways. Implementation of this data standard will simplify this variety and should have a positive

budget effect. Consolidation of treatment data into a statewide set of data will make display and analytical activities easier and less time-consuming.

**Background:** The ability to look at the wide range of land treatments conducted by OR/WA Bureau of Land Management has been recognized as a need for a long time. Requests for data about land treatments are received on a frequent basis from a variety of program areas. These requests can be answered with the corporate treatments data in the future instead of having to go program to program and office to office to consolidate the information.

**Manual/Handbook Sections Affected:** None.

**Coordination:** These data sets have been reviewed by the field offices two times. The first was with Information Bulletin (IB) OR-2010-047. Following the issuance of that IB the GIS Technical Support (Pamela Keller) made visits to most OR/WA field offices to get additional input and review. Comments received on the IB and the input from the field visits led to a second round of review with IB OR-2011-069. Additional comments were received and changes made. A wide variety of existing systems and databases (fully described in the data standard) were reviewed in the course of developing this data standard. Data collected from the field offices during these reviews constitute the initial load of data in the GIS edit database. A description of how data from the field offices was cross-walked to the final treatments structure is provided. To see the comments and responses, as well as, the district data crosswalk, contact Stan Frazier, at 503-808-6009, or sfrazier@blm.gov.

**Contact:** Stanley Frazier, OR/WA State Data Administrator, at 503-808-6009, or Pamela Keller, GIS Technical Support, at 541-573-4486. Please refer to the data standard for the list of affected data stewards.

**Districts with Unions** are reminded to notify their unions of this instruction memorandum and satisfy any bargaining obligations before implementation. Your servicing Human Resources Office or Labor Relations Specialist can provide you with assistance in this matter.

Signed by
Michael S. Mottice
Associate State Director

Authenticated by
Paj Shua Cha
Records Section

Attachment - 1
1 – Treatments Spatial Data Standard (78pp)

Distribution
WO570 (Hawkinson)
OC120 (Chatfield)

# 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 | 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:<br>• Chris Cadwell for Forestry, Micro*Storms (M*S), at 541-683-6120.<br>• Leanne Mruzik for Fuels, National Fire Plan Operations and Reporting System (NFPORS), at 503-808-6592.<br>• Jeanne Standley for Weeds National Invasive Species Information Management System (NISIMS), at 541-751-4283.<br>• Robert Hopper for Range, Range Improvement Project System (RIPS), at 503-808-6118.<br>• Al Doelker for Fisheries, Interagency Restoration Database Application (IRDA) and Aquatic Resources Information Management System (ARIMS), at 503-808-6067. |
| Lead GIS Specialist | The Lead GIS Specialist, Pamela Keller at 541-573-4486, 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. |
| Application Manager | 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, Chris Cadwell at 541-683-6120, works with data stewards and the lead GIS specialist for on-going maintenance and management of the updated application. |
| State Data Administrator | The State Data Administrator, Stanley Frazier at 503-808-6009, provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator |

| | |
|---|---|
| | ensures that defined processes for development of data standards and metadata are followed and that they are consistent and complete. The 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 State Records Administrator, Sherrie Reid at 503-808-6655, is responsible for identifying any privacy issues related to spatial data. The State Records Administrator also provides direction and guidance on data release and fees. The State Records Administrator ensures that data has been classified under the proper records retention schedule and determines appropriate Freedom of Information Act category. |

**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 <u>about</u> treatments. Treatments are areas (polygons), zones of alteration. Sometimes a point or line is thought of as a treatment, but the <u>area</u> 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. Exclosure/protection (PROT). Fenced exclosures 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 a different lists of valid values (domains).

- The WORKAGENT attribute provides information on "who" did the treatment.

- The attributes BENEFIT, 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). 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 land treatments exclusively. Since no interagency data standard exists, this data standard is not implemented beyond BLM.

## 2.4 RELATIONSHIP TO OTHER DATASETS

**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 is 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 BENEFIT 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 exclosure 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, smaller or larger to 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 M*S database application manages attributes of the FOI. The FOI is represented in GIS as polygons of forest stands. Western Oregon BLM districts currently store, and maintain forest management activity/treatment data in M*S/FOI, but it is being redesigned to adopt the ODF. With this transition, the existing data will be used to initially populate the ODF treatment feature classes from the FOI and core ODF attributes from M*S. The M*S application will be revised to adopt the management of M*S Core Data (treatments, vegetation, and treatment surveys), data under the ODF. The revised application will manage both the ODF core attributes and additional attributes for these three core M*S topic areas. The existing M*S/FOI will continue to be used according to current standards until this transition is accomplished. More information on the migration of M*S to the ODF can be found on the OR/WA SharePoint site, Forestry page under Application Development.

**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 and other treatments for invasive species. A linking field will be added when the national database or application is operational.

**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 BENEFIT, 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, United States 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 Contractinng 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 NFPORS and RIPS 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:

Stanley Frazier
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:

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

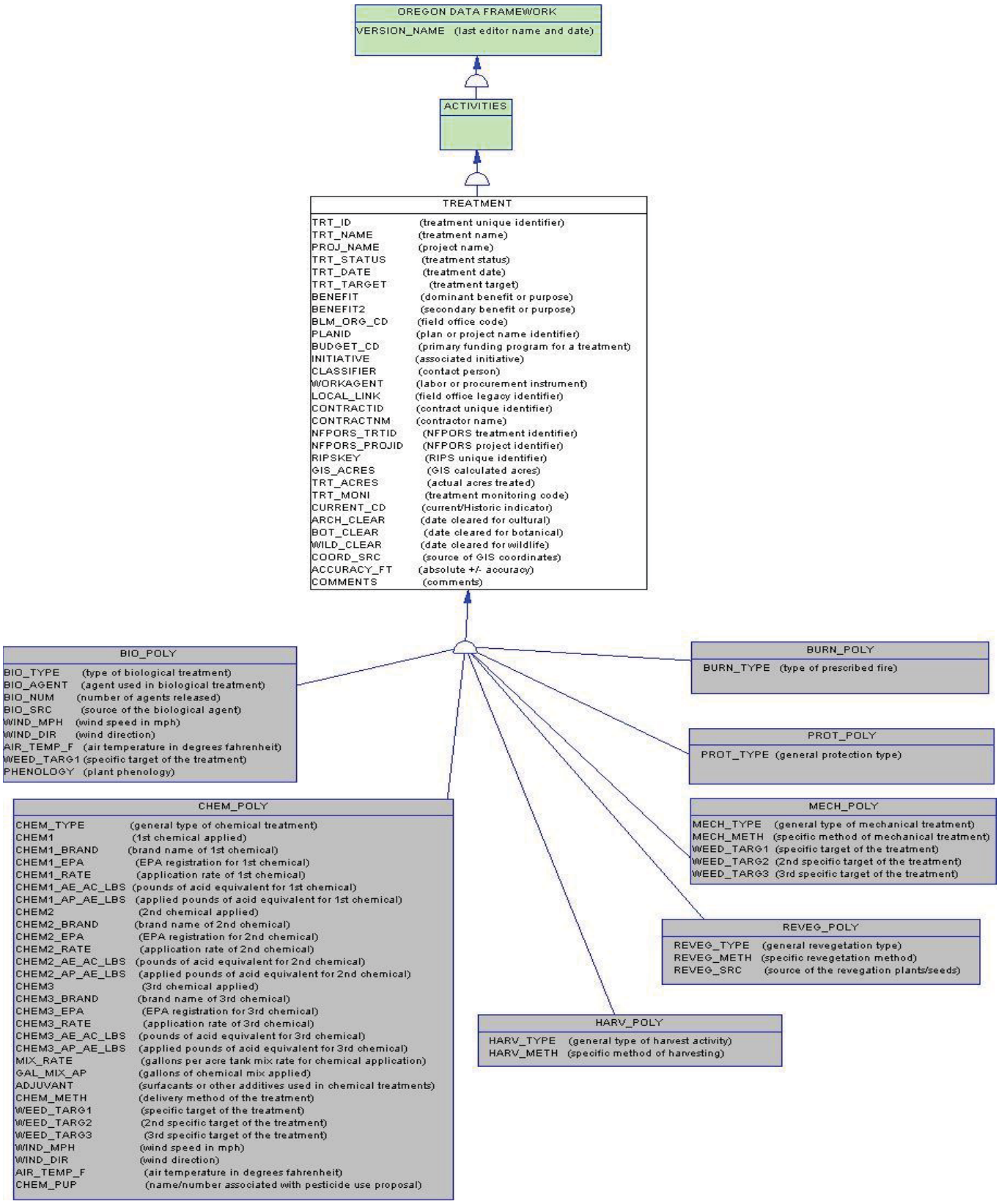


Figure 1 Data Organization Structure

# 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.

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_NAME should be one-to-one with TRT_ID. The TRT_ID/TRT_NAME 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.
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, SCID, M*S, 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 "Range 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 BENEFIT 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 BENEFIT 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. BENEFIT will contain the most important, primary benefit, and a secondary benefit can be listed in BENEFIT2. If needed, additional benefits can be listed in a simple table linked by TRT_ID. A single domain of choices is used for BENEFIT 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:

Stanley Frazier
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.

## 4.1 BURN_POLY (Burn Treatment Polygons)

| Attribute Name | Data Type | Length | Default Value | Required? | Domain |
|---|---|---|---|---|---|
| TRT_ID | Integer | Long | | Yes | |
| TRT_NAME | String | 40 | | 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_TARG | String | 30 | | No | dom_TRT_TARG |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 | 40 | | 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 | |
| **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 |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 | 40 | | Yes | |
| PROJ_NAME | String | 100 | | No | |
| **CHEM_TYPE** | **String** | **30** | | **Yes** | **dom_CHEM_TYPE** |
| TRT_STATUS | String | 8 | | Yes | dom_TRT_STATUS |
| TRT_DATE | String | 8 | | Yes | |
| **CHEM1** | **String** | **20** | | **Yes** | **dom_CHEMICAL** |
| **CHEM1_BRAND** | **String** | **40** | | **No** | **dom_CHEM_BRAND** |
| **CHEM1_EPA** | **String** | **20** | | **No** | **dom_CHEM_EPA** |
| **CHEM1_RATE** | **String** | **10** | | **No** | **dom_CHEM_RATE** |
| **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_RATE** | **String** | **10** | | **No** | **dom_CHEM_RATE** |
| **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_RATE** | **String** | **10** | | **No** | **dom_CHEM_RATE** |
| **CHEM3_AE_AC_LBS** | **Double** | **16,4** | | **No** | |
| **CHEM3_AP_AE_LBS** | **Double** | **16,6** | | **No** | |
| **MIX_RATE** | **String** | **10** | | **No** | **dom_MIX_RATE** |
| **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** | | **Yes** | **dom_WEEDS_PlantSpecies Code** |
| **WEED_TARG2** | **String** | **8** | | **No** | **dom_WEEDS_PlantSpecies** |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | **Code** |
| **WEED_TARG3** | **String** | **8** | | **No** | **dom_WEEDS_PlantSpecies Code** |
| **WIND_MPH** | **Integer** | **Short** | | **No** | |
| **WIND_DIR** | **String** | **3** | | **No** | **dom_COMPASS_DIR** |
| **AIR_TEMP_F** | **Integer** | **Short** | | **No** | |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |
| **CHEM_PUP** | **String** | **20** | | **No** | |
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 | 40 | | Yes | |
| PROJ_NAME | String | 100 | | No | |
| **HARV_TYPE** | **String** | **30** | | **Yes** | **dom_HARV_TYPE** |

| | | | | | |
|---|---|---|---|---|---|
| TRT_STATUS | String | 12 | | Yes | dom_TRT_STATUS |
| TRT_DATE | String | 8 | | Yes | |
| **HARV_METH** | **String** | **20** | | **Yes** | **dom_HARV_METH** |
| TRT_TARG | String | 30 | | No | dom_TRT_TARG |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 | 40 | | 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 | |
| **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** |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 | 40 | | 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_TARG | String | 30 | | No | dom_TRT_TARG |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |

| | | | | | |
|---|---|---|---|---|---|
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 | 40 | | 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 | |
| **REVEG_METH** | **String** | **20** | | **No** | **dom_REVEG_METH** |
| TRT_TARG | String | 30 | | No | dom_TRT_TARG |
| **REVEG_SRC** | **String** | **30** | | **No** | |
| BENEFIT | String | 30 | | Yes | dom_BENEFIT |
| BENEFIT2 | String | 30 | | No | dom_BENEFIT |
| BLM_ORG_CD | String | 5 | | Yes | dom_BLM_ORG_CD |

| | | | | | |
|---|---|---|---|---|---|
| PLANID | String | 100 | | No | dom_PLANID |
| BUDGET_CD | String | 10 | | No | |
| INITIATIVE | String | 20 | | No | dom_INITIATIVE |
| CLASSIFIER | String | 30 | | No | |
| WORKAGENT | String | 40 | | No | dom_WORKAGENT |
| LOCAL_LINK | String | 30 | | No | |
| CONTRACTID | String | 10 | | No | |
| CONTRACTNM | String | 30 | | No | |
| NFPORS_TRTID | Integer | Long | | No | |
| NFPORS_PROJID | Integer | Long | | No | |
| RIPSKEY | String | 6 | | No | |
| GIS_ACRES | Double | 16,4 | | Yes | |
| TRT_ACRES | Double | 16,4 | | No | |
| TRT_MONI | String | 20 | | No | dom_TRT_MONI |
| CURRENT_CD | String | 1 | | Yes | dom_CURRENT_CD |
| 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 CHARACTERISTCS

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<br>BLM Structured Name | ACCURACY_FT<br>ACCURACY_FEET_MEASURE |
| Description | Inherited from Entity TREATMENT<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>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. |
| 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<br>BLM Structured Name | ADJUVANT<br>Chemical_Adjuvant_Text |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u> |

| | |
|---|---|
| | Free text field for entering adjuvants (surfactants or other additives) used in chemical treatments, if desired. |
| Required/Optional | 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 | Not Inherited<br>Used in Feature Classes:<br>BIO_POLY<br>CHEM_POLY<br><br><u>Definition</u><br>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<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Date the proposed treatment area received archaeological clearance. YYYYMMDD or YYYYMM or YYYY format. |
| Required/Optional | Optional |

| | |
|---|---|
| Domain (Valid Values) | None. Examples: 20091022, 200109, 1999 |
| Data Type | Variable Characters (8) |

## 7.5 BENEFIT

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | BENEFIT<br>Primary_Benefiting_Resource_Text |
| Description | Inherited from Entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>The intended main or primary benefiting entity (resource) from the treatment action. Only benefits that are officially acknowledged and recognized for a particular treatment should be considered, and BENEFIT will contain only the most important. A secondary benefit can be listed in BENEFIT2. Some choices are more general and the most specific choice should be used, e.g., a 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_BENEFIT |
| Data Type | Variable Characters (30) |

## 7.6 BENEFIT2

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | BENEFIT2<br>Secondary_Benefiting_Resource_Text |
| Description | Inherited from Entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY |

| | |
|---|---|
| | Definition<br>A secondary benefiting resource ("reason" for the treatment). Only benefits that are officially acknowledged and recognized for a particular treatment should be considered. Additional benefits (same domain) can be listed in a linked table. Some choices are more general, and the most specific choice should be used, e.g., birds-listed rather than birds-general. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_BENEFIT |
| Data Type | Variable Characters (30) |

## 7.7 BIO_AGENT

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

## 7.8 BIO_NUM

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | BIO_NUM<br>Biological_Agent_Number |
| Description | Not inherited<br>Used in Feature Class:<br>BIO_POLY<br><br>Definition<br>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 |

## 7.9 BIO_SRC

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | BIO_SRC<br>Biological_Agent_Source_Text |
| Description | Not inherited<br>Used in Feature Class:<br>BIO_POLY<br><br><u>Definition</u><br>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) |

## 7.10 BIO_TYPE

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

## 7.11 BLM_ORG_CD

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | BLM_ORG_CD<br>Administrative_Unit_Organization_Code |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Combination of the BLM "state" and field office which has administrative responsibility for the treatment. The OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, and California, and vice versa. Similarly, the treatment may cross Resource Area or district boundaries and the administrative responsibility is assigned to one or the other. The unit can be identified only to the district or even state level. |
| Required/Optional | Required |
| Domain (Valid Values) | dom_BLM_ORG_CD |
| Data Type | Characters (5) |

## 7.12 BOT_CLEAR

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

| | |
|---|---|
| Data Type | Variable Characters (8) |

## 7.13 BUDGET_CD

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | BUDGET_CD<br>Funding_Program_Code |
| Description | Inherited from Entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Primary funding program activity for a treatment. |
| Required/Optional | Optional |
| Domain (Valid Values) | None. Examples: 1020, 1040, 1220, 1060MX |
| Data Type | Variable Characters (10) |

## 7.14 BURN_TYPE

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

## 7.15 CHEM_METH

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM_METH<br>Chemical_Delivery_Method_Type_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>Specific delivery methods of chemical treatment. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_CHEM_METH |
| Data Type | Variable Characters (20) |

## 7.16 CHEM_PUP

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM_PUP<br>Pesticide_Use_Proposal_Area_Identifier |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.17 CHEM_TYPE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM_TYPE<br>Chemical_Treatment_Type_Code |
| Description | Not Inherited<br>Used in Feature Class: |

| | |
|---|---|
| | CHEM_POLY<br><br>Definition<br>General type of chemical treatment. |
| Required/Optional | Required |
| Domain (Valid Values) | dom_CHEM_TYPE |
| Data Type | Variable Characters (30) |

## 7.18 CHEM1

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM1<br>First_Chemical_Name |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br>Definition<br>Name of the first chemical used. |
| Required/Optional | Required |
| Domain (Valid Values) | dom_CHEMICAL |
| Data Type | Variable Characters (20) |

## 7.19 CHEM1_AE_AC_LBS

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM1_AE_AC_LBS<br>First_Chemical_Acid_Equivalent_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br>Definition<br>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_RATE). |
| Required/Optional | Optional |
| Domain (Valid Values) | None. Examples: 0.5, 1.0, 0.95 |

| | |
|---|---|
| Data Type | Decimal (8.4) |

## 7.20 CHEM1_AP_AE_LBS

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM1_AP_AE_LBS<br>First_Chemical_Applied_Acid_Equivalent_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.21 CHEM1_BRAND

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM1_BRAND<br>First_Chemical_Brand_Name |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.22 CHEM1_EPA

| | |
|---|---|
| Geodatabase Name | CHEM1_EPA |

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

## 7.23 CHEM1_RATE

| | |
|---|---|
| Geodatabase Name | CHEM1_RATE |
| BLM Structured Name | First_Chemical_Application_Rate |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>Application rate of first chemical. The rate reflects the recommended quantity and units on the chemical label. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_CHEM_RATE |
| Data Type | Variable Characters (10) |

## 7.24 CHEM2

| | |
|---|---|
| Geodatabase Name | CHEM2 |
| BLM Structured Name | Second_Chemical_Name |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>Name of the second chemical used, if any. |
| Required/Optional | Optional |

| | |
|---|---|
| Domain (Valid Values) | dom_CHEMICAL |
| Data Type | Variable Characters (20) |

## 7.25 CHEM2_AE_AC_LBS

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM2_AE_AC_LBS<br>Second_Chemical_Acid_Equivalent_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br>Definition<br>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_RATE). |
| Required/Optional | Optional |
| Domain (Valid Values) | None. Examples: 0.5, 1.0, 0.95 |
| Data Type | Decimal (8.4) |

## 7.26 CHEM2_AP_AE_LBS

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM2_AP_AE_LBS<br>Second_Chemical_Applied_Acid_Equivalent_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br>Definition<br>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) |

## 7.27 CHEM2_BRAND

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM2_BRAND<br>Second_Chemical_Brand_Name |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.28 CHEM2_EPA

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM2_EPA<br>Second_Chemical_EPA_Registration_Number |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.29 CHEM2_RATE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM2_RATE<br>Second_Chemical_Application_Rate |
| Description | Not Inherited<br>Used in Feature Class: |

| | |
|---|---|
| | CHEM_POLY<br><br>Definition<br>Application rate of the second chemical, **if any**. The rate reflects the recommended quantity and units on the chemical label. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_CHEM_RATE |
| Data Type | Variable Characters (10) |

## 7.30 CHEM3

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM3<br>Third_Chemical_Name |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br>Definition<br>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<br>BLM Structured Name | CHEM3_AE_AC_LBS<br>Third_Chemical_Acid_Equivalent_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br>Definition<br>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_RATE). |
| 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<br>BLM Structured Name | CHEM3_AP_AE_LBS<br>Third_Chemical_Applied_Acid_Equivalent_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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<br>BLM Structured Name | CHEM3_BRAND<br>Second_Chemical_Brand_Name |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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_RATE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CHEM3_RATE<br>Third_Chemical_Application_Rate |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>Application rate of the third chemical, **if any**. The rate reflects the recommended quantity and units on the chemical label. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_CHEM_RATE |
| Data Type | Variable Characters (10) |

## 7.36 CLASSIFIER

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CLASSIFIER<br>Classifier_Name |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><u>Definition</u><br>Name (mixed case, first and last) of the subject matter specialist most |

| | |
|---|---|
| | knowledgeable about the treatment (contact). |
| Required/Optional | Optional |
| Domain (Valid Values) | None. Examples: Mary Smith, John Doe |
| Data Type | Variable Characters (20) |

## 7.37 COMMENTS

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

## 7.38 CONTRACTID

| | |
|---|---|
| Geodatabase Name | CONTRACTID |
| BLM Structured Name | Contract_Identification_Number |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>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 (20) |

## 7.39 CONTRACTNM

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

## 7.40 COORD_SRC

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | COORD_SRC<br>COORDINATE_SOURCE_CODE |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>The actual source of the GIS coordinates for the polylines. If the line is copied from another theme and already has COORD_SRC, it should be reviewed and may need to be changed for use in this dataset. |
| Required/Optional<br>Domain (Valid Values) | Optional<br>dom_COORD_SRC |

| | |
|---|---|
| Data Type | Variable Characters (7) |

## 7.41 CURRENT_CD

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | CURRENT_CD<br>Treatment_Current_Code |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Only meaningful for existing treatment feature classes, not applicable to proposed treatment. Whether an entity is considered "Historic" depends on the type of treatment. Date/age does not determine this, but whether the entity is now removed, obsolete, replaced or erased in some sense. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_CURRENT_CD |
| Data Type | Characters (1) |

## 7.42 GAL_MIX_AP

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | GAL_MIX_AP<br>Chemical_Applied_Measure |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.43 GIS_ACRES

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name<br>Description | GIS_ACRES<br>GIS_Acres_Measure<br>Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>The GIS polygon acres. This is necessary in order to compare to TRT_ACRES. Must be recalculated with every edit submission. The acres will be automatically calculated when the feature classes are published. The BLM_ORG_CD will be used to determine the appropriate projection. May not be relevant to Biological treatments. |
| Required/Optional | Required |
| Domain (Valid Values) | None |
| Data Type | Decimal(16.6) |

## 7.44 HARV_METH

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | HARV_METH<br>Harvest_Method_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>HARV_POLY<br><br><u>Definition</u><br>Specific method of harvesting. |
| Required/Optional | Required |
| Domain (Valid Values) | dom_HARV_METH |
| Data Type | Variable Characters (20) |

## 7.45 HARV_TYPE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | HARV_TYPE<br>Harvest_Type_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>HARV_POLY<br><br><u>Definition</u><br>General type of harvest activity. |
| Required/Optional | Required |
| Domain (Valid Values) | dom_HARV_TYPE |
| Data Type | Variable Characters (30) |

## 7.46 INITIATIVE

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

## 7.47 LOCAL_LINK

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | LOCAL_LINK<br>Local_Database_Identifier |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes: |

| | |
|---|---|
| | BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>District legacy identifier or database link for a treatment (other than RIPS and NFPORS). |
| Required/Optional | Optional |
| Domain (Valid Values) | None. Examples: 127UB, 35-1, 4102 |
| Data Type | Variable Characters (30) |

## 7.48 MECH_METH

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | MECH_METH<br>Mechanical_Method_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>MECH_POLY<br><br><u>Definition</u><br>Specific methods, tools, and materials used for mechanical (machine or manual) treatment. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_MECH_METH |
| Data Type | Variable Characters (20) |

## 7.49 MECH_TYPE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | MECH_TYPE<br>Mechanical_Treatment_Type_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>MECH_POLY<br><br><u>Definition</u><br>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) |

## 7.50 MIX_RATE

| | |
|---|---|
| Geodatabase Name | MIX_RATE |
| BLM Structured Name | Chemical_Mix_Applied_Rate |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.51 NFPORS_PROJID

| | |
|---|---|
| Geodatabase Name | NFPORS_PROJID |
| BLM Structured Name | NFPORS_Project_Identifier |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>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 |

## 7.52 NFPORS_TRTID

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | NFPORS_TRTID<br>NFPORS_Treatment_Identifier |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>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 |

## 7.53 PHENOLOGY

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | PHENOLOGY<br>Plant_Phenology_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>BIO_POLY<br><br><u>Definition</u><br>Phenological stage (or stages) of the plant being treated with a biological agent. For example, “Seedling,” “Flowering.” .Stages are combined (separated by “/”) if meaningful for management, for example, “Bud/Flowering.” “Deaddormant” is used instead of “Dead” or “Dormant” because of the difficulty in declaring a plant dead. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_PHENOLOGY |

| | |
|---|---|
| Data Type | Variable Characters (30) |

## 7.54 PLANID

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

## 7.55 PROJ_NAME

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | PROJ_NAME<br>Project_Name_Text |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>District-assigned name for a project that encompasses several treatment types and/or treatment units. It is not the same as the plan or project authorizing the action (PLANID) and there may be many PROJ_NAME for one PLANID. |
| Required/Optional | Optional |
| Domain (Valid Values) | None. Examples: Big Creek Juniper Cut, County Roads Weed Control |

| | |
|---|---|
| Data Type | Variable Characters (100) |

## 7.56 PROT_TYPE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | PROT_TYPE<br>Project_Type_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>PROT_POLY<br><br><u>Definition</u><br>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) |

## 7.57 REVEG_METH

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | REVEG_METH<br>Revegetation_Method_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>REVEG_POLY<br><br><u>Definition</u><br>Specific method of revegetation. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_REVEG_METH |
| Data Type | Variable Characters (20) |

## 7.58 REVEG_SRC

| | |
|---|---|
| Geodatabase Name | REVEG_SRC |

| | |
|---|---|
| BLM Structured Name | Revegetation_Source_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>REVEG_POLY<br><br><u>Definition</u><br>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) |

## 7.59 REVEG_TYPE

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

## 7.60 RIPSKEY

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | RIPSKEY<br>RIPS_Identifier |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY |

| | |
|---|---|
| | Definition<br>RIPS Key. 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) |

## 7.61 TRT_ACRES

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_ACRES<br>Treatment_Acres_Measure |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br>Definition<br>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 BIOor PROT treatments. |
| Required/Optional | Optional |
| Domain (Valid Values) | None |
| Data Type | Decimal (16.6) |

## 7.62 TRT_DATE

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_DATE<br>Treatment_Date |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY |

| | |
|---|---|
| | CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>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.<br><br>YYYYMMDD or YYYYMM, or YYYY format |
| Required/Optional | Required (for completed treatments) |
| Domain (Valid Values) | None. Examples: 20091022, 200109, 1999 |
| Data Type | Variable Characters (8) |

## 7.63 TRT_ID

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_ID<br>Treatment_Identifier |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Unique number identifier for the treatment entity. Multiple "units" of a treatment are given unique TRT_IDs and TRT_ID is unique across 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 |

## 7.64 TRT_MONI

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_MONI<br>Treatment_Monitor_Code |

| | |
|---|---|
| Description | Not Inherited<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY HARV_POLY<br>CHEM_POLY MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Result as determined from post treatment inspection. Questions asked will be different for different treatment types. For prescribed BURN, these might include:<br><br>1. Was consumption of the targeted fuels inadequate, adequate, or excessive?<br>2. Were targeted mortality levels inadequate, adequate, or excessive?<br>3. Was soil heating acceptable or unacceptable?<br>4. Did any unacceptable damage to non-targeted resources or resource values occur?<br><br>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:<br><br>1. What was the germination percentage?<br>2. What percent survived one year?<br>3. What was the coverage? |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_TRT_MONI |
| Data Type | Variable Characters (20) |

## 7.65 TRT_NAME

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_NAME<br>Treatment_Name |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><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 (40) |

## 7.66 TRT_STATUS

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_STATUS<br>Treatment_Status_Code |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>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) |

## 7.67 TRT_TARG

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | TRT_TARG<br>Treatment_Target_Code |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes: |

| | |
|---|---|
| | BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>Target (affected species) of the treatment action. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_TRT_TARG |
| Data Type | Variable Characters (30) |

## 7.68 VERSION_NAME

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

## 7.69 WEED_TARG1

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | WEED_TARG1<br>Weed_First_Target_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY, MECH_POLY, BIO_POLY<br><br><u>Definition</u><br>First target weed species of the vegetation treatment. |
| Required/Optional | Required, except when CHEM_TYPE=MONITOR |
| Domain (Valid Values) | dom_WEEDS_PlantSpeciesCode |
| Data Type | Variable Characters (8) |

## 7.70 WEED_TARG2

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | WEED_TARG2<br>Weed_Second_Target_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY, MECH_POLY<br><br><u>Definition</u><br>Second target weed species of the vegetation treatment, **if any**. |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_WEEDS_PlantSpeciesCode |
| Data Type | Variable Characters (8) |

## 7.71 WEED_TARG3

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | WEED_TARG3<br>Weed_Third_Target_Code |
| Description | Not Inherited<br>Used in Feature Class:<br>CHEM_POLY, MECH_POLY<br><br><u>Definition</u><br>Third target weed species of the vegetation treatment, **if any**. |

| | |
|---|---|
| Required/Optional | Optional |
| Domain (Valid Values) | dom_WEEDS_PlantSpeciesCode |
| Data Type | Variable Characters (8) |

## 7.72 WILD_CLEAR

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

## 7.73 WIND_DIR

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | WIND_DIR<br>Wind_Compass_Cardinal_Direction_Code |
| Description | Not inherited<br>Used in Feature Classes:<br>BIO_POLY<br>CHEM_POLY<br><br><u>Definition</u><br>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) |

## 7.74 WIND_MPH

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | WIND_MPH<br>Wind_Speed_Miles_Per_Hour_Measure |
| Description | Not Inherited<br>Used in Feature Classes:<br>BIO_POLY<br>CHEM_POLY<br><br><u>Definition</u><br>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 |

## 7.75 WORKAGENT

| | |
|---|---|
| Geodatabase Name<br>BLM Structured Name | WORKAGENT<br>Workagent_Text |
| Description | Inherited from entity TREATMENTS<br>Used in Feature Classes:<br>BIO_POLY BURN_POLY<br>CHEM_POLY HARV_POLY<br>MECH_POLY PROT_POLY<br>REVEG_POLY<br><br><u>Definition</u><br>"Who" did the work (or the type of procurement instrument). |
| Required/Optional | Optional |
| Domain (Valid Values) | dom_WORKAGENT |
| Data Type | Variable Characters (20) |

## 8. ASSOCIATED FILES OR DATABASES

Treatments have many associated files, tables, databases, and applications. Currently, the most important related applications are M*S, NFPORS, and RIPS. The linking field is understood for these applications. Other applications which may need to upload spatial features from the treatments feature classes are TSIS, SCID, ARIMS, and IRDA. Linkage to these systems is not yet determined.

## 9. LAYER FILES (PUBLICATION VIEWS)

### 9.1 GENERAL BACKGROUND

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

A. Copied completely with no changes (replicated).

B. Copied with no changes except to omit one or more feature classes from a feature dataset.

C. Minor changes made (e.g., clip, dissolve, union with ownership) in order to make the data easier to use.

These "Publication feature classes" are indicated by "PUB" in their 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).

### 9.2 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.

# 10. EDITING PROCEDURES

## 10.1 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.

## 10.2 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.

## 10.3 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 SOURCEL next, then DEM, and MAP last.

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

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

## 10.4 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, BENEFIT, 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." WEED_TARG1 is allowed to be blank.

# OREGON/WASHINGTON DATA FRAMEWORK OVERVIEW

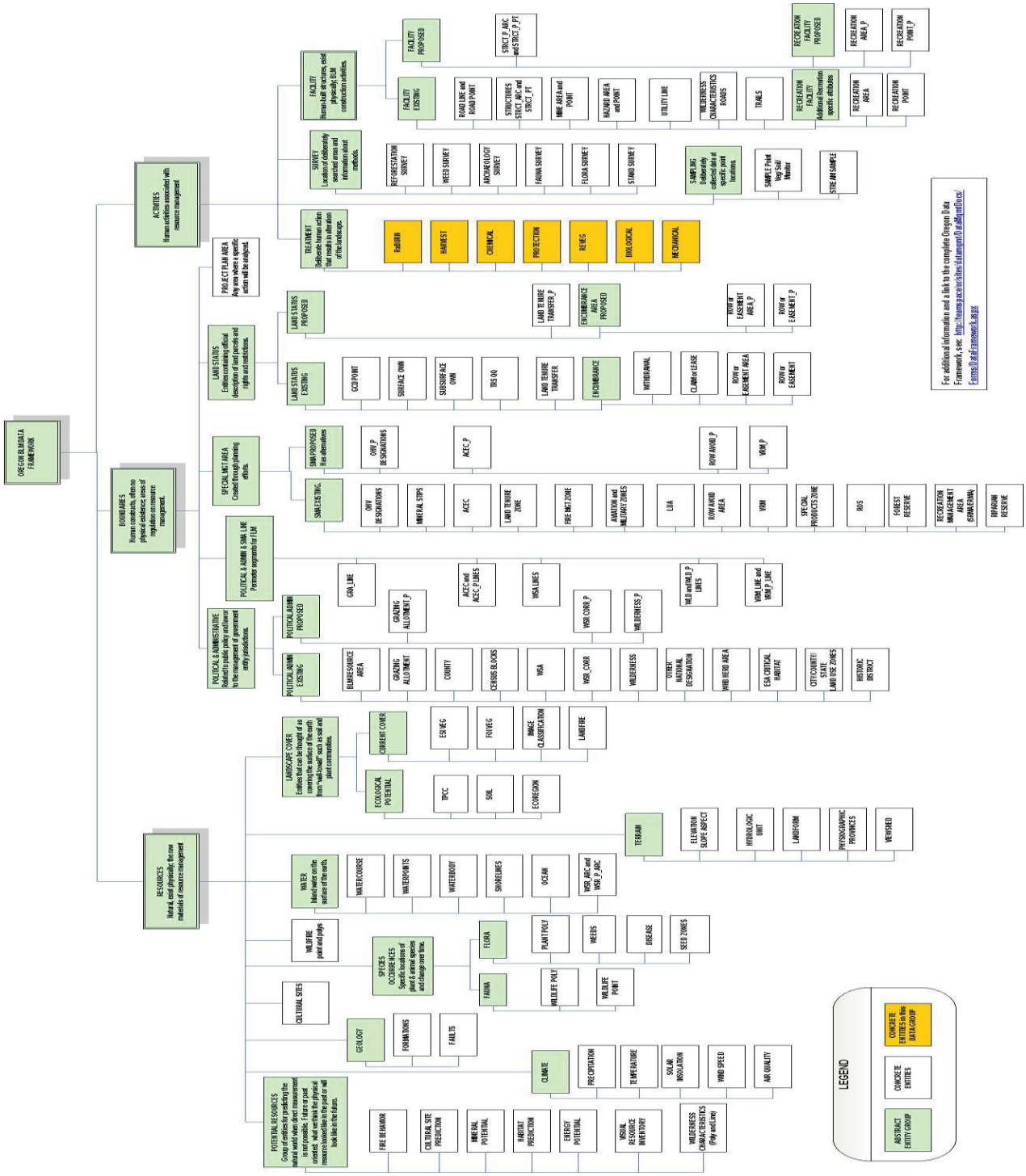


Figure 2 Oregon Data Framework Overview

## 11. 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 currents lists:

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

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

### A.1 BENEFIT [**BACK**]

| | |
|---|---|
| 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 |
| 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 |
| 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−Benefiting resource not specifically identified |
| EDDR | EDDR−Early Detection Rapid Repsonse |

## A.2 BIO_AGENT [**BACK**]

| | |
|---|---|
| Cattle | Cattle |
| Goats | Goat |
| Sheep | Sheep |
| ACMA | ACMA−Aceria malherbae |
| AGAL | AGAL−Agonopterix alstromeriana |
| CELI | CELI−Ceutorhynchus litura |
| GAPU | GAPU−Galerucella pusilla |
| LAMI | LAMI−Larinus minutus |
| MEJA | MEJA−Mecinus janthinus |
| RHCO | RHCO−Rhagoletis complete |
| URCA | URCA−Urophora cardui |

## A.3 BIO_TYPE [**BACK**]

| | |
|---|---|
| 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 |
| Monitor | Monitor−Previously treated area |

## A.4 BLM_ORG_CD [**BACK**]

| | |
|---|---|
| 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.5 BURN_TYPE [**BACK**]

| | |
|---|---|
| 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 |

## A.6 CHEMICAL [**BACK**]

| | |
|---|---|
| 2-4-Damine | 2-4-Damine |
| 2-4-Dester | 2-4-Dester |
| Picloram | Picloram |
| Dicamba | Dicamba |
| Chlorsulfuron | Chlorsulfuron |
| Glyphosate | Glyphosate |
| Imazapic | Imazapic |
| Metsulfuron | Metsulfuron |
| Aminopyralid | Aminopyralid |
| Diuron | Diuron |
| Triclopyr | Triclopyr |
| Clopyralid | Clopyralid |
| Bromacil | Bromacil |
| Sulfometuron methyl | Sulfometuron methyl |
| Unknown | Unknown |
| Not Applicable | Not Applicable |

## A.7 CHEM_BRAND [**BACK**]

| | |
|---|---|
| Clarity | Clarity |
| Diablo | Diablo |
| HiDep | HiDep |
| Tordon22K | Tordon22K |
| Weedar64 | Weedar64 |
| Rodeo | Rodeo |
| Roundup | Roundup |
| RoundupPro | RoundupPro |
| RoundupMax | RoundupMax |
| WeedoneLV6 | WeedoneLV6 |
| Platoon | Platoon |
| Weedmaster | Weedmaster |
| Unison | Unison |
| Transline | Transline |
| KrovarIDF | KrovarID |
| Saber | Saber |
| TelarXP | TelarXP |
| LandmarkXP | LandmarkXP |
| Killzall | Killzall |
| Veteran720 | Veteran720 |
| AquaNeat | AquaNeat |
| Plateau | Plateau |
| WeedestroyAM40 | WeedestroyAM40 |
| WeedoneLV4 | WeedoneLV4 |
| Banvel | Banvel |
| Amine4 | Amine4 |
| Garlon3A | Garlon3A |
| Hardball | Hardball |
| Milestone | Milestone |
| Vision | Vision |
| Unknown | Unknown |
| Not Applicable | Not Applicable |

## A.8 CHEM_EPA [**BACK**]

| | |
|---|---|
| 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.9 CHEM_METH [**BACK**]

| | |
|---|---|
| Backpack | Backpack |
| ATV | ATV |
| Handtools | Handtools |
| Fixed-Wing | Fixed-Wing |
| Helicopter | Helicopter |
| Truck | Truck |
| Horseback | Horseback |
| UTV | UTV |
| Hack-Squirt | Hack-Squirt |

## A.10 CHEM_RATE [**BACK**]

| | |
|---|---|
| 3Q/A | 3Q/A |
| 2.5Q/A | 2.5Q/A |
| 2Q/A | 2Q/A |
| 1.5Q/A | 1.5Q/A |
| 1Q/A | 1Q/A |
| 3.5P/A | 3.5P/A |
| 2.5P/A | 2.5P/A |
| 1.5P/A | 1.5P/A |
| 1.25P/A | 1.25P/A |
| 1P/A | 1P/A |
| 0.5P/A | 0.5P/A |
| Other | Other |
| Unknown | Unknown |
| NA | NA−Not Applicable |

## A.11 CHEM_TYPE [**BACK**]

| | |
|---|---|
| Fertilizer | Fertilizer |
| Herbicide | Herbicide |
| Monitor | Monitor |

## A.12 COMPASS_DIR [**BACK**]

| | |
|---|---|
| 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 [**BACK**]

| | |
|---|---|
| CFF | CFF−Lines duplicated or buffered from Cartographic Feature Files (USFS) |
| DEM | DEM−Digital Elevation Model (30 m or better accuracy) used for creation of contours |
| DIS | DIS−Lines generated to connect discontinuous features |
| DLG | DLG−Lines duplicated or buffered from (24K scale accuracy) USGS Digital Line Graphs |
| DOQ | DOQ−Screen digitized linework over Digital Orthoquad backdrop |
| DRG | DRG−Screen digitized linework over Digital Raster Graphic backdrop |
| GCD | GCD−Lines snapped to Geographic Coordinate Database Points |
| GPS | GPS−Lines obtained from a Global Positioning System device |
| IMG | IMG−Linework derived from interpretation of satellite or other non-photographic imagery |
| MAP | MAP−Digitized linework from 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 CURRENT_CD [**BACK**]

| | |
|---|---|
| C | C−Entity is still present on the ground |
| H | H−Entity is obsolete, obliterated or removed |
| N | N−Not applicable, entity is still a proposal |

## A.15 HARV_METH [**BACK**]

| | |
|---|---|
| Clearcut | Clearcut−All target trees removed |
| Thinning | Thinning−Trees removed to reduce density |
| Selective | Selective−Individual trees selected for removal |
| Handcut | Handcut−No power tools used |
| Seed Tree | Seed Tree−Trees left to provide seed for natural reproduction |
| Shelterwood | Shelterwood−Trees left to provide protection for reproduction |
| Mortality Salvage | Mortality Salvage−Individual scattered dead, dying, or down trees |
| None | None−Designated No Harvest, project level, not an allocation |
| Unknown | Unknown−Harvest method is unknown |

## A.16 HARV_TYPE [**BACK**]

| | |
|---|---|
| Commercial-Timber | Commercial-Timber |

| | |
|---|---|
| Biomass | Biomass−Removal of woody biomass |
| Woodcutting | Woodcutting−Domestic use |
| Designated No Harvest | Designated No Harvest−Project level decision, not an allocation |

## A.17 INITIATIVE [**BACK**]

| | |
|---|---|
| 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 |

## A.18 MECH_METH [**BACK**]

| | |
|---|---|
| Dozer | Dozer |
| Chainsaw | Chainsaw |
| Disking | Disking |
| Ripping | Ripping |
| Trenching | Trenching |
| Scalping | Scalping |
| Machine-Unspecified | Machine-Unspecified |
| Manual | Manual−No power tools |
| Masticator | Masticator |
| Feller/Buncher | Feller/Buncher |
| Skidder/Yarder | Skidder/Yarder |
| Forwarder | Forwarder |
| Unknown | Unknown |
| Monitor | Monitor |
| Chaining | Chaining−Dragging heavy anchor chain by bulldozer |

## A.19 MECH_TYPE [**BACK**]

| | |
|---|---|
| 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 |

| | |
|---|---|
| Shrub/Weeds Removal | Shrub/Weeds Removal−Clearing, pulling or chopping weeds and/or shrubs |
| 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−Mechanical soil preparation |
| 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 |

## A.20 MIX_RATE [**BACK**]

| | |
|---|---|
| 50G/A | 50G/A−50 gallons per acre |
| 25G/A | 25G/A−25 gallons per acre |
| Other | Other−A different mix rate used |

## A.21 PHENOLOGY [**BACK**]

| | |
|---|---|
| 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 |

## A.22 PLANID [**BACK**]

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

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

## A.23 PROT_TYPE [**BACK**]

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

## A.24 REVEG_METH [**BACK**]

| | |
|---|---|
| Aerial | Aerial |
| Broadcast | Broadcast |
| Harrow/Broadcast | Harrow/Broadcast |
| Drill | Drill |
| Jet Stinger | Jet Stinger |
| Bare Root | Bare Root |
| Container | Container |
| Manual | Manual |
| Unknown | Unknown |

## A.25 REVEG_TYPE [**BACK**]

| | |
|---|---|
| Tree Planting | Tree Planting |
| Tree Seeding-Natural | Tree Seeding-Natural |
| Tree Seeding-Artificial | Tree Seeding-Artificial |
| Range Seeding | Range Seeding |
| Shrub Planting | Shrub Planting |

## A.26 TRT_MONI [**BACK**]

| | |
|---|---|
| Acceptable | Acceptable |
| Mixed Result | Mixed Result |
| Unacceptable | Unacceptable |
| Unknown Result | Unknown Result |

## A.27 TRT_STATUS [**BACK**]

| | |
|---|---|
| Completed | Completed−Treatment action completed |
| Initial | Initial−Scoping, action not yet approved or started |
| Active | Active−Treatment action underway |
| Suspended | Suspended−Treatment action halted |
| Rejected | Rejected−Considered and found unsuitable |

## A.28 TRT_TARG [**BACK**]

| | |
|---|---|
| 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 |
| 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.29 WEEDS_PlantSpeciesCode [**BACK**]

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

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

## A.30 WORKAGENT [**BACK**]

| | |
|---|---|
| Force Account | Force Account−Federal labor force |
| 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 Purchaser |
| Landowner | Landowner |
| Unknown | Unknown |