Oregon/Washington Bureau of Land Management

TIMBER PRODUCTION CAPABILITY CLASSIFICATION

Spatial Data Standard

Photo of person watching log yarder at the Rowell Creek Timber Sale located nine miles southwest of Willamina, Oregon. Photo by Michael Campbell, BLM, June 2018.

Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	7/5/2005	Chris Cadwell, David Haney, Barbara Haney	TPCC Edit Guide.	All
2.0	6/26/2016	Dana Baker-Allum, Carolina Hooper	Migrated TPCC Edit Guide into ODF data standard format.	All
2.1	3/17/2017	Dana Baker-Allum	Updated State Records Administrator	6
2.2	3/23/2017	Dana Baker-Allum	Updated Records Retention Schedule	7
2.3				
2.4	1/30/2020	Al Thompson	Reformat and edit.	
3.0	10/7/2021	Dana Baker-Allum, Carolina Hooper, Craig Ducey, Maria Fiorella	Significant update.	Most

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

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1 General Information

The Timber Production Capability Classification (TPCC) dataset represents areas of BLM managed lands in Western Oregon that are classified according to the physical and biological capability of the site to support and produce forest products. The purpose of TPCC is to determine whether forest lands are capable of producing timber on a sustained-yield basis and are suitable for planned timber management. TPCC is based upon the sites capability to produce wood fiber, not on the vegetation currently occupying the site. This data was generated from a variety of data sources over a relatively long period of time. Accuracy of the data, relative to related data and current versions of source data, may be highly variable. Site specific questions of scale and accuracy should be directed to the TPCC data steward.

The TPCC was issued as a BLM manual (5251-1) supplement by the Oregon State Office (OSO) in May 1996 (no electronic copy available). A field inventory was conducted in the mid to late 1980s to classify all lands in Western Oregon BLM in accordance with the manual in preparation for the Resource Management Plans (RMP). Attributes were initially entered into the Micro*Storms database. GIS capture of the TPCC theme was done on mylars by the districts and digitized as part of the initial Western Oregon Digital Database (WODDB) related to the RMP development in the late 1980s. Very limited backdrop reference material was available for this initial mapping. This initial mapping remained a frozen dataset until 1998. In 2005, an editable dataset and edit guidance was made available to the districts for editing.

- Dataset (Theme) Name: Timber Production Capability Classification
- Dataset (Feature Class): TPCC_POLY

1.1 Roles and Responsibilities

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Data Steward	The State Data Steward responsibilities include approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential Privacy issues, and managing that data as a corporate resource. The State Data Steward coordinates with field office data stewards, the State Data Administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality.
GIS Technical Lead	The GIS Technical Lead works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the development of data standards. The GIS technical lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS technical lead works with data editors to ensure the consistency and accordance with the established data standards of data input into the enterprise Spatial Database Engine (SDE) geodatabase. The GIS technical lead provides technical assistance and advice on GIS analysis, query, and display of the dataset.
State Data Administrator	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Records Administrator	The State Records Administrator assists the state data steward to identify any privacy issues related to spatial data. The state records administrator also provides direction and guidance on data release and fees. The state records administrator classifies data under the proper records retention schedule and determines the appropriate Freedom of Information Act category.

1.2 FOIA Category

This dataset falls under the standard Records Access Category 1(B) – BLM records that may contain protected information that must be considered for segregation prior to release.

1.3 Records Retention Schedule

The DRS/GRS/BLM Combined Records Schedule under Schedule 20/52a (Electronic Records/Geographic Information Systems) does NOT list this theme as one of the system-centric themes that are significant for BLM's mission that must be permanently retained.

TEMPORARY. Delete when no longer needed for administrative, legal, audit, or other operational purposes (subject to any records freeze or holds that may be in place).

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

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

1.4 Security/Access/Sensitivity

The Timber Production Capability Classification theme does not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the OR/WA BLM).

This dataset is not sensitive and there are no restrictions on access to this data within the BLM. This dataset falls under the standard Records Access Category 1(B) – BLM records that may contain protected information that must be considered for segregation prior to release. Attributes CLASSIFIER, APPR_BY, FRAG_OPTN, RFST_OPTN, and REMARKS are to be removed from external datasets. There are no privacy issues or concerns associated with these data themes. A privacy impact assessment was completed on 8/12/2021.

1.5 Keywords

Keywords that can be used to locate this dataset include:

- BLM Thesaurus: Forest, Geospatial
- Additional keywords: Forestry, Silviculture, Vegetation, Reforestation, Land Classification, Allowable Cut Planning, Sustained Yield
- ISO Thesaurus: biota, environment

1.6 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 - Data Administration
- 5251 - Timber Production Capacity Classification
- 9167 - Geographic Information Systems (GIS)

2 Dataset Overview

2.1 Usage

TPCC is an integral part of the allowable cut planning process. It defines the land area that is forested and is capable of sustained yield harvest. It should be updated during the field operations of the timber sale planning process to reflect actual site conditions. It is used for broad-scale analysis, such as RMP, or site-specific analysis, such as timber sale design. It is used as a companion dataset to the Forest Operations Inventory (FOIVEG) thematic dataset. The two datasets may or may not have coincident lines as several stands may be contained within a single TPC classification or, conversely, several TPCC polygons may fall within one FOIVEG unit. This data was generated from a variety of data sources over a relatively long period of time.

2.2 Sponsor/Affected Parties

The sponsor for this dataset is the Deputy State Director, Resource Planning, Use, and Protection.

2.3 Relationship to Other Datasets, Databases, or Files

Relationship between TPCC and other GIS Datasets:

- Land Ownership - Since the TPCC feature class is coincident with our surface land ownership, the primary delineation criteria for a TPCC polygon should be all BLM managed lands. The CADNSDI and Landlines (LLI) datasets are the source for all TPCC polygon delineations based on this ownership. The minimum mapping feature size for land use allocations is the same as for LLI – any legally defined mapping unit.
- Forest Operations Inventory (FOIVEG) - The major use of the TPCC feature class is for timber harvest planning; therefore, the secondary source data should be the FOIVEG feature class. Where LLI has not been updated with GCDB, significant gaps remain between LLI and FOIVEG, making FOIVEG the better source for coincident linework. This will assure more accurate acreage calculations for timber harvest planning based on TPC classifications. In areas where boundaries between land use allocations are not based on ownership lines, FOIVEG again makes the best source for linework.
- Administrative Unit Boundaries - In some instances, there are TPCC designation changes based on BLM district boundaries. This linework makes poor operational lines for treatments and should only be used to meet original designations in the district RMP.

2.4 Data Category/Architecture Link

This data theme is a portion of the Oregon Data Framework (ODF) shown in Figure 1, Oregon Data Framework (ODF) Overview on page 9. The illustration is a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The ODF utilizes the concept of inheritance to define specific instances of

data. The ODF divides all OR/WA resource-related data into three general categories:

- Activities
- Resources
- Boundaries

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

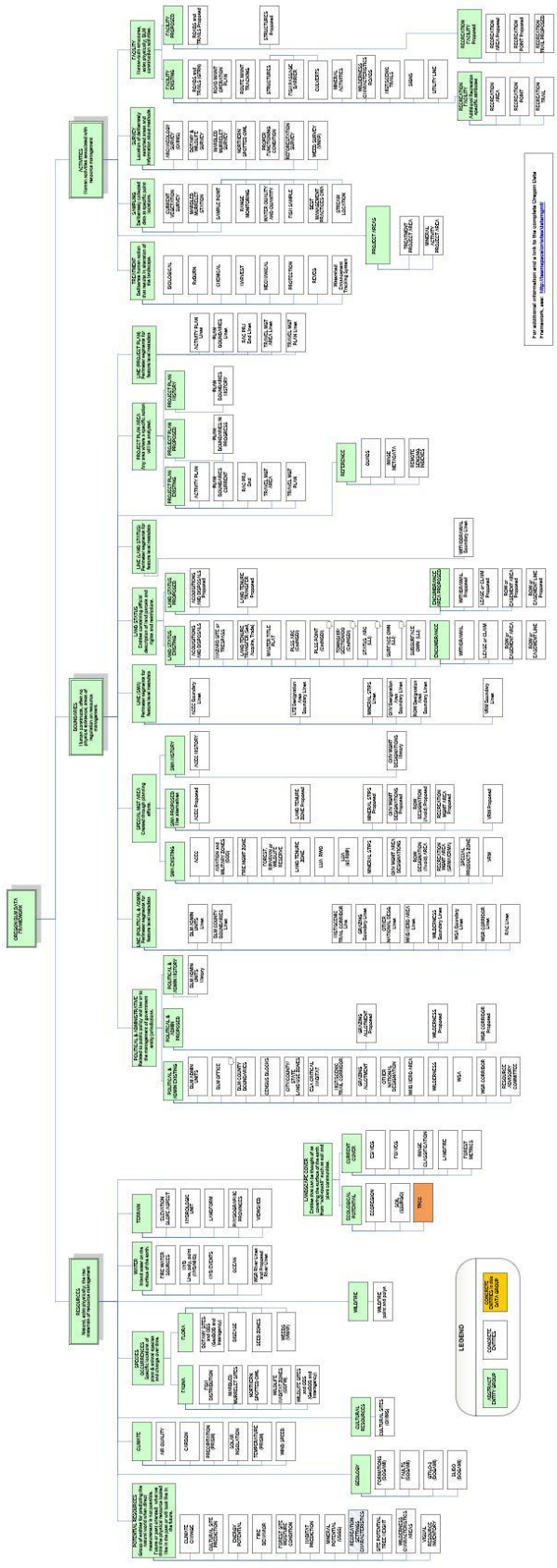


Figure 1 Oregon Data Framework Overview

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

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

In the ODF, TPCC is considered a natural resource and categorized as follows:

ODF

Resources

Landscape Cover

Ecological Potential

TPCC_POLY

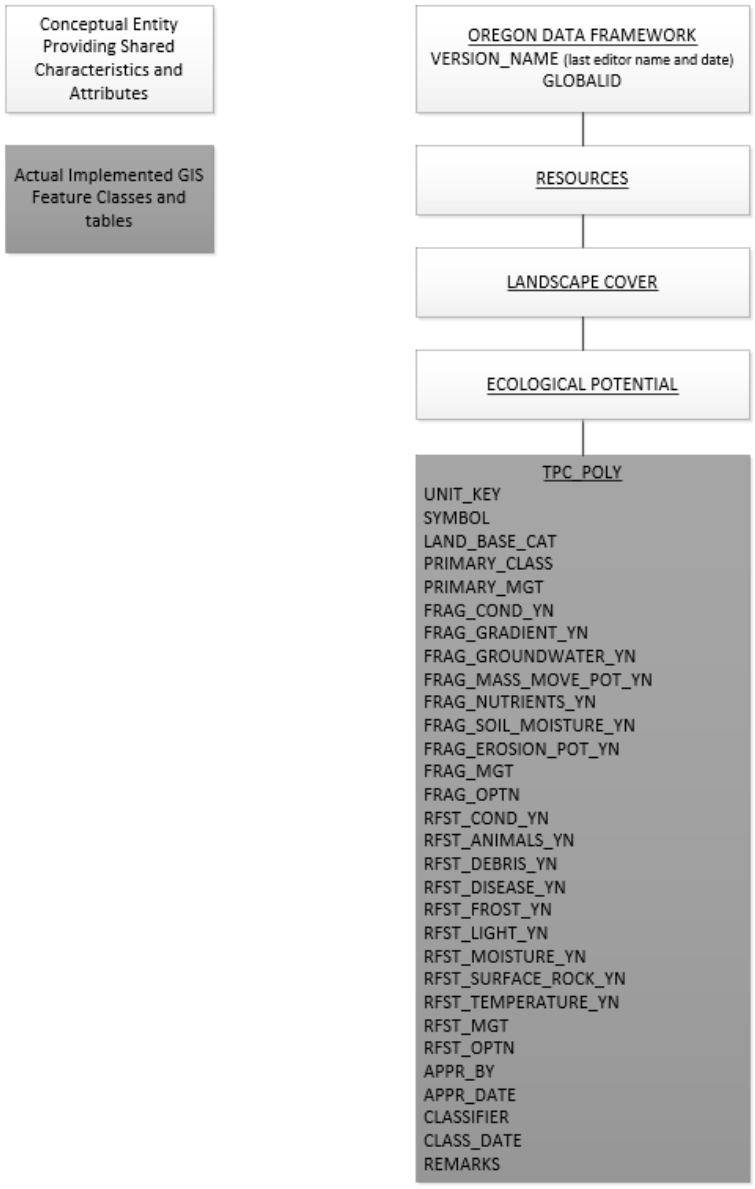


Figure 2 Data Organization Structure

2.5 Relationship to DOI Enterprise Architecture Data Resource Model

The Department of the Interior (DOI) Enterprise Architecture contains a component called the Data Resource Model. This model addresses the concepts of data sharing, data description, and data context. This data standard provides information needed to address each of those areas. Data sharing is addressed through complete documentation and simple data structures which make sharing easier. Data description is addressed through the section on Attribute Descriptions. Data context is addressed through the data organization and structure portions of this document. In addition, the DOI Data Resource Model categorizes data by use of standardized Data Subject Areas and Information Classes. For this data set, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

3 Data Management Protocols

3.1 Accuracy Requirements

TPCC data has a wide range of accuracies. Locational accuracy is dependent on the original classifier, or the base map used to generate the polygon but there are many instances where this source is unknown because this polygon dataset has been managed by a variety of methods which predate the implementation of GIS. Many features were imported from the legacy data. The locational accuracy of much of the legacy data is not good. However, more recent polygons generated in association with updated landlines have a higher level of spatial accuracy.

3.2 Collection, Input, and Maintenance Protocols

Data is collected using the process identified in BLM Manual Supplement 5251-1 Timber Production Capability Classification Handbook (4/25/1986).

Detailed editing guidance is available in section 9 of this document.

3.3 Update Frequency and Archival Protocols

Districts at a minimum are to maintain the TPC classification for lands that have been acquired, delete data for lands that have been exchanged or disposed, and refine the original classification as significant new information is developed from further field examination.

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

3.4 Statewide Monitoring

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

Each year, the Resource Science Data team of the BLM Division of Resources, Lands, Minerals and Fire meets with each state data steward for every corporate geospatial theme to conduct an annual review of the data. During the annual review, geospatial staff present the state data stewards with a report detailing Quality Assurance/Quality Control (QAQC) results performed on the data. The QAQC does the following:

- Checks that all attribute values conform to the range or coded-value domains to which they are applied.
- Checks that all attributes marked as required in the data standard have values.
- Checks for duplicate features which have the same geometry and attributes.
- Checks for overlapping features if forbidden by the data standard.
- Checks for invalid geometry.
- Other checks as necessary (can be customized according to the data standard).

In addition to this report, geospatial staff conduct a qualitative needs assessment with the steward to identify any unmet needs or problems with the status of the data. At the conclusion of the review, the team records the steward's approvals of the datasets reviewed. These approvals are then added to the corporate metadata.

4 Timber Production Capability Classification Schema (simplified)

General Information: Attributes are listed in the order they appear in the geodatabase feature class. The order is an indication of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: https://www.blm.gov/about/data/oregon-data-management

For domains not listed at that site contact: State Data Administrator.

4.1 Timber Production Capability Classification Feature Dataset

4.1.1 TPCC_POLY Feature Class (Timber Production Capability Classification Polygons)

For domain and default values, see Section 7, **Attribute Characteristics and Definition** in this document

Attribute Name	Data Type	Length	Default Value	Required	Domain
UNIT_KEY	Long Integer			Yes	
SYMBOL	String	100		Yes ***	
LAND_BASE_CAT	String	30		Yes	dom_TPCC_LAND_BASE
PRIMARY_CLASS	String	40		Yes	dom_TPCC_PRI_CLASS
PRIMARY_MGT	String	30		Yes	dom_TPCC_PRI_MGT
FRAG_COND_YN	String	2		Yes	dom_YN_NA
FRAG_GRADIENT_YN	String	2		Yes	dom_YN_NA_U
FRAG_GROUNDWATER_YN	String	2		Yes	dom_YN_NA_U
FRAG_MASS_MOVE_POT_YN	String	2		Yes	dom_YN_NA_U
FRAG_NUTRIENTS_YN	String	2		Yes	dom_YN_NA_U
FRAG_SOIL_MOISTURE_YN	String	2		Yes	dom_YN_NA_U
FRAG_EROSION_POT_YN	String	2		Yes	dom_YN_NA_U
FRAG_MGT	String	20		Conditional	dom_TPCC_CFL_MGT
FRAG_OPTN	String	40		No	dom_TPCC_OPTN
RFST_COND_YN	String	2		Yes	dom_YN_NA
RFST_ANIMALS_YN	String	2		Yes	dom_YN_NA_U
RFST_DEBRIS_YN	String	2		Yes	dom_YN_NA_U
RFST_DISEASE_YN	String	2		Yes	dom_YN_NA_U
RFST_FROST_YN	String	2		Yes	dom_YN_NA_U
RFST_LIGHT_YN	String	2		Yes	dom_YN_NA_U
RFST_MOISTURE_YN	String	2		Yes	dom_YN_NA_U
RFST_SURFACE_ROCK_YN	String	2		Yes	dom_YN_NA_U
RFST_TEMPERATURE_YN	String	2		Yes	dom_YN_NA_U
RFST_MGT	String	20		Conditional	dom_TPCC_CFL_MGT

RFST_OPTN	String	40		No	dom_TPCC_OPTN
APPR_BY	String	20		No	
APPR_DATE	Date			No	
CLASSIFIER	String	20		No	
CLASS_DATE	Date			No	
REMARKS	String	255		No	
BLM_ORG_CD	String	5		Yes ***	dom_BLM_ORG_CD
GIS_ACRES	Double			Yes ***	
VERSION_NAME	String	50	InitialLoad	Yes *	
GLOBALID	GUID			Yes *	

* Values automatically generated

** Enforced during quality control, may appear in data as not required

*** Maintained through versioning tools, may appear not required in database

5 Projection and Spatial Extent

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM OR/WA in Western Oregon. See the metadata for this data for a more precise description of the extent.

6 Spatial Entity Characteristics

- TPCC_POLY
  - Description: Instance of Landscape Cover with the Resources group.
  - Geometry: Polygons. Simple polygons, not multi-part, are used.
  - Topology: Yes. Polygons must not overlap entirely or in part.
  - Integration Requirements: None.

7 Attribute Characteristics and Definition (In alphabetical order)

7.1 APPR_BY

Geodatabase Name	APPR_BY
BLM Structured Name	Approved_By_Name
Inheritance	Not Inherited
Alias Name	Approved By
Feature Class Use/Entity Table	TPCC_POLY
Definition	The first initial, period, and last name OR last name of the person who approved the TPC classification; this is generally the Area Manager.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "J.HUGHES", "HUGHES"
Data Type	String (20)

7.2 APPR_DATE

Geodatabase Name	APPR_DATE
BLM Structured Name	Approved_Date
Inheritance	Not Inherited
Alias Name	Approved Date
Feature Class Use/Entity Table	TPCC_POLY
Definition	The date that the TPCC unit was approved by the Area Manager or other responsible official.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 5/1/2000, 10/20/2021
Data Type	Date

7.3 BLM_ORG_CD

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	Administrative_Unit_Organization_Code
Inheritance	Inherited from Entity ODF
Alias Name	None
Feature Class Use/Entity Table	TPCC_POLY
Definition	A combination of the BLM administrative state and field office which has administrative responsibility for the spatial entity. This includes which office covers the entity for planning purposes and which office is the lead for GIS edits. Another agency or individual may have the physical management responsibility for the on-the-ground entity. This field applies particularly when a spatial entity crosses resource area or district boundaries

	and the administrative responsibility is assigned to one or the other rather than splitting the spatial unit. Similarly, OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, and California and vice versa. When appropriate, the office can be identified only to the district or state level rather than to the resource area level. This field is populated on version submission.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	dom_BLM_ORG_CD
Data Type	String (5)

7.4 CLASS_DATE

Geodatabase Name	CLASS_DATE
BLM Structured Name	Classified_Date
Inheritance	Not Inherited
Alias Name	Classified Date
Feature Class Use/Entity Table	TPCC_POLY
Definition	The date the TPCC unit was classified.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 5/1/2001, 12/20/1999
Data Type	Date

7.5 CLASSIFIER

Geodatabase Name	CLASSIFIER
BLM Structured Name	Classifier_Name
Inheritance	Not Inherited
Alias Name	Classifier Name
Feature Class Use/Entity Table	TPCC_POLY
Definition	Name of the TPCC classifier. The first initial, period, and last name OR last name only of the person who made the classification recommendation.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "J. DOE", "DOE"
Data Type	String (20)

7.6 FRAG_COND_YN

Geodatabase Name	FRAG_COND_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Code

Inheritance	Not Inherited
Alias Name	Fragile Interfering Conditions
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if the timber growing potential on forested TPCC polygons is easily reduced due to fragile conditions. This field must be populated with "Y (Yes)" or "N (No)" if the Primary Class field is "Fragile Problem" or "Fragile and Reforestation Problem". Otherwise, this field must be populated with "NA (Not Applicable." If any of the related fragile condition fields are marked Yes, then this field will be marked Yes.
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA
Data Type	String (2)

7.7 FRAG_EROSION_POT_YN

Geodatabase Name	FRAG_EROSION_POT_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Erosion_Potential_Code
Inheritance	Not Inherited
Alias Name	Surface Erosion Potential
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if the growing potential on forested TPCC polygons is easily reduced due to erosion potential. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.8 FRAG_GRADIENT_YN

Geodatabase Name	FRAG_GRADIENT_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Gradient_Code
Inheritance	Not Inherited
Alias Name	Gradient
Feature Class Use/Entity Table	TPCC_POLY

Definition	Indicates if the growing potential on forested TPCC polygons is easily reduced due to gradient. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.9 FRAG_GROUNDWATER_YN

Geodatabase Name	FRAG_GROUNDWATER_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Groundwater_Code
Inheritance	Not Inherited
Alias Name	Groundwater
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if the growing potential on forested TPCC polygons is easily reduced due to groundwater. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.10 FRAG_MASS_MOVE_POT_YN

Geodatabase Name	FRAG_MASS_MOVE_POT_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Mass_Movement_Potential_Code
Inheritance	Not Inherited
Alias Name	Mass Movement Potential
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if the growing potential on forested TPCC polygons is easily reduced due to potential of mass movement. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem."

	For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.11 FRAG_MGT

Geodatabase Name	FRAG_MGT
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Management_Code
Inheritance	Not Inherited
Alias Name	Fragile Management
Feature Class Use/Entity Table	TPCC_POLY
Definition	A description of land areas that are capable of producing forest that have been designated as 'fragile'. These stands are either restricted or nonsuitable. If the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem" then this field is required.
Required/Optional	Conditional
Domain (Valid Values)	dom_TPCC_CFL_MGT
Data Type	String (20)

7.12 FRAG_NUTRIENTS_YN

Geodatabase Name	FRAG_NUTRIENTS_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Nutrients_Code
Inheritance	Not Inherited
Alias Name	Nutrients
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if the growing potential on forested TPCC polygons is easily reduced due to nutrients. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.13 FRAG_OPTN

Geodatabase Name	FRAG_OPTN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Option_Code
Inheritance	Not Inherited
Alias Name	Fragile Option
Feature Class Use/Entity Table	TPCC_POLY
Definition	A further or additional description of the type of risk or practices needed for the fragile problem. Field for Coos Bay and NW Oregon only.
Required/Optional	Optional
Domain (Valid Values)	dom_TPCC_OPTN
Data Type	String (40)

7.14 FRAG_SOIL_MOISTURE_YN

Geodatabase Name	FRAG_SOIL_MOISTURE_YN
BLM Structured Name	Timber_Production_Capability_Classification_Fragile_Interfering_Conditions_Soil_Moisture_Code
Inheritance	Not Inherited
Alias Name	Soil Moisture
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if the growing potential on forested TPCC polygons is easily reduced due to soil moisture. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "Fragile Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.15 GIS_ACRES

Geodatabase Name	GIS_ACRES
BLM Structured Name	GIS_Acres_Measure
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	TPCC_POLY

Definition	The area of a polygon as calculated by GIS in acres. The value is an estimate for the acquisition for payment and process. May not be reflective of the actual size of the parcels, which will be determined by official survey. GIS_ACRES is calculated when the submitted polygon is approved for incorporation into the dataset. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating acres, so the features are projected to one of three projections as determined by the BLM_ORG_CD of the record. These three projections all utilize linear units of meters, so the ESRI Geodatabase-controlled field SHAPE.AREA can be used to convert to acres with the factor based on the U.S. Survey Foot: GIS_ACRES = SHAPE.AREA * 0.0002471044 Projection for BLM_ORG_CD: Prineville: NAD 1983 USFS R6 Albers Coos Bay, Lakeview, Medford, NW Oregon, Roseburg: NAD 1983 UTM Zone 10N Burns, Spokane, Vale: NAD 1983 UTM Zone 11N This field is populated on version submission.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain. Examples: 40.225, 120.44
Data Type	Double

7.16 GLOBALID

Geodatabase Name	GLOBALID
BLM Structured Name	Global_ID_Identifier
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	TPCC_POLY
Definition	System generated unique identifier.
Required/Optional	Required
Domain (Valid Values)	No domain.
Data Type	GUID

7.17 LAND_BASE_CAT

Geodatabase Name	LAND_BASE_CAT
BLM Structured Name	Timber_Production_Capability_Classification_Land_Base_Category_Code
Inheritance	Not Inherited
Alias Name	Land Base Category

Feature Class Use/Entity Table	TPCC_POLY
Definition	Describes if the polygon contains commercial forest land, noncommercial forest land, or if the polygon is non-forested. Commercial forest land is capable of producing at least 20 cubic feet per acre per year of commercial tree species; noncommercial forest land is either very low site or incapable of producing commercial tree species. Non-forest land is incapable of supporting 10% tree stocking or sites that have been converted to non-forest uses.
Required/Optional	Required
Domain (Valid Values)	dom_TPCC_LAND_BASE
Data Type	String (30)

7.18 PRIMARY_CLASS

Geodatabase Name	PRIMARY_CLASS
BLM Structured Name	Timber_Production_Capability_Classification_Primary_Class_Code
Inheritance	Not Inherited
Alias Name	Primary Class
Feature Class Use/Entity Table	TPCC_POLY
Definition	The primary classification of the site for timber production.
Required/Optional	Required
Domain (Valid Values)	dom_TPCC_PRI_CLASS
Data Type	String (40)

7.19 PRIMARY_MGT

Geodatabase Name	PRIMARY_MGT
BLM Structured Name	Timber_Production_Capability_Classification_Primary_Management_Code
Inheritance	Not Inherited
Alias Name	Primary Management
Feature Class Use/Entity Table	TPCC_POLY
Definition	The primary management of the site.
Required/Optional	Required
Domain (Valid Values)	dom_TPCC_PRI_MGT
Data Type	String (30)

7.20 REMARKS

Geodatabase Name	REMARKS
BLM Structured Name	Timber_Production_Capability_Classification_Remarks_Text

Inheritance	Not Inherited
Alias Name	Remarks
Feature Class Use/Entity Table	TPCC_POLY
Definition	The file name with the path of a text file that contains comments for each TPCC unit. Example: \\dfs\blm\or\loc\gis\projects\or\state_office\tpc_remarks\medford\rkxxxxxx.txt The values "xxxxxx" represents the TPCC unit key number.
Required/Optional	Optional
Domain (Valid Values)	No domain.
Data Type	String (255)

7.21 RFST_ANIMALS_YN

Geodatabase Name	RFST_ANIMALS_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Animals_Code
Inheritance	Not Inherited
Alias Name	Animals
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is an animal reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.22 RFST_COND_YN

Geodatabase Name	RFST_COND_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problem_Conditions_Code
Inheritance	Not Inherited
Alias Name	Reforestation Problems
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there are forestation problems associated with a site. This field must be populated with "Y (Yes)" or "N (No)" if the Primary Class field is "Reforestation Problem" or "Fragile and Reforestation

	Problem". Otherwise, this field must be populated with "NA (Not Applicable." If any of the related reforestation condition fields are marked Yes, then this field will be marked Yes.
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA
Data Type	String (2)

7.23 RFST_DEBRIS_YN

Geodatabase Name	RFST_DEBRIS_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Debris_Code
Inheritance	Not Inherited
Alias Name	Debris
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a debris reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.24 RFST_DISEASE_YN

Geodatabase Name	RFST_DISEASE_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Disease_Code
Inheritance	Not Inherited
Alias Name	Disease
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a disease reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.25 RFST_FROST_YN

Geodatabase Name	RFST_FROST_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Frost_Code
Inheritance	Not Inherited
Alias Name	Frost
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a frost reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.26 RFST_LIGHT_YN

Geodatabase Name	RFST_LIGHT_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Light_Code
Inheritance	Not Inherited
Alias Name	Light
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a light reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.27 RFST_MGT

Geodatabase Name	RFST_MGT
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Management_Code

Inheritance	Not Inherited
Alias Name	Reforestation Management
Feature Class Use/Entity Table	TPCC_POLY
Definition	A management classification of a land area capable of producing forest that has identified reforestation problems. These stands are either restricted or nonsuitable. If the PRIMARY_CLASS = "Reforestation Problem" or "Fragile and Reforestation Problem" then this field is required.
Required/Optional	Conditional
Domain (Valid Values)	dom_TPCC_CFL_MGT
Data Type	String (20)

7.28 RFST_MOISTURE_YN

Geodatabase Name	RFST_MOISTURE_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Moisture_Code
Inheritance	Not Inherited
Alias Name	Moisture
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a moisture reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.29 RFST_OPTN

Geodatabase Name	RFST_OPTN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Option_Code
Inheritance	Not Inherited
Alias Name	Reforestation Option
Feature Class Use/Entity Table	TPCC_POLY
Definition	A further or additional description of the type of risk or practices needed for reforestation problem. For Coos Bay or Salem Districts only.
Required/Optional	Optional
Domain (Valid Values)	dom_TPCC_OPTN

Data Type	String (40)

7.30 RFST_SURFACE_ROCK_YN

Geodatabase Name	RFST_SURFACE_ROCK_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Surface_Rock_Code
Inheritance	Not Inherited
Alias Name	Surface Rock
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a surface rock reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.31 RFST_TEMPERATURE_YN

Geodatabase Name	RFST_TEMPERATURE_YN
BLM Structured Name	Timber_Production_Capability_Classification_Reforestation_Problems_Temperature_Code
Inheritance	Not Inherited
Alias Name	Temperature
Feature Class Use/Entity Table	TPCC_POLY
Definition	Indicates if there is a temperature reforestation problem associated with a site. This field should only be populated with a "Y (Yes)" or "N (No)" if the PRIMARY_CLASS = "'Reforestation Problem" or "Fragile and Reforestation Problem." For all other PRIMARY_CLASS types, fill this field with "NA (Not Applicable)".
Required/Optional	Required
Domain (Valid Values)	dom_YN_NA_U
Data Type	String (2)

7.32 SYMBOL

Geodatabase Name	SYMBOL

BLM Structured Name	Timber_Production_Capability_Classification_Symbol_Text
Inheritance	Not Inherited
Alias Name	Symbol
Feature Class Use/Entity Table	TPCC_POLY
Definition	A simplified field used for map labeling that is assigned based on a unit's primary classification. Values are assigned when edit versions are posted to the corporate database. Editors should avoid editing this field.
Required/Optional	Required
Domain (Valid Values)	No domain. See TPCC Symbol Quick Reference Guide for examples.
Data Type	String (100)

7.33 UNIT_KEY

Geodatabase Name	UNIT_KEY
BLM Structured Name	Timber_Production_Capability_Classification_Unit_Key_Number
Inheritance	Not Inherited
Alias Name	Unit Key #
Feature Class Use/Entity Table	TPCC_POLY
Definition	The SUBJECT element in the old TPCC theme. Numerous paper records from the original inventory exist that relate to the 5- or 6-digit key number that was assigned by Micro*Storms. The unit_key value is generated via the "Set TPC Key ID" ArcMap tool. These numbers will follow the existing district numbering schema. Editors should avoid editing this field once it has been generated. Initial new key numbers by district: • Salem - 152450 • Eugene - 382100 • Coos Bay - 495500 • Roseburg - 82100 • Medford - 282300 • K-Falls - 882100
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	Long Integer

7.34 VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Inheritance	Not Inherited
Alias Name	None

Feature Class Use/Entity Table	TPCC_POLY
Definition	Name of the corporate geodatabase version previously used to edit the record. InitialLoad = feature has not been edited in ArcSDE. Format: username.XXX-mmddyy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation. Example: sfrazier.FIRE_POLY-121210-111034 Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	String (50)

8 Layer Files (Publication Views)

8.1 General

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

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

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

8.2 Specific to This Dataset

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

In addition, the following attributes should be removed from the external dataset:

- CLASSIFIER
- APPR_BY
- FRAG_OPTN
- RFST_OPTN
- REMARKS

9 Editing Procedures

9.1 Managing Overlap

Within the TPCC_POLY feature class, overlapping polygons are not allowed. "Overlap" means there is potentially more than one feature in the same feature class that occupies the same space ("stacked" polygons).

There is a topology rule on the edit dataset that does not allow overlapping polygons within the dataset. Editors will not be able to submit the edit version if there are topology errors.

9.2 Editing Quality Control

Duplicate features. Checking for undesired duplicates is critical. Polygons or arcs that are 100% duplicate are 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.

To avoid overlapping polygons on the same area, polygons from different input themes are incorporated with the Union spatial overlay tool, not copied.

Union rather than intersect is used to prevent unintended data loss.

Gap and overlap slivers. These can be hard to find if there are no topology rules. A temporary map topology can be created to find overlap slivers. Gap slivers can be found by constructing polygons from all arcs and checking polygons with very small area.

Buffer and dissolve considerations. 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.

GPS considerations. GPS linework is often messy and should always be checked and cleaned up as necessary. Often vertices need to be thinned (generalize) especially at line ends. 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.

Be careful when merging lines. Multi-part lines will be created if there are tiny unintentional (unknown) gaps, and it can be difficult to find these unless the multi-parts are exploded.

Null geometry. 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 small features may also be unintended, resulting from messy line work.

Check tolerances. In general, set Cluster Tolerance as small as possible. This is 0.000000009 Degree (0.000007 degree is approximately 1 meter).

Snapping considerations. 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 PLSS (CadNSDI 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 the same number of vertices in the target, and source theme arcs. When the DEF_FEATURE is "SUBDIVISION," snap the line segment to PLSS points, and make sure there are the same number of vertices in the line as PLSS points.

Check that all date fields contain valid dates in MM/DD/YYYY format. If an attribute has a domain, check for invalid values. The values must be exact.

Check for capitalization and spacing differences in attribute values that should be the same. Check for leading or trailing blanks what will make a different value even if it looks identical.

9.3 Theme Specific Guidance

There is much in the data standard that addresses editing and provides guidance especially in the Data Management Protocols (Section 3).

TPCC polygons are frequently defined by linework in either CADNSDI or FOIVEG. Other features such as district boundaries, roads, streams, etc. may, at times, be used for more detailed TPCC delineation.

Accuracy of the these defining features in the GIS are of varying quality, and our update capabilities to bring all thematic layers into perfect coincidence is not considered an attainable goal for this Edit group. As update to the TPCC is performed, the following order of GIS reference datasets should be utilized as a base for defining polygons:

- CADNSDI
- FOIVEG
- Administrative Units
- Transportation, hydrography, and other GIS themes

The accuracy standard for any individual TPCC polygon is relative to the accuracy and quality of the other base features available for reference.

9.3.1 Create a New TPCC Polygon

Use the OR/WA SDE Version Management tools to create a TPC edit version. For more information on how to use the version management tools, see the guide at:

https://doimspp.sharepoint.com/sites/blm-or/gis/Support%20Document/BLM_Version_Management.pdf

Using the standard ArcMap editing tools, create a new polygon. When examining the attributes in the editor menu, you will notice that the fields (except VERSION_NAME) are NOT auto-populated with default values. This is a change from previous versions of this dataset.

Finish entering the TPCC attributes. The TPCC Diagram shown in Figure 4 can be used to assist in the classification of new TPCC units. The attributes listed on the left will remain blank if the table says "No" and must be filled in when it says "Yes."

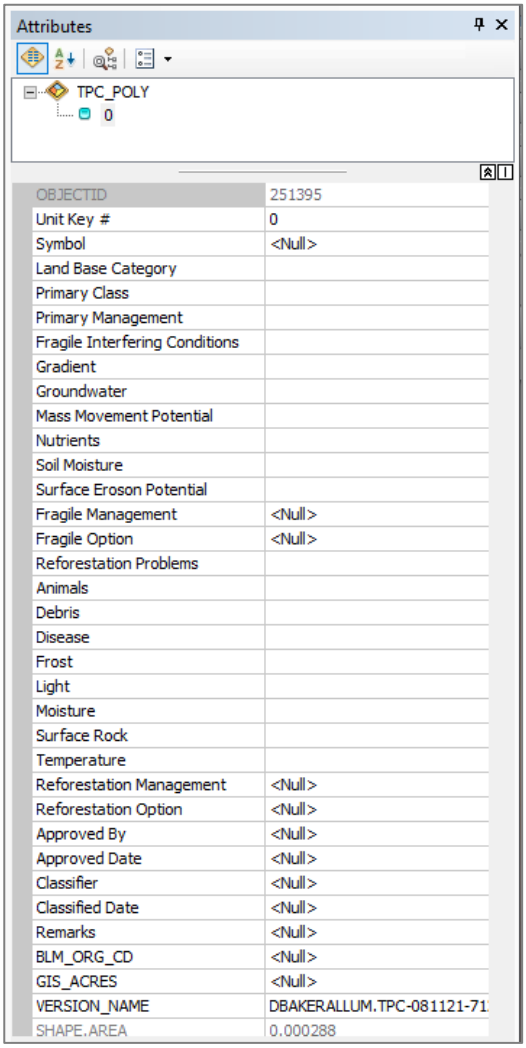
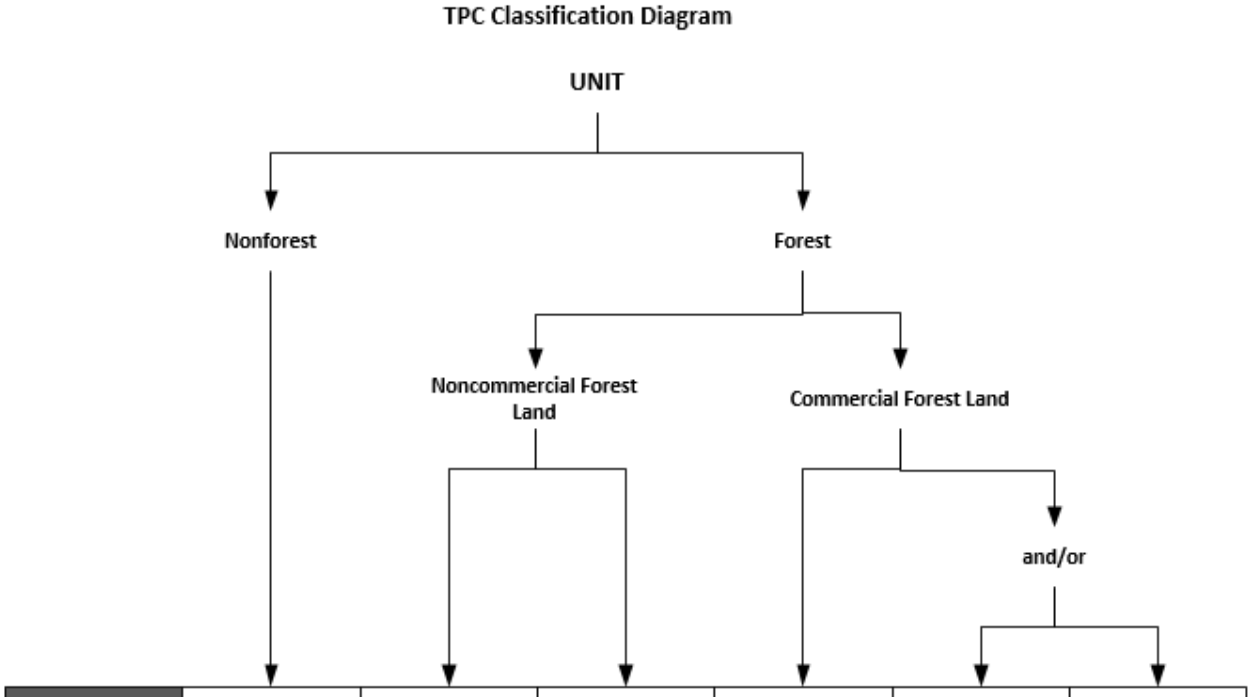


Figure 3 TPCC Attributes

9.3.2 Basic TPCC Hierarchy of Rules

The following are the basic TPPC hierarchy rules:

1. All Nonforest units receive no further classification beyond land base category, primary class, primary management, and symbol.
2. Noncommercial Forest Land designation receives either Low Productivity Site or Noncommercial Species Primary Class.
3. All Noncommercial Forest Land designations have a Management of Noncommercial Forest Land.
4. All Commercial Forest Land units that are No Problem do not receive a Fragile or Reforestation designation.
5. All Commercial Forest Land units that are not No Problem must have either a Fragile designation or a Reforestation designation or both.
6. All Commercial Forest Land Fragile and Reforestation classifications must have at least one Interfering Condition identified.
7. All Commercial Forest Land Fragile and Reforestation classifications must have a management designation.
8. All Commercial Forest Land Fragile classifications that are Nonsuitable will not receive a reforestation classification.



Land Base Category	Nonforest	Noncommercial Forest Land	Noncommercial Forest Land	Commercial Forest Land	Commercial Forest Land	Commercial Forest Land
Primary Class	Nonforest	Low Productivity Site	Noncommercial Species	No Problem	Fragile Problem	Reforestation Problem
Primary Management	Nonforest	Noncommercial Forest Land	Noncommercial Forest Land	No Problem	Restricted or Nonsuitable	Restricted or Nonsuitable
Reforestation or Fragile Management	Empty (Null)	Empty (Null)	Empty (Null)	Empty (Null)	Restricted or Nonsuitable	Restricted or Nonsuitable

Figure 4 Classification Diagram

9.3.3 Set TPC Key ID Tool

The next step is to set a unique value for the UNIT_KEY field. Each TPCC unit must have a unique UNIT_KEY value assigned. These values will continue to be assigned based on the editor's district using a numbering convention.

To calculate the value, right-click on the selected TPCC polygon, as shown in Figure 7, and bring up the context menu. Select the TPC: Set TPC Key ID menu option.

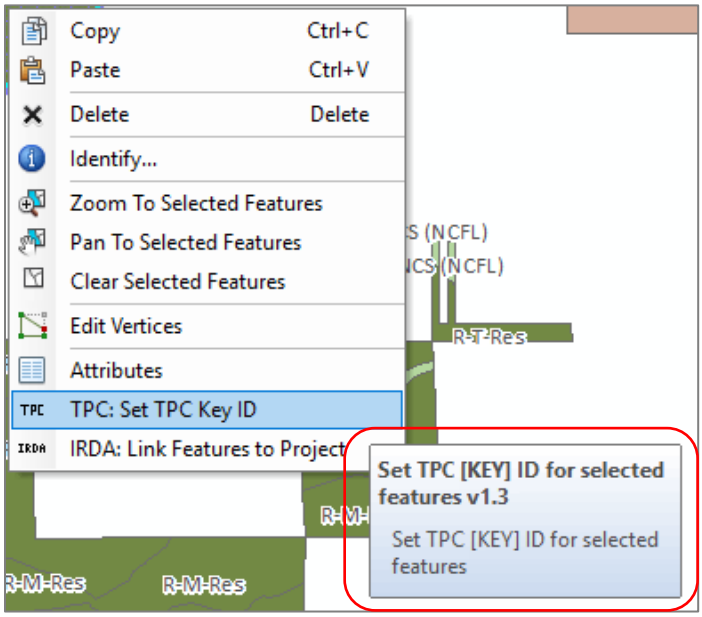


Figure 5 Set the TPC Key ID menu

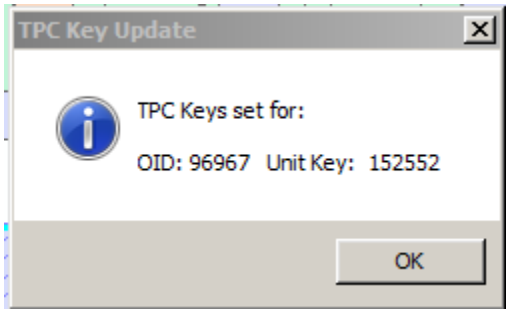


Figure 6 Message Dialog Box

In addition to assigning a unit key value, this tool will also create a Remarks text file, shown in Figure 7, with the storage pathname. This text file can be accessed either through a text editor outside of ArcMap or within ArcMap using the Hyperlink tool.

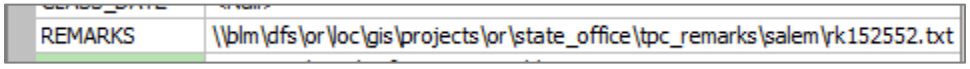


Figure 7 Remarks Text File

The ArcMap Hyperlink tool, shown in Figure 8, is activated in the Layer Properties menu under the Display tab. Select the Remarks field from the pulldown menu and check the Document option button. Click Apply and OK.

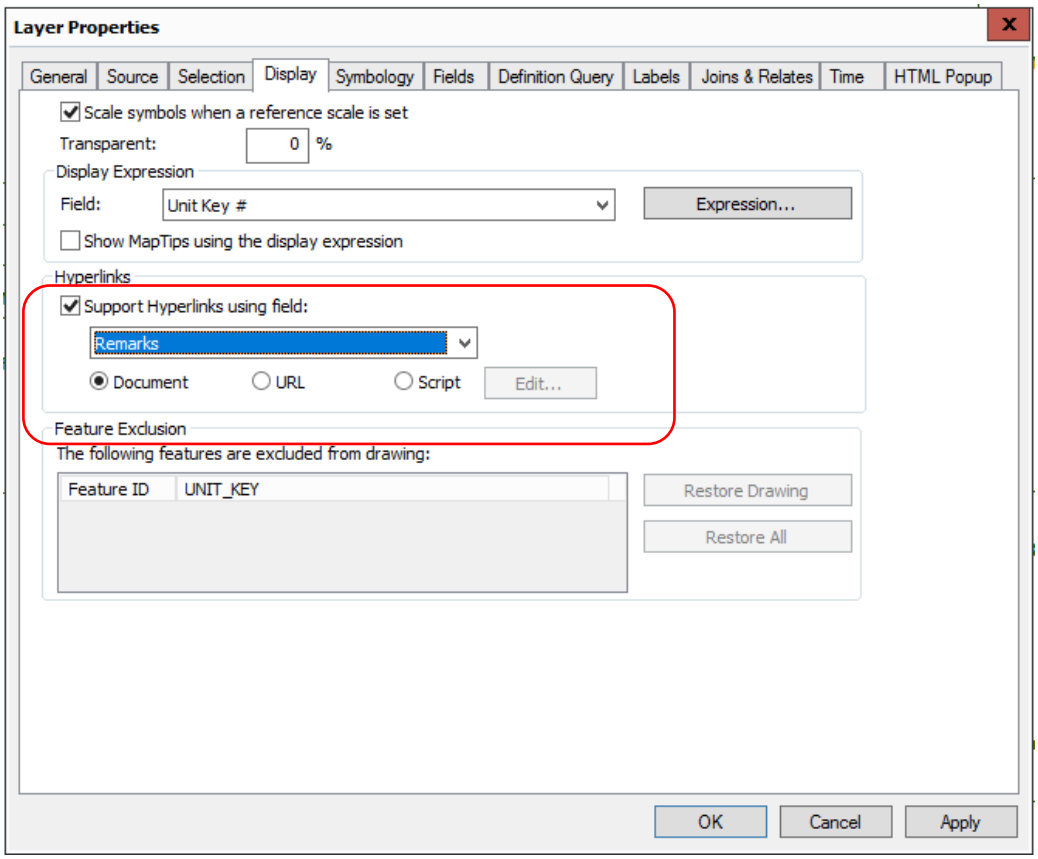


Figure 8 ArcMap Hyperlink Tool

The Hyperlink tool should now be activated and bright yellow. Using this tool, select the desired polygon, as shown in Figure 9. You will see the pathname of the Remarks file displayed in the data frame and the Remarks file will open in Notepad. You can update this file as necessary.

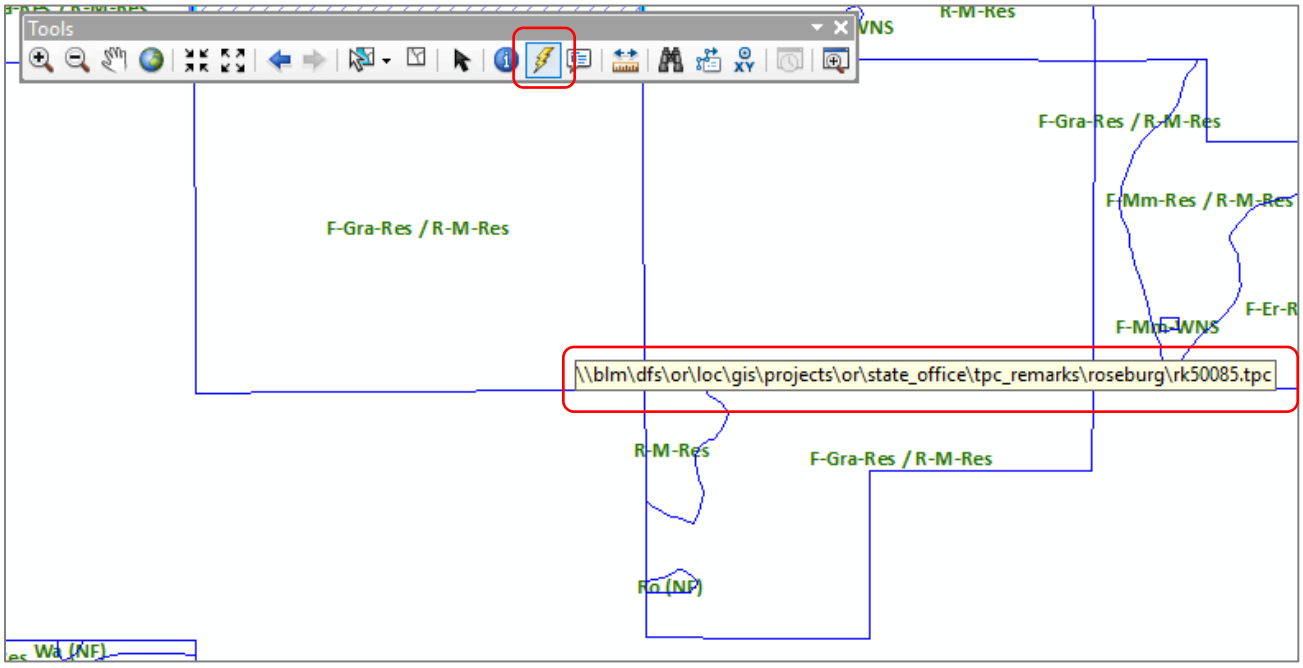


Figure 9 Select Desired Polygon

9.3.4 TPCC Attribute QC

This theme's complex attribute hierarchies require a robust attribute validation check, so the standard attribute validation has been extended during transaction submission. In addition to validating and checking the TPCC attributes, the Symbol field values are calculated during version submission.

When ready to submit your version, as shown in Figure 10, if any spatial edits were completed, validate the topology, save the edits, and stop the edit session.

With the TPC version highlighted in the source tab, right-click and select Submit Version from the context menu.

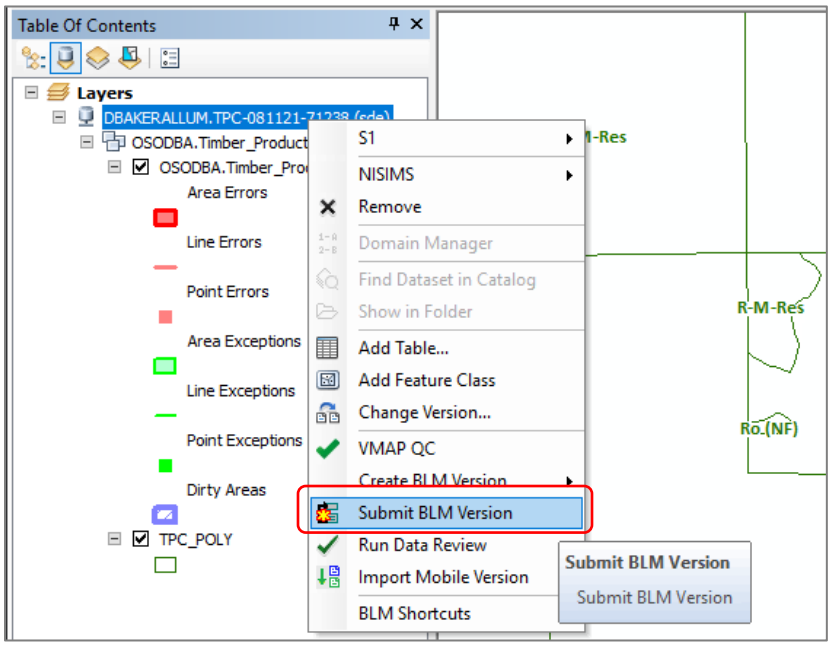


Figure 10 Submit Version

Errors are displayed in a window as shown in figure 11. All errors must be fixed before the version can be submitted.

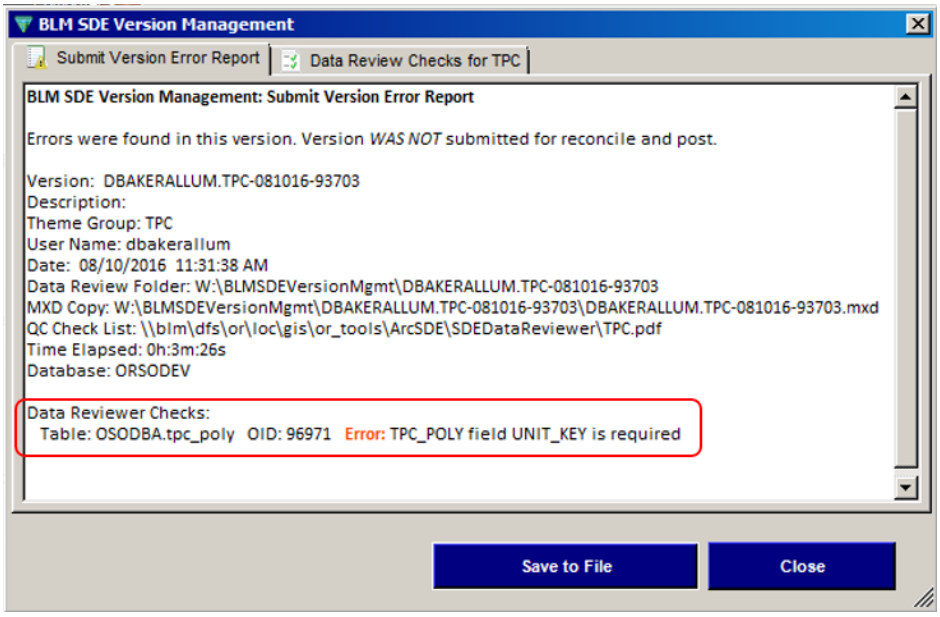


Figure 11 Flagged Error

For more information on the edit checks performed on this dataset, click the Data Review Checks for TPC tab, as shown in Figure 15, of the error window.

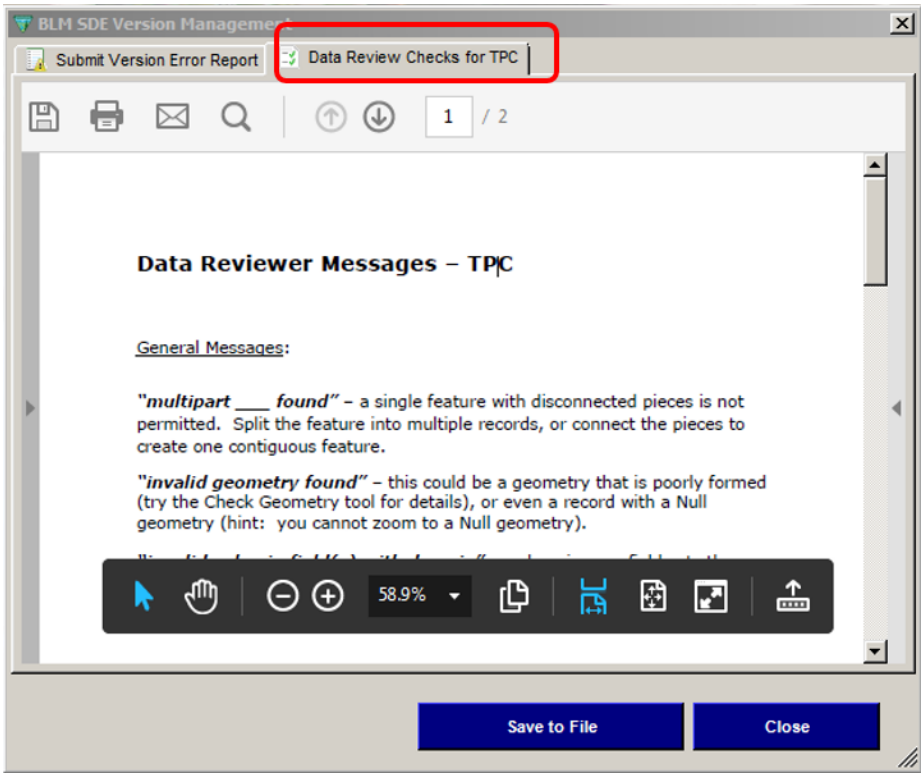


Figure 12 Data Review Checks

Once all the errors have been resolved, the version can be submitted for posting.

10 Abbreviations and Acronyms

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

Table 2 Abbreviations/Acronyms Used

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

A Domains (Valid Values)

These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: http://www.blm.gov/or/datamanagement/index.php

For domains not listed at that site contact: contact the State Data Administrator.

A.1 dom_BLM_ORG_CD

Administrative Unit Organization Code. Standard BLM organization codes generated from the national list. This is a subset of OR/WA administrative offices and those in other states that border.

This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom_BLM_ORG_CODE.xls.

A.2 dom_TPCC_CFL_MGT

TPCC Commercial Forest Land Fragile and Reforestation Management Code. A description of land areas that are capable of producing forest that have been designated as fragile conditions or have reforestation problems.

Code	Description
Nonsuitable	Nonsuitable - Commercial forest land incapable of meeting minimum stocking levels where future production will be reduced even if special measures are applied to mitigate fragile and/or reforestation problems.
Restricted	Restricted - Commercial forest land where forestry work may be completed, but fragile and/or reforestation problems must be addressed.

A.3 dom_TPCC_LAND_BASE

TPCC Land Base Category Code. Describes if the polygon contains commercial forest land, noncommercial forest land, or if the polygon is nonforested.

Code	Description
Commercial Forest Land	Commercial Forest Land - Forest land capable of yielding at least 20 cubic feet of wood per acre per year of commercial tree species.
Noncommercial Forest Land	Noncommercial Forest Land - Forest land incapable of yielding at least 20 cubic feet of wood per acre per year of commercial tree species or forest land capable of producing only noncommercial tree species.
Nonforest	Nonforest - Sites within the forest zone incapable of maintaining 10% stocking of forest trees or sites managed for to non-forestry uses.

A.4 dom_TPCC_OPTN

TPCC Fragile and Reforestation Option Code. Fragile and Reforestation Option codes (Salem and Coos Bay only).

Code	Description
Needs Added Practices	Needs Added Practices (Salem SYU only)
Practice Ineffective	Practice Ineffective (Salem SYU only)
Severe Site Problem	Severe Site Problem (Salem SYU only)
R2 + R1	R2 + R1 (Salem SYU only)
R3 + R1	R3 + R1 (Salem SYU only)
R3 + R2	R3 + R2 (Salem SYU only)
Low Risk	Low Risk (Coos Bay SYU only)
High Risk	High Risk (Coos Bay SYU only)

A.5 dom_TPCC_PRI_CLASS

TPCC Primary Class Code. The code used for primary classification of the site.

Code	Description
Agriculture	Agriculture
Brush	Brush
Fragile Problem	Fragile Problem
Fragile and Reforestation Problem	Fragile and Reforestation Problem
Grass	Grass
Low Productivity Site	Low Productivity Site
Noncommercial Species	Noncommercial Species
Nonforest	Nonforest
No Problem	No Problem
Reforestation Problem	Reforestation Problem
Recreation Site	Recreation Site
Road	Road
Rock	Rock
Seed Orchard	Seed Orchard
Utility Site	Utility Site
Water	Water

A.6 dom_TPCC_PRI_MGT

TPCC Primary Management Code. Primary management of the site.

Code	Description
No Problem	No Problem - Commercial forest land that can be reforested with commercial species and does not have fragile conditions.

Code	Description
Noncommercial Forest Land	Noncommercial Forest Land - Forest land incapable of yielding at least 20 cubic feet of wood per acre per year of commercial tree species or forest land capable of producing only noncommercial tree species.
Nonforest	Nonforested - Sites within the forest zone incapable of maintaining 10% stocking of forest trees or sites managed for to non-forestry uses.
Nonsuitable	Nonsuitable - Commercial forest land incapable of meeting minimum stocking levels where future production will be reduced even if special measures are applied to mitigate fragile and/or reforestation problems.
Restricted	Restricted - Commercial forest land where forestry work may be completed, but fragile and/or reforestation problems must be addressed.

A.9 dom_YN_NA

Yes No Not Applicable Code. Standard OR/WA BLM Yes/No/Not Applicable domain.

Code	Description
Y	Yes
N	No
NA	Not Applicable

A.10 dom_YN_NA_U

Yes No Not Applicable Unknown Code. Standard OR/WA BLM Yes/No/Not Applicable/Unknown domain.

Code	Description
Y	Yes
N	No
NA	Not Applicable
U	Unknown

B TPCC Symbol Automated Calculation

When edit versions for the TPCC dataset are submitted for posting, the SDE administrators will update the Symbol field using the following guidance. Only records that have been edited will be updated.

B.1 Nonforested

For Nonforest Primary Class values, the symbol is a concatenation of "NF-" and a short code representing the Primary Class. The one exception is the NF code.

Primary Class	Symbol
Agriculture	NF-AG
Brush	NF-BRSH
Grass	NF-GRSS
Nonforest	NF
Recreation Site	NF-REC
Road	NF-RD
Rock	NF-RCK
Seed Orchard	NF-ORCH
Utility Site	NF-UTL
Water	NF-WTR

B.2 Noncommercial Forest Land

For Noncommercial Forrest Land Primary Class values, the symbol is a concatenation of "NCFL-" and a short code representing the primary class code.

Primary Class	Symbol
Low Productivity Site	NCFL-LPS
Noncommercial Species	NCFL-NCSP

B.3 Commercial Forest Land - NonProblem

When the Primary Class value is NP, set the symbol according to the table below.

Primary Class	Symbol
No Problem	NP

B.4 Commercial Forest Land - Fragile and Reforestation Problems

When the Primary Class is Fragile Problem), Reforestation Problem, or Fragile and Reforestation Problem, then a symbol string is built using values in the fragile and reforestation fields.

Primary Class	Symbol
Fragile Problem	A concatenated string (with no spaces) that equals: "F" If FRAG_MGT = "Nonsuitable", then add "N" If FRAG_MGT = " Restricted", then add "R" "-" If FRAG_EROSION_POT_YN = "Y", then add "E" If FRAG_GRADIENT_YN = "Y", then add "G" If FRAG_NUTRIENTS_YN = "Y", then add "N" If FRAG_MASS_MOVE_POT_YN = "Y", then add "P" If FRAG_SOIL_MOISTURE_YN = "Y", then add "S" If FRAG_GROUNDWATER_YN = "Y", then add "W" Examples: FN-N FR-GP
Reforestation Problem	A concatenated string (with no spaces) that equals: "R" If RFST_MGT = "Nonsuitable", then add "N" If RFST_MGT = " Restricted", then add "R" "-" If RFST_ANIMALS_YN = "Y", then add "A" If RFST_DEBRIS_YN = "Y", then add "D" If RFST_FROST_YN = "Y", then add "F" If RFST_SURFACE_ROCK_YN = "Y", then add "K" If RFST_LIGHT_YN = "Y", then add "L" If RFST_MOISTURE_YN = "Y", then add "M" If RFST_TEMPERATURE_YN = "Y", then add "T" If RFST_DISEASE_YN = "Y", then add "Z" Examples: RR-DST RR-FLS

Primary Class	Symbol
Fragile and Reforestation Problem	Fragile and Reforestation Problem (CFL) A concatenated string (with no spaces) that equals: "F" If FRAG_MGT = "Nonsuitable", then add "N" If FRAG_MGT = " Restricted", then add "R" "-" If FRAG_EROSION_POT_YN = "Y", then add "E" If FRAG_GRADIENT_YN = "Y", then add "G" If FRAG_NUTRIENTS_YN = "Y", then add "N" If FRAG_MASS_MOVE_POT_YN = "Y", then add "P" If FRAG_SOIL_MOISTURE_YN = "Y", then add "S" If FRAG_GROUNDWATER_YN = "Y", then add "W" "," "R" If RFST_MGT = "Nonsuitable", then add "N" If RFST_MGT = " Restricted", then add "R" "-" If RFST_ANIMALS_YN = "Y", then add "A" If RFST_DEBRIS_YN = "Y", then add "D" If RFST_FROST_YN = "Y", then add "F" If RFST_SURFACE_ROCK_YN = "Y", then add "K" If RFST_LIGHT_YN = "Y", then add "L" If RFST_MOISTURE_YN = "Y", then add "M" If RFST_TEMPERATURE_YN = "Y", then add "T" If RFST_DISEASE_YN = "Y", then add "Z" Examples: FR-GP, RR-DST FN-N, RR-FLS

C TPCC Symbol Quick Reference Guide

Non Forested	
NF-AG	Agriculture
NF-BRSH	Brush
NF-GRSS	Grass
NF	Nonforest
NF-REC	Recreation Site
NF-RD	Road
NF-RCK	Rock
NF-ORCH	Seed Orchard
NF-UTL	Utility Site
NF-WTR	Water

Non Commercial Forest Land	
NCFL-LPS	Low Productivity Site
NCFL-NCSP	Noncommercial Species

Commercial Forest Land			
NP	No Problem		
F	Fragile Problem	R	Reforestation Problem

Fragile Conditions		Fragile Management	
E	Erosion Potential	N	Nonsuitable
G	Gradient	R	Restricted
N	Nutrients		
P	Mass Movement Pot		
S	Soil Moisture		
W	Groundwater		

Reforestation Conditions		Reforestation Management	
A	Animals	N	Nonsuitable
D	Debris	R	Restricted
F	Frost		
K	Surface Rock		
L	Light		
M	Moisture		
T	Temperature		
Z	Disease		

Most Popular Examples and Descriptions	
Symbol	**Long Description**
FR-G,RR-AL	Fragile Problem Gradient Restricted AND Reforestation Problem Animals, Light Restricted
FR-G,RR-L	Fragile Problem Gradient Restricted AND Reforestation Problem Light Restricted
FR-G,RR-M	Fragile Problem Gradient Restricted AND Reforestation Problem Moisture Restricted
FR-G,RR-T	Fragile Problem Gradient Restricted AND Reforestation Problem Temperature Restricted
FR-W,RN-L	Fragile Problem Groundwater Restricted AND Reforestation Problem Light Nonsuitable Woodland
FR-P,RR-M	Fragile Problem Mass Movement Potential Restricted AND Reforestation Problem Moisture Restricted
FR-S,RR-L	Fragile Problem Soil Moisture Restricted AND Reforestation Problem Light Restricted
FN-G	Fragile Problem Gradient Nonsuitable Woodland
FN-W	Fragile Problem Groundwater Nonsuitable Woodland
FN-P	Fragile Problem Mass Movement Potential Nonsuitable Woodland
FR-NS	Fragile Problem Nutrients, Soil Moisture Restricted
FR-S	Fragile Problem Soil Moisture Restricted
FN-S	Fragile Problem Soil Moisture Nonsuitable Woodland
RR-AL	Reforestation Problem Animals, Light Restricted
RR-P	Reforestation Problem Disease Restricted
RR-L	Reforestation Problem Light Restricted
RR-M	Reforestation Problem Moisture Restricted
RN-S	Reforestation Problem Surface Rock Nonsuitable Woodland
RR-T	Reforestation Problem Temperature Restricted
RN-T	Reforestation Problem Temperature Nonsuitable Woodland