Taylor Grazing Act District Boundaries

IMPLEMENTATION GUIDELINES

March 23, 2010

Version 1.2

United States Department of the Interior
Bureau of Land Management
National Operations Center
Division of Resource Services
Denver Federal Center

Denver, Colorado 80225

Purpose of Implementation Guidelines

This document describes the physical design for the national data standard for the geospatial dataset. It is intended as a guideline for implementation. States may extend and expand upon this guideline in order to meet their specific needs, provided that when the data is pushed up to the national level, it will meet the minimum requirements as set forth in the data standard.

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INTRODUCTION

Data Structures Implemented

The data for inclusion in this dataset shall be collected in a known datum and coordinate system. The data stored on the EGIS server in Denver shall be stored in geographic coordinates for national layers using the Bureau standard NAD 83 datum (rather than in a specific projection). However, there are multiple realizations of NAD 83 datum in existence, therefore the metadata for each dataset should contain more specific labeling of the datum. Examples of this would include: NAD 83 (2007) or NAD 83 (CORS 96) (1997). Every effort should be made to be as specific as possible in delineating the appropriate datum.

	Data Structures Implemented	
	There are four structures in this implementation:	
A	*tga_arc*	Represents the arc features that will define the current TGA polygons. These arcs will have the feature-level metadata attributes shown assigned to them.
B	*tga_poly*	Represents the polygon features for the current TGA district boundaries.
C	*tga_lng_arc*	Represents the arc features that will define the lineage TGA polygons. These arcs will have the feature level metadata attributes shown assigned to them.
D	*tga_lng_poly*	Represents the polygon features for the lineage TGA district boundaries.

Design Considerations

Background

The implementation of this data standard includes feature classes for "lineage" arcs and polygons. The intent of the lineage feature classes is to store the various iterations that the TGA district boundaries have undergone since the original boundaries were set.

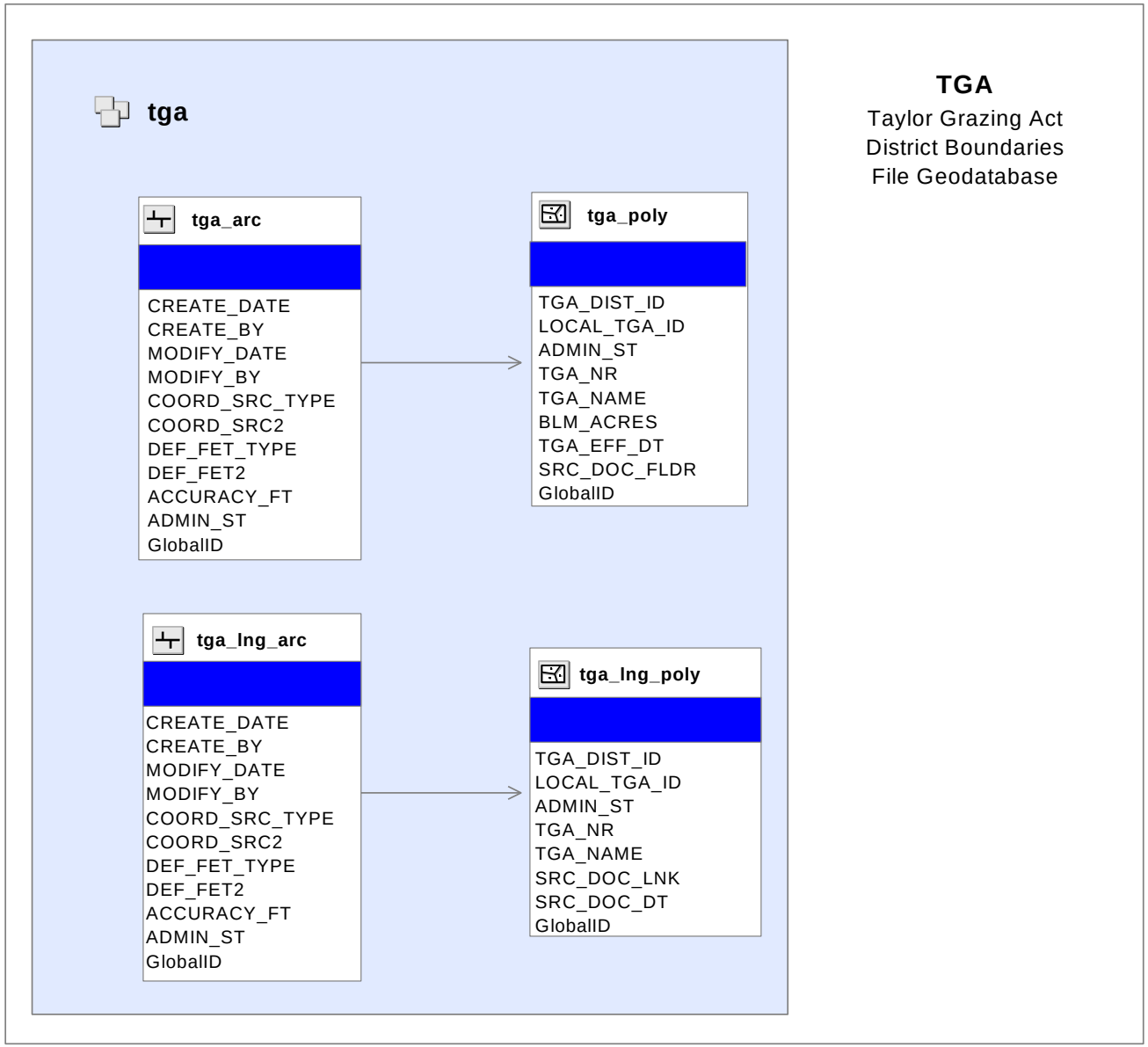
Domains

This geodatabase does not include the following shared domains (common to other datasets). These domains are common with other data standards and feature classes, and as such they must be implemented differently than those domains specific to the data standard

(reference the Domain Information Section at: http://web.blm.gov/data_mgt/std_proc.htm). The domain names are included in the tables, in italic text. The domain values may be located in the Access Database at: http://web.blm.gov/data_mgt/std_proc.htm.

- *DOM_COORD_SOURCE_TYPE*
- *DOM_DEF_FEATURE_TYPE*
- *DOM_ADMIN_ST*

Physical Database Diagram



Topology

Geodatabase and map topologies will be established to relate the active feature classes together, to maintain feature geometry, and to aid in the editing of features. The implementation of this data standard requires that polygons be defined by bounding arcs. Therefore, a minimum set of geodatabase topology rules are defined as part of the geodatabase to verify the coincidence between these two feature classes.

Map topology shall be established during edit sessions. Edits to the polygon shape will be performed by modifying the bounding arc. (Historical or archived polygons will not be edited once they become inactive). For additional information, refer to the best practices document at: http://web.blm.gov/data_mgt/std_proc.htm. *It is recommended that these tools be used and implemented to improve data quality and integrity.*

Geodatabase Topology Rules

The following are the minimum that should be implemented. Additional topology rules may be added depending on data requirements for each office. xxxx_arc, xxxx_poly, etc., represent the names of the feature classes that participate in the rule.

Topology Rule	**Required?**
tga_arc **Must Not Overlap**	Mandatory
tga_arc **Must Be Covered by Boundary of** *tga_poly*	Mandatory
tga_arc **Must Not Self-Overlap**	Mandatory
tga_arc **Must Not Have Dangles**	Optional
tga_poly **Must Not Overlap**	Mandatory
tga_poly **Boundary Must Be Covered by** *tga_arc*	Mandatory
tga_lng_arc **Must Be Covered by Boundary of** *tga_lng_poly*	Mandatory
tga_lng_arc **Must Not Self-Overlap**	Mandatory
tga_lng_arc **Must Not Have Dangles**	Optional
tga_lng_poly **Boundary Must Be Covered by** *tga_lng_arc*	Mandatory

Data Guidelines

Implementation of the data standards will occur at those organizational levels of the Bureau as appropriate. The standards are intended to be platform-independent.

There are some attributes that are intended to eventually become system generated when a system or application is developed to manage this dataset. At present, there is no specific application for maintaining this data layer, therefore those attributes will need to be manually edited until such an application exists.

The attributes included in this implementation are those that have been established for the national data standard and cannot be modified, except through the Data Standards Maintenance process. If additional attributes or domain values are needed, individual states/offices will have to create a new attribute and populate with a new attribute domain assignment. Metadata for the additional attributes must be documented by that state/office.

The format for entering the date in the geodatabase (GDB) will be MM/DD/YYYY. The ESRI software displays the date field according to how dates are formatted for display on the computer. The FGDC-compliant format for the date field is YYYYMMDD. There are two methods in which the FGDC format could be used for storing the date. The date format on the computer can be reset which may introduce unintended consequences within other programs, or the date field could be defined as a text field which would leave ample room for errors being introduced to the data. Although the National Data Standards are intended to be platform-independent, the ESRI GDB format is the current platform implemented throughout the BLM.

Knowledge about the original source of the digital data may not be known because of the age of the original dataset. When that happens, "Unknown" is an allowed value for the coordinate source attribute in the feature level metadata for the arcs comprising the boundary of polygon features. Additionally, the accuracy may be stated as "-1" which designates that the accuracy of the data is unknown. The purpose of these attributes is to track information from the time of the implementation of the standard forward. There is no intent to capture information from the past unless it is already known and documented. All data put into a GIS has the potential for someone to take it as 'fact' and try to use it incorrectly. Any data that is disseminated should include a standard disclaimer within the Federal Geographic Data Committee (FGDC) metadata for the dataset. This disclaimer would state that, for Taylor Grazing Act data, the data source information is unknown and that there is no warranty with regard to the dataset. The accuracy section of the FGDC metadata record would also include a statement that the accuracy is unknown and may range out to + or - _____ (whatever amount). **The feature level metadata is not an attempt to replace that disclaimer.**

Dataset Review Cycle

As the data for the TGA districts is historical information, updates would only occur on an ad hoc basis when modifications (e.g. exchanges) are made or corrections to data are found. State range leads will review data only upon modifications to the dataset.

National Dataset Update Cycle

At this time there are no current plans to establish active replication processes for this dataset, due to its static nature.

Records Retention

The entire geodatabase for TGA will be archived on an annual basis, by December 31, for the previous calendar year. **Note: Records issues will be handled according to official policy for Records Management.**

DATA STANDARD IMPLEMENTATION DETAILS

A. Taylor Grazing Act District Boundaries Arcs (tga_arc)

The arc features used to define the polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The last five attributes document the origin and characteristics of each arc.

Taylor Grazing Act District Boundaries Arcs Attributes

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CREATE_DATE	Created Date	Date	YES	09/09/9999		No
CREATE_BY	Created By Name	Char(30)	YES	UNK		No
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		No
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		No
COORD_SRC_TYPE	Coordinate Source Type Code	Char(5)	YES	UNK	*DOM_COORD_SOURCE_TYPE*	No
COORD_SRC2	Coordinate Source Code	Char(25)	NO			No
DEF_FET_TYPE	Defining Feature Type Code	Char(15)	YES	UNK	*DOM_DEF_FEATURE_TYPE*	No
DEF_FET2	Defining Feature Code	Char(30)	NO			No
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer(4)	YES	-1		No
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Name	Definition/Design Considerations
CREATE_ DATE	Location Effective Date	**Logical Definition**: The date which is the calendar year, month, and day when the position of the Location was produced. **Design Considerations:** As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999

GIS Name	Logical Name	Definition/Design Considerations
CREATE_ BY	Not applicable	**Logical Definition**: Not on the logical model. **Design Considerations:** The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK
MODIFY_ DATE	Location Modified Date	**Logical Definition**: The date which is the calendar year, month, and day when the position of the Location was last modified. **Design Considerations:** As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	**Logical Definition**: Not on the logical model. **Design Considerations:** The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK
COORD_ SRC_TYPE	Location Source Type Name	**Logical Definition**: The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. **Design Considerations:** Attribute Domain Assignment: *DOM_COORD_SOURCE_TYPE* Default: UNK

GIS Name	Logical Name	Definition/Design Considerations
COORD_ SRC2	Location Source Description Specific Name	**Logical Definition**: The name that identifies a more specific description of the location (coordinate source). **Design Considerations:** *Suggested* values for codes appear in the domains appendix. The user may leave this value "null," choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the 'Accuracy Measurement Table'. This is an optional attribute.
DEF_FET_ TYPE	Defining Feature Type Name	**Logical Definition**: The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. **Design Considerations:** Attribute Domain Assignment: *DOM_DEF_FEATURE_TYPE* Default: UNK
DEF_FET2	Defining Feature Description Name	**Logical Definition**: The name that identifies a more specific description of the feature from which the arcs are derived to create polygon boundaries. This information further describes the physical or mapping feature that makes up the polygon boundary. **Design Considerations:** *Suggested* code values appear in the domains appendix. The user may leave this value "null," choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This is an optional attribute.

<table>
<tr><th>GIS Name</th><th>Logical Name</th><th>Definition/Design Considerations</th></tr>
<tr><td>ACCURACY_FT</td><td>Line Form Accuracy Measure</td><td>
Logical Definition: The measure that describes how close, in Line Form UOM Type Name, the actual location is to the spatial depiction.

Design Considerations: The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or, 3) the measurement of that accuracy as is noted in the National Standard for Spatial Data Accuracy (NSSDA)[1] which is a data usability standard issued by the Federal Geographic Data Committee (FGDC).

Default: -1

A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made. Below is an example table of accuracy measurements. (Attempting to list all values in a domain table would produce an infinite list.)
<table>
<tr><th colspan="2">Accuracy Measurement Example Table</th></tr>
<tr><td>1</td><td>+/– 1 Feet</td></tr>
<tr><td>10</td><td>+/– 10 Feet</td></tr>
<tr><td>15</td><td>+/– 15 Feet</td></tr>
<tr><td>20</td><td>+/– 20 Feet</td></tr>
<tr><td>100</td><td>+/- 100 Feet</td></tr>
</table>
1 Federal Geographic Data Committee. 1998. Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998.
</td></tr>
</table>

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	**Logical Definition**: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. **Design Considerations**: A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g., LL**AK**039000) Note: This attribute is included for purposes of replication. Attribute Domain Assignment: *DOM_ADMIN_ST*
GlobalID	Not Applicable	**Logical Definition**: Not on the logical model. **Design Considerations:** Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

B. Taylor Grazing Act District Boundaries Polygons (tga_poly)

The polygon features for the current Taylor Grazing Act district boundaries are defined below. The TGA district boundaries attributes may be duplicated in other data sets but are considered minimum information for unique feature identification and cartographic purposes. Domain values are used when appropriate.

Taylor Grazing Act District Boundaries Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
TGA_DIST_ID	TGA Unique ID	Char(6)	YES			Yes
LOCAL_TGA_ID	Local TGA Identifier	Char(20)	NO			No
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
TGA_NR	District Number	Char(4)	YES			No
TGA_NAME	District Name	Char(40)	YES			No
BLM_ACRES	BLM Acres	Double	NO			No
TGA_EFF_DT	TGA Effective Date	Date	YES	06/28/1934		No
SRC_DOC_FLDR	Source Document Folder Link	Char(200)	YES			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Name	Definition/Design Considerations
TGA_DIST_ID	Taylor Grazing District Identifier	**Logical Definition**: The designed primary key that will uniquely identify a single occurrence of the entity. **Design Considerations**: Unique Identifier for each district comprised of 2-digit Administrative State Code (ADMIN_ST) and a 4-digit sequential number for the district within that state (TGA_NR). The value for this field can be obtained using the Field Calculator in ArcMap with the expression [TGA_DIST_ID] = [ADMIN_ST] + [TGA_NR].

GIS Name	Logical Name	Definition/Design Considerations
LOCAL_TGA_ID	Not Applicable	**Logical Definition**: Not on the logical data model. **Design Considerations**: The current identifier that was used by a state or field office to identify a TGA at the state or field office level.
ADMIN_ST	State Alphabetic Code	**Logical Definition**: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. **Design Considerations**: A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g. LL**AK**039000) Attribute Domain Assignment: *DOM_ADMIN_ST*
TGA_NR	Taylor Grazing District Number	**Logical Definition**: The number assigned to a Taylor Grazing Act district. **Design Considerations:** 4-digit sequential number assigned to each district by the BLM within a geographic state.
TGA_NAME	Taylor Grazing District Name	**Logical Definition**: The name that is given to a Taylor Grazing District to distinguish it via a label rather than the number. **Design Considerations**: If the district does not have a name, the name will be a combination of the administrative state and the district number, e.g., *Nevada District 10*.
BLM_ACRES	Not Applicable	**Logical Definition**: Not on logical data model. **Design Considerations**: The acres within the polygon that are under BLM jurisdiction. A manually entered number reflecting the number of acres stated in the official document for the grazing district that are under BLM jurisdiction (not system-generated or calculated polygon acreage).

GIS Name	Logical Name	Definition/Design Considerations
TGA_EFF_DATE	Taylor Grazing District Location Effective Date	**Logical Definition**: The date on which the location for a specific district is effective. **Design Considerations**: The last known date for which there is a modifying document. (This should be the same date as the most recent SRC_DOC_DT in the TGA Lineage feature class.) If the effective date is unknown, the date when the District is created in the dataset will be used as the effective date. Boundary effective date for the Taylor Grazing Act district boundary polygon. Default: 06/28/1934
SRC_DOC_FLDR	Not Applicable	**Logical Definition**: Not on logical data model. **Design Considerations**: The link to the folder that contains all documents that established the current Taylor Grazing Act District boundary.
GlobalID	Not Applicable	**Logical Definition**: Not on the logical model. **Design Considerations**: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

C. Taylor Grazing Act District Boundaries Lineage Arcs (tga_lng_arc)

The arc features used to define the Taylor Grazing Act district boundaries lineage polygons are described in the following table. These attributes serve as feature level metadata information for the polygon boundaries. The last five attributes document the origin and characteristics of each arc.

Taylor Grazing Act District Boundaries Lineage Arcs Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CREATE_DATE	Created Date	Date	YES	09/09/9999		Yes
CREATE_BY	Created By Name	Char(30)	YES	UNK		Yes
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		Yes
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		Yes
COORD_SRC_TYPE	Coordinate Source Type Code	Char(5)	YES	UNK	*DOM_COORD_SOURCE_TYPE*	No
COORD_SRC2	Coordinate Source Code	Char(25)	NO			No
DEF_FET_TYPE	Defining Feature Type Code	Char(15)	YES	UNK	*DOM_DEF_FEATURE_TYPE*	No
DEF_FET2	Defining Feature Code	Char(30)	NO			No
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer(4)	YES	-1		No
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Name	Definition/Design Considerations
CREATE_ DATE	Location Effective Date	**Logical Definition**: The date which is the calendar year, month, and day when the position of the Location was produced. **Design Considerations**: As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999

GIS Name	Logical Name	Definition/Design Considerations
CREATE_ BY	Not applicable	**Logical Definition**: Not on the logical model. **Design Considerations**: The User ID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK
MODIFY_ DATE	Location Modified Date	**Logical Definition**: The date which is the calendar year, month, and day when the position of the Location was last modified. **Design Considerations**: As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	**Logical Definition**: Not on the logical model. **Design Considerations**: The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK
COORD_ SRC_TYPE	Location Source Type Name	**Logical Definition**: The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. **Design Considerations**: Attribute Domain Assignment: *DOM_COORD_SOURCE_TYPE* Default: UNK

GIS Name	Logical Name	Definition/Design Considerations
COORD_ SRC2	Location Source Description Specific Name	**Logical Definition**: The name that identifies a more specific description of the location (coordinate source). **Design Considerations**: *Suggested* values for codes appear in the domains appendix. The user may leave this value "null," choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the 'Accuracy Measurement Table'. This is an optional attribute.
DEF_FET_ TYPE	Defining Feature Type Name	**Logical Definition**: The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. **Design Considerations**: Attribute Domain Assignment: *DOM_DEF_FEATURE_TYPE* Default: UNK
DEF_FET2	Defining Feature Description Name	**Logical Definition**: The name that identifies a more specific description of the feature from which the arcs are derived to create polygon boundaries. This information further describes the physical or mapping feature that makes up the polygon boundary. **Design Considerations**: *Suggested* code values appear in the domains appendix. The user may leave this value "null," choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This is an optional attribute.

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Design Considerations: The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or, 3) the measurement of that accuracy as is noted in the National Standard for Spatial Data Accuracy (NSSDA)[1] which is a data usability standard issued by the Federal Geographic Data Committee (FGDC).

Default: -1

A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made. Below is an example table of accuracy measurements. (Attempting to list all values in a domain table would produce an infinite list.)
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</table>
[1] Federal Geographic Data Committee. 1998. Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998.
</td></tr>
</table>

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	**Logical Definition**: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. **Design Considerations**: A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g., LL**AK**039000) Note: This attribute is included for purposes of replication. Attribute Domain Assignment: *DOM_ADMIN_ST*
GlobalID	Not Applicable	**Logical Definition**: Not on the logical model. **Design Considerations**: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

D. Taylor Grazing Act District Boundaries Lineage Polygons (tga_lng_poly)

The lineage polygon features for Taylor Grazing Act district boundaries are defined below. The intent of the lineage feature class is to store the various iterations that the TGA district boundaries have undergone since the original boundaries were set. The lineage TGA polygons are no longer active, but will be stored for historical reference. Domain values are used when appropriate.

Taylor Grazing Act District Boundaries Lineage Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
TGA_DIST_ID	TGA Unique ID	Char(6)	YES			Yes
LOCAL_TGA_ID	Local TGA Identifier	Char(20)	NO			No
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
TGA_NR	District Number	Char(4)	YES			No
TGA_NAME	District Name	Char(40)	YES			No
SRC_DOC_LNK	Source Document Link	Char(200)	YES			No
SRC_DOC_DT	Date of Source Document	Date	YES	6/28/1934		No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Name	Definition/Design Considerations
TGA_DIST_ID	Taylor Grazing District Identifier	**Logical Definition**: The designed primary key that will uniquely identify a single occurrence of the entity. **Design Considerations**: Unique Identifier for each district comprised of 2-digit Administrative State Code (ADMIN_ST) and a 4-digit sequential number for the district within that state (TGA_NR). The value for this field can be obtained using the Field Calculator in ArcMap with the expression [TGA_DIST_ID] = [ADMIN_ST] + [TGA_NR].

GIS Name	Logical Name	Definition/Design Considerations
LOCAL_TGA_ID	Not Applicable	**Logical Definition**: Not on the logical data model. **Design Considerations**: The current identifier that was used by a state or field office to identify a TGA at the state or field office level.
ADMIN_ST	State Alphabetic Code	**Logical Definition**: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. **Design Considerations**: A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g., LL**AK**039000) Attribute Domain Assignment: *DOM_ADMIN_ST*
TGA_NR	Taylor Grazing District Number	**Logical Definition**: The number assigned to a Taylor Grazing District. **Design Considerations**: 4-digit sequential number assigned to each district by the BLM within a geographic state.
TGA_NAME	Taylor Grazing District Name	**Logical Definition**: The name that is given to a Taylor Grazing District to distinguish it via a label rather than the number. **Design Considerations**: If the district does not have a name, the name will be a combination of the administrative state and the district number, e.g., “Nevada District 10.”

GIS Name	Logical Name	Definition/Design Considerations
SRC_DOC_LNK	Not Applicable	**Logical Definition**: Not on the logical model. **Design Considerations**: The link to the document(s) that established the Taylor Grazing Act District boundary. The document is scanned and placed in the folder for that district (see "SRC_DOC_FLDR" attribute in the tga_poly feature class) with all other documents that contain changes to the district boundary. If the original document that established the TGA boundary (or caused a change in the boundary) cannot be located, the person responsible for making the boundary change will write up an explanation as to how and why the boundary was changed. This "new" document will be attached to the district feature. All documents for a district will be organized into a 'district' folder, which will be included as a link in the tga_poly feature class.
SRC_DOC_DT	Taylor Grazing District Location Effective Date	**Logical Definition**: The date on which the location for a specific district is effective. **Design Considerations**: The date of the source document that established the specific iteration of the TGA district boundary.
GlobalID	Not Applicable	**Logical Definition**: Not on the logical model. **Design Considerations**: Software-generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

APPENDIX A: DOMAIN VALUES

Domain values are maintained separately from the data standard because they are more likely to have an addition or change that would not affect the data standard. Domain values cannot be added to attributes specific to the standard (except through the data standardization maintenance step). A state can extend the data standard with a new attribute, which can have a state specific domain list. However, all attributes which are required as part of the standard must have a value from the data standard domain list. Any additional attributes and their associated domain values must be documented with metadata by that office.

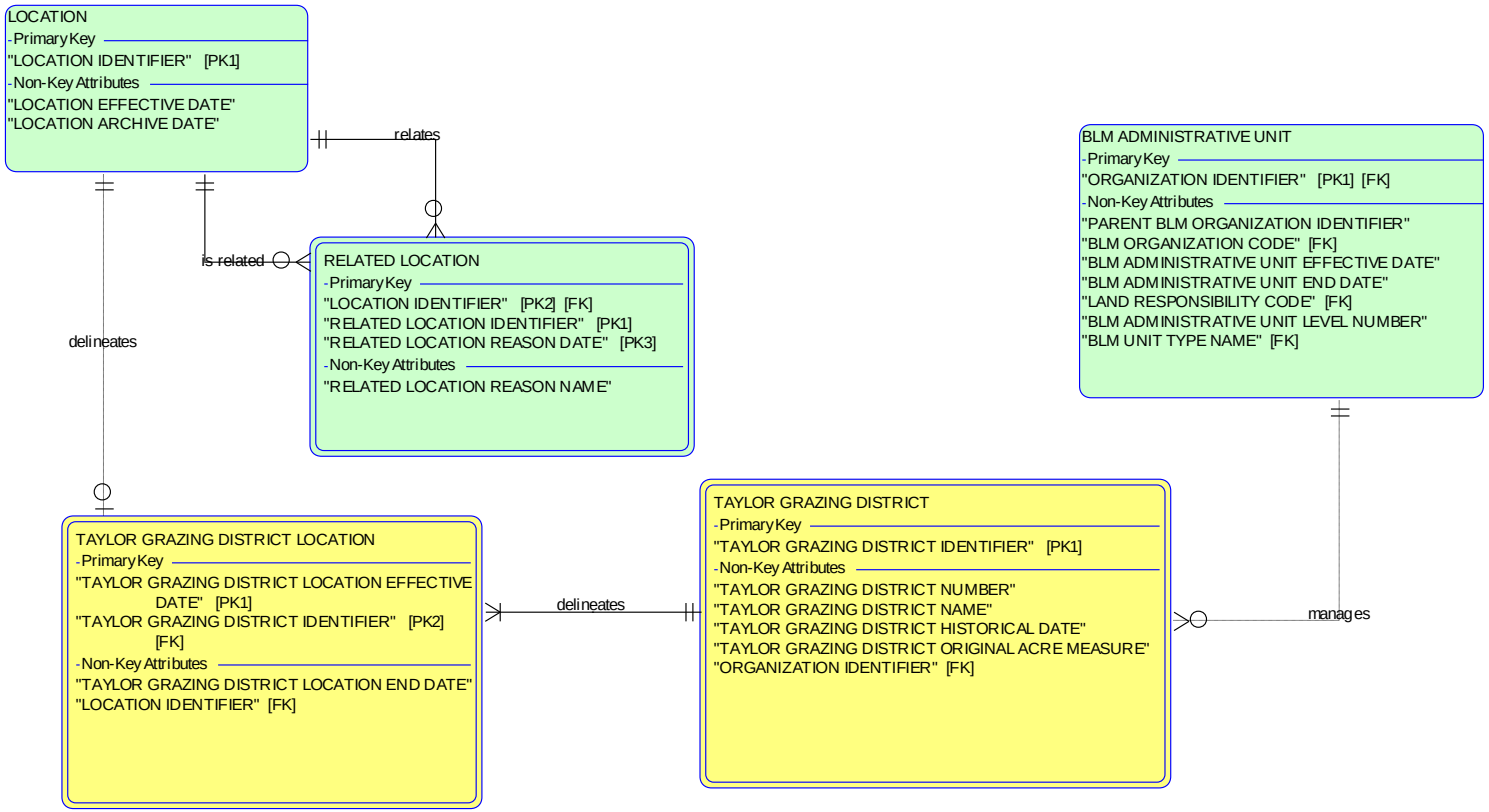
No domain values are specific to the Taylor Grazing Act district boundaries.

For Feature Level Metadata Domains, please see the Domain Information Section at: http://web.blm.gov/data_mgt/std_proc.htm.

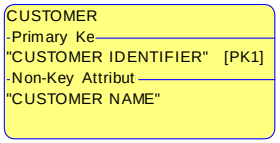
APPENDIX B: LOGICAL DATA MODEL

The entities in green are not part of this standard and do not need to be reviewed. They are provided to show context and provide relationships to other data only. To improve viewing, zoom to 200%; to print a larger version, use the 11"x17" model on the same webpage as this document."

Taylor Grazing District Boundary 4/14/2009 version 4 DRAFT



APPENDIX C: READING A LOGICAL DATA MODEL

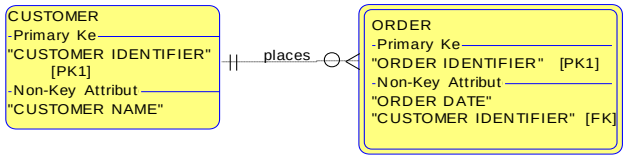


ENTITY

- *The noun or object on something of relevance to the business*
- *Shown as a box, with the name (singular in capital letters at the top, example below: ORDER)*

ATTRIBUTES

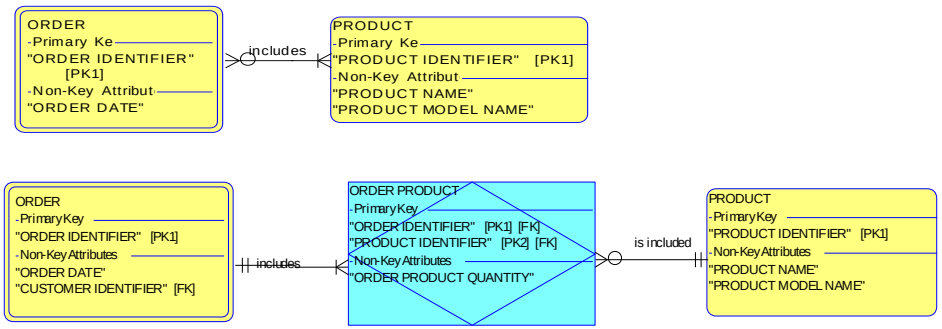
- *The adjective which is the data or information about an entity; describes an entity (ORDER NUMBER, ORDER DATE)*
- *Has **only one** valid value for an occurrence of an entity at any given time The same value of an attribute may describe more than one entity occurrence*
- *PK = Primary Key – uniquely identifies an occurrence of an entity (one customer may have same name as another customer, so CUSTOMER IDENTIFIER is unique for a customer)*
- *FK = Foreign Key – the primary key of the parent entity is a Foreign key in the child entity*
- *The Word Identifier indicates that this will be a designed key, its format is not known, but the modeling tool required a format and size. The actual content and size of the identifier will be determined during design.*



The line includes optionality (minimum occurrences, inner symbol) and cardinality (maximum occurrences, symbol next to entity) | = one 0 = zero < or > = many

RELATIONSHIP

- *The verb which shows an association between entities and represents business rules*
- *Represented by a line between two entities with active verb or verb phase (all small letters)*
- *Reading : Left to right (A CUSTOMER places zero to many ORDERs) and right to left (An ORDER is placed by one and only one CUSTOMER)*
- *Because a Customer can have many Orders, the Customer is considered the Parent Entity and the Order is considered the Child Entity). So the way you read it is normally from the Parent Entity to the Child Entity*



MANY-TO-MANY

- *In a logical data model, many to many relationships are resolved. In the example to the left an ORDER includes one to many PRODUCTs and a PRODUCT can be in zero or many ORDERs.*

ASSOCIATIVE ENTITY

- *resolves the many to many*
- *with the diamond symbol*

APPENDIX D: ATTRIBUTE METADATA TERMINOLOGY

The following matrix describes the metadata for the Data Standards Implementation Details.

Attribute Metadata Field	Metadata Definition	Example
GIS Name	*The abbreviated name of the field as it appears in the database*	*RCVR_TYPE*
Alias	*An alternative name that is more descriptive and user-friendly than the Logical or GIS Field Name*	*GPS RECEIVER TYPE*
Data Format	*Specific type of data allowed/# of characters or numbers/Precision & Scale*	*Char(15)*
Required?	*If an attribute does or does not have to have a value. If "YES", the attribute is required, if "NO", the attribute is optional.*	*NO (is optional)*
Default Value	*Value that will apply if no other value is specified; included in domain value list.*	*N/A*
Domain Name	*Name of the table for that attribute, containing the Code, Description, and Definition for each value in the table*	*DOM_RCVR_TYPE*
Derived?	*If the attribute value is derived from the value of one or more other attribute values (Yes) otherwise, (No) the value is not derived.*	*No*
Logical Attribute Name	*The business name of the attribute which includes the entity name, and representation term*	*Global Positioning System Receiver Type Name*