

National Landscape Conservation System (NLCS) IMPLEMENTATION GUIDELINES

September 8, 2010 Version 1.1

United States Department of the Interior Bureau of Land Management National Operations Center Division of Resource Services Denver Federal Center Denver, Colorado 80225

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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 data set 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. While the standard datum is NAD 83, there are multiple realizations of that datum in existence. The metadata for each data set shall contain more specific labeling of the datum as appropriate. 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 five feature datasets in this implementation:				
	 National Monuments, National Conservation Areas and Similar Designations (nlcs_nm_nca) Wilderness Areas, Wilderness Study Areas and Other Related Lands with Wilderness Characteristics (nlcs_wld) Wild and Scenic Rivers (nlcs_wsr) National Scenic and Historic Trails (nlcs_nsht) Conservation Lands of the California Desert (nlcs_clcd) 				
	There are 18 structures in this implementation (encompassed within the above-named feature datasets):				
A	nlcs_nm_nca_arc	Represents the arc features that will define the NLCS National Monuments, National Conservation Areas and Similar Designations polygons. These arcs will have the feature level metadata attributes shown assigned to them.			
В	nlcs_nm_nca_poly	Represents the polygon features that show the boundaries for the NLCS National Monuments, National Conservation Areas and Similar Designations areas.			
С	nlcs_wld_arc	Represents the arc features that will define the NLCS Wilderness Areas polygons. These arcs will have the feature level metadata attributes shown assigned to them.			
Dnlcs_wld_polyRepresents the polygon features that show the boundaries for the NLCS Wilderness Areas.		Represents the polygon features that show the boundaries for the NLCS Wilderness Areas.			
E	nlcs_wsa_arc	Represents the arc features that will define the NLCS Wilderness Study Areas.			
F	nlcs_wsa_poly	Represents the polygon features that show the boundaries for the NLCS Wilderness Study Areas.			

G	nlcs_oth_rel_lnds_arc	Represents the arc features that will define the Other Related (wilderness) Lands that qualify for NLCS protection.
Н	nlcs_oth_rel_lnds_poly	Represents the polygon features that show the boundaries for the NLCS Other Related Lands.
Ι	nlcs_wsr_ln	Represents the line features for the Wild and Scenic River lines. These lines will have the feature level metadata attributes shown assigned to them.
J	nlcs_wsr_orv_tbl	Is a non-spatial table for storing Outstandingly Remarkable Values (ORV) for Wild and Scenic Rivers.
	nlcs_wsr_orv_rel	Is a relationship class which links the nlcs_wsr_ln feature class to the nlcs_wsr_orv_tbl. Information from both the outstandingly remarkable values table and the line feature class can be accessed through the use of this relationship.
K	nlcs_wsr_corr_arc	Represents the arc features that will define the NLCS Wild and Scenic River Corridor polygons. These arcs will have the feature level metadata attributes shown assigned to them.
L	nlcs_wsr_corr_poly	Represents the polygon features that show the boundaries for the NLCS Wild and Scenic River Corridors.
М	nlcs_nsht_ln	Represents the line features for the National Scenic and Historic Trails. These lines will have the feature level metadata attributes shown assigned to them.
N	nlcs_nsht_corr_arc	Represents the arc features that will define the NLCS National Scenic and Historic Trails Corridor polygons. These arcs will have the feature level metadata attributes shown assigned to them.
0	nlcs_nsht_corr_poly	Represents the polygon features that show the boundaries for the NLCS National Scenic and Historic Trails Corridors.
Р	nlcs_clcd_arc	Represents the arc features that will define the NLCS Conservation Lands of the California Desert polygons. These arcs will have the feature level metadata attributes shown assigned to them.
Q	nlcs_clcd_poly	Represents the polygon features that show the boundaries for the NLCS Conservation Lands of the California Desert.

Design Considerations

National Unique Identifier for NLCS

NLCS units have not had a unique national primary key (identifier). Each state has used its own design for what the identifier is for the state. Now that NLCS units will be a national dataset, a unique national identifier is required.

The primary key for NLCS units will be ten characters. The first four will be "NLCS" and the last six will be a sequential number.

- Creating the Initial Dataset

There are currently over 800 NLCS units identified for the Bureau of Land Management. Each state has been assigned a range of unique identifiers to use. As the NLCS units are converted to the new standard and pushed up to the national level, the state will use an identifier within their assigned range for each individual NLCS unit.

Relationship Classes For This Data Standard

The implementation of the geodatabase supporting this data standard includes a one-to-many, composite relationship class. The following lists the relationship classes and provides a brief description of each:

A. nlcs_wsr_orv_rel: one-to-many relationship class linking each feature in *nlcs_wsr_ln* to one or more records in *nlcs_wsr_orv_tbl*, where the data are recorded.



Domains

There are domain tables that are common across other data standards and feature classes, and as such they must be implemented differently than those domains that are specific to the data standard (reference <u>Domain Information</u> Section located at http://web.blm.gov/data_mgt/std_proc.htm). These shared domains are not included in the geodatabase associated with these implementation guidelines.

The common 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
- DOM_NHT_CND_CTGY*
- DOM_TRAIL_TYPE*

* Note: These domains are included in the Domains document, even though they are shared (common) domains because the full FGDC Trails data standard has not yet been adopted.

The following domains are unique to the dataset; therefore, they are associated in the geodatabase and are included in the XML schema. The domain names are included in the tables, in normal text.

- NLCS_DOM_NLCS_TYPE
- NLCS_DOM_WSA_RCMND
- NLCS_DOM_WC_TYPE
- NLCS_DOM_WSR_CTGY
- NLCS_DOM_ORV
- NLCS_DOM_MNG_AGCY**

** Note: This domain is expected to be modified once the data standard efforts for Surface Management Agency (SMA) are completed. The Managing Agency domain may evolve into either the full list or a subset of SMA.

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 located 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?			
National Monuments, National Conservation Areas and Similar Designations Feature Dataset:				
nlcs_nm_nca_arc Must Not Overlap	Mandatory			
nlcs_nm_nca_arc Must Be Covered By Boundary Of nlcs_nm_nca_poly	Mandatory			
nlcs_nm_nca_arc Must Not Self-Overlap	Mandatory			
nlcs_nm_nca_poly Must Not Overlap	Mandatory			
nlcs_nm_nca _poly Boundary Must Be Covered By nlcs_nm_nca_arc	Mandatory			
Wilderness Areas, Wilderness Study Areas and Other Related Lands with Wilderness Characteristics Feature Dataset:				
nlcs_wld_arc Must Not Overlap	Mandatory			
nlcs_wld_arc Must Be Covered By Boundary Of nlcs_wld_poly	Mandatory			
nlcs_wld_arc Must Not Self-Overlap	Mandatory			
nlcs_wld_poly Must Not Overlap	Mandatory			

nlcs_wld_poly Boundary Must Be Covered By nlcs_wld_arc	Mandatory			
nlcs_wsa_arc Must Not Overlap	Mandatory			
nlcs_wsa_arc Must Be Covered By Boundary Of nlcs_wsa_poly	Mandatory			
nlcs_wsa_arc Must Not Self-Overlap	Mandatory			
nlcs_wsa_poly Must Not Overlap	Mandatory			
nlcs_wsa_poly Boundary Must Be Covered By nlcs_wsa_arc	Mandatory			
nlcs_oth_rel_lnds_arc Must Not Overlap	Mandatory			
nlcs_oth_rel_lnds_arc Must Be Covered By Boundary Of nlcs_oth_rel_lnds_poly	Mandatory			
nlcs_oth_rel_lnds _arc Must Not Self-Overlap	Mandatory			
nlcs_oth_rel_lnds _poly Must Not Overlap	Mandatory			
nlcs_oth_rel_lnds_poly Boundary Must Be Covered By nlcs_oth_rel_lnds _arc	Mandatory			
nlcs_wld_poly Must Not Overlap With nlcs_wsa_poly	Mandatory			
nlcs_wld_poly Must Not Overlap With nlcs_oth_rel_lnds_poly	Mandatory			
nlcs_wsa_poly Must Not Overlap With nlcs_oth_rel_lnds_poly	Mandatory			
Wild and Scenic Rivers Feature Dataset:				
nlcs_wsr_ln Must Not Self-Overlap	Mandatory			
nlcs_wsr_ln Must Not Overlap	Mandatory			
nlcs_wsr_corr_arc Must Not Overlap	Mandatory			
nlcs_wsr_corr_arc Must Be Covered By Boundary Of nlcs_wsr_corr_poly	Mandatory			
nlcs_wsr_corr_arc Must Not Self-Overlap	Mandatory			

nlcs_wsr_corr_poly Must Not Overlap	Mandatory			
nlcs_wsr_corr_poly Boundary Must Be Covered By nlcs_wsr_corr_arc	Mandatory			
National Scenic and Historic Trails Feature Dataset:				
nlcs_nsht_ln Must Not Self-Overlap	Mandatory			
nlcs_nsht_corr_arc Must Not Overlap	Mandatory			
nlcs_nsht_corr_arc Must Be Covered By Boundary Of nlcs_nsht_corr_poly	Mandatory			
nlcs_nsht_corr_arc Must Not Self-Overlap	Mandatory			
nlcs_nsht_corr_poly Must Not Overlap	Mandatory			
nlcs_nsht_corr_poly Boundary Must Be Covered By nlcs_nsht_corr_arc	Mandatory			
Conservation Lands of the California Desert Feature Dataset:				
nlcs_clcd_arc Must Not Overlap	Mandatory			
nlcs_clcd_arc Must Be Covered By Boundary Of nlcs_clcd_poly	Mandatory			
nlcs_clcd_arc Must Not Self-Overlap	Mandatory			
nlcs_clcd_poly Must Not Overlap	Mandatory			
nlcs_clcd_poly Boundary Must Be Covered By nlcs_clcd_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 the present time there is no specific application for maintaining this data layer and therefore those attributes will currently need to be manually edited.

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 desired by individual states/offices, create a new attribute and populate with a new attribute domain assignment. Metadata for the additional attributes must be documented by that 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.

Dataset Review Cycle

The data for the NLCS should be reviewed and updated as appropriate.

National Dataset Update Cycle

The national level data for the NLCS should be updated as needed, on the NOC EGIS server. This update shall occur through replication, with the updated information reflected on the BLM external data server within 30 days. State and local offices shall determine an update cycle that fits their specific needs for local data.

DATA STANDARD IMPLEMENTATION DETAILS

A. NLCS National Monuments, National Conservation Areas and Similar Designations Arcs (nlcs_nm_nca_arc)

The arc features used to define the NLCS National Monuments, National Conservation Areas and Similar Designations polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

NLCS National Monuments, National Conservation Areas and Similar Designations Arc Attributes						
GIS NAME	GIS NAME ALIAS		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	YES	-1		NO
OFFSET_FT	Arc Offset in Feet	Short Integer	YES	0		NO
LEGAL_DESCR	Legal Description	Char(20)	NO			NO
GlobalID	GlobalID	UUID	YES			NO
ADMIN_ST Administrative State Code		Char(2)	YES		DOM_ADMIN_ST	NO
	•	•	•	•		•

GIS Name	Logical Name	Definition/Design Consideration		
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		
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	d 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.		
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.		
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK		

GIS Name	Logical Name	Definition/Design Consideration	
COORD_SRC2	Location Source Description Specific Name	Logical Definition : The name that identifies a more specific description of the location (coordinate source).	
		Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .	
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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>	

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GIS Name	Logical Name	Definition/Design	Consideration			
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit of Measure 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 U. S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy</i> (<i>NSSDA</i>) ^{<i>I</i>} 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.)				
			Accuracy M	easurement Example Table		
			1	+/- 1 Feet		
		-	10	+/- 10 Feet		
		-	15	+/- 15 Feet		
		-	20	+/- 20 Feet		
			-	100	+/- 100 Feet	
		¹ Federal Geographic I Standard for Spatial D	Data Committee. 1 ata Accuracy, FGD	998. <u>Geospatial Positioning Accuracy</u> DC-STD-007.3-1998	V Standards Part 3: National	
OFFSET_FT	Not Applicable	Logical Definition: Not on logical model.				
		Design Considera defining feature.	tions: The mea	surement, in feet, that an arc ha	s been offset from the	

GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

B. NLCS National Monuments, National Conservation Areas and Similar Designations Polygons (nlcs_nm_nca_poly)

The polygon features for the NLCS National Monuments, National Conservation Areas and Similar Designations are defined below. Domain values are used when appropriate.

This feature class includes Cooperative Management and Protection Areas, Forest Reserves, National Conservation Areas, National Monuments, and Outstanding Natural Areas. Descriptions of each type of polygon found in this feature class are located at the end of this section of the document.

NL	NLCS National Monuments, National Conservation Areas and Similar Designations Polygon Attributes							
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?		
NLCS_ID	NLCS Unique Identifier	Char(10)	YES			No		
NLCS_NAME	NLCS Name	Char(100)	YES			NO		
CASEFILE_NO	Casefile Number	Char(17)	NO	UNK		NO		
NLCS_TYPE	Designation	Char(50)	YES		NLCS_DOM_NLCS_TYPE	NO		
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO		
GlobalID	GlobalID	UUID	YES			NO		

GIS Name	Logical Name	Definition/Design Consideration		
NLCS_ID National Landscape Conservation System Place Identifier	National Landscape Conservation System	Logical Definition : The designed primary key that will uniquely identify a single occurrence of the entity.		
	Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.			
NLCS_NAME	National Landscape Conservation System Place Name	Logical Definition: The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values.Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.		

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GIS Name	Logical Name	Definition/Design Consideration				
CASEFILE_NO	Case File Number	Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.				
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions.				
		Default: UNK				
NLCS_TYPE	National Landscape Conservation System	Logical Definition : The name that indicates the type of the nationally significant designated areas.				
	Type Name	Design Considerations:				
		Attribute Domain Assignment: NLCS_DOM_NLCS_TYPE				
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2				
		Design Considerations: 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.				
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)				
		Note: This attribute is included for purposes of replication.				
		Attribute Domain Assignment: DOM_ADMIN_ST				

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GIS Name	Logical Name	Definition/Design Consideration
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.

NLCS NATIONAL MONUMENTS, NATIONAL CONSERVATION AREAS AND SIMILAR DESIGNATION TYPES:

NATIONAL MONUMENT

National Monuments are areas, when designated by presidential proclamation, that protect objects of scientific or historic interest pursuant to the Antiquities Act of 1906; or, when designated by Congress, that protect, enhance, or preserve significant values and opportunities for present and future generations. National monuments typically contain unique and nationally important natural, cultural, scientific, recreational or scenic resources.

NATIONAL CONSERVATION AREA

National Conservation Areas are areas of public land designated by Congress to, generally, conserve, protect, and enhance certain unique and nationally important values, such as natural, cultural, scientific, recreational or scenic resources.

OUTSTANDING NATURAL AREA

Outstanding Natural Areas are areas designated by Congress to preserve exceptional, rare, or unusual natural characteristics, protect wildlife habitat, and provide for the protection or enhancement of natural, educational, or scientific values.

COOPERATIVE MANAGEMENT AND PROTECTION AREA

Cooperative Management and Protection Areas are areas designated by Congress to conserve, protect, enhance, and manage the long-term ecological integrity and socio-economic environment of an area, cooperative and innovative management projects, and traditional access to cultural and gathering sites; to promote sustainable uses such as grazing and recreation; and to promote and foster cooperation, communication, and understanding and to reduce conflict between users and interests.

FOREST RESERVE

Forest Reserves are areas designated by Congress to conserve and study land, fish, wildlife, and forests occurring in such areas while providing public recreation opportunities and other management needs. Forest Reserves may enter into cooperative management agreements for the purpose of acquiring from and providing to the State in which they occur goods and services to be used by the Secretary and the State in cooperative management.

C. NLCS Wilderness Area Arcs (nlcs_wld_arc)

The arc features used to define the NLCS Wilderness Area polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

NLCS Wilderness Area Arc 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	YES	-1		NO
OFFSET_FT	Arc Offset in Feet	Short Integer	YES	0		NO
LEGAL_DESCR	Legal Description	Char(20)	NO			NO
GlobalID	GlobalID	UUID	YES			NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO

GIS Name	Logical Name	Definition/Design Consideration			
CREATE_DATE	Location Effective Date	Logical Definition : The date which is the calendar year, month, and day when the positio 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 Consideration					
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.					
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.					
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK					

GIS Name	Logical Name	Definition/Design Consideration			
COORD_SRC2 Location Source Description Specific Name		Logical Definition : The name that identifies a more specific description of the location (coordinate source).			
		Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .			
DEF_FET_TYPE	Defining Feature Type Name	Logical Definition : The name that identifies the high-level category for the actual physic 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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>			

GIS Name	Logical Name	Definition/Design	Definition/Design Consideration				
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit Of Measure 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 U.S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy (NSSDA)</i> 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.)					
			Accuracy Me	easurement Example Table			
			1	+/- 1 Feet	-		
			10	+/- 10 Feet			
			15	+/- 15 Feet			
			20	+/- 20 Feet			
		100 +/- 100 Feet					
		¹ Federal Geographic <u>Standard for Spatial D</u>	Data Committee. 1 Data Accuracy, FGD	998. <u>Geospatial Positioning Accurac</u> C-STD-007.3-1998	cy Standards Part 3: National		
OFFSET_FT	Not Applicable	Logical Definition: Not on logical model.					
		Design Considera defining feature.	ations: The mea	surement, in feet, that an arc ha	as been offset from the		

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GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

D. NLCS Wilderness Areas Polygons (nlcs_wld_poly)

The polygon features for the NLCS Wilderness Areas are defined below. Domain values are used when appropriate.

A Wilderness is a special place where the earth and its community of life are essentially undisturbed; they retain a primeval character, without permanent improvements and generally appear to have been affected primarily by the forces of nature. In 1964, Congress established the National Wilderness Preservation System and designated the first Wilderness Areas in passing the Wilderness Act. The uniquely American idea of wilderness has become an increasingly significant tool to ensure long-term protection of natural landscapes. Wilderness protects the habitat of numerous wildlife species and serves as a biodiversity bank for many species of plants and animals. Wilderness is also a source of clean water.

	NLCS Wilderness Areas Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?	
NLCS_ID	NLCS Unique Identifier	Char(10)	YES			NO	
NLCS_NAME	NLCS Name	Char(100)	YES			NO	
CASEFILE_NO	Casefile Number	Char(17)	NO	UNK		NO	
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO	
DESIG_DATE	Designation Date	Date	YES	09/09/9999		NO	
GlobalID	GlobalID	UUID	YES			NO	

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.

GIS Name	Logical Name	Definition/Design Consideration
NLCS_NAME	National Landscape Conservation System	Logical Definition : The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values.
Place .	Place Name	Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.
CASEFILE_NO	Case File Number	Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions.
		Default: UNK
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

GIS Name	Logical Name	Definition/Design Consideration	
DESIG_DATE	National Landscape Conservation System Place Designation Date	Logical Definition: The date on which a national landscape conservation unit was designated as such through Congress or other authorized body.Design Considerations: The date will be in the format of MM/DD/YYYY.	
		Default: 09/09/9999	
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.	

E. NLCS Wilderness Study Areas Arcs (nlcs_wsa_arc)

The arc features used to define the NLCS Wilderness Study Areas polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

NLCS Wilderness Study Areas Arc 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	YES	-1		NO
OFFSET_FT	Arc Offset in Feet	Short Integer	YES	0		NO
LEGAL_DESCR	Legal Description	Char(20)	NO			NO
GlobalID	GlobalID	UUID	YES			NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO

GIS Name	Logical Name	Definition/Design Consideration	
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 Consideration			
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.			
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.			
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK			

GIS Name	Logical Name	Definition/Design Consideration
COORD_SRC2 Location Source Description Specific Name		Logical Definition : The name that identifies a more specific description of the location (coordinate source).
		Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .
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 Logi Description Name which the p		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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>

GIS Name	Logical Name	Definition/Design	n Consideration				
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit of Measure 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 U. S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy (NSSDA)¹</i> which is a data usability standard issued by the Federal Geographic Data Committee (FGDC).					
		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.)					
			Accuracy Measurement Example Table				
			1 +/- 1 Feet				
			10	+/- 10 Feet	-		
			15	+/- 15 Feet			
			20	+/- 20 Feet			
			100 +/- 100 Feet				
		¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National</u> <u>Standard for Spatial Data Accuracy</u> , FGDC-STD-007.3-1998					
OFFSET_FT	Not Applicable	Logical Definition: Not on logical model.					
		Design Consider defining feature.	Design Considerations: The measurement, in feet, that an arc has been offset from the defining feature.				
				Default: 0			

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GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

F. NLCS Wilderness Study Areas Polygons (nlcs_wsa_poly)

The polygon features for the NLCS Wilderness Study Areas are defined below. Domain values are used when appropriate.

The Federal Land Policy and Management Act of 1976 directed the Bureau to inventory and study its roadless areas for wilderness characteristics. To be designated as a Wilderness Study Area, an area has to have the following characteristics: Size - roadless areas of at least 5,000 acres of public lands or of a manageable size; Naturalness - generally appears to have been affected primarily by the forces of nature; Opportunities - provides outstanding opportunities for solitude or primitive and unconfined types of recreation. In addition, Wilderness Study Areas often have special qualities such as ecological, geological, educational, historical, scientific and scenic values.

NLCS Wilderness Study Areas Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
NLCS_ID	NLCS Unique Identifier	Char(10)	YES			NO
NLCS_NAME	NLCS Name	Char(100)	YES			NO
CASEFILE_NO	Casefile Number	Char(17)	NO	UNK		NO
WSA_RCMND	WSA Recommendation	Char(20)	YES		NLCS_DOM_WSA_RCMND	NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
ROD_DATE	Record of Decision Date	Date	YES	09/09/9999		NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.

GIS Name	Logical Name	Definition/Design Consideration
NLCS_NAME	National Landscape Conservation System	Logical Definition : The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values.
		Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.
CASEFILE_NO	Case File Number	Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions
		Default: UNK
WSA_RCMND	Wilderness Study Area Recommendation Name	Logical Definition : The name that indicates the BLM recommendation on wilderness suitability.
		Design Considerations:
		Attribute Domain Assignment: NLCS_DOM_WSA_RCMND
GIS Name	Logical Name	Definition/Design Consideration
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ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST
ROD_DATE	Land Related Project Decision Date	Logical Definition : The date on which the decision is signed by the person who has approval authority for the decisions.
		Design Considerations: The Record of Decision signing date of the monitoring or activity plan, if any, for the particular Wilderness Study Area. The date will be in the format of MM/DD/YYYY.
		Default: 09/09/9999
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.

G. NLCS Other Related Lands Arcs (nlcs_oth_rel_Inds_arc)

The arc features used to define the NLCS Other Related Lands polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

	NLCS Other Related Lands Arc 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	YES	-1		NO			
OFFSET_FT	Arc Offset in Feet	Short Integer	YES	0		NO			
LEGAL_DESCR	Legal Description	Char(20)	NO			NO			
GlobalID	GlobalID	UUID	YES			NO			
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO			
			1	1					

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GIS Name	Logical Name	Definition/Design Consideration
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
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

GIS Name	Logical Name	Definition/Design Consideration
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.
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK
COORD_SRC2	Location Source Description Specific	Logical Definition : The name that identifies a more specific description of the location (coordinate source).
	Name	Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .
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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>

GIS Name	Logical Name	Definition/Design	Definition/Design Consideration					
ACCURACY_FT	Line Form Accuracy Measure	Logical Definitio Type Name the ad	Logical Definition: The measure that describes how close, in Line Form Unit of Measure Fype Name the actual location is to the spatial depiction.					
		Design Consider ground location is by one of three m map was used to o or 3) the measures <i>Accuracy (NSSDA)</i> Committee (FGDC	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 U.S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy (NSSDA)¹</i> which is a data usability standard issued by the Federal Geographic Data Committee (FGDC).					
		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.)						
		Accuracy Measurement Example Table						
			1 +/- 1 Feet					
			10	+/- 10 Feet	-			
			15	+/- 15 Feet	-			
			20	+/- 20 Feet				
			100	+/- 100 Feet	-			
		¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National</u> <u>Standard for Spatial Data Accuracy</u> , FGDC-STD-007.3-1998						
OFFSET_FT	Not Applicable	Logical Definition	n: Not on logical	model.				
		Design Consider defining feature.	ations: The meas	surement, in feet, that an arc ha	as been offset from the			
				Default: 0				

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GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

H. NLCS Other Related Lands Polygons (nlcs_oth_rel_Inds_poly)

The polygon features for the NLCS Other Related Lands are defined below. Domain values are used when appropriate.

Included in this feature class are lands not in Wilderness or Wilderness Study Areas that have been determined to have wilderness character through inventory or land use planning. These lands fall into one of two categories:

NLCS Other Related Lands:

WILDERNESS VALUE - LANDS WITH WILDERNESS CHARACTERISTICS

Inventoried areas not in Wilderness or Wilderness Study Areas that have been determined to meet the size, naturalness, and the outstanding solitude and/or the outstanding primitive and unconfined recreation criteria.

WILDERNESS CHARACTERISTIC PROTECTION AREAS

Former lands with Wilderness Value - Lands with Wilderness Characteristics where a plan decision has been made to protect them.

	NLCS Other Related Lands Polygon Attributes								
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?			
NLCS_ID	NLCS Unique Identifier	Char(10)	YES			NO			
NLCS_NAME	NLCS Name	Char(100)	YES			NO			
CASEFILE_NO	Casefile Number	Char(17)	NO	UNK		NO			
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO			
WC_TYPE	Designation	Char(43)	YES		NLCS_DOM_WC_TYPE	NO			
GlobalID	GlobalID	UUID	YES			NO			
	•	•				•			

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.
NLCS_NAME	National Landscape Conservation System Place Name	 Logical Definition: The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values. Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.
CASEFILE_NO	Case File Number	Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions.
		Default: UNK

GIS Name	Logical Name	Definition/Design Consideration
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST
WC_TYPE	National Landscape Conservation System	Logical Definition : The name that indicates the type of the nationally significant designated areas.
	Type Name	Design Considerations:
		Attribute Domain Assignment: NLCS_DOM_WC_TYPE
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.

I. NLCS Wild and Scenic River Lines (nlcs_wsr_ln)

The line features for NLCS Wild and Scenic Rivers are defined below. Domain values are used when appropriate. The feature class is related to the nlcs_wsr_orv_tbl (table) through the nlcs_wsr_orv_rel (relationship class).

The Wild and Scenic River feature class includes selected rivers in the United States preserved for possessing outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Rivers, or sections of rivers, so designated are preserved in their free-flowing condition and are not dammed or otherwise improved.

Lines will be segmented when any of the attributes change (e.g. when the classification changes) or to capture changes in Outstandingly Remarkable Values (ORV). Every segment must have at least one record in the related table, nlcs_wsr_orv_tbl.

	NLCS Wild and Scenic River Line Attributes								
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?			
NLCS_ID	NLCS Unique Identifier	Char(10)	YES			NO			
WSR_CTGY	Category	Char(25)	YES		NLCS_DOM_WSR_CTGY	NO			
NLCS_NAME	NLCS Name	Char(100)	YES			NO			
CASEFILE_NO	Casefile Number	Char(17)	NO	UNK		NO			
WSR_SGMNT_NO	WSR Segment Number	Char(10)	YES			NO			
NHD_RCH_CD	National Hydrography Dataset Reach Code	Char(14)	YES	UNK		NO			
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO			
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			

NLCS Wild and Scenic River Line Attributes								
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?		
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	YES	-1		NO		
GlobalID	GlobalID	UUID	YES			NO		

GIS Name	Logical Name	Definition/Design Consideration	
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last air digits will be a sequential number.	
		"NLCS" and the last six digits will be a sequential number.	
WSR_CTGY	Wild and Scenic River Status Name/River Conservation Classification Name	 Logical Definition: The name that indicates the status of the wild and scenic river conservation classification. A name that indicates one of the river classifications as defined in the Wild and Scenic Rivers Act of 1968. Design Considerations: Attribute Domain Assignment: NLCS DOM WSR CTGY 	
NI CS NAME	National Landscape	Logical Definition: The name of a nationally significant designated area with scientific	
NLC5_NAME	Conservation System Place Name	cultural, educational, ecological and other values.	
		Design Considerations: The official name of the Wild and Scenic River. It may contain spaces, plus a combination of upper and lowercase alpha characters.	

GIS Name	Logical Name	Definition/Design Consideration		
CASEFILE_NO	Case File Number	Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.		
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions.		
		Default: UNK		
WSR_SGMNT_NO	Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.		
		Design Considerations: The segment number will be ten alpha-numeric characters, comprised of the two-digit BLM Administrative State, followed by eight numbers. Each state will generate and manage their own sets of numbers. Each number must be unique within a given state.		
NHD_RCH_CD	Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.		
		Design Considerations: The code is comprised of two parts: The first 8 are the hydrologic unit code for the sub basin in which the reach exists; the last 6 digits are assigned in sequential order, arbitrarily among reaches. While this is a mandatory attribute, a value of UNK is allowed. This field is for future use as new data is compiled from NHD data. Default: UNK		
1				

GIS Name	Logical Name	Definition/Design Consideration			
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2			
		Design Considerations: 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.			
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)			
		Note: This attribute is included for purposes of replication.			
		Attribute Domain Assignment: DOM_ADMIN_ST			
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			
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			

GIS Name	Logical Name	Definition/Design Consideration
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.
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK
COORD_SRC2	Location Source Description Specific	Logical Definition : The name that identifies a more specific description of the location (coordinate source).
	Name	Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .

GIS Name	Logical Name	Definition/Design Consideration			
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 which the arcs are derived to create polygon boundaries. This information further des the physical or mapping feature that makes up the polygon boundary.			
		Design Considerations: <u>Suggested</u> 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. <u>This is an optional attribute.</u>			

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GIS Name	Logical Name	Definition/Design Consideration				
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit of Measure 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 U. S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy (NSSDA)¹</i> 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.)				
		Accuracy Measurement Example Table				
			1	+/- 1 Feet		
			10	+/- 10 Feet		
			15	+/- 15 Feet		
		20 +/- 20 Feet 100 +/- 100 Feet				
		¹ Federal Geographic Standard for Spatial D	Data Committee. 1 Data Accuracy, FGI	1998. <u>Geospatial Positioning Accuracy</u> DC-STD-007.3-1998	V Standards Part 3: National	

GIS Name	Logical Name	Definition/Design Consideration
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.

J. NLCS Wild and Scenic River Outstandingly Remarkable Values Table (nlcs_wsr_orv_tbl)

The one-to-many table for recording Outstandingly Remarkable Values (ORVs) for each Wild and Scenic River segment is defined below. Each river segment must have one or more records documenting the associated Outstandingly Remarkable Values. If there are no ORVs associated with a river segment, then populate the ORV field with the default value "None."

NLCS Wild and Scenic River Outstandingly Remarkable Values Table Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
WSR_SGMNT_NO	WSR Segment Number	Char(10)	YES			NO
ORV	Outstandingly Remarkable Value	Char(30)	YES	None	NLCS_DOM_ORV	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Consideration			
WSR_SGMNT_NO	Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.			
		Design Considerations: The segment number will be ten alpha-numeric characters, comprised of the two-digit BLM Administrative State, followed by eight numbers. Each state will generate and manage their own sets of numbers. Each number must be unique within a given state.			
ORV	Outstandingly Remarkable Value Name	Logical Definition : The name of the outstandingly remarkable value which is a unique, rare, or exemplary feature that is significant at a comparative regional or national scale.			
		Design Considerations:			
		Attribute Domain Assignment: NLCS_DOM_ORV Default: None			
GlobalID	Not Applicable	Logical Definition: Not on 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 only.			

K. NLCS Wild and Scenic River Corridor Arc (nlcs_wsr_corr_arc)

The arc features used to define the NLCS Wild and Scenic River Corridor polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

NLCS Wild and Scenic River Corridor Arc 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	YES	-1		NO
OFFSET_FT	Arc Offset in Feet	Small Integer	YES	0		NO
LEGAL_DESCR	Legal Description	Char(20)	NO			NO
GlobalID	GlobalID	UUID	YES			NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO

GIS Name	Logical Name	Definition/Design Consideration
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
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

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GIS Name	Logical Name	Definition/Design Consideration
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.
		Design Considerations : The domain contains those values that would most likely be used in the determination of source codes for the dataset.
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK
COORD_SRC2	Location Source Description Specific	Logical Definition : The name that identifies a more specific description of the location (coordinate source).
Name		Design Considerations : <u>Suggested values</u> 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'. <u>This is an optional attribute</u> .
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 : <u>Suggested</u> 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. <u>This is an optional attribute</u> .

GIS Name	Logical Name	Definition/Design	n Consideration	1			
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit of Measure 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 U. S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy</i> (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.)					
		Accuracy Measurement Example Table					
		1 +/- 1 Feet					
			10 +/- 10 Feet				
		15 +/- 15 Feet					
		20 +/- 20 Feet					
		100 +/- 100 Feet					
	¹ Federal Geographic Data Committee. 1998. Geospatial Positioning Accuracy Standards Part 3: Nati Spatial Data Accuracy, FGDC-STD-007.3-1998						
OFFSET_FT	Not Applicable	Logical Definition	n: Not on logic	al model.			
		Design Considerations: The measurement, in feet, that an arc has been offset from defining feature.					
				Default: 0			

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GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

L. NLCS Wild and Scenic River Corridor Polygons (nlcs_wsr_corr_poly)

The polygon features for the NLCS Wild and Scenic River Corridor are defined below. The corridor is the official area that is managed to protect the outstandingly remarkable values of that river segment. Domain values are used when appropriate.

DOMAIN NAME	DERIVED?
	NO
	NO
NLCS_DOM_WSR_CTGY	NO
	NO
DOM_ADMIN_ST	NO
_	NLCS_DOM_WSR_CTGY

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.
NLCS_NAME	National Landscape Conservation System Place Name	 Logical Definition: The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values. Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.
WSR_CTGY	Wild and Scenic River Status Name/River Conservation Classification Name	 Logical Definition: The name that indicates the status of the wild and scenic river conservation classification. A name that indicates one of the river classifications as defined in the Wild and Scenic Rivers Act of 1968. Design Considerations: Attribute Domain Assignment: NLCS_DOM_WSR_CTGY

GIS Name	Logical Name	Definition/Design Consideration
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

M. NLCS National Scenic and Historic Trails Lines (nlcs_nsht_ln)

The line features used to define the NLCS National Scenic and Historic Trails are defined below. These attributes serve to store the feature level metadata information for the lines. The fifth through the ninth attributes document the origin and characteristics of each line.

Note: There is an additional column in two of the tables pertaining to National Scenic and Historic Trails. This column, "FGDC Equivalent" lists the name of the corresponding attribute as captured in the August 2010 FGDC Federal Trail Data Standard. It is listed here for informational purposes only.

NLCS National Scenic and Historic Trails Line Attributes							
GIS NAME	ALIAS	FGDC EQUIVALENT	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
NLCS_ID	NLCS Unique Identifier		Char(10)	YES			NO
TRAIL_TYPE	Trail Designation		Char(20)	YES		DOM_TRAIL_TYPE	NO
NSHT_SGMNT_NO	NSHT Segment Number		Char(10)	YES			NO
NLCS_NAME	NLCS Name	Trail Name	Char(100)	YES			NO
FAMS_ID	Facilities Asset Management ID		Char(8)	YES			NO
CASEFILE_NO	Casefile Number		Char(17)	NO	UNK		NO
MNG_AGCY	Managing Agency		Char(8)	YES		NLCS_DOM_MNG_AGCY	NO
ADMIN_ST	Administrative State Code		Char(2)	YES		DOM_ADMIN_ST	NO
NHT_CND_CTGY	National Historic Trails Condition Category	NHT Condition Category	Char(60)	NO		DOM_NHT_CND_CTGY	NO
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

NLCS National Scenic and Historic Trails Line Attributes							
GIS NAME	ALIAS	FGDC EQUIVALENT	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
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	YES	-1		NO
GlobalID	GlobalID		UUID	YES			NO

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.
TRAIL_TYPE	Trail Designation Type Name	Logical Definition: The name that describes the type of designation given to a piece of land. If Designated National Trail, values are scenic or historic.
		Design Considerations: (Note: While this attribute may contain additional values in other datasets, for this dataset these are the only applicable values.)
		Note: This attribute does not correspond with the August 2010 FGDC/Federal Trails Data Standard attribute for "TRAIL TYPE."
		Attribute Domain Assignment: DOM_TRAIL_TYPE

GIS Name	Logical Name	Definition/Design Consideration			
NSHT_	Trail Segment	Logical Definition: The official numeric or alpha numeric identifier for the trail segment.			
SGMNT_NO	Identifier	Design Considerations: The segment number will be ten alpha-numeric characters, comprised of the two-digit BLM Administrative State, followed by eight numbers. Each state will generate and manage their own sets of numbers. Each number must be unique within a given state.			
NLCS_NAME National Landscape Conservation System Place Name	National Landscape	Logical Definition: The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values.			
	System Place Name	Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.			
		Note: The NLCS_NAME attribute corresponds with the August 2010 FGDC/Federal Trails Data Standard attribute "TRAIL NAME." However, the NLCS NAME attribute is a longer field length (100 vs. 60 characters) to allow for the full range of NLCS names found in this standard.			
FAMS_ID	Facility Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.			
		Design Considerations: If an NSHT segment exists in the Facility Asset Management System (FAMS), this is a mandatory attribute.			
CASEFILE_NO Case File Number		Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.			
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions.			
		Default: UNK			

GIS Name	Logical Name	Definition/Design Consideration			
MNG_AGCY	Organization	Logical Definition: The code that indicates the preferred acronym for an organization.			
	Acronym Code	Design Considerations: The managing agency of the NLCS unit.			
		Note: This attribute does not correspond directly with the August 2010 FGDC/Federal Trails Data Standard attribute for Managing Org. The FGDC attribute requires a level of detail that is not captured in this standard.			
		Attribute Domain Assignment: NLCS_DOM_MNG_AGCY			
ADMIN_ST State Alphabetic Code		Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2			
		Design Considerations: 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.			
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)			
		Note: This attribute is included for purposes of replication.			
		Attribute Domain Assignment: DOM_ADMIN_ST			
NHT_CND_ CTGY	NHT Condition Category (from Federal Trail Data Standard - FTDS)	Logical Definition: The text associated with the "Interagency classification category designed to assess the comparative character of visible trail remnants of the NHT at the time of mapping."			
		Design Considerations: National Historic Trail condition category. This attribute is called the "NHT Condition Category" in the Federal (interagency) Trails Data Standard.			
		Attribute Domain Assignment: DOM_NHT_CND_CTGY			

GIS Name	Logical Name	Definition/Design Consideration			
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			
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.			
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.			
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK			

GIS Name	Logical Name	Definition/Design Consideration
COORD_SRC2	Location Source Description	Logical Definition : The name that identifies a more specific description of the location (coordinate source).
Specific Name		Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .
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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>

GIS Name	Logical Name	Definition/Design Consideration				
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit of Measure 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 U. S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy</i> (<i>NSSDA</i>) ^{<i>l</i>} 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.)				
			Accuracy Measurement Example Table			
			1 +/- 1 Feet			
			10	+/- 10 Feet		
			15	+/- 15 Feet		
			20	+/- 20 Feet		
			100	+/- 100 Feet		
		¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National S</u> <u>Spatial Data Accuracy</u> , FGDC-STD-007.3-1998				
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables. 				

N. NLCS National Scenic and Historic Trails Corridor Arcs (nlcs_nsht_corr_arc)

The arc features used to define the NLCS National Scenic and Historic Trails Corridor polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

NLCS National Scenic and Historic Trails Corridor Arc 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	YES	-1		NO
OFFSET_FT	Arc Offset in Feet	Short Integer	YES	0		NO
LEGAL_DESCR	Legal Description	Char(20)	NO			NO
GlobalID	GlobalID	UUID	YES			NO
ADMIN_ST	ADMIN_ST Administrative State Code		YES		DOM_ADMIN_ST	NO

GIS Name	Logical Name	Definition/Design Consideration			
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			
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			

GIS Name	Logical Name	Definition/Design Consideration			
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. Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset. 			
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK			
COORD_SRC2 Location Source Description Specific		Logical Definition : The name that identifies a more specific description of the location (coordinate source).			
	Name	Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .			
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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>			

GIS Name	Logical Name	Definition/Design Consideration				
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition : The measure that describes how close, in Line Form Unit of Measure 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 U. S. Geological Survey (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 <i>National Standard for Spatial Data Accuracy (NSSDA)¹</i> 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.)				
		Accuracy Measurement Example Table				
			1 +/- 1 Feet			
			10	+/- 10 Feet		
			15	+/- 15 Feet		
			20	+/- 20 Feet		
			100	+/- 100 Feet		
		¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards F</u> <u>Standard for Spatial Data Accuracy</u> , FGDC-STD-007.3-1998				
OFFSET_FT	Not Applicable	Logical Definition: Not on logical model.				
		Design Considerations: The measurement, in feet, that an arc has been offset from the defining feature.				
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GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

O. NLCS National Scenic and Historic Trails Corridor Polygons (nlcs_nsht_corr_poly)

The polygon features for the NLCS National Scenic and Historical Trails Corridors are defined below. The corridor is the area that will be managed to protect the purposes for which the trail was established. Domain values are used when appropriate.

Note: There is an additional column in two of the tables pertaining to National Scenic and Historic Trails. This column, "FGDC Equivalent" lists the name of the corresponding attribute as captured in the August 2010 FGDC Federal Trails Data Standard. It is listed here for informational purposes only.

	NLCS National Scenic and Historic Trails Corridor Polygon Attributes						
GIS NAME	ALIAS	FGDC EQUIVALENT	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
NLCS_ID	NLCS Unique Identifier		Char(10)	YES			NO
NLCS_NAME	NLCS Name	Trail Name	Char(100)	YES			NO
TRAIL_TYPE	Trail Designation		Char(20)	YES		DOM_TRAIL_TYPE	NO
MNG_AGCY	Managing Agency		Char(8)	YES		NLCS_DOM_MNG_AGCY	NO
GlobalID	GlobalID		UUID	YES			NO
ADMIN_ST	Administrative State Code		Char(2)	YES		DOM_ADMIN_ST	NO

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.

GIS Name	Logical Name	Definition/Design Consideration			
NLCS_NAME	National Landscape Conservation System Place Name	Logical Definition: The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values.			
		Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.			
		Note: The NLCS_NAME attribute corresponds with the August 2010 FGDC/Federal Trails Data Standard attribute "TRAIL NAME." However, the NLCS NAME attribute is a longer field length (100 vs. 60 characters) to allow for the full range of NLCS names found in this standard.			
TRAIL_TYPE	Trail Designation Type Name	Logical Definition: The name that describes the type of designation given to a piece of If Designated National Trail, values are scenic or historic.			
		Design Considerations: (Note: While this attribute may contain additional values in other datasets, for this dataset these are the only applicable values.)			
		Note: This attribute does not correspond with the August 2010 FGDC/Federal Trails Data Standard attribute for "TRAIL TYPE."			
		Attribute Domain Assignment: DOM_TRAIL_TYPE			
MNG_AGCY Organization		Logical Definition: The code that indicates the preferred acronym for an organization.			
	Acronym Code	Design Considerations: The managing agency of the NLCS unit.			
		Note: This attribute does not correspond directly with the August 2010 FGDC/Federal Trails Data Standard attribute for Managing Org. The FGDC attribute requires a level of detail that is not captured in this standard.			
		Attribute Domain Assignment: NLCS_DOM_MNG_AGCY			

GIS Name	Logical Name	Definition/Design Consideration
GlobalID	Not Applicable	Logical Definition: Not on 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 only.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

P. NLCS Conservation Lands of the California Desert Arcs (nlcs_clcd_arc)

The arc features used to define the NLCS Conservation Lands of the California Desert are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries. The fifth through the ninth attributes document the origin and characteristics of each arc.

Note: The data standard for this feature class is preliminary.

NLCS Conservation Lands of the California Desert Arc 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	YES	-1		NO
OFFSET_FT	Arc Offset in Feet	Short Integer	YES	0		NO
LEGAL_DESCR	Legal Description	Char(20)	NO			NO
GlobalID	GlobalID	UUID	YES			NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
			•			

GIS Name	Logical Name	Definition/Design Consideration				
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				
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				

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GIS Name	Logical Name	Definition/Design Consideration
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.
		Design Considerations: The domain contains those values that would most likely be used in the determination of source codes for the dataset.
		Attribute Domain Assignment: DOM_COORD_SOURCE_TYPE Default: UNK
COORD_SRC2	Location Source Description Specific	Logical Definition : The name that identifies a more specific description of the location (coordinate source).
	Name	Design Considerations: <u>Suggested</u> 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'. <u>This is an optional attribute</u> .
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: <u>Suggested</u> 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. <u>This is an optional attribute.</u>

GIS Name	Logical Name	Definition/Design	Definition/Design Consideration				
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition	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 <i>National Standard for Spatial Data Accuracy (NSSDA)</i> 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.)					
			Accuracy M	easurement Example Table			
			1	+/- 1 Feet			
			10	+/- 10 Feet			
			15	+/- 15 Feet			
			20	+/- 20 Feet			
		100 +/- 100 Feet					
		¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: N</u> <u>Standard for Spatial Data Accuracy</u> , FGDC-STD-007.3-1998					
OFFSET_FT	Not Applicable	Logical Definition: Not on logical model.					
		Design Considera defining feature.	ations: The me	asurement, in feet, that an arc ha	s been offset from the		

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GIS Name	Logical Name	Definition/Design Consideration
LEGAL_DESC	Not Applicable	Logical Definition: Not on logical model.
		Design Considerations: This field will provide a link to the Congressionally required legal boundary description. It will link to that text document through either a segment ID number or by referencing the start- and end-points traditionally annotated on the Congressionally required map and referenced in the boundary description.
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2
		Design Considerations: 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.
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)
		Note: This attribute is included for purposes of replication.
		Attribute Domain Assignment: DOM_ADMIN_ST

Q. NLCS Conservation Lands of the California Desert Polygons (nlcs_clcd_poly)

The polygon features for the NLCS Conservation Lands of the California Desert are defined below. Domain values are used when appropriate.

Conservation Lands of the California Desert are those public lands (currently being identified in response to the 2009 Omnibus Public Land Management Act) within the California Desert Conservation Area that are administered by the BLM for conservation purposes. By act of Congress, all public lands within the California Desert Conservation Area administered by the BLM for conservation purposes are included in the BLM's National Landscape Conservation System.

Note: The data standard for this feature class is preliminary.

	NLCS Conservation Lands of the California Desert Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?	
NLCS_ID	NLCS Unique Identifier	Char(10)	YES			NO	
NLCS_NAME	NLCS Name	Char(100)	YES			NO	
CASEFILE_NO	Casefile Number	Char(17)	NO	UNK		NO	
GlobalID	GlobalID	UUID	YES			NO	
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO	

GIS Name	Logical Name	Definition/Design Consideration
NLCS_ID	National Landscape Conservation System Place Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity.Design Considerations: The primary key for NLCS will be 10 digits. The first four will be "NLCS" and the last six digits will be a sequential number.

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GIS Name	Logical Name	Definition/Design Consideration	
NLCS_NAME	National Landscape Conservation System	Logical Definition : The name of a nationally significant designated area with scientific, cultural, educational, ecological and other values.	
	Place Name	Design Considerations: The official name of the NLCS area. It may contain spaces, plus a combination of upper and lowercase alpha characters.	
CASEFILE_NO	Case File Number	Logical Definition : The number that refers to the serialized case file number of the group of official documents that record the facts, or actions taken, on a specific application, such as an oil and gas lease, exchange, airport lease, easement acquisition, etc.	
		Design Considerations: The serialized case number for each NLCS area. The BLM standard for permanently preserving official records of congressionally required maps and legal boundary descriptions.	
		Default: UNK	
GlobalID	Not Applicable	Logical Definition: Not on 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 only. It is not used as a unique identifier for relationships between feature classes/tables.	

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GIS Name	Logical Name	Definition/Design Consideration	
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2	
		Design Considerations: 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.	
		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 FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL <u>AK</u> 030900)	
		Note: This attribute is included for purposes of replication.	
		Attribute Domain Assignment: DOM_ADMIN_ST	

APPENDIX A: DOMAIN VALUES

Domain values are maintained separately from the data standard. This is due to values being 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 thru 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 that 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.

For domain values specific to NLCS, see the NLCS Domains document.

For Feature Level Metadata Domains, please see the <u>Domain Information</u> Section, located 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."



Legend: See Appendix C

APPENDIX C: READING A LOGICAL DATA MODEL

CUSTOMER -Primary Ke "CUSTOMER IDENTIFIER" [PK1] -Non-Key Attribut "CUSTOMER NAME"	 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. 				
CUSTOMER -Primary Ke "CUSTOMER IDENTIFIER" [PK1] -Non-Key Attribut "CUSTOMER NAME" The line includes optionality (missymbol) and cardinality (maximu entity) ////////////////////////////////////	ORDER -Primary Ke "ORDER IDENTIFIER" [PK1] -Non-Key Attribut "ORDER DATE" "CUSTOMER IDENTIFIER" [FK] nimum occurrences, inner um occurrences, symbol next to ero $< or > = many$	 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 			
ORDER -Primary Ke "ORDER IDENTIFIER" [PK1] -Non-Key Attribut. "ORDER DATE" ORDER -PrimaryKey "ORDER IDENTIFIER" [PK1] -Non-Key Attributes "ORDER IDENTIFIER" [FK] -Non-Key Attributes "ORDER DATE" "CUSTOMER IDENTIFIER" [FK]	PRODUCT -Primary Ke -PRODUCT IDENTIFIER" [PK1] -Non-Key Attribut -PRODUCT NAME" -PRODUCT NAME" -PRODUCT MODEL NAME" ORDER PRODUCT -PrimaryKey -PROBE/DENTIFIER" [PK1] [FK] -PRODUCT IDENTIFIER" [PK2] [FK] -PRODUCT IDENTIFIER" [PK2] [FK] - ORDER PRODUCT - ORDER PRODUCT QUANTITY	PRODUCT -PrimaryKey "PRODUCT IDENTIFIER" [PK1] NorkeyAttributes "PRODUCT NAME" "PRODUCT MODEL NAME"	 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 Metadata Definition Field		Example				
GIS Name	<i>The abbreviated name of the field as it appears in the database.</i>	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.	<i>Char</i> (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				
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				