AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) IMPLEMENTATION GUIDELINES

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

Implementation Guidelines for Areas of Critical Environmental Concern (ACEC)

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Part I: Introduction

This document describes the national data standard for the Areas of Critical Environmental Concern (ACEC) 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. The arc information and the feature level metadata will exist in the arc feature class. For the full physical implementation, including instructions and files to build a geodatabase, please go to http://teamspace/sites/blmnds/est2010/default.aspx.

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.

There are nine tables in this implementation:

1. *acec_predesig_arc* represents the arc features that will define the Pre-designated ACEC polygons. These arcs will have the feature level metadata attributes shown assigned to them.
2. *acec_predesig_poly* represents the polygon features that show the boundaries for the Pre-Designated ACECs.
3. *acec_desig_arc* represents the arc features that will define the Designated ACEC polygons. These arcs will have the feature level metadata attributes shown assigned to them.
4. *acec_desig_poly* represents the polygon features that show the boundaries for the Designated ACECs.
5. *acec_hist_poly* represents the polygon features that show Historical ACECs.
6. *acec_predesig_desig_type_tbl* will contain the legally recognizable/designated reason(s) that an area that has been nominated or considered as an ACEC.
7. *acec_predesig_mgmt_const_tbl* will contain the legally recognizable/designated management constraint(s) placed on an area that has been nominated or considered as an ACEC.
8. *acec_desig_type_tbl* will contain the legally recognizable/designated reason(s) that an area that has been designated as an ACEC.
9. *acec_mgmt_const_tbl* will contain the legally recognizable/designated management constraint(s) placed on an area that has been designated as an ACEC.

Domains

This geodatabase does not include the following shared domains (common to other datasets). These domains are common with other data standards and feature classes, and as such they must be implemented differently than those domains that are specific to the data standard (reference Domain Information section located at http://web.blm.gov/data_mgt/std_proc.htm).

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

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

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.

- ACEC_DOM_DESIG_CODE
- ACEC_DOM_DESIG_STATUS
- ACEC_DOM_LIMIT
- ACEC_DOM_MGMT_CON_TYPE
- ACEC_DOM_SEN_CODE

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.

The following Geodatabase Topology Rules apply:

- *acec_predesig_arc* **Must Not Overlap**
- *acec_predesig_arc* **Must Be Covered By Boundary Of** *acec_predesig_poly*
- *acec_predesig_arc* **Must Not Self-Overlap**
- *acec_predesig_poly* **Must Not Overlap**
- *acec_predesig_ poly* **Boundary Must Be Covered By** *acec_predesig_arc*
- *acec_desig_arc* **Must Not Overlap**
- *acec_desig_arc* **Must Be Covered By Boundary Of** *acec_desig_poly*
- *acec_desig_arc* **Must Not Self-Overlap**
- *acec_desig_poly* **Must Not Overlap**
- *acec_desig_ poly* **Boundary Must Be Covered By** *acec_desig_arc*

If you are creating new data where the polygons are being created by the bounding arcs, you may want to include the GDB topology rule "*Must not have dangles"* for the arc feature class(es). This way any gaps in the lines defining your polygon boundaries can be discovered and corrected before you construct your polygons.

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.

The Administrative State, District and Field Office codes were part of a three tier identification system, which has been replaced by the ten-character DOI FBMS Organization Code. For BLM national data standards, we will be using only the last eight characters of the FBMS organization code (the two-character BLM Administrative State Code and the six-character Administrative Office Code). While using these codes in combination can contribute to the creation of a unique identifier, they are also listed as separate attributes so that if the codes change at a single level, the concatenated code can then be regenerated. However, if the 8 character code is used as part of a unique identifier, the unique identifier is not re-generated if the organization code changes.

To populate the field for the Administrative Unit Code attribute in the geodatabase (ADM_UNIT_CD), individual offices should download the Access database containing the common domains at the following website: http://web.blm.gov/data_mgt/std_proc.htm. Click on the link for “Shared Domain Values (Access DB)” to download the Access database). The field should be populated with the office code for the lowest level of the organization that has jurisdiction.

Review Cycle

The data for the ACECs should be reviewed on at least an annual basis for updates. The data standard itself will also be reviewed annually or at the time of request by the users through the data steward.

National Unique Identifier for ACEC

ACECs have not had a national unique national primary key (identifier). Each state has used its own design for what the identifier is for the state. Now that ACECs will be a national data set, a unique national identifier is required. The existing local identifiers for ACECs will be included with the data set, but will not be the primary key for the data set.

The primary key for ACEC will be ten digits. The first four will be "ACEC" and the last six digits will be a sequential number.

- Creating the Initial Data Set

There are currently over 1100 ACECs designated for the BLM. Each state has been assigned a range of unique identifiers to use. As the ACECs 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 ACEC.

Part II: Data Standard Implementation Details

Table Information

A. Areas of Critical Environmental Concern Pre-designated Arcs (acec_predesig_arc)

The arc features used to define the pre-designated polygon features are described in the following table. The arc attributes serve as feature level metadata information. Some of these items will be system generated in the future and will not require any input effort by the users. Others have Domain values with appropriate definitions. The last five attributes describe the data collection method along with a description of the expected spatial accuracy.

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

GIS Name	Logical Attribute Name	Definition
CREATE_DATE	Not Applicable	Not on the logical model. This is a system generated attribute. 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. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
CREATE_BY	Not Applicable	Not on the logical data model. This is a system Gen attribute. As a new feature is added to the system the UserID of the person creating the feature will be collected and maintained. The UserID will be the persons BLM login ID. This attribute will be deleted before providing the data to the public.
MODIFY_DATE	Not Applicable	Not on the logical model. This is a system generated attribute. 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. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
MODIFY_BY	Not Applicable	Not on the logical data model. This is a system Gen attribute. As a feature is edited or modified while in the system UserID of the person modifying the data will be collected and maintained. The UserID will be the persons BLM login ID. This attribute will be deleted before providing the data to the public.
COORD_SRC_TYPE	Location Source Type Name	The name (code) that identifies the general category for the origin of the location coordinate (Appendix A), representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. Attribute Domain Assignment: *DOM_COORD_SOURCE_TYPE* Default: UNK
COORD_SRC2	Location Source Description Specific Name	The name (code) that identifies a more specific description of the coordinate source. Suggested values appear in a table (Appendix A), but the user is free to enter any value they choose. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the 'Accuracy Measurement Table'. This is an optional attribute.
DEF_FET_TYPE	Defining Feature Type Name	The (name) code that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. (Appendix A) Attribute Domain Assignment: *DOM_DEF_FEATURE_TYPE* Default: UNK
DEF_FET2	Defining Feature Description Name	The name (code) 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. Suggested values appear in a table (Appendix A) but the user is free to enter any value they choose. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This is an optional attribute.
ACCURACY_FT	Line Form Accuracy Measure	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

<table>
<tr><td></td><td></td><td>spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the National Standard for Spatial Data Accuracy (NSSDA)[1] which is a data usability standard issued by the Federal Geographic Data Committee (FGDC).

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

A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g. LLAK039000)
Note: This attribute is included for purposes of replication.
Attribute Domain Assignment: DOM_ADMIN_ST</td></tr>
<tr><td>GlobalID</td><td>Not Applicable</td><td>Not on the logical model.

Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data.
Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.</td></tr>
</table>

B. Areas of Critical Environmental Concern Pre-designated Polygons (acec_predesig_poly)

The polygon features for pre-designated Areas of Critical Environmental Concern are defined below. Domain values are used when appropriate.

There will be a minimum of 15attributes associated with the pre-designated ACEC polygon features.

ACEC Pre-designated Polygons Attributes

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
LOC_ACEC_ID	Local ACEC Identifier	Char(20)	NO			No
ACEC_NAME	ACEC Name	Char(60)	YES	UNK		No
CASEFILE_NO	ACEC Casefile Number	Char(17)	NO	N/A		No
LUP_NAME	Land Use Plan Name	Char(50)	YES	UNK		No
ACEC_DESIG_STATUS	Status	Char(25)	YES	UNK	ACEC_DOM_DESIG_STATUS	No
STATUS_EFF_DATE	Status Effective Date	Date	YES	09/09/9999		No
STATUS_END_DATE	Status End Date	Date	YES	09/09/9999		No
GIS_ACRES	GIS Acres	Double (16.6)	YES	0		Yes
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
ADM_OFC_CD	Administrative Office Code	Char(6)	YES	000000		No
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	No
SENSITIVITY	View Sensitivity Code	Char(3)	YES	UNK	ACEC_DOM_SEN_CODE	No
COMMENTS	Comments	Char(250)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Attribute Name	Definition
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be “ACEC” and the last six digits will be a sequential number.
LOC_ACEC_ID	Not Applicable	Not on the logical data model. The current identifier that was used by a state or field office to identify an ACEC at the state or field office level.

ACEC_NAME	Area Critical Environmental Concern Name	The name of the ACEC taken from the Record of Decision and Land Use Plan which officially designated the ACEC.
CASEFILE_NO	Case File Number	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. (CMR). This field should be in uppercase (for example, OR035582). This is a BLM International Organization for Standardization (ISO) assigned number used for identification of all lands and minerals case files including ACECs. This is the link to the LR2000 database. N/A - Not Applicable is the default code and will be used when no casefile number has been assigned. A value of "UNK" indicates unknown.
LUP_NAME	Project Name	The name given to a project that represents the full, official name associated with the project. For ACECs, this attribute will be the Land Use Plan Name.
ACEC_DESIG_STATUS	ACEC Designation Status Name	The name that represents the stage of authorization category for an area being reviewed for the Land Use Plan. Attribute Domain Assignment: ACEC_DOM_DESIG_STATUS Default: UNK
STATUS_EFF_DATE	Pre-designated Status Effective Date	The date on which the pre-designation status of the area becomes effective. The date will be in the format of MM/DD/YYYY. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
STATUS_END_DATE	Pre-designated Status End Date	The date on which the pre-designation status of the area is no longer effective. The date will be in the format of MM/DD/YYYY.

		The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
GIS_ACRES	Not Applicable	Not on the logical data model. This is a calculated value of area in units of acres based on the area field created by default within the ESRI Polygon data structure. For the purposes of a 'national data layer', the data are to be stored in geographic coordinates which do not correspond to ground values. This requires that there be a standard method for calculating this attribute. The method used for these data are as follows: The data are projected into a standard projection such as the ESRI default Albers projection for the continental United States, "US Albers NAD 1983." Once the data are projected, then a calculation of "SHAPE_Area (square meters) * 0.0002471044 = acres" is applied to the existing 'area' field that is default area created by the ESRI software resulting in the field (Attribute) 'SHAPE_Area'. Please note that the figure used in this calculation is the factor for converting the US Survey Foot value from the length of a meter as opposed to the International Standard for converting meters and feet.
ADMIN_ST	State Alphabetic Code	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. A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g. LL**AK**039000) Attribute Domain Assignment: *DOM_ADMIN_ST*

ADM_OFC_CD	Office.BLM Organization Code	BLM administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. This is a six-digit code. In the FBMS Organization Codes, use the six characters after the State designators. (e.g. LLAK**030900**)
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This is an eight-character code. In the FMBS Organization Codes, use the last eight characters (e.g. LL**AK030900**). The field should be populated with the office code for the lowest level of the organization with jurisdiction. Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
SENSITIVITY	Area of Critical Environmental Concern View Sensitivity Code	A code that designates the sensitivity of the information on the ACEC. Attribute Domain Assignment: ACEC_DOM_SEN_CODE Default: UNK
COMMENTS	Area of Critical Environmental Concern Comments Text	The text that provides additional information about the Area of Critical Environmental Concern.
GlobalID	Not Applicable	Not on the logical model. Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

C. Areas of Critical Environmental Concern Designated Arcs (acec_desig_arc)

The arc features used to define the designated polygon features are described in the following table. The arc attributes serve as feature level metadata information. Some of these items will be system generated in the future and will not require any input effort by the users. Others have Domain values with appropriate definitions. The last five attributes describe the data collection method along with a description of the expected spatial accuracy.

ACEC Designated Arcs Attributes

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

GIS Name	Logical Attribute Name	Definition
CREATE_DATE	Not Applicable	Not on the logical data model. This is a system Gen attribute. 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. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
CREATE_BY	Not Applicable	Not on the logical data model. This is a system Gen attribute. As a new feature is added to the system the UserID of the person creating the feature will be collected and maintained. The UserID will be the persons BLM login ID. This attribute will be deleted before providing the data to the public.
MODIFY_DATE	Not Applicable	Not on the logical data model. This is a system Gen attribute. 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. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.

MODIFY_BY	Not Applicable	Not on the logical data model. This is a system Gen attribute. As a feature is edited or modified while in the system UserID of the person modifying the data will be collected and maintained. The UserID will be the persons BLM login ID. This attribute will be deleted before providing the data to the public.
COORD_SRC_TYPE	Location Source Type Name	The name (code) that identifies the general category for the origin of the location coordinate (Appendix A), representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. Attribute Domain Assignment: *DOM_COORD_SOURCE_TYPE* Default: UNK
COORD_SRC2	Location Source Description Specific Name	The name (code) that identifies a more specific description of the coordinate source. Suggested values appear in a table (Appendix A), but the user is free to enter any value they choose. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the 'Accuracy Measurement Table'. This is an optional attribute.
DEF_FET_TYPE	Defining Feature Type Name	The (name) code that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. (Appendix A) Attribute Domain Assignment: *DOM_DEF_FEATURE_TYPE* Default: UNK
DEF_FET2	Defining Feature Description Name	The name (code) 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. Suggested values appear in a table (Appendix A) but the user is free to enter any value they choose. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This is an optional attribute.
ACCURACY_FT	Line Form Accuracy Measure	The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the *National Standard for Spatial Data Accuracy (NSSDA)*[1] which is a data usability standard issued by the Federal Geographic Data Committee (FGDC).

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

A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g. LLAK039000)
Note: This attribute is included for purposes of replication.
Attribute Domain Assignment: DOM_ADMIN_ST</td></tr>
<tr><td>GlobalID</td><td>Not Applicable</td><td>Not on the logical model.

Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data.
Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.</td></tr>
</table>

D. Areas of Critical Environmental Concern Designated Polygons (acec_desig_poly)

Once a polygon feature leaves the Pre-Designated phase (transitions from Considered to Designated), that polygon will be removed from the ACEC Pre-designated feature class and be placed in the ACEC Designated feature class. The polygon features for designated Areas of Critical Environmental Concern are defined below. These Areas of Critical Environmental Concern boundary attributes may be duplicated in other data sets but are considered minimum information for unique feature identification and cartographic purposes. Domain values are used when appropriate.

There will be a minimum of 14 attributes associated with the designated ACEC polygon features.

ACEC Designated Polygons Attributes

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
LOC_ACEC_ID	Local ACEC Identifier	Char(20)	NO			No
ACEC_NAME	ACEC Name	Char(60)	YES	UNK		No
CASEFILE_NO	ACEC Casefile Number	Char(17)	NO	N/A		No
LUP_NAME	Land Use Plan Name	Char(50)	YES	UNK		No
ACEC_EST_ACR	ACEC Estimated Acres	Double (16.6)	NO	0		No
ROD_DATE	ROD Date	Date	YES	09/09/9999		No
GIS_ACRES	GIS Acres	Double (16.6)	YES	0		Yes
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
ADM_OFC_CD	Administrative Office Code	Char(6)	YES	000000		No
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	No
SENSITIVITY	View Sensitivity Code	Char(3)	YES	UNK	ACEC_DOM_SEN_CODE	No
COMMENTS	Comments	Char (250)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Attribute Name	Definition
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be “ACEC” and the last six digits will be a sequential number.
LOC_ACEC_ID	Not Applicable	Not on the logical data model.

		The current identifier that was used by a state or field office to identify an ACEC at the state or field office level.
ACEC_NAME	Area Critical Environmental Concern Name	The name of the ACEC taken from the Record of Decision and Land Use Plan which officially designated the ACEC.
CASEFILE_NO	Case File Number	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. (CMR). This field should be in uppercase (for example, OR035582). This is a BLM International Organization for Standardization (ISO) assigned number used for identification of all lands and minerals case files including ACECs. This is the link to the LR2000 database. N/A - Not Applicable is the default code and will be used when no casefile number has been assigned. A value of "UNK" indicates unknown.
LUP_NAME	Project Name	The name given to a project that represents the full, official name associated with the project. For ACECs, this attribute will be the Land Use Plan Name.
ACEC_EST_ACR	Designated ACEC Size Measure	The measure of the area estimated in the designation process for land use planning. This is the designated size (acres) and may be different than the actual area. This does not change. Acres are calculated using the following formula: [Acres = Area (in meters)/4046.87]. This may be different than the GIS calculated area of the ACEC polygon. This field value should be the same for each polygon in an ACEC comprised of multiple polygons. The values in this field do not change. Do not use this field to derive GIS acres.
ROD_DATE	Land Related Project Decision Date	The date on which the decision is signed by the person who has approval authority for the decisions. The ROD signing date of the monitoring or activity plan, if any, for the particular ACEC. The date will be in the format of MM/DD/YYYY. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
GIS_ACRES	Not Applicable	Not on the logical data model. This is a calculated value of area in units of acres based on the area field created by default within the ESRI Polygon data structure. For the purposes of a 'national data layer', the data are to be stored in geographic coordinates which do not correspond to ground values. This requires that there be a standard method for calculating this attribute. The method used for these data are as follows: The data are projected into a standard projection such as the ESRI default Albers projection for the continental United States, "US Albers NAD 1983." Once the data are projected, then a calculation of "SHAPE_Area (square meters) * 0.0002471044 = acres" is applied to the existing 'area' field that is default area created by the ESRI software resulting in the field (Attribute) 'SHAPE_Area'. Please note that the figure used in this calculation is the factor for converting the US Survey Foot value from the length of a meter as opposed to the International Standard for converting meters and feet.
ADMIN_ST	State Alphabetic Code	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. A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g. LL**AK**039000) Attribute Domain Assignment: *DOM_ADMIN_ST*
ADM_OFC_CD	Office.BLM Organization Code	BLM administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. This is a six-digit code. In the FBMS Organization Codes, use the six characters after the State designators. (e.g. LLAK**030900**)
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands.

		This is an eight-character code. In the FMBS Organization Codes, use the last eight characters (e.g. LL**AK030900**). The field should be populated with the office code for the lowest level of the organization with jurisdiction. Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
SENSITIVITY	Area of Critical Environmental Concern View Sensitivity Code	A code that designates the sensitivity of the information on the ACEC. Attribute Domain Assignment: ACEC_ DOM_SEN_CODE Default: UNK
COMMENTS	Area of Critical Environmental Concern Comments Text	The text that provides additional information about the Area of Critical Environmental Concern.
GlobalID	Not Applicable	Not on the logical model. Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

E. Areas of Critical Environmental Concern Historical Polygons (acec_hist_poly)

The intent of the historical feature class is to store changes to Designated ACEC polygons only. The historical feature class should remain empty until something has changed in a feature. The business can run an annual archive if they so choose, or as required. The Historical Areas of Critical Environmental Concern polygon features are a result of the ACEC polygons being permanently changed as a result of a business need. The resulting ACEC polygons are no longer active, but will be stored for historical reference. There are no arc features tied to these polygons since once a polygon is inactive and is moved to the historical polygon feature class it should not be edited further. If the polygon needs to be recreated a copy of the feature can be moved back to the active feature class and editing can be conducted there. These Areas of Critical Environmental Concern boundary attributes may be duplicated in other data sets but are considered minimum information for unique feature identification and cartographic purposes. Domain values are used when appropriate.

There will be a minimum of 15 attributes associated with the historical ACEC polygon features.

ACEC Historical Polygons Attributes

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED ?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
LOC_ACEC_ID	Local ACEC Identifier	Char(20)	NO			No
ACEC_NAME	ACEC Name	Char(60)	YES	UNK		No
CASEFILE_NO	ACEC Casefile Number	Char(17)	NO	N/A		No
LUP_NAME	Land Use Plan Name	Char(50)	YES	UNK		No
ACEC_EST_ACR	ACEC Estimated Acres	Double (16.6)	NO	0		No
ROD_DATE	ROD Date	Date	YES	09/09/9999		No
GIS_ACRES	GIS Acres	Double(16.6)	YES	0		Yes
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	No
ADM_OFC_CD	Administrative Office Code	Char(6)	YES	000000		No
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	No
SENSITIVITY	View Sensitivity Code	Char(3)	YES	UNK	ACEC_DOM_SEN_CODE	No
INACTIVE_DT	ACEC Inactive Date	Date	YES	09/09/9999		No
COMMENTS	Comments	Char (250)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Attribute Name	Definition
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be "ACEC" and the last six digits will be a sequential number.
LOC_ACEC_ID	Not Applicable	Not on the logical data model. The current identifier that was used by a state or field office to identify an ACEC at the state or field office level.
ACEC_NAME	Area Critical Environmental Concern Name	The name of the ACEC taken from the Record of Decision and Land Use Plan which officially designated the ACEC.
CASEFILE_NO	Case File Number	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. (CMR). This field should be in uppercase (for example, OR035582). This is a BLM International Organization for Standardization (ISO) assigned number used for identification of all lands and minerals case files including ACECs. This is the link to the LR2000 database. N/A - Not Applicable is the default code and will be used when no casefile number has been assigned. A value of "UNK" indicates unknown.
LUP_NAME	Project Name	The name given to a project that represents the full, official name associated with the project. For ACECs, this attribute will be the Land Use Plan Name.
ACEC_EST_ACR	Designated ACEC Size Measure	The measure of the area estimated in the designation process for land use planning. This is the designated size (acres) and may be different than the actual area. This does not change. Acres are calculated using the following formula: [Acres = Area (in meters)/4046.87]. This may be different than the GIS calculated area of the ACEC polygon. This field value should be the same for each polygon in an ACEC comprised of multiple polygons. The values in this field do not change. Do not use this field to derive GIS acres.
ROD_DATE	Land Related Project Decision Date	The date on which the decision is signed by the person who has approval authority for the decisions.

		The ROD signing date of the monitoring or activity plan, if any, for the particular ACEC. The date will be in the format of MM/DD/YYYY. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
GIS_ACRES	N/A	Not on the logical data model. This is a calculated value of area in units of acres based on the area field created by default within the ESRI Polygon data structure. For the purposes of a 'national data layer', the data are to be stored in geographic coordinates which do not correspond to ground values. This requires that there be a standard method for calculating this attribute. The method used for these data are as follows: The data are projected into a standard projection such as the ESRI default Albers projection for the continental United States, "US Albers NAD 1983." Once the data are projected, then a calculation of "SHAPE_Area (square meters) * 0.0002471044 = acres" is applied to the existing 'area' field that is default area created by the ESRI software resulting in the field (Attribute) 'SHAPE_Area'. Please note that the figure used in this calculation is the factor for converting the US Survey Foot value from the length of a meter as opposed to the International Standard for converting meters and feet.
ADMIN_ST	State Alphabetic Code	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. A two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT and WY. In the FBMS Organization Codes, use the second 2 characters (after the LL). (e.g. LL**AK**039000) Attribute Domain Assignment: *DOM_ADMIN_ST*

ADM_OFC_CD	Office.BLM Organization Code	BLM administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. This is a six-digit code. In the FBMS Organization Codes, use the six characters after the State designators. e.g. LLAK**030900**)
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This is an eight-character code. In the FMBS Organization Codes, use the last eight characters (e.g. LL**AK030900**). The field should be populated with the office code for the lowest level of the organization with jurisdiction. Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
SENSITIVITY	Area of Critical Environmental Concern View Sensitivity Code	A code that designates the sensitivity of the information on the ACEC. Attribute Domain Assignment: ACEC_DOM_SEN_CODE Default: UNK
INACTIVE_DT	Location Archive Date	The calendar date on which the ACEC is no longer effective because the external boundary of the ACEC changed or it is no longer considered as an ACEC. Business Rules: ACECs with End Dates are a separate feature class from Designated ACECs. The date will be in the format of MM/DD/YYYY. The format for storing the date field in the geodatabase (GDB) will be MM/DD/YYYY due to ESRI software limitations. 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, YYYYMMDD, is for publishing/displaying the date field. 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.
COMMENTS	Area of Critical Environmental Concern Comments Text	The text that provides additional information about the Area of Critical Environmental Concern.
GlobalID	Not Applicable	Not on the logical model.

		Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

F. Areas of Critical Environmental Concern Pre-designated Designation Type Table (acec_predesig_desig_type_tbl)

Designation Type "reflects the legally recognizable/designated reason(s) placed on an area with some degree of ACEC status (designated, nominated, or considered)." This field captures the reason(s) why an area was nominated or considered an ACEC. The values are taken from 43 CFR 1610.7-2. A value of "UNK" will indicate unknown. All pre-designated ACECs must be associated with at least one Designation Type. An ACEC can have more than one designation reason.

ACEC Pre-designated Designation Type Table

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
ORDER_NO	ACEC Designation Reason Order Number	Integer	YES	1		No
ACEC_REASON	ACEC Designation Reason Code	Char(4)	YES	UNK	ACEC_DOM_DESIG_CODE	No
DESIG_REAS_TEXT	Designation Reason Text	Char(40)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Attribute Name	Definition
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be "ACEC" and the last six digits will be a sequential number.
ORDER_NO	Area of Critical Environmental Concern Designation Reason Order Number	The number that identifies the order of importance of the designation reason. The primary reason is number one.
ACEC_REASON	ACEC Designation Reason Code	The code that designates the legally significant reasons placed on a designated, nominated, or considered Area of Critical Environmental Concern, as defined in CFR 1610.7-2. Attribute Domain Assignment: ACEC_ DOM_DESIG_CODE Default: UNK
DESIG_REAS_TEXT	Optional Designation Reason Text	The text that provides additional information about the Designation Reason, associated with the Designation Reason Code. (optional)
GlobalID	Not Applicable	Not on the logical model.

		Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

G. Areas of Critical Environmental Concern Pre-designated Management Constraints Table (acec_predesig_mgmt_const_tbl)

A constraint "reflects the legally recognizable/designated management constraint(s) placed on an area with some degree of ACEC status (designated, nominated, or considered)." A value of "UNK" will indicate unknown.

ACEC Pre-designated Management Constraints Table						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
MGMT_CON_TYPE	Management Constraint Type	Char(26)	YES	UNK	ACEC_DOM_MGMT_ CON_TYPE	No
PRIORITY_NO	Priority Number	Char(2)	NO			No
LIMITATION	Limitation	Char(20)	NO	UNK	ACEC_DOM_LIMIT	No
SPECIFIC_TEXT	Constraint Specific Text	Char(100)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Attribute Name	Definition
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be "ACEC" and the last six digits will be a sequential number.
MGMT_CON_TYPE	Management Constraint Category Name	The name for the legally recognizable and designated management constraints, restrictions and goals placed on an area with some degree of the status (designated, nominated, or considered). A code will be used to indicate the type of management constraint. Attribute Domain Assignment: ACEC_DOM_MGMT_CON_TYPE Default: UNK
PRIORITY_NO	Management Constraint Area of Critical Environmental Concern Order Number	The number that identifies the order of importance of the management constraint. The primary reason is number one.
LIMITATION	Management Limitation Type Name	The name of the type of limitations that can be placed on a management constraint category. A code will be used to indicate the type of limitation. Attribute Domain Assignment: ACEC_DOM_LIMIT Default: UNK

SPECIFIC_TEXT	ACEC Management Constraint Specific Text	The text that describes the specifics about a management constraint category.
GlobalID	Not Applicable	Not on the logical model. Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

H. Areas of Critical Environmental Concern Designation Type Table (acec_desig_type_tbl)

Designation Type "reflects the legally recognizable/designated reason(s) placed on an area with some degree of ACEC status (designated, nominated, or considered)." This field captures the reason(s) why an area was nominated, considered, or designated an ACEC. The values are taken from 43 CFR 1610.7-2. A value of "UNK" will indicate unknown. All ACECs must be associated with at least one Designation Type. An ACEC can have more than one designation reason.

ACEC Designation Type Table

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
ORDER_NO	ACEC Designation Reason Order Number	Integer	YES	1		No
ACEC_REASON	ACEC Designation Reason Code	Char(4)	YES	UNK	ACEC_DOM_DESIG_CODE	No
DESIG_REAS_TEXT	Designation Reason Text	Char(40)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	**Logical Attribute Name**	**Definition**
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be "ACEC" and the last six digits will be a sequential number.
ORDER_NO	Area of Critical Environmental Concern Designation Reason Order Number	The number that identifies the order of importance of the designation reason. The primary reason is number one.
ACEC_REASON	ACEC Designation Reason Code	The code that designates the legally significant reasons placed on a designated, nominated, or considered Area of Critical Environmental Concern, as defined in CFR 1610.7-2. Attribute Domain Assignment: ACEC_DOM_DESIG_CODE Default: UNK
DESIG_REAS_TEXT	Optional Designation Reason Text	The text that provides additional information about the Designation Reason, associated with the Designation Reason Code. (optional)
GlobalID	Not Applicable	Not on the logical model.

		Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

I. Areas of Critical Environmental Concern Management Constraints Table (acec_mgmt_const_tbl)

A constraint "reflects the legally recognizable/designated management constraint(s) placed on an area with some degree of ACEC status (designated, nominated, or considered)." A value of "UNK" will indicate unknown.

ACEC Management Constraints Table

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ACEC_ID	ACEC Unique Identifier	Char(10)	YES			No
MGMT_CON_TYPE	Management Constraint Type	Char(26)	YES	UNK	ACEC_DOM_MGMT_CON_TYPE	No
PRIORITY_NO	Priority Number	Char(2)	NO			No
LIMITATION	Limitation	Char(20)	NO	UNK	ACEC_DOM_LIMIT	No
SPECIFIC_TEXT	Constraint Specific Text	Char(100)	NO			No
GlobalID	GlobalID	UUID	YES			No

GIS Name	Logical Attribute Name	Definition
ACEC_ID	Area of Critical Environmental Concern Identifier	The designed primary key that will uniquely identify a single occurrence of the entity. The primary key for ACEC will be 10 digits. The first four will be "ACEC" and the last six digits will be a sequential number.
MGMT_CON_TYPE	Area of Critical Environmental Concern Management Constraint Category Name	The name for the legally recognizable and designated management constraints, restrictions and goals placed on an area with some degree of the status (designated, nominated, or considered). A code will be used to indicate the type of management constraint. Attribute Domain Assignment: ACEC_DOM_MGMT_CON_TYPE Default: UNK
PRIORITY_NO	Management Constraint Order Number	The number that identifies the order of importance of the management constraint. The primary reason is number one.
LIMITATION	Management Limitation Type Name	The name of the type of limitations that can be placed on a management constraint category. A code will be used to indicate the type of limitation. Attribute Domain Assignment: ACEC_DOM_LIMIT Default: UNK
SPECIFIC_TEXT	ACEC Management Constraint Specific Text	The text that describes the specifics about a management constraint category.
GlobalID	Not Applicable	Not on the logical model.

		Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication. It is not used as a unique identifier for relationships between feature classes/tables.

Part III: Appendices

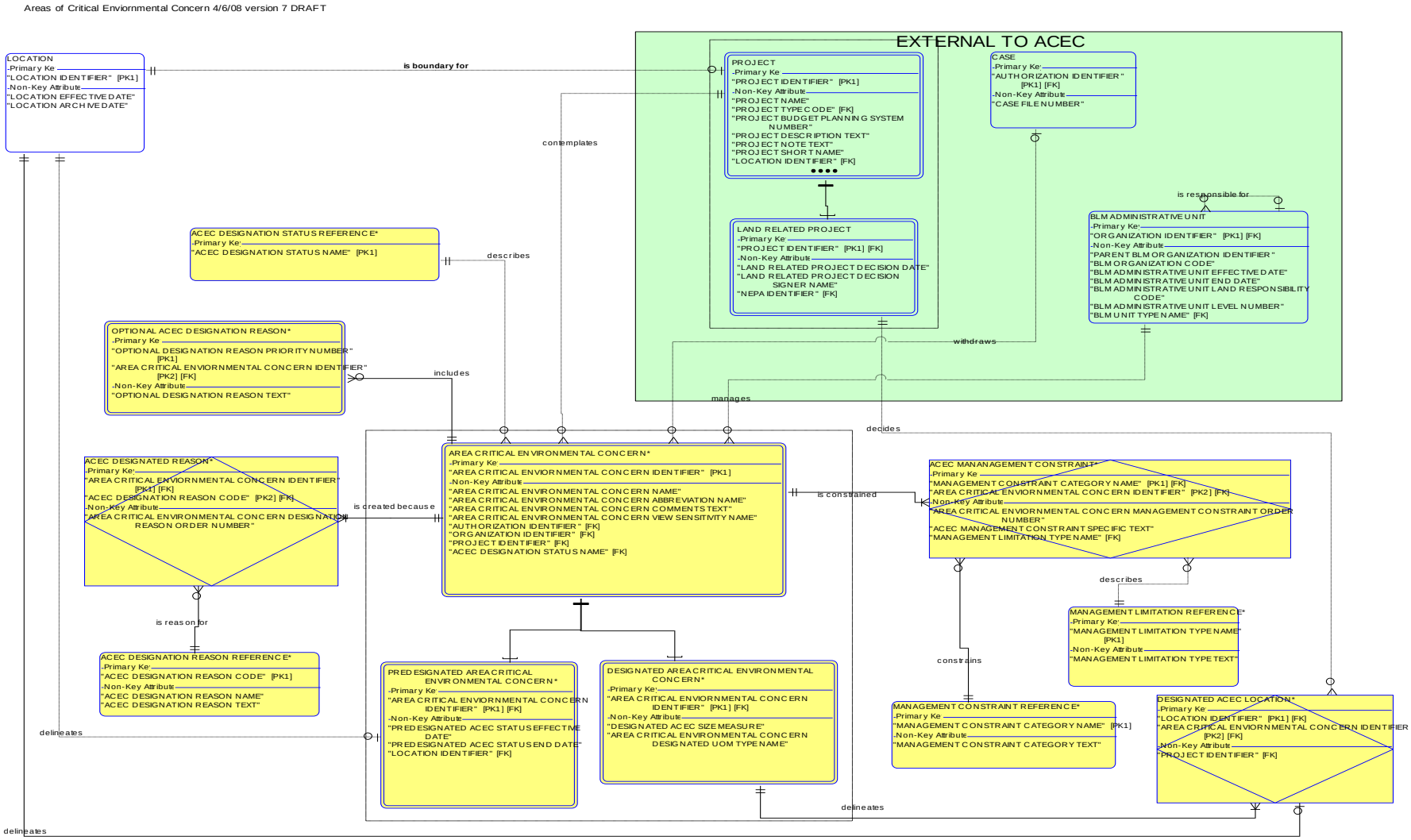
Appendix A: Domain Values and Examples

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 ACEC, please go to: http://teamspace/sites/blmnds/est2010/default.aspx

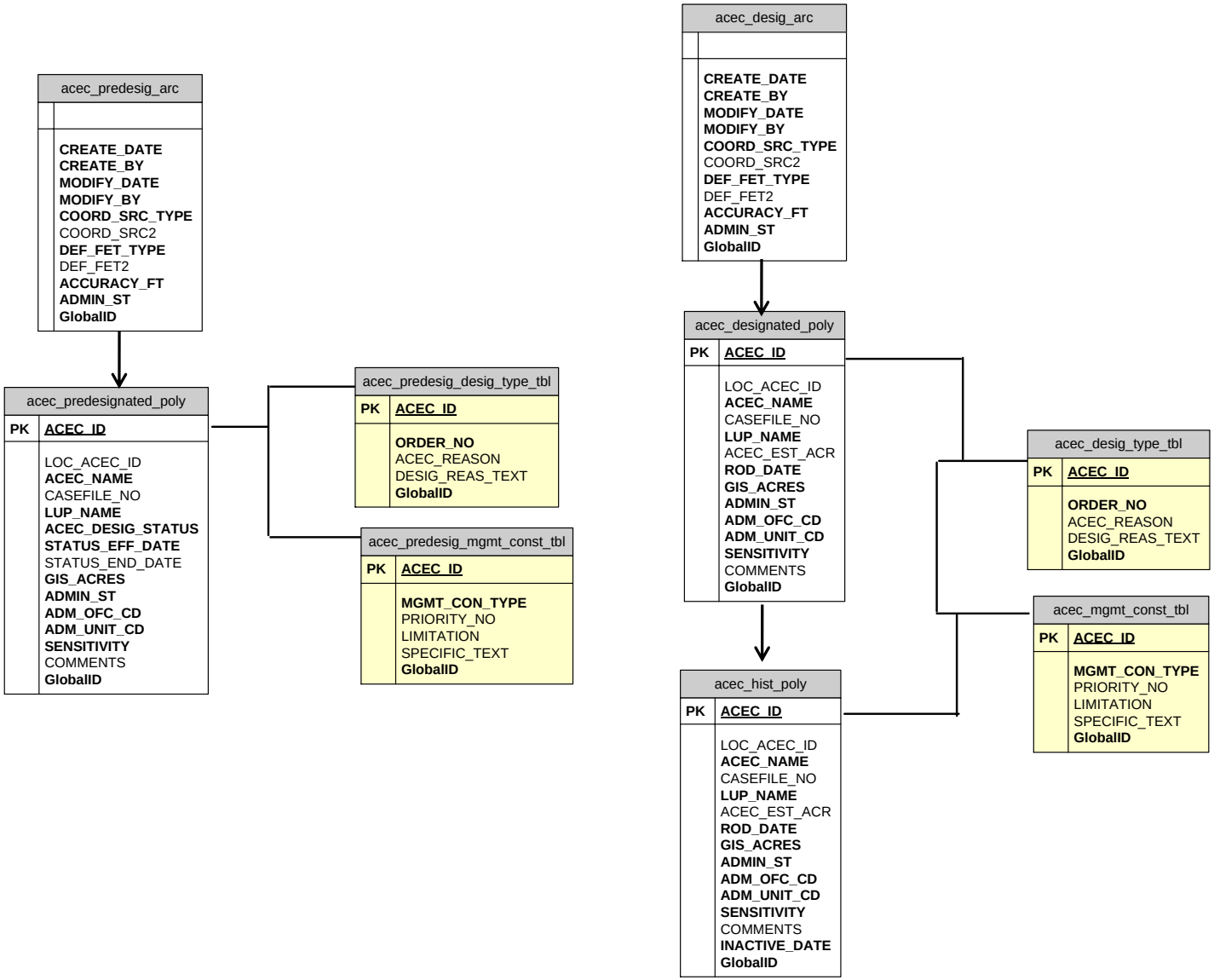
For Feature Level Metadata Domains, please see the Domain Information Section, located at http://web.blm.gov/data_mgt/std_proc.htm

Appendix B: Logical Data Model



Legend: PK (Primary Key) – uniquely identifies one occurrence (row) of the entity; FK (Foreign Key): is all or part of the PK of another entity it is related to. PK1, PK2 – indicates the PK is made of of more than 1 attribute to make it unique. 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

Appendix C: Physical Database Diagram



Appendix D: Attribute Metadata Terminology

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