



**Cultural Resource Management (CRM)**  
*(Security Classification: Sensitive)*

**IMPLEMENTATION GUIDELINES**

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## **INTRODUCTION**

### ***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 data pushed up to the national level meets the minimum requirements as set forth in the Data Standard.

### ***Data Standard Development Overview***

This document describes the physical design of the national data standard for the Cultural Resource Management (CRM) geospatial dataset. The CRM standard and implementation is designed to address BLM business and reporting needs and provide more accurate and standardized analysis of cultural resources spanning state boundaries. This implementation will standardize cultural data currently residing at the state level, with various structures and identifiers. The National Heritage Solution Pilot (NHSP) project was performed to prove the proposed data standard by migrating cultural resource data from 11 State Historic Preservation Offices (SHPOs) and BLM state offices. Subsequent changes were made to the data standard to accommodate the incoming data. Some fields in this standard were designed to store data in a temporary state until they can be properly cleaned and transformed.

Federal standards and guidelines state that agencies should define the boundaries of surveyed areas and record the precise location of all properties identified. Having accurate boundaries of cultural resources will help track their existence, type and eligibility or status for the National Register of Historic Places (NRHP) or as a National Historic Landmark.

This spatial data implementation includes attribute fields for tracking the status of these designations. An attribute field is also included to document the identifiers for the National Environmental Policy Act (NEPA) documents that initiated cultural resource investigations. The structure can help determine where investigations have occurred, where resources have been sought and found in a given area, and attributes of each, such as the investigation title and class or the type and condition of a resource.

### **High-level Planning**

The purpose of the national dataset is to have a set of seamless information for high-level landscape analysis. The CRM dataset will store basic information about resources and investigations to support this need. Any additional information not included in this standard that the states currently maintain will continue to be maintained at the state level.

All the original polygon identifiers (IDs) are retained in the national dataset, but not all the related records are included. The detailed information in the source data from each state is not intended to be retained in the national dataset as users will have access to that information if required for other business needs or purposes.

The crosswalks developed from the state data to the national data standard are designed to aggregate the specific detailed information that the states maintain into a more generic or higher level classification in some cases. As a result, some of the detail of the original information is not intended to be included in the national dataset.

The original IDs from the source polygon data will be retained in the national CRM dataset. The related data may or may not be included per ID. If more detail is needed about an investigation or a resource, the original source data can be accessed from the state by using the ID to locate the record.

Implementation of the data standards will occur at the organizational levels of the Bureau of Land Management (BLM) as appropriate. The standards are intended to be platform-independent.

The attributes included in this implementation have been established for this 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, they may be included in the state specific database as long as core national standard attributes and domains are maintained.

### ***Review Cycle***

During the next phase of developing the CRM data standard, each state dataset will be evaluated for migration into the national standard. Extract Transform and Load (ETL) processes will be developed to transform the state data into the national standard on a regular interval. The data representative for each state will review the dataset for completeness and accuracy initially, and then again on a regular interval. Any new schema changes in the source data will need to be tracked in order to maintain the ETL processes.

It is recommended that the national CRM data steward review the data quality on a monthly basis. The data steward is responsible for taking action to increase the data quality that includes coaching, mentoring, or training staff. On a semi-annual basis, a review of the data structure should occur against known business requirements to determine if there are changes in the standard.

Quality checks (QCs) will be developed and run periodically at the national level to verify the quality of the data. Reports will quantify which data needs to be corrected by each state or SHPO office.

A quality check (QC) is needed to verify that the values in CRM\_DOM\_RSRCE\_PRMRY\_CAT domain appropriately match the temporal cultural assignment for each record. For example, if the temporal cultural assignment value is “Prehistoric”, then an invalid domain value would be “Utilities”.

### **National Dataset Update Cycle**

The ETL process will be used to pull the data from each state, transform it and load it into the BLM national data standard. The frequency in which this will occur will need to be determined. Currently the suggestion from the Subject Matter Expert (SME) is to run the ETL process quarterly.

### **Records Retention**

The entire geodatabase for CRM will be archived on an annual basis, by October 15, for the previous fiscal year.

**Note:** Records issues will be handled according to official policy for Records Management.

## **DATA STRUCTURES IMPLEMENTED**

The data for inclusion in this dataset shall be collected in a known datum and coordinate system. The data stored on the National Operations Center (NOC) EGIS server in Denver shall be stored in geographic coordinates for national layers using the BLM standard NAD 83 datum rather than in a specific projection. While the standard datum is NAD 83, there are multiple realizations of that datum. The metadata for each dataset shall contain more specific labeling of the datum as appropriate. Examples of this 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.

<b>Data Structures Implemented</b>	
<i>crm_rsrce_poly</i>	Represents the polygon features that show the boundaries for Resource areas.
<i>crm_invstgtn_poly</i>	Represents the polygon features that show the boundaries for Investigation areas.
<i>crm_rsrce_invstgtn_tbl</i>	This is the associative table that cross-references resources to investigations and vice versa. It resolves the many to many relationship between investigations and resources.

## ***Domains Implemented***

When working with datasets that are part of a national data standard, many of the attributes have domain assignments. These domains should be implemented and maintained to help ensure data integrity and to aid in the development of national datasets. Domains may be unique to a specific feature class, or common across multiple feature classes either within an enterprise environment, or within a file geodatabase. Several domains and their associated coded values require periodic updates; for example, Administrative Unit Codes are linked to the FPPS which changes regularly.

### **Global Domains**

Global domain names that are common across multiple data standards and feature classes are listed below in *italics*. These global domain values are located in the [Access Database](#) located on the NOC Data Management National Data Standards SharePoint site.

These are the global domains used in this data standard:

- *DOM\_ADMIN\_ST*
- *DOM\_YES\_NO*
- *DOM\_YES\_NO\_UNDTRMND*

### **Data Standard-Specific Domains**

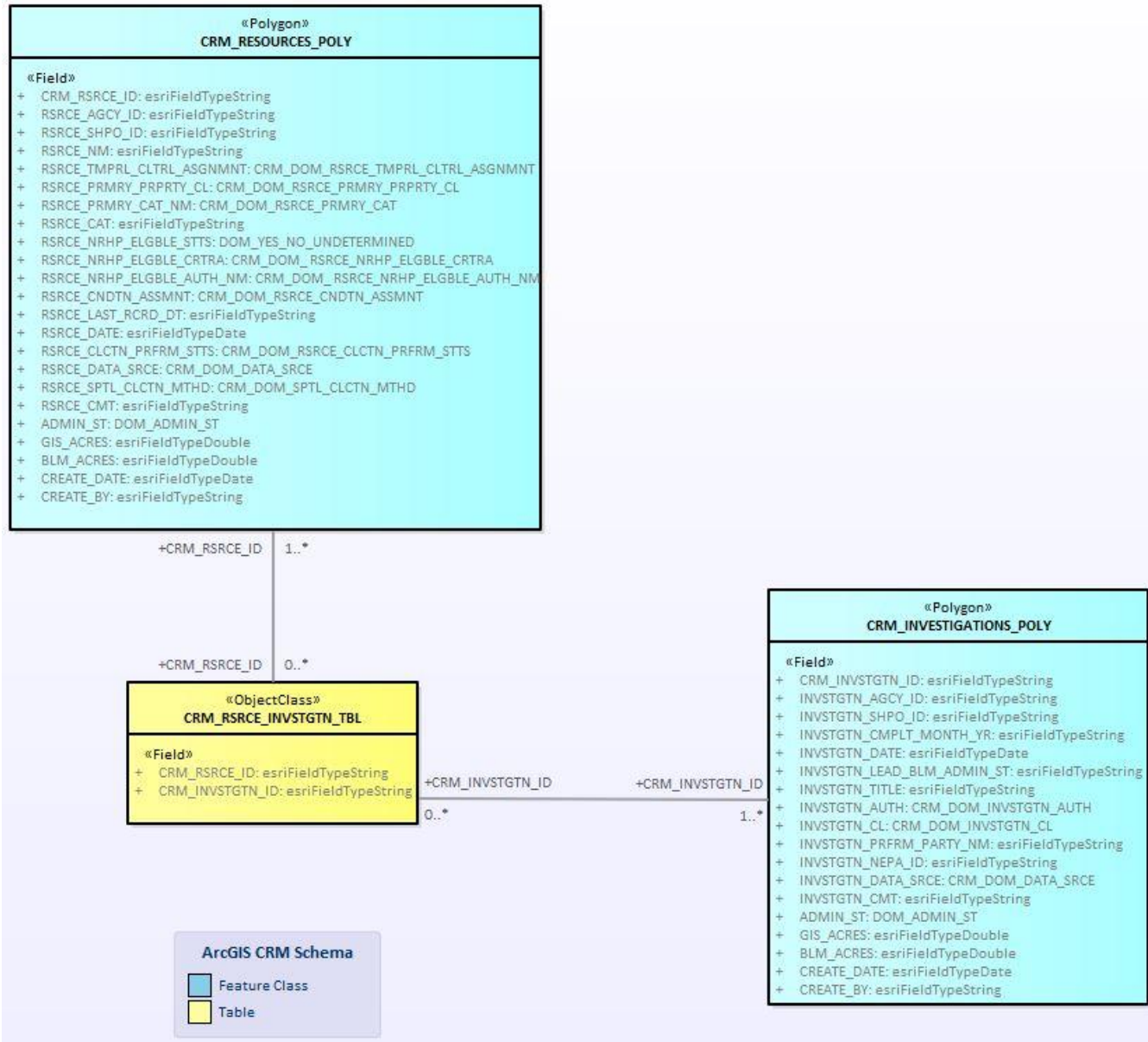
The following domains are unique to the CRM dataset. Therefore, they are included in the geodatabase and in the XML schema. The CRM specific domain names are indicated below, in normal text.

- CRM\_DOM\_RSRCE\_TMPRL\_CLTRL\_ASGNMNT
- CRM\_DOM\_RSRCE\_PRMRY\_PRPTY\_CL
- CRM\_DOM\_RSRCE\_PRMRY\_CAT
- CRM\_DOM\_RSRCE\_NRHP\_ELGBLE\_CRTRA
- CRM\_DOM\_RSRCE\_NRHP\_ELGBLE\_AUTH\_NM
- CRM\_DOM\_RSRCE\_CNDTN\_ASSMNT
- CRM\_DOM\_RSRCE\_CLCTN\_PRFRM\_STTS
- CRM\_DOM\_DATA\_SRCE
- CRM\_DOM\_SPTL\_CLCTN\_MTHD
- CRM\_DOM\_INVSTGTN\_AUTH
- CRM\_DOM\_INVSTGTN\_CL

The XML file is provided as a [Link to Sharepoint](#) does not contain global domains in order to avoid duplicating them in the new schema. Please refer to the [Domains Management](#) document for instructions on adding these global domains to the geodatabase and linking them to the feature classes.

The “[Global Domains](#)” document is located on the National Data Standards SharePoint (“Standards Support Information” tab > Document Type: Reference > Subject: Domains). Shared domains are not included in the geodatabase associated with these implementation guidelines.

## Physical Database Diagram





## ***Topology***

Geodatabase (gdb) and map topologies are often used 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 does not require topologies.

## ***Design Considerations***

### **Background**

The CRM Data Standard builds on previous work conducted by the Cultural Resources Data Sharing Partnership (CRDSP) and the Federal Geographic Data Committee (FGDC).

The implementation of this data standard was designed during the Colorado Plateau Pilot Project (CPPP) with the initial intent of importing legacy data from each of the four SHPOs: Utah, Arizona, New Mexico and Colorado. During the NHSP project, a total of 11 states were migrated into the data standard as part of another pilot project.

The implementation of the geodatabase supporting this standard includes two polygon feature classes, Investigations (surveys) and Resources (sites). An intermediate table is set up between the Investigations and Resources for those states that maintain a many to many relationship between those. Not all states maintain this relationship.

The pilot phase of this implementation involved importing data from four diverse database structures. The second pilot (NHSP) involved migrating eleven diverse database structures and reporting on the results of that process. Schema changes were identified during this process and are included in this data standard. Future design considerations that were uncovered during the pilot migration process are included in Appendix E of the CRM Data Standard Report.

During the NHSP migration project there were some issues identified and some rules established as part of that effort. The following list includes descriptions of those:

- a. Each individual investigation has a unique ID by the lead agency, usually an alphanumeric.  
A new investigation will have a new ID, for example, sometimes a revisit of a previous investigation area will simply add a numerical suffix to the first, such as 18N355 and 18N355.1, or it may be quite different. Each investigation should also have a completion date and report name to help identify it uniquely.
- b. Some, but not all state SHPO data will have predefined identifiers which relate Investigations with Resources. Going forward, these relationships should be retained by reestablishing a new relationship using the unique CRM ID (at the national level) and populating the intermediate table in this data standard.

- c. Day-forward, it is recommended that for any dates that are stored as free-form text fields will need to be converted into a date format during the transformation process and/or manually. This type of edit may need to be negotiated with each state SHPO office.
- Any text-format dates that are not able to be automatically transformed into a date format will be sent back to the state as an error to correct. Negotiations need to be made to get conformance to the national standard.
  - There are two fields for dates in Resources and in Investigations. One field holds the free-form text date field that needs to be cleaned and transformed into the other field which is a date field.
  - Once all the dates are clean, the text date field can be dropped. The date formatted date field will remain going forward.
- d. The detailed information in the source data from each state will not be retained in the national dataset.
- The purpose of the national dataset is to have a set of seamless information for high-level planning and landscape analysis. The CRM dataset will store basic core information about resources and investigations to support this need. Any additional information not included in this standard that the states currently maintain will continue to be maintained at the state level.
  - The crosswalks from the state data to the national data standard are designed to aggregate the specific detailed information that the states maintain into a more generic, higher-level classification in some cases. As a result, some of the original information will not be included in the national dataset.
  - The original IDs from the source polygon data will be retained in the national CRM dataset. The related data may or may not be included per ID. If more detail is needed about an investigation or a resource, the original source data can be accessed from the state by using the ID to locate the record.
- e. Only one Temporal Cultural Assignment is needed for each resource polygon in the national dataset. Several states maintain resources with more than one Temporal Cultural Assignment for one polygon. As part of this data standard, it is intended that each value in the state source data will be crosswalked in combination (as part of the ETL process) to determine one primary value to use in the national dataset. For example, if a resource has both Historic and Prehistoric elements, then the resource in the national dataset will be assigned “Multi-Component” for the Temporal Cultural Assignment.
- f. Some states do not maintain all of the data outlined in this data standard. This data will not be required, but negotiations will occur with each state to meet the standard as closely as possible, with the goal of 100 percent compliance. The [CRM NHSP Data Migration Status Report](#) outlines what specific data was found missing and to what degree.
- g. There is some concern that the states are not maintaining a unique ID for each polygon with unique attributes. Many states that have this problem are going through a database redesign. It is assumed that this problem will not occur moving forward, but that legacy data may still have an issue. In the ETL process that will be developed, the intent is that these cases will be corrected by creating multi-part features for each unique ID. In the next phase of development, those states redesigning their data will need to have their new data structure evaluated for any remaining issues. The [CRM NHSP Data Migration Status Report](#) has more information about this.

## Relational Data Structures

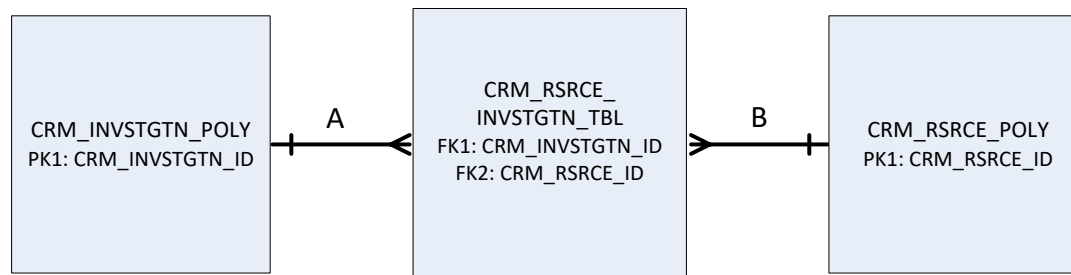
Ultimately, there should exist a zero or one-to-many relationship between each Investigation and its Resource polygons: each unique Investigation record could have zero to many associated Resources. Resources are expected to also have a zero or one-to-many relationship with Investigations since a single resource could be associated with zero or more investigations. This constitutes a many-to-many relationship between Investigation polygons and Resource polygons.

It is the intent of this standard to have a single record for each Investigation, even if it spans multiple polygons over a large area. If there are several polygons with the same ID, those will be dissolved into one multi-part feature.

When a many-to-many relationship exists in a database, the standard database design method is to create a ‘junction’, or ‘associative’ table with each feature class having a one-to-many relationship with it. This table may hold only the fields necessary to create the relationship, the foreign keys, or it may include additional fields that would help describe either of the two related features. These additional fields may assist with initial editing and merging of data. The Data Standard Report shows this as the ‘CRM Resource Investigation’ table.

### Relationship Classes for this Data Standard

The following describes the relationship classes included in the standard and provides a brief description of each. This implementation relates the Investigation and the Resource polygons each to the Resource Investigation table using one-to-many relationships.



- A. `crm_rsrce_rel`: a one-to-many relationship class linking each Resource feature in `crm_rsrce_poly` to the associative table `crm_rsrce_invstgtn_tbl`.
- B. `crm_invstgtn_rel`: a one-to-many relationship class linking each Investigation feature in `crm_rsrce_poly` to the associative table `crm_rsrce_invstgtn_tbl`.

For more information on relational data structures, please refer to the document entitled “[Relational Data Structures](#)” (National Data Standards SharePoint >“Standards Support Information” tab > Document Type: Instruction > Subject: Geospatial).

### Common Attributes

The following are attributes (data elements) that are common across feature classes. These include attributes for edit tracking and feature level metadata domains.

GIS Name	Logical Name	Physical Definition & Design Consideration
ADMIN_ST	State Alphabetic Code	<p><b>Physical Definition:</b> 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.</p> <p>Attribute Domain Assignment:</p> <p>DOM_ADMIN_ST</p> <p><b>Design Consideration:</b> Two letter, upper case abbreviation for the administrative state office. In the FPPS Organization Codes, use the second two characters (after the LL, e.g. <u>LLAK</u>030900).</p>

GIS Name	Logical Name	Physical Definition & Design Consideration
GIS_ACRES	Polygon Area Measure	<p><b>Physical Definition:</b> The total number of acres within travel management areas and plans polygon.</p> <p><b>Design Considerations:</b> The entire acreage of the polygon regardless of land status.</p> <p>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.</p> <p>The method used for these data are as follows: Project the data into a standard projection such as the ESRI default Albers equal-area projection for the continental U.S., “US Albers NAD 1983.” (Make sure the area measure of your data is square meters, as opposed to square feet.) Then use the field calculator in ArcMap with the expression: [GIS_ACRES] = [SHAPE_Area] * 0.0002471044. Please note that the figure used in this calculation is the factor for converting the U.S. Survey Foot value from the length of a meter, as opposed to the International Standard for converting meters and feet.</p> <p><b>Default:</b> 0.0</p>
BLM_ACRES	Not Applicable	<p><b>Physical Definition:</b> The acres within the polygon that are under BLM jurisdiction.</p>
CREATE_DATE	Not applicable	<p><b>Physical Definition:</b> The date in which the record was created.</p> <p><b>Design Consideration:</b> The data of the data migration. The date will be in the format of MM/DD/YYYY.</p>
CREATE_BY	Not applicable	<p><b>Physical Definition:</b> The UserID (BLM login ID) of the person who migrated the data.</p> <p><b>Design Consideration:</b> This attribute will be deleted before providing the data to the public.</p>

GIS Name	Logical Name	Physical Definition & Design Consideration
GlobalID	Not Applicable	<p><b>Physical Definition:</b> A 32-character alpha-numeric code that serves as the universal and unique identifier for each feature within the feature class of a geodatabase.</p> <p><b>Design Consideration:</b> 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.</p>

## DOMAINS

### Purpose

Domain values are an integral part of any data standard to ensure consistency and quality of the data captured using a data standard. This document provides the information necessary to understand those data elements (attributes) that have a set of domain values and the descriptions of the domain values to provide guidance in using the appropriate value. Reference entities and other entities that have a fairly stable list of values are included in this document for the data standard.

As this document will be used for both the data standard report and the implementation guidelines, it includes both the logical and implementation views of each of the domain sets. Standard Geospatial Domain Values (those pertaining to feature-level metadata) are not included in this document, but will be part of the Implementation Guidelines.

## Domain Documentation

### CRM Specific Domains

Domain Name: CRM Resource Temporal Cultural Assignment		
Physical Domain Table		CRM_DOM_RSRCE_TMPRL_CLTRL_ASGNMNT
<p>The general age category and cultural affiliation of the resource.</p> <p>The domain values vary by state and region with historic post Euro American contact. Ethnohistoric refers to resources that are post Euro American influence or contact but are incorporated into traditional Native American life ways.</p>		
Geodatabase Domain Values		<p><b>DEFAULT VALUE:</b> Unknown</p>
Code	Description	Definition
Prehistoric	Prehistoric	Precontact Native American of or pertaining to the time or a period prior to recorded history.
Ethnohistoric	Ethnohistoric	The archaeological signature of post contact sites of indigenous or non-Western peoples. This includes prehistoric and historic Euro American-Asian goods and signatures.
Historic	Historic	Historic sites are those created by Euro and Asian Americans, i.e., not Native American.
Multicomponent	Multicomponent	Has more than one temporal assignment which could include prehistoric, ethnohistoric and historic components.
Unknown	Unknown	The age of the resource cannot be determined, either because it has not been examined with regard to age or because an examination failed to find any indicators of age.

<b>Domain Name: CRM Resource Primary Property Class</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_RSRCE_PRMRY_PRRPTY_CL</b>
The primary classification type of the property which conveys management implications.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Site
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Building	Building	A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
Cultural ACEC	Cultural ACEC	Area of Critical Environmental Concern (ACEC) Defined by significant cultural resource values (field office/RMP/LUP defined).
District	District	A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.
Landscape	Landscape	Large-scale properties often comprised of multiple, linked features that form a cohesive area or place. Landscapes have cultural and historical meanings attached to them by the peoples who have traveled, used, and interwoven these places into generations of practice.  Examples: Designed Historic Landscapes (battlefield, park, garden, grounds, facilities etc.); Rural Historic Landscape (agricultural, farming structures, orchards, forest etc.).
National Landmark	National Landmark	National Historic Landmarks (NHLs) are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the U.S..
Object	Object	The term "object" is used to distinguish from buildings and structures, those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
Sacred Site	Sacred Site	Any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious.



		significance to, or ceremonial use by, an Indian religion (from EO 13007). Includes Native American Graves Protection and Repatriation Act (NAGPRA), includes re-interred Native American human remains, potential or known grave sites, cairn burials, and crevice burials.
Site	Site	A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.
Structure	Structure	The term “structure” is used to distinguish from buildings as those functional constructions made usually for purposes other than human shelter.
Traditional Cultural Property	Traditional Cultural Property	A property that derives significance from traditional values associated with it by a social and/or cultural group such as an Indian tribe or local community. A traditional cultural property may qualify for the National Register of Historic Properties if it meets the criteria and criteria exceptions at 36 CFR 60.4. See National Register Bulletin 38.
World Heritage Site	World Heritage Site	A World Heritage Site is a landmark or area which is selected by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as having cultural, historical, scientific or other form of significance, and is legally protected by international treaties. The sites are judged important to the collective interests of humanity.

Sources:[http://en.wikipedia.org/wiki/National\\_Register\\_of\\_Historic\\_Places\\_property\\_types](http://en.wikipedia.org/wiki/National_Register_of_Historic_Places_property_types)  
[http://en.wikipedia.org/wiki/National\\_Register\\_of\\_Historic\\_Places](http://en.wikipedia.org/wiki/National_Register_of_Historic_Places), <http://www.nps.gov/nr/>  
[https://en.wikipedia.org/wiki/World\\_Heritage\\_Site](https://en.wikipedia.org/wiki/World_Heritage_Site)  
[National Register Bulletin 15](#)

<b>Domain Name: Resource Primary Category</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_RSRCE_PRMRY_CAT</b>
<p>The primary, most prevalent general purpose or pattern of use that created the resource may also be known as “site type”.</p> <p>Refers to historic, multi-component, historic Native American sites, as well as sites with an unknown Resource General Temporal and Cultural Assignment.</p>		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Unknown
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Agricultural	Agricultural	Agricultural sites include evidence of the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products.
Commercial	Commercial	Commercial sites include evidence of activities related to or used in the buying and selling of goods and services such as stables, general store, etc.
Communication	Communication	Communication resources and infrastructure such as telegraph, phone lines, cell towers and other communication resources.
Government	Government	Government sponsored actions such as exploration, Indian agencies, land surveys, public works related to CCC and other locations.
Industrial	Industrial	Industrial sites include evidence of manufacturing activities with European construction materials and methods.
Logging	Logging	Logging sites include evidence of activities related to cutting trees for lumber such as lumber camps, flumes, skid trails, etc.
Military	Military	Military sites have characteristics of or relate to soldiers or armed forces.
Mining	Mining	Mining sites include evidence of mineral extractive activities with European construction materials and method.
Oil and Gas	Oil and Gas	Oil and Gas sites include evidence of Oil and Gas extractive activities with European construction materials and methods.

Prospecting	Prospecting	Prospecting sites include evidence of exploration of an area especially for mineral deposits.
Ranching	Ranching	Ranching sites include evidence of large farming activities especially in the U.S. where animals (such as cattle, horses, and sheep) are raised and in varying degrees the preparation and marketing of the resulting cattle and sheep.
Recreation	Recreation	These include historic recreation sites on federal lands such as campgrounds or campsites, parks, picnic areas, interpretive sites and other historic recreational facilities or locations.
Residential	Residential	These prehistoric or ethnohistoric sites were occupied for periods of time and contain evidence of a wide array of activities that may include some or all of the following including tool maintenance, grinding stone use, and measurable midden development as evidenced by density and diversity of artifact classes including flaked stone debris, formal tools, projectile points, milling tools, pottery, and features such as midden deposits, hearths, house pits and rings. Sites contain three or more artifact classes and a diversity of formal tools. Occupation sites often contain high-investment residential structures such as semi-subterranean pit houses. It is inferred that sites of this type were seasonally occupied over relatively long periods of time by an extended social group consisting of men, women, and children. Due to expended length of occupation and seasonal re-use, complex occupation sites have the highest potential to contain subsurface deposits.
Settlement	Settlement	These historic locations contain habitation features consistent with a historic settlement. These sites were occupied for extended periods of time and contain evidence of a wide array of activities which may include structures and structural ruins, agricultural implements, corrals, glassware, metal implements, garbage dumps, military objects, etc. Such historic sites contain three or more artifact classes and a diversity of formal tools. Occupation sites often contain high-investment residential structures such as sod, adobe, wooden, and masonry construction. It is inferred that sites of this type were seasonally or permanently occupied over relatively long periods of time by an extended social group consisting of men, women, and children. Due to expended length of occupation or seasonal re-use, complex occupation sites have potential to contain subsurface deposits often including outhouse deposits that may contain significant archaeological information. These site types may often be viewed as a district from a National Register categorization. Includes government sites such as Indian agencies where residence occurred.

Specialty Site	Specialty Site	Specialty sites relate more to the symbolic or strategic realm, rather than subsistence and settlement. Some may occur in association with habitation sites, but many lack associated artifacts. Sites included in this category include, but are not limited to, rock art, caches, rock cairns, vision quest sites, trails and burials sites, exploration sites, land survey sites, line camp, etc.
Task Specific	Task Specific	Prehistoric or ethnohistoric site of a single task specific activity which might have included hunting/processing, lithic reduction, milling, mining or single reduction. Sites included in this category are Hunting/Processing Camps, Hunting Blinds, Lithic Reduction Stations, Granaries, Milling Stations, and Quarry/Single Reduction Stations.
Temporary Camp	Temporary Camp	Prehistoric or ethnohistoric logistical or embedded procurement camps similar to residential bases, but used for short-term, task specific hunting, gathering or tool stone procurement. They may have only been utilized seasonally for a short duration or by smaller family groups. The density and diversity of the artifacts decreases with these types of occupations, exhibiting the functional traits of the type of resource procurement being conducted. Sites may lack evidence of living floors or structures. Single or separable temporal component may increase the National Register significance. The artifact assemblage may be limited in quantity but will contain a high diversity of materials (e.g., ceramics, fire-cracked rock, features/structures) representing both male and female activities. Because of their shorter duration of use, the likelihood of subsurface deposits is lower than that for complex occupation sites.
Temporary Historic Site	Temporary Historic Site	Historic site used for short-term, task specific activities such as cattle drive encampments, military battle encampment sites, harvesting camps, recreational campsites, etc. They may have only been utilized seasonally for a short duration, or by smaller groups. The density and diversity of artifacts decreases with these types of occupations, exhibiting the functional traits of the type of resource activity being conducted. Sites may have hearths but lack evidence of developed living floors or structures. Single or separable temporal component may increase the National Register significance. The artifact assemblage may be limited in quantity but will contain a high diversity of materials (e.g., ceramics, fire-cracked rock, features/structures) representing both or either male and female activities. Because of their shorter duration of use, the likelihood of subsurface deposits is lower than that for complex occupation or settlement sites.

Transportation	Transportation	Transportation sites includes evidence of a system for moving passengers or goods from one place to another.
Utilities	Utilities	Energy infrastructure that shows evidence of power being delivered from one place to another. Examples are: power lines, power plants and other energy structures.
Wtr Strg Cnvync	Water Storage and Conveyance	Any water infrastructure that shows evidence of water control features such as dams, reservoirs, flumes, ditches, tank, pipelines, or troughs.
Unknown	Unknown	The primary purpose or pattern of use is unknown or cannot be determined.

Definitions sourced from “Cultural Resource Model and Class III Inventory for Owyhee Land Exchange” (pg. 25-29, 34).

<b>Domain Name: Yes No Undetermined</b>		
<b>Physical Domain Table</b>		<b>DOM_YES_NO_UNDTRMND</b>
Indicates if, during the most recent evaluation, the resource was determined to be eligible for listing on the National Register of Historic Places (NRHP).		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b> Undetermined
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Yes	Yes	Resource is eligible for NRHP listing.
No	No	Resource is NOT eligible for NRHP listing.
Undetermined	Undetermined	No determination was made during the most recent evaluation if the resource is eligible for NRHP listing.

<b>Domain Name: CRM Resource National Register of Hisoric Places Eligibility Criteria</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_RSRCE_NRHP_ELGBLE_CRTRA</b>
The criteria under which the determination of NRHP eligibility was made.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Not Specified
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Eligible A Only	Eligible A Only	Resource eligible due to association with events that have made a significant contribution to the broad patterns of our history.
Eligible B Only	Eligible B Only	Resource eligible due to association with the lives of persons significant in our past.
Eligible C Only	Eligible C Only	Resource eligible due to the embodiment of distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
Eligible D Only	Eligible D Only	Resources that have yielded, or may be likely to yield, information important in prehistory or history.
Eligible (A, B, and/or C)	Eligible (A, B, and/or C)	Resource is eligible under any combination of A, B or C, but not D.
Eligible ((A, B and/or C) and D)	Eligible ((A, B and/or C) and D)	The resource is eligible for NRHP listing under any combination of (A, B, C) and D. Examples include: Eligible under (A and D) or (A, B and D) or (B and D) or (C and D) or (B, C and D), etc. Do not use this value if the resource is eligible under D only or any combination of A, B and C but not D.
Not Specified	Not Specified	The criteria under which the NRHP eligibility determination is not recorded.

NA	Not Applicable	The resource was determined to be not eligible for NRHP listing and there for criteria for eligibility are not applicable.
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<b>Domain Name: CRM National Register of Historic Places Eligibility Authority Name</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_RSRCE_NRHP_ELGBLE_AUTH_NM</b>
The authority or process under which the NHRP eligibility was made. Provides information about the level of authority that can be placed in the NRHP eligibility determination.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		N/A
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Consultant	Consultant	The eligibility status shown for the resource is based on an assessment and recommendation made by a consultant.
Managing Agency	Managing Agency	The eligibility status shown for the resource is based on a determination made by the agency responsible for managing the resource following the guidelines for evaluation specified in federal law and the procedural and policy documents of the agency. The agency may, or may not, have agreed with the consultant recommendation in arriving at the determination.
SHPO	SHPO	The eligibility status shown for the resource is based on a determination made by the agency and concurred upon by the SHPO and/or made independently by SHPO.
Natl Register	Keeper of the National Register	The eligibility status shown for the resource was determined by the Keeper of the National Register or the Keeper's delegate.
NA	Not Applicable	The resource does not require an eligibility determination.
Unknown	Unknown	No information on who determined eligibility.

<b>Domain Name: CRM Resource Condition Assessment</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_RSRCE_CNDTN_ASSMNT</b>
The resource condition, in terms of its natural or unnatural degradation.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Unknown
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Stable	Stable	Erosion, decay or alteration by humans, forces of nature that would occur at an expected pace.
Deteriorating	Deteriorating	In danger of destruction, or an unacceptable rate of deterioration or damage.
Threatened	Threatened	Elements of eligibility and/or significance are deteriorating and may be destroyed. Appropriate mitigation measures should to be taken.
Destroyed	Destroyed	Site may be completely destroyed with no physical evidence remaining or lacks any integrity to be eligible for listing on the NRHP and/or contains no “archaeological interest” pursuant to ARPA (see 43 CFR 7.3.)
Unknown	Unknown	The condition of the resource is not known.
NA	Not Applicable	The resource is not subject to degradation or destruction,(e.g., district or landmark boundary).



<b>Domain Name: CRM Resource Collection Performed Status</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_RSRCE_CLCTN_PRFRM_STTS</b>
Indicates if a documented collection has ever been performed on this resource.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b> No
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Yes	Yes	At least one documented collection has been performed.
No	No	No documented collection has been performed.
Unknown	Unknown	It is unknown if a collection has been performed.
NA	Not Applicable	Entity is a boundary or other type of resource on which a collection would never be performed, such as a district or landmark boundary. Collection would occur at specific resources and reflected in those specific entities records.

<b>Domain Name: CRM Data Source</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_DATA_SRCE</b>
The source of the digital data from which the information about the resource and/or investigation was taken.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b> Unknown
<b>Code</b>	<b>Description</b>	<b>Definition</b>
AK SHPO	AK SHPO	Alaska State Historic Preservation Office
AZSITE	AZSITE	Arizona Cultural Resource Inventory
BLM Oregon OCRIS	BLM Oregon OCRIS	Bureau of Land Management Oregon State Office Database
CA BLM	CA BLM	Bureau of Land Management California Office
CO SHPO	CO SHPO	Bureau of Land Management Colorado Office

ES	Eastern States	Eastern States
FS	FS	United States Forest Service
ID BLM	ID BLM	Bureau of Land Management Idaho Office
ID SHPO	ID SHPO	Idaho State Historic Preservation Office
MT SHPO	MT SHPO	Montana State Historic Preservation Office
ND SHPO	ND SHPO	North Dakota State Historic Preservation Office
NM SHPO	NM SHPO	New Mexico State Historic Preservation Office
NPS	NPS	United States National Park Service
NV SHPO	NV SHPO	Nevada State Historic Preservation Office
OK SHPO	OK SHPO	Oklahoma State Historic Preservation Office
SD SHPO	SD SHPO	South Dakota State Historic Preservation Office
TX SHPO	TX SHPO	Texas State Historic Preservation Office
UT SHPO	UT SHPO	Utah State Historic Preservation Office
WA SHPO	WA SHPO	Washington State Historic Preservation Office
WY SHPO	WY SHPO	Wyoming State Historic Preservation Office

<b>Domain Name: CRM Spatial Collection Method</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_SPTL_CLCTN_MTHD</b>
The method or manner in which the spatial data regarding the location of the resource was collected.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Unknown
<b>Code</b>	<b>Description</b>	<b>Definition</b>
GPS	GPS	A GPS unit, of any grade, was used.

Digitized – USGS24000	Digitized – USGS24000	Horizontal position coordinates were derived from USGS map at 1:24,000 scale. If one transfers a GPS position to a map, then digitizes from the map, the accuracy is still that of the map, not the GPS.
Digitized – USGS62500	Digitized – USGS62500	Horizontal position coordinates were derived from USGS map at 1:62,500 scale. <b>Note:</b> If one transfers a GPS position to a map, then digitizes from the map, the accuracy is still that of the map, not the GPS.
Digitized – USGS63560	Digitized – USGS63560	Horizontal position coordinates were derived from USGS map at 1:63,560 scale. <b>Note:</b> If one transfers a GPS position to a map, then digitizes from the map, the accuracy is still that of the map, not the GPS.
Digitized – USGS100000	Digitized – USGS100000	Horizontal position coordinates were derived from USGS map at 1:100,000 scale. <b>Note:</b> If one transfers a GPS position to a map, then digitizes from the map, the accuracy is still that of the map, not the GPS.
Digitized – USGS 250000	Digitized – USGS 250000	Horizontal position coordinates were derived from USGS map at 1:250,000 scale. <b>Note:</b> If one transfers a GPS position to a map, then digitizes from the map, the accuracy is still that of the map, not the GPS.
Digitized-Other	Digitized-Other	Examples include: Digitized land office maps, Mylar, other map scales not listed.
Aliquot	Aliquot	Derived from an aliquot (cadastral) location. This depends upon the size of the aliquot part relative to the entity coordinate. At best, the horizontal positional accuracy is that of the associated map.
Hand Sketch	Hand Sketch	Examples include: Verbal description of location which is hand drawn into a geospatial boundary.
Image Interpretation	Image Interpretation	Interpretation from an image which could include infrared, remote sensing, etc.
Other	Other	Some other source, known but not among choices listed.
Unknown	Unknown	Method used to collect geospatial data is not known.

<b>Domain Name: CRM Investigation Authority</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_INVSTGTN_AUTH</b>
The authority or framework under which the investigation occurred.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Unknown
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Section 106	Section 106	Section 106 of the National Historic Preservation Act (NHPA) of 1966.
Section 110	Section 110	Section 110 of the National Historic Preservation Act (NHPA) of 1966.
ARPA	ARPA	Archeological Resources Protection Act of 1979.
NAGPRA	NAGPRA	Native American Graves Protection and Repatriation Act.
Other	Other	Investigation authorized via another process not listed above.
Unknown	Unknown	The authorization process is not known.

<b>Domain Name: CRM Investigation Class</b>		
<b>Physical Domain Table</b>		<b>CRM_DOM_INVSTGTN_CL</b>
The type of investigation completed, indicates the level of detail/complexity of an investigation.		
<b>Geodatabase Domain Values</b>		<b>DEFAULT VALUE:</b>
		Unknown
<b>Code</b>	<b>Description</b>	<b>Definition</b>
Class II Inventory	Class II Inventory	An inventory that does not meet state Class III inventory standards. May include probabilistic field survey: A statistically based sample survey designed to help characterize the probable density, diversity and distribution of archeological properties in a large area by interpreting the results of surveying limited and discontinuous portions of the target area.

Class III Inventory	Class III Inventory	Intensive field survey: A continuous, intensive survey of an entire target area, aimed at locating and recording all archaeological properties that have surface indications, by walking close-interval parallel transects until the area has been thoroughly examined. Class III methods vary geographically; conforming to the prevailing standards for the region involved with transect spacing of 30 meters or less.
Class II and Class III	Class II and Class III Inventory	Combination of Class II and Class III survey strategies used in the investigation.
Excavation	Excavation	Subsurface investigation at a known resource location.
Collections Non-Field Study	Collections or Non-Field Study	Analysis of materials, artifacts, samples that are taken from a resource in a previous investigation.
Monitoring	Monitoring	A condition assessment of existing resource(s) or high probability area(s) to include site updates, ground disturbance, etc.
Ethnographic Study	Ethnographic Study	Ethnography or ethnographic is the systematic study of people and cultures.
Site Specific Study	Site Specific Study	Advanced study of a resource over and above general recordation to address specific research questions and domains.
Other	Other	An investigation that does not fit within previous categories (e.g., cursory, reconnaissance).
Unknown	Unknown	The class or type of investigation is not known.

## DATA STANDARD IMPLEMENTATION DETAILS

### A. Resource Polygons (*crm\_rsrce\_poly*)

The features for Resource Polygons are defined below. Domain values are used when appropriate.

A resource polygon shows the historic property constituting the smallest unit of management considered by the NRHP; it may be an individual building, structure, object or site.

**Common Attributes are documented in Bold.** Design considerations for common attributes can be found above in the Common Attributes section.

CRM Resource Polygon Featureclass Attributes						
GIS NAME	ALIAS	DATA FORMAT	ALLOW NULLS?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CRM_RSRCE_ID	CRM Resource Unique Identifier	Char(50)	NO			YES
RSRCE_AGCY_ID	Agency Resource Identifier	Char(50)	YES			NO
RSRCE_SHPO_ID	SHPO Database Resource Identifier	Char(50)	YES			NO
RSRCE_NM	Resource Name	Char(255)	YES			NO
RSRCE_TMPRL_CLTRL_ASGNMNT	Resource Temporal Cultural Assignment	Char(50)	NO	Unknown	<i>CRM_DOM_RSRCE_TMPRL_CLTRL_ASGNMNT</i>	NO
RSRCE_PRMRY_PPRPTY_CL	Resource Primary Property Class	Char(30)	NO	Site	<i>CRM_DOM_RSRCE_PRMRY_PPRPTY_CL</i>	NO
RSRCE_PRMRY_CAT_NM	Resource Primary Category Name	Char(30)	NO	Unknown	<i>CRM_DOM_RSRCE_PRMRY_CAT</i>	NO
RSRCE_CAT	Resource Category	Char(2000)	YES			NO
RSRCE_NRHP_ELGBLE_STTS	Resource NRHP Eligibility Status	Char(12)	NO	Undetermined	<i>DOM_YES_NO_UNDETERMINED</i>	NO
RSRCE_NRHP_ELGBLE_CRTRA	NRHP Eligibility Criteria	Char(35)	NO	Not Specified	<i>CRM_DOM_RSRCE_NRHP_ELGBLE_CRTRA</i>	NO

CRM Resource Polygon Featureclass Attributes						
GIS NAME	ALIAS	DATA FORMAT	ALLOW NULLS?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
RSRCE_NRHP_ELGBLE_AUTH_NM	Resource NRHP Eligibility Authority Name	Char(35)	YES	NA	<i>CRM_DOM_RSRCE_NRHP_ELGBLE_AUTH_NM</i>	NO
RSRCE_CNDTN_ASSMNT	Resource Condition Assessment	Char(50)	NO	Unknown	<i>CRM_DOM_RSRCE_CNDTN_ASSMNT</i>	NO
RSRCE_LAST_RCRD_DT	Resource Last Recorded Date	Char (20)	YES			NO
RSRCE_DATE	Resource Last Recorded Date	Date	YES			NO
RSRCE_CLCTN_PRFRM_STTS	Resource Collection Performed Status	Char(20)	NO	Unknown	<i>CRM_DOM_RSRCE_CLCTN_PRFRM_STTS</i>	NO
RSRCE_DATA_SRCE	Resource Data Source	Char(25)	NO	Unknown	<i>CRM_DOM_DATA_SRCE</i>	NO
RSRCE_SPTL_CLCTN_MTHD	Resource Spatial Collection Method	Char(30)	NO	Unknown	<i>CRM_DOM_SPTL_CLCTN_MTHD</i>	NO
RSRCE_CMT	Resource Comments	Char (2000)	YES			NO
<b>ADMIN_ST</b>	Administrative State Code	Char(2)	NO		<i>DOM_ADMIN_ST</i>	NO
<b>GIS_ACRES</b>	GIS Acres	Double	NO	0.0		YES
<b>BLM_ACRES</b>	BLM Acres	Double	NO	0.0		NO
<b>CREATE_DATE</b>	Created Date	Date	NO	9/9/9999		NO
<b>CREATE_BY</b>	Created By Name	Char(30)	NO	UNK		NO
<b>GlobalID</b>	GlobalID	UUID	NO			NO
<b>Common Attributes are documented in Bold.</b> Physical definitions and design considerations for common attributes can be found above in the Global Common Attributes section.						

GIS Name	Alias	Physical Definition and Design Considerations
CRM_RSRCE_ID	CRM Resource Identifier	<p><b>Physical Definition:</b> The BLM-assigned primary key for resource polygons. This value is calculated using the ADMIN_ST value concatenated with the data standard abbreviation “CRM” and then which featureclass it is. In this case it is “RSRCE” for resource. Next is an incrementing number that includes a range specific to each state in alphabetical order. The incrementing number starts at 1,000,000 and ends at 999,999 for each state.</p> <p><b>Design Considerations:</b></p> <p>AK – CRMRSC1,000,000 to CRMRSC1,999,999  AZ – CRMRSC2,000,000 to CRMRSC2,999,999  CA – CRMRSC3,000,000 to CRMRSC3,999,999  CO – CRMRSC4,000,000 to CRMRSC4,999,999  ES – CRMRSC5,000,000 to CRMRSC5,999,999  ID – CRMRSC6,000,000 to CRMRSC6,999,999  MT – CRMRSC7,000,000 to CRMRSC7,999,999  NM – CRMRSC8,000,000 to CRMRSC8,999,999  NV – CRMRSC9,000,000 to CRMRSC9,999,999  OR – CRMRSC10,000,000 to CRMRSC10,999,999  UT – CRMRSC12,000,000 to CRMRSC12,999,999  WY – CRMRSC13,000,000 to CRMRSC13,999,999</p>



GIS Name	Alias	Physical Definition and Design Considerations
RSRCE_AGCY_ID	Agency Resource Identifier	<p><b>Physical Definition:</b> The alphanumeric identifier for the resource assigned by the managing agency (usually assigned by a BLM field office). If assigned by consultants: A working/temporary identifier.</p> <p><b>Design Considerations:</b> Free-form text field.</p> <p><i>Examples:</i></p> <p>Arizona: 2007-732.ASM, A75-180.MNA BLM-010-01-1988-003</p> <p>Colorado: 5RB.2657, 5RB.3404.2</p> <p>New Mexico: 87534, 87532, NM-21-44168</p> <p>Utah: 42SP397, 42SP125</p> <p>Some NM offices do not issue BLM numbers, but others do. 87534 and 87532 are examples of SHPO assigned numbers which uses the LA system. NM-21-44168 is an example of a BLM office assigned resource identifier.</p> <p>Associated with Business Rule # 11 and #13</p>
RSRCE_SHPO_ID	SHPO Database Resource Identifier	<p><b>Physical Definition:</b> The unique identifier originating from the SHPO database for the resource polygon.</p> <p><b>Design Considerations:</b> Free-form text field. This unique identifier will be migrated into the CRM geodatabase “as is”.</p> <p>Associated with Business Rule # 11 and #13</p>
RSRCE_NM	Resource Name	<p><b>Physical Definition:</b> The name given to the cultural resource.</p> <p><b>Design Considerations:</b> Free-form text field.</p>

GIS Name	Alias	Physical Definition and Design Considerations
RSRCE_TMPRL_CLTRL_ASGNMNT	Resource Temporal Cultural Assignment	<p><b>Physical Definition:</b> The general age category and cultural affiliation of the resource.</p> <p>The domain values vary by state and region with historic post EuroAmerican contact. Ethnohistoric refers to resources that are post EuroAmerican influence or contact but are part of traditional Native American life ways.</p> <p>Attribute Domain Assignment: CRM_DOM_RSRCE_TMPRL_CLTRL_ASGNMNT</p> <p><i>Default: Unknown</i></p> <p>Associated with Business Rule #2.</p>
RSRCE_PRMRY_PRPRTY_CL	Resource Primary Property Class	<p><b>Physical Definition:</b> The primary classification type of the resource property which conveys management implications.</p> <p>Attribute Domain Assignment: CRM_DOM_RSRCE_PRMRY_PRPRTY_CL</p> <p><i>Default: Site</i></p> <p>Associated with Business Rule # 4.</p>
RSRCE_PRMRY_CAT_NM	Resource Primary Category	<p><b>Physical Definition:</b> The primary, most prevalent general purpose or pattern of use that created the resource. May also be known as “site type”.</p> <p>Domain Assignment: CRM_DOM_RSRCE_PRMRY_CAT</p> <p><i>Default: Unknown</i></p> <p>Associated with Business Rule # 5 and #8.</p>

GIS Name	Alias	Physical Definition and Design Considerations
RSRCE_CAT	Resource Category	<p><b>Physical Definition:</b> This is a field that holds the concatenated category values that include site constituents, artifacts, and features. These values should be used to determine the value for the “Resource Primary Category” field.</p> <p>Associated with Business Rule # 5.</p>
RSRCE_NRHP_ELGBLE_STTS	Resource NRHP Eligibility Status	<p><b>Physical Definition:</b> Indicates if, during the most recent evaluation, the resource was determined to be eligible for listing on the National Register of Historic Places. A determination of eligibility is a decision made by the Department of the Interior that a district, site, building, structure or object meets the National Register criteria for evaluation although the property is not formally listed in the National Register.</p> <p><b>Design Considerations:</b></p> <p>Attribute Domain Assignment: DOM_YES_NO_UNDETERMINED</p> <p><b>Default: <i>Undetermined</i></b></p> <p>Associated with Business Rule # 6 and #8.</p>

GIS Name	Alias	Physical Definition and Design Considerations
RSRCE_NRHP_ELGBLE_CRTRA	Resource NRHP Eligibility Criteria	<p><b>Physical Definition:</b> The criteria under which the determination of NRHP eligibility was made. Elevates management decision – mitigation impacts</p> <p><b>Design Considerations:</b> Attribute Domain Assignment: CRM_DOM_RSRCE_NRHP_ELGBLE_CRTRA</p> <p><i>Default: Not Specified</i> Associated with Business Rule #6 and #8.</p>
RSRCE_NRHP_ELGBLE_AUTH_NM	Resource NRHP Eligibility Authority Name	<p><b>Physical Definition:</b> The authority or process under which the NHRP eligibility was made. Provides information about the level of trust that can be placed in the NRHP eligibility determination.</p> <p><b>Design Considerations:</b> Attribute Domain Assignment: CRM_DOM_RSRCE_NRHP_ELGBLE_AUTH_NM</p> <p><i>Default: N/A</i> Associated with Business Rule #6 and #8.</p>

GIS Name	Alias	Physical Definition and Design Considerations
RSRCE_CNDTN_ASSMNT	Resource Condition Assessment	<p><b>Physical Definition:</b> The resource condition in terms of its natural or unnatural degradation.</p> <p><b>Design Considerations:</b> Attribute Domain Assignment: CRM_DOM_RSRCE_CNDTN_ASSMNT <i>Default: Unknown</i> Associated with Business Rule # 7.</p>
RSRCE_LAST_RCRD_DT	Resource Last Recorded Date	<p><b>Physical Definition:</b> The calendar year in which the resource was last recorded or updated.</p> <p><b>Design Considerations:</b> Date format is YYYY.</p>
RSRCE_DATE	Resource Last Recorded Date	<p><b>Physical Definition:</b> A full date in which the resource was last recorded or updated. This will be the field to use going forward in order to retain the temporal aspect of this data. The RSRCE_LAST_RCRD_DT holds a non-standard set of date values that need to be cleaned and moved into this RSRCE_DATE field.</p> <p><b>Design Considerations:</b> This stores a full date field.</p>
RSRCE_CLCTN_PRFRM_STTS	Resource Collection Performed Status	<p><b>Physical Definition:</b> Indicates if a documented collection has ever been performed on this resource.</p> <p>Documentation sources may include the site record or collection catalog.</p> <p><b>Design Considerations:</b> Attribute Domain Assignment: DOM_YES_NO_UNKNOWN <i>Default: Unknown</i> Associated with Business Rule #9.</p>

GIS Name	Alias	Physical Definition and Design Considerations
RSRCE_DATA_SRCE	Resource Data Source	<p><b>Physical Definition:</b> The source of the digital data from which the information about this resource was taken.</p> <p><b>Design Considerations:</b> Attribute Domain Assignment: CRM_DOM_DATA_SRCE <i>Default: Unknown</i></p>
RSRCE_SPTL_CLCTN_MTHD	Resource Spatial Collection Method	<p><b>Physical Definition:</b> The method or manner in which the spatial data regarding the location of the resource was collected.</p> <p>Attribute Domain Assignment: CRM_DOM_SPTL_CLCTN_MTHD <i>Default: Unknown</i></p>
RSRCE_CMT	Resource Comment	<p><b>Physical Definition:</b> A comment field that allows the user to provide more information about the site, artifacts or features.</p> <p><b>Design Considerations:</b> Free-form text field.</p>

## ***B. Investigation Polygons (crm\_invstgtn\_poly)***

The features for Investigation Polygons are defined below. Domain values are used when appropriate.

An investigation polygon portrays an event or activity resulting in the identification, documentation, restoration, rehabilitation or preservation of historic properties. Investigations may, or may not (in the case of “negative” identification efforts), relate to one or more historic properties. Common examples of investigations include inventory, excavation, documentation and restoration activities.

**Common Attributes are documented in Bold.** Design Considerations for common attributes can be found above in the Common Attributes section.

CRM Investigation Polygon Featureclass Attributes						
GIS NAME	ALIAS	DATA FORMAT	ALLOW NULLS?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CRM_INVSTGTN_ID	CRM Investigation Unique Identifier	Char(50)	NO			YES
INVSTGTN_AGCY_ID	Agency Investigation Unique Identifier	Char(50)	YES			NO
INVSTGTN_SHPO_ID	SHPO Database Investigation Identifier	Char(50)	YES			NO
INVSTGTN_CMLPTE_MONTH_YR	Investigation Completed Month/Year	Char(20)	YES			NO
INVSTGTN_DATE	Investigation Completed Date	Date	YES			NO
INVSTGTN_LEAD_BLM_ADMIN_ST	Investigation Lead BLM Administrative State	Char(2)	NO			NO
INVSTGTN_TITLE	Investigation Title	Char(255)	YES			NO
INVSTGTN_ATHRTY	Investigation Authority	Char(50)	NO	Unknown	<i>CRM_DOM_INVSTGTN_AUTH</i>	NO
INVSTGTN_CLASS	Investigation Class	Char(30)	NO	Unknown	<i>CRM_DOM_INVSTGTN_CL</i>	NO
INVSTGTN_PRFRM_PARTY_NM	Investigation Performed By Party Name	Char(100)	YES			NO
INVSTGTN_NEPA_ID	Investigation NEPA Identifier	Char (50)	YES			NO
INVSTGTN_DATA_SRCE	Investigation Data Source	Char(25)	NO	Unknown	<i>CRM_DOM_DATA_SOURCE</i>	NO
INVSTGTN_CMT	Investigation Comments	Char(2000)	YES			NO
<b>ADMIN_ST</b>	Administrative State Code	Char(2)	NO		<i>DOM_ADMIN_ST</i>	NO
<b>GIS_ACRES</b>	GIS Acres	Double	NO	0.0		YES
<b>BLM_ACRES</b>	BLM Acres	Double	NO	0.0		NO
<b>CREATE_DATE</b>	Created Date	Date	NO	9/9/9999		NO
<b>CREATE_BY</b>	Created By Name	Char(30)	NO	UNK		NO
<b>GlobalID</b>	GlobalID	UUID	NO			NO

**Common Attributes are documented in Bold.** Physical definitions and design considerations for common attributes can be found above in the Global Common Attributes section.

GIS Name	Alias	Physical Definition and Design Considerations
CRM_INVSTGTN_ID	CRM Investigation Identifier	<p><b>Physical Definition:</b> The BLM-assigned primary key for investigation polygons. This value is calculated using the ADMIN_ST value concatenated with the data standard abbreviation “CRM” and then which feature class it is. In this case it is “INVSTGTN” for investigation. Next is an incrementing number that includes a range specific to each state in alphabetical order. The number starts at 1,000,000 and increments 999,999 for each state.</p> <p><b>Design Considerations:</b> Block Number assignments.</p> <p>AK – CRMINV1,000,000 to CRMINV1,999,999  AZ – CRMINV2,000,000 to CRMINV2,999,999  CA – CRMINV3,000,000 to CRMINV3,999,999  CO – CRMINV4,000,000 to CRMINV4,999,999  ES – CRMINV5,000,000 to CRMINV5,999,999  ID – CRMINV6,000,000 to CRMINV6,999,999  MT – CRMINV7,000,000 to CRMINV7,999,999  NM – CRMINV8,000,000 to CRMINV8,999,999  NV – CRMINV9,000,000 to CRMINV9,999,999  OR – CRMINV10,000,000 to CRMINV10,999,999  UT – CRMINV11,000,000 to CRMINV11,999,999  WA – CRMINV12,000,000 to CRMINV12,999,999  WY – CRMINV13,000,000 to CRMINV13,999,999</p>



GIS Name	Alias	Physical Definition and Design Considerations
<p>INVSTGTN_AGCY_ID</p>	<p>Agency Investigation Identifier</p>	<p><b>Physical Definition:</b> The alphanumeric identifier for the investigation assigned by the managing agency (usually assigned by a BLM field office). If assigned by consultants: A working/temporary identifier.</p> <p><b>Design Considerations:</b> Free-form text field.</p> <p><i>Examples:</i></p> <p>Arizona: 3.257.SHPO                      Colorado: GF.LM.R514                      New Mexico: NM-010-2014(III)B,                      NM-220-2011(IV)055                      Utah: U00A10570, U00A10616                      Nevada example: 3 is the field / district office, followed by a sequential; CRR stands for Cultural Resource Report).</p> <p>UT does not assign an investigation agency ID. The state investigation ID is the unique identifier for an investigation.</p> <p>New Mexico does NOT use state investigation ID as its investigation number. All BLM offices assign a BLM investigation ID.</p> <p>If a resource has multiple managers, there may be more than one agency number.</p> <p>Associated with Business Rule # 11 and #13</p>

GIS Name	Alias	Physical Definition and Design Considerations
INVSTGTN_SHPO_ID	SHPO Database Investigation Identifier	<p><b>Physical Definition:</b> The unique identifier originating from the SHPO database for the investigation polygon.</p> <p><b>Design Considerations:</b> Free-form text field. This unique identifier will be migrated into the CRM geodatabase “as is”.</p> <p>Associated with Business Rule # 11 and #13.</p>
INVSTGTN_CMPLT_MONTH_YR	Investigation Completed Month/Year	<p><b>Physical Definition:</b> The month and year in which the inventory was completed.</p> <p><b>Design Consideration:</b> Date format is MM-YYYY.</p>
INVSTGTN_DATE	Investigation Completed Date	<p><b>Physical Definition:</b> A full date in which the investigation was last recorded or updated. This will be the field to use going forward in order to retain the temporal aspect of this data. The INVSTGTN_CMPLTE_MONTH_YR holds a non-standard set of date values that need to be cleaned and moved into this INVSTGTN_DATE field.</p> <p><b>Design Considerations:</b> This is in a date field format to hold temporal data instead of a text field that holds just the year.</p>

GIS Name	Alias	Physical Definition and Design Considerations
INVSTGTN_LEAD_BLM_ADMIN_ST	Investigation Lead BLM Administrative State	<p><b>Physical Definition:</b> Lead BLM administrative state having primary responsibility for the investigation. If an investigation crosses state lines, SHPOs in both states will have an investigation report. One state will take the lead in a multi-state investigation and this field will be populated with the lead state's identifier.</p> <p>NM has examples of investigations crossing state lines.</p> <p><b>Design Consideration:</b></p> <p>Attribute Domain Assignment: DOM_ADMIN_ST</p>
INVSTGTN_TITLE	Investigation Title Name	<p><b>Physical Definition:</b> The name by which the investigation is known.</p> <p><b>Design Consideration:</b> Free-form text field. There is no formal convention for investigation title name.</p> <p><i>Examples:</i></p> <p>“A Class III Inventory of 17.3 Acres of BLM Land Near Lake Woebegone, Prairie County, Minnesota”</p> <p>Title could be assigned at the state level as the title of the report or may be the title assigned by the SHPO.</p>

GIS Name	Alias	Physical Definition and Design Considerations
INVSTGTN_AUTH	Investigation Authority	<p><b>Physical Definition:</b> The authority or framework under which the investigation occurred.</p> <p><b>Design Consideration:</b> Attribute Domain Assignment: CRM_DOM_INVSTGTN_AUTH <i>Default: Unknown</i> Associated with Business Rule #15.</p>
INVSTGTN_CL	Investigation Class	<p><b>Physical Definition:</b> The type of investigation completed. Indicates the level of detail and complexity of the investigation.</p> <p><b>Design Consideration:</b> Attribute Domain Assignment: CRM_DOM_INVSTGTN_CL <i>Default: Unknown</i> Associated with Business Rule #10 and #14.</p>
INVSTGTN_PRFRM_PARTY_NM	Investigation Performed By Party Name	<p><b>Physical Definition:</b> The name of the contractor, company, agency or office that performed the investigation.</p> <p><b>Design Consideration:</b> Free-form text field. Associated with Business Rule #16.</p>

GIS Name	Alias	Physical Definition and Design Considerations
INVSTGTN_NEPA_ID	Investigation NEPA Identifier	<p><b>Physical Definition:</b> The identifier of the NEPA document which triggered the investigation or the Cultural Resources Management Plan that generated the investigation.</p> <p><b>Design Consideration:</b> Free-form text field.</p>
INVSTGTN_DATA_SRCE	Investigation Data Source	<p><b>Physical Definition:</b> The source of the digital data from which the information about this inventory was taken. Intended to show if the data came from the legacy SHPO database, an external source or from within the BLM once the new system is put into place.</p> <p><b>Design Considerations:</b> Attribute Domain Assignment:CRM_DOM_DATA_SRCE</p> <p><i>Default: Unknown</i></p>
INVSTGTN_CMT	Investigation Comment	<p><b>Physical Definition:</b> A comment field that provides more information about the investigation.</p> <p><b>Design Considerations:</b> Free-form text field.</p>

### C. Resource Investigation Table (*crm\_rsrce\_invstgtn\_tbl*)

The Resource Table represents transactional datafor Resource Polygons (*crm\_rsrce\_poly*).

GIS NAME	ALIAS	DATA FORMAT	ALLOW NULLS?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CRM_RSRCE_ID	CRM Resource Unique Identifier	Char(50)	NO			NO
CRM_INVSTGTN_ID	CRM Investigation Identifier	Char(50)	NO			NO

GIS Name	Alias	Physical Definition & Design Considerations
CRM_RSRCE_ID	CRM Unique Resource Identifier	<p><b>Physical Definition:</b> The foreign key used to relate to records in the resource polygon layer.</p> <p><b>Design Considerations:</b> See the Design Considerations statement for this attribute field in the attribute descriptions table for the Resource Polygons feature class (<i>crm_rsrce_poly</i>).</p> <p>Associated with Business Rule #12.</p>
CRM_INVSTGTN_ID	CRM Investigation Identifier	<p><b>Physical Definition:</b> The foreign key used to relate to records in the investigation polygon layer.</p> <p><b>Design Considerations:</b> See the Design Considerations statement for this attribute field in the attribute descriptions table for the Investigation Polygon feature class (<i>crm_rsrce_poly</i>).</p> <p>Associated with Business Rule #12.</p>

## **APPENDIX A: DOMAIN VALUES**

Documentation about the nature and management of domain values is available on the [BLM National Data Standards SharePoint](#). Instructions are provided below for navigating to each document on this SharePoint page.

For further details about domains specific to this standard, see the “CRM\_Domains\_NHSP.docx”:

- Review Data Development > Development Type: Data Standard > Data Development Project Name: CRM – Cultural Resource Management

For further details about Feature Level Metadata Domains, please see “Feature Level Metadata Domains Definitions”:

- Standards Support Information > Document Type: Reference > Subject: Domains

For further details about Global Domains, please see “Global Domains Definitions”:

- Standards Support Information > Document Type: Reference > Subject: Domains

For instructions on implementing and maintaining domains in a geodatabase, see “Domains Management for Geodatabases”:

- Standards Support Information > Document Type: Instruction > Subject: Domains

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.

## APPENDIX B: 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/number of characters or numbers/Precision and Scale.	Char(15)
Allow Nulls?	If an attribute is or is not allowed to have a “Null” value. If “NO”, the attribute is required, if “YES”, 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. The description of how the attribute is derived will be included in the Definition/Design Consideration.	NO
Logical Attribute Name	The business name of the attribute which includes the entity name, and representation term. Definitions for Logical Attributes can be found in the Data Standard Report.	Global Positioning System Receiver Type Name



**REVISION HISTORY**

<b>VERSION NO.</b>	<b>VERSION TYPE</b>	<b>DATE</b>	<b>PURPOSE</b>
1.0	Original Pilot		
1.1	Revision	09/16/2015	Update implementation guide to reflect changes made as a result of data migration. Document will be presented to SMEs.
1.2	Second Pilot	5/19/2017	Modified proposed data standard from CPPP project as a result of migrating 11 states data into the standard (NHSP project).
1.3	Final	02/14/2018	Finalized the first revision of the data standard.