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CULTURAL RESOURCES MANAGEMENT (CRM) BUSINESS RULES

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

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INTRODUCTION

Description of the Data Standard

The BLM Cultural Heritage program investigates, records, evaluates, and manages cultural resources on BLM-administered public lands and in areas of BLM responsibility. The BLM management of cultural resources (archaeological, historic and socio-cultural properties) is in accordance with the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, and other applicable legislation as identified in Appendix F in the CRM Data Standard Report.

The CRM data standard applies most directly to historic and prehistoric resources. Such resources are generally fifty years old or older. BLM defines a cultural resource in Manual 8100 as “a definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence”. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups as defined by the NHPA and implementing regulations, 36 CFR 800.

The Cultural Resource Management (CRM) data standard provides a common data format for compiling spatial and non-spatial data about cultural resources and the investigations associated with those cultural resources. Data collected in accordance with a standardized data format are more useful and convenient for cultural analysis and land management by a wider variety of programs and individuals. The CRM data standard provides the ability to determine where investigations have occurred, when they occurred and what area was covered. The CRM data standard provides the ability to determine where resources have been identified in an area, what type of resources were found, and the regulatory status of each resource.

The CRM data standard was developed initially as part of the Colorado Plateau Pilot Project (CPPP). The CPPP project included assembling data from four states. Subsequently the National Heritage Solution Pilot (NHSP) included assembling data from 11 states and proving the proposed data standard. Any changes as a result of this effort are included in this document. The pilot effort was tasked with creating a landscape and interstate level database, for cultural resources site and inventory data, which can be employed to consider cultural resources at high level-planning, such as Programmatic Environmental Impact Statements (PEISs), Resource Management Plans (RMPs), Rapid Ecoregional Assessments (REAs) and Focal Area analyses. The core attributes identified within this document serve to answer business questions and the BLM’s landscape analysis needs for planning, multistate regional analysis, and national level cultural resource management issues. Some state and field office business needs may not be fully met by this national data standard.

The CRM national dataset is intended to be an aggregated dataset that contains a processed and generalized version of the detailed source data from the SHPO offices. For example, only the most recent resource eligibility determination and resource conditions are needed in the national dataset; when each state may keep all of these records for each visit. To ensure the data is updated at the national level; ETL

processes will be developed that gather the detailed data from each state and migrate it to fit into the national data standard on a periodic interval.

Previous work to create data standards, conducted by the Cultural Resources Data Sharing Partnership (CRDSP) and the Federal Geographic Data Committee (FGDC), provides background for the content and metadata standards for BLM's CRM data standard. The BLM's CRM data standard addresses the business needs of the BLM as distinct from other state and federal agencies.

Business Rules Purpose

The rules under which data are used and modified (See BLM Handbook H 1283-2, Data Administration and Management Handbook, Chapter 7 – Documenting Business Rules.)

Business rules describe the limitations put on the business either by practice or by legal authority. They provide a formal structure for understanding the business operation. There are generally two perspectives from which business rules are described:

From a business perspective, business rules are operating principles that define and control business activities and the products and services they deliver. Business rules typically define who can take what actions and under what circumstances, and are generally expressed in terms of policy, procedures, and guidelines. Subject Matter Experts (SMEs) are the main sources for information on these types of business rules.

From an information system and data perspective, business rules dictate how data is managed and accessed. These types of rules specify constraints on the creation, update, use, archival, and disposal/deletion of data. These types of rules may be created by the SMEs and Data Stewards, but may also be created by the developer and data experts for a particular application in conjunction with the SMEs and Data Stewards.

BUSINESS RULES

BR1. Federal Geographic Data Committee (FGDC) Standards

FGDC standards that apply to Cultural Resource Management (CRM) will be adhered to in the implementation of this standard.

Business Rule Source and Description

Guidance

Type of Business Rule

Required

Current Implementation

Not Applicable

BR2. Each cultural resource needs a primary timeframe assignment for project planning purposes.

A primary timeframe assignment is needed to understand the chronology of sites in a project area. This information allows the archaeologist to make high-level planning decisions about further evaluation that may need to occur. This also provides detail needed for NRHP evaluation. Having this information in the national database provides the ability to quantify the number of sites of a certain type and age for planning decisions.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR3. The national dataset will be used for high-level planning and will not include the detailed data that each state maintains.

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 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.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR4. Primary Site Activities and Uses

The primary classification type of the resource is needed to convey management implications. This is needed to provide a general understanding of the primary activities and uses that occurred at the site. This information helps to understand resource eligibility and significance.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR5. The resource data needs to include information about the artifact's complexity, diversity and the potential to yield information.

The main activity of the site is derived from the complexity and diversity of all the artifacts and features located at the site. This information provides an indication of site significance and its potential to yield information that qualify the resource for listing on the NRHP. It also provides information about the primary site activities.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR6. Track Eligibility Determination to Identify Cultural Priority Areas.

Only the most significant and most recent eligibility determination is needed. The NRHP Eligibility Authority determines the resource eligibility. There is a need to identify site significance and eligibility for the NRHP, allowing the determination of the areas that represent the highest sensitivity for cultural resources. This provides information early in the planning process to manage resources proactively and to facilitate minimization of conflicts in project planning.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR7. Only the most recent resource condition is needed.

Many states collect more than one condition record on a resource over time. For the national dataset, only the most recent condition is needed to establish the condition of the resource. If the Resource Last Recorded Date is not populated, then the worst condition will take precedence. The following indicates the rank to use for the condition values with the worst condition at the top of the list:

- 1) Destroyed
- 2) Threatened
- 3) Deteriorating
- 4) Stable

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR8. Significant resources need to be identified to reduce or eliminate conflict with a proposed project in the same area.

There is a need to provide information early in the planning process so that significant resources can be protected and allow decision-makers to understand the extent and nature of resources within the planning area. This allows for a proactive assessment of cultural resource values. This information facilitates project efficiencies and cost savings.

The significance of the resource is determined by the main activity of the site and the eligibility criteria.

Business Rule Source and Description

BLM Manual 8100

Type of Business Rule

Standard (Required)

Current Implementation

Interim

BR9. Track the collection status for a resource.

This information is needed to indicate that important resources were collected from the site. These can contribute to the assessment of site significance, education, public outreach and scientific research. In the future, the intent is to link to the specific collection information maintained with the Science, Permitting and Tracking System (SPATS) and Interior Collection Management System (ICMS) databases using the site number (trinomial).

Business Rule Source and Description

BLM Manual 8100

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR10. Class I Inventories are Not within Scope of This Data Standard.

Class I inventories are literature reviews that include the delineation of regional research questions, summaries of current knowledge, and other overviews of cultural resources. Class I inventories are not within scope of this data standard.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR11. Source data with pending SHPO or Agency ID's will not be included in the national dataset.

Resources or Investigations that do not have a SHPO or Agency ID assigned will not be migrated into the national dataset. Once those records are assigned an ID, then the next time the data is pulled from the state, those records will be included in the national dataset. A temporary ID could be assigned if the timespan to get a permanent ID is determined to be too long to not include the data.

Business Rule Source and Description

BLM Manual 8100

Type of Business Rule

Standard (Required)

Current Implementation

Not Applicable

BR12. There is a business need to know which resources or how many resources were found or updated during which investigation.

Not all states maintain a relationship between the investigation and the resource. The states that maintain a link between Investigations and Resources are CA, CO, OR and NM. For those that do, this information will be retained in the national dataset. Going forward, there is a need to know which resources are related to which investigation so that the history of the resource can be tracked through the investigations. The dates in which the investigation was completed or the resource was recorded are needed to track this information. Coordination with the SHPO is required to ensure that this information is collected and maintained going forward.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR13. There is a business need to link back to the original SHPO source data to gather more detailed information and to communicate information between the two agencies.

This data standard does not include all the detail that is maintained by each state SHPO office. The following fields are needed to reference (manually) back to the source data to find more detailed information:

RSRCE_AGCY_ID
 RSRCE_SHPO_ID
 INVSTGTN_AGCY_ID
 INVSTGTN_SHPO_ID

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR14. Tracking the Investigation Class

Investigations are an undertaking to determine resources within a proposed project or planning area. There is a need to track the investigation class and the level of completeness, and allows the user to determine whether further investigation in the project or planning area needs to occur and at what level.

Business Rule Source and Description

BLM Manual 8100

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR15. Tracking the Investigation Authority

The BLM conducts investigations under multiple authorities. It is important to track what authority was applied for planning and compliance purposes. The authority information is needed so the user can determine if Section 106 consultation has been accomplished in the project or planning area. Other investigations, such as Section 110, do not require consultation with the SHPO.

Business Rule Source and Description

BLM Manual 8100

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR16. Tracking the Investigation Performing Party

The performing party is information that needs to be tracked as it is related to the permitting process. Most of the investigation work is contracted out and requires a permit to conduct work on federal lands. This information indicates whether the investigation was done under permit, contract, or by a qualified federal entity.

Business Rule Source and Description

BLM Manual 8100

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

BR17. Overlapping Polygons

The resources and investigation layers both store overlapping polygons. These should be considered when reporting acreages to avoid double-counting.

Business Rule Source and Description

Guidance

Type of Business Rule

Standard (Desired)

Current Implementation

Not Applicable

Affected Groups

Cultural resource specialists, planners, field office managers.

Office	Role	Name and Title	Contact Information
WO-240	Sponsor	Byron Loosle, Division Chief	bloosle@blm.gov 202-912-7240
WO-240	Data Steward	Kirk Halford, Deputy Perservation Officer/State Archaeologist	fhalford@blm.gov 208-373-4043
OC-535	Development Team	Katy Carpenter, Geospatial Data Analyst	ccarpenter@blm.gov 303-236-5446
OC-535	Development Team	Venkata Kola, Sr. Enterprise Data Modeler	vkola@blm.gov 303-236-2624
OC-535	Development Team	Kumari Parul Bisen, Business Data Analyst	kbisen@blm.gov 303 236-6310

REVISION HISTORY

VERSION NO.	VERSION TYPE	DATE	PURPOSE
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.