

# Handbook of Guidelines and Procedures for Inventory, Evaluation, and Mitigation of Cultural Resources

Bureau of Land Management Colorado State Office 1998 (revised March 2021)

# **Table of Contents**

I. PURPOSE AND OBJECTIVES	1
II. AUTHORITIES	1
III. GLOSSARY OF TERMS	2
IV. LIST OF BUREAU OF LAND MANAGEMENT MANUALS FOR CULTURAL RESOURCE	
MANAGEMENT	4
V. PERMIT PROCEDURES FOR ARCHAEOLOGICAL INVESTIGATIONS	5
A. Types of Permits	6
1. Survey and Recordation	6
2. Limited Testing and/or Collection	7
3. Excavation and/or Removal	7
B. Permit Application, Renewal, and Modification	8
1. Organizational Qualifications	8
2. Individual Qualifications	9
3. Qualifications of Proposed Curatorial Facility	11
4. Certification by Curatorial Facility	12
5. Cultural and Geographic Area Experience	12
C. Application Review and Evaluation	12
D. Permit Areas	13
E. Permit Numbers	13
F. Fieldwork Authorization	
G. Pre-Field Check-In	13
H. Post-Field Check-In	
I. Annual Permit Reports to the State Office	
J. Outreach	
VI. INVENTORY	
A. Objectives	
B. Classes of Inventory	
C. Determination of Level of Inventory	
D. Minimal Area to be Inventoried	16
1. Rights-of-Way	17
2. Coal 17	
3. Oil and Gas	17
4. Geophysical	
5. Indirect APE	
E. Level and Intensity of Inventory and/or Monitoring	
F. Inventory Field Methods	
G. Recording Cultural Resources	20

H. Digital Data Management Specifications	20	
I. Evaluation	20	
J. Reporting Process and Standards		
1. Negative findings	21	
2. Positive findings with no effect to cultural resources	21	
3. Positive findings with effects to cultural resources	21	
K. Collection and Curation	22	
1. Collection	23	
2. Curation		
L. Treatment Options		
1. Avoidance	24	
2. Minimization	24	
3. Mitigation	24	
M. Treatment/Mitigation Plans	25	
N. Unanticipated Discoveries		
O. Emergencies	26	
P. Other General Standards that Apply to Land Uses		

#### I. PURPOSE AND OBJECTIVES

This handbook addresses cultural resource standards and guidelines and provides direction to Bureau of Land Management (BLM), cultural resource specialists, prospective or current cultural resource use permittees (CRUPs), other federal agencies, and commercial developers (herein referred to as project proponents). The requirements that are discussed here and in the BLM Manual Series 8100 dated December 3, 2004 (https://www.blm.gov/policy/manuals) regarding cultural resource policy are to be used by CRUPs that are applying for or hold a permit to conduct cultural resource work for a Federal undertaking or independent scientific study. This information is also used by the BLM to guide its own cultural program and by permit holders and project proponents to understand the scope and requirements that they may have to undertake in carrying out the stipulations attached to leases and permits under which they may be working.

The BLM requires that the cultural resource use permittee receiving a Permit for Archaeological Investigations (PAI) carry out the terms and conditions of the permit or face suspension or revocation of the permit. For a project proponent to proceed with a project, the permit stipulations must be completed. Signing the permit indicates acceptance of these responsibilities.

The BLM will provide necessary guidance to both cultural resource use permittees and project proponents regarding legal and regulatory requirements and cultural resource management. The BLM *is not* an arbitrator between cultural resource use permittees and project proponents with business disputes. The BLM strongly suggests that the two business entities develop explicit contracts between themselves prior to any CRUP application or issuance.

The BLM is required by law and regulation to ensure that Bureau-initiated or Bureau-authorized actions do not inadvertently harm or destroy cultural resources. Because most cultural resources are unidentified, irreplaceable, and highly sensitive to ground disturbance, it is necessary that the resources are properly identified, evaluated, and reported prior to any proposed action that might affect their integrity or condition. All cultural artifacts and other related materials such as notes, photographs, GIS, GPS, and other digital data, etc. from public lands remain the property of the U. S. Government.

#### II. AUTHORITIES

Other guidance provided for the identification, evaluation, treatment and management of cultural resources on BLM lands can be found in the Programmatic Agreement Among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers Regarding the Manner in which BLM will Meet Its Responsibilities under the National Historic Preservation Act (NHPA, as amended in 2016) [Also see "BLM Manual 8100 The Foundations For Managing Cultural Resources" for listing and description of applicable historic preservation laws].

In Colorado, specific guidance is provided by the:

- BLM Colorado Manual 8100 dated December 3, 2004;
- State Protocol Agreement Between the Colorado State Director of the Bureau of Land Management and the Colorado State Historic Preservation Officer Regarding the Manner in which the Bureau of Land Management will meet its Responsibilities under the National Historic Preservation Act and the 2012 National Programmatic Agreement Among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2014) (Protocol or Protocol Agreement);
- Office of Archaeology and Historic Preservation (OAHP) Colorado Cultural Resource Survey Manual;
- Colorado OAHP Cultural Resource Report Forms and Guidelines; and
- General Colorado historic and prehistoric context documents, as well as specific context documents, many of which can be found here: <a href="www.historycolorado.org/historic-prehistoric-contexts">www.historycolorado.org/historic-prehistoric-contexts</a>.

#### III. GLOSSARY OF TERMS

<u>Area of potential effects</u>: the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be caused by the undertaking.

<u>Cultural landscape</u>: a cultural landscape is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with an historic event, activity, or person, or exhibiting other cultural or aesthetic values (NPS Preservation Briefs 36, "Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes").

<u>Cultural resource or cultural property</u>: a definite location of human activity, occupation, or use, normally greater than 50 years of age, identifiable through field inventory, historical documentation, or oral evidence. The term includes archaeological, historical, or architectural sites, structures, places, or sites 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 (cf. "traditional cultural property"). Cultural resources are concrete, material places and things that are located, classified, ranked, and managed through the system of identifying, protecting, and utilizing for public benefit described in laws, regulations, and the BLM Manuals.

<u>Definite location</u>: having discernible, map-able, more-or-less exact limits or boundaries, on a scale that can be established by a survey crew using conventional sensing and recording equipment, by an informant's direct on-the-ground indication, or by precise placement in a documentary source (see "cultural resource or cultural property").

<u>Direct effect</u>: refers to the causality, not the physicality, of the effect to historic properties. This means that if the effect comes from the undertaking at the same time and place with

no intervening cause, it is considered "direct" regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.). Pursuant to 36 CFR 800.5(a)(1), such effects must impact "...any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association"."

<u>Field office standards and procedures</u>: procedures and reporting standards for cultural resource use permittees conducting projects under a Permit for Archaeological Investigations that supplement standards and procedures in this Handbook, and are maintained by individual BLM field offices or districts.

<u>Historic property</u>: any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). The term includes artifacts, records, and remains that are related to and located within such properties. The term "eligible" for inclusion in the NRHP includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet NRHP listing criteria (National Historic Preservation Act, 54 U.S.C. 300308). (See also "cultural resource or cultural property." Cultural resource or cultural property is an analogous BLM term not limited by NRHP status.) In Colorado, properties classified as "need data" are treated as if they are eligible for the NRHP.

Indirect effect: effects caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable. Pursuant to 36 CFR 800.5(a)(1), such effects must impact "...any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."

<u>Isolated find</u>: a physical location of past human activity consisting of one or very few artifacts in a location that is interpreted as not representing patterned human behavior. [Note: The distinction between a site and an isolated find is, in many instances, difficult to quantify. The above definition does not operationalize the distinction; it merely provides guidance to the Field Offices. In practice, the operational concepts of site and isolated find will be explicitly defined by each Field Office archaeologist and may, therefore, vary significantly from region to region within Colorado. Each Field Office should be asked to provide their definition before entering the field.]

<u>Large-scale projects</u>: projects involving acreage more than 160 acres with no sites, or any size acreage where sites are present. Test excavations, sample/full-scale excavations, and scientific research are considered to be large-scale projects. There is some flexibility in the use of this quideline according to project complexity.

<u>Permit areas:</u> permits are issued by three Colorado regions associated with Field Offices (FO) and National Landscape Conservation Lands: Plains region (Browns Canyon National Monument [NM], Kremmling FO [Larimer County only], and Royal Gorge FO); Mountain region (Colorado River Valley FO, Dominguez-Escalante National Conservation Area [NCA], Grand Junction FO, Gunnison FO, Gunnison Gorge NCA, Kremmling FO, Little Snake FO, McInnis Canyons NCA, San Luis Valley

FO, Uncompanded FO, and White River FO); and Southwest region (Canyons of the Ancients NM, La Jara Geographic Area (formerly La Jara FO, the southern portion of the San Luis Valley FO), and Tres Rios FO).

<u>Permittee</u>: professional cultural resource use permittee that holds a BLM PAI.

<u>Proponent</u>: operator, commercial developer, or any other party or organization proposing to conduct federal undertakings for which BLM is the lead agency.

<u>Section 106 consultation</u>: refers to consultation between the BLM (or other federal agency), the Colorado State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), Tribes, local governments, and other consulting parties, in accordance with Section 106 of the NHPA, and following procedures specified in the State Protocol Agreement.

<u>Site</u>: a *site* is the locus of previous human activity (50-year age minimum) at which the preponderance of evidence suggests either one-time diagnostically interpretable use or repeated use over time, or multiple classes of activities.

<u>Small-scale projects with limited results</u>: linear projects that do not exceed four (4) miles in length and/or block areas of 160 acres or fewer, with no sites, and a maximum of four (4) isolated finds.

<u>Traditional cultural property</u>: 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. See "cultural resource or cultural property" and "definite location." A traditional cultural property may qualify for the NRHP if it meets the criteria and criteria exceptions at 36 CFR 60.4 (see National Register Bulletin No. 38).

<u>Undertaking</u>: a term with legal definition and application i.e., "actions carried out by or on behalf of the agency; those carried out with Federal financial assistance; those requiring a Federal permit, license, or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a federal agency" (see National Historic Preservation Act, Section 106 and Section 301(7), Appendix 5; 36 CFR Part 800.16). Section 106 does not apply to actions subject to State or local regulations. Most land use authorizations approved by BLM, as well as BLM-funded projects, are undertakings for purposes of Section 106 of the NHPA.

# IV. LIST OF BUREAU OF LAND MANAGEMENT MANUALS FOR CULTURAL RESOURCE MANAGEMENT

8100 THE FOUNDATIONS FOR MANAGING CULTURAL RESOURCES

8110 IDENTIFYING AND EVALUATING CULTURAL RESOURCES

8130 PLANNING FOR USES OF CULTURAL RESOURCES

8140 PROTECTING CULTURAL RESOURCES

8150 PERMITTING USES OF CULTURAL RESOURCES

8160 COLLECTIONS MANAGEMENT (reserved)

8170 INTERPRETING CULTURAL RESOURCES FOR THE PUBLIC

#### V. PERMIT PROCEDURES FOR ARCHAEOLOGICAL INVESTIGATIONS

A PAI is a land use authorization that the State Director, or his/her designee, issues to a qualified applicant, pursuant to BLM Manual 8150, for the purposes of carrying out various identification and/or data recovery operations on cultural properties that are located on BLM-administered lands. The PAI does not apply to non-federal surface. Although permits are not issued for consultants working on non-federal land under BLM requirements, BLM is responsible for the quality of work done to satisfy historic preservation requirements and may ask to review both the project proponent's proposed choice of consultant and the adequacy of the work proposed and advise the proponent about adequacy of the qualifications and/or the work through official correspondence. The BLM must accept a consultant's work product before completing the historic preservation review process and approving the proponent's lands use application. At no time should a consultant use the permit as the mechanism to gain access to non-federal surface. The proponent is responsible for obtaining landowner consent and access.

Permits are issued partly under the authority of Section 302(b) of the Federal Land Policy and Management Act of 1976 (FLPMA) and the procedures in BLM Manual Section 2920, but in contrast to other "2920 permits," PAIs are nonexclusive, noncompetitive, minimum impact permits, and are not subject to Notices of Realty Action, filing fees, or cost reimbursement. PAIs are required for any person(s) performing cultural resource investigations on BLM-administered lands in Colorado. Permits are also issued under the authority of the Archaeological Resources Protection Act of 1979 (ARPA). PAIs are issued by the BLM Colorado State Office. For more information, contact the BLM Colorado State Archaeologist.

The State Director, or his/her designee, is responsible for receiving permit applications; preparing case files; conducting technical and management reviews to ensure that all qualifying requirements are met; issuing, denying, modifying, suspending, and revoking permits; and maintaining current files.

Field Office Managers or their designee, are responsible for conducting technical and management reviews of permit applications as requested by the State Director, or his/her designee; for making recommendations to the State Director, or his/her designee, for permit issuance, denial, modification, suspension, or revocation; for notifying and consulting with affected Tribes; for monitoring work conducted under permits; and for issuing fieldwork authorizations.

Cultural Resource Specialists on State and Field Office staffs are responsible for providing and

documenting technical reviews and recommendations; for developing terms and conditions; for monitoring and documenting permittees' technical performance; and for compliance with permit terms and conditions.

While the Colorado BLM encourages and requires participation by permittees at various stages of the Section 106 process, the Colorado BLM retains ultimate responsibility for complying with all requirements of the NHPA and its implementing regulations.

Permits may be issued to appropriately qualified applicants, provided the work proposed would further knowledge in the public interest, would not conflict with other legitimate or protected uses of the public lands and resources, and would not be inconsistent with any approved management plan, objective, or established policy applicable to the public lands concerned.

Permits are not issued to other Federal agencies. Officially proposed cultural work may be authorized by a written agreement. Approval is subject to the same review process and considerations specified in Manual 8150. The written agreement can be a letter, subject to the same special conditions applied to other permit holders, which must be referenced in the letter, with special conditions attached. Other Federal agencies are required to obtain a fieldwork authorization from the appropriate Field Office Manager prior to beginning fieldwork. An employee of another Federal agency, proposing to conduct off-duty personal research that would require a permit, is subject to the standard permit application process.

The terms and conditions that apply to all permits are listed in them and must be followed for all projects, or the permit may be suspended or revoked.

Additional Field Office standards and procedures are available at <a href="https://www.blm.gov/programs/cultural-heritage-and-paleontology/archaeology/what-we-manage/colorado">https://www.blm.gov/programs/cultural-heritage-and-paleontology/archaeology/what-we-manage/colorado</a>.

# A. Types of Permits

Cultural resource use permittees must be specific about the type of permit being requested in their application. The following uses are authorized:

1. <u>Survey and Recordation</u> activities may be authorized for applicants who propose to identify, evaluate, record, or conduct similar non-impacting studies of cultural properties that will not include excavation and/or removal of material remains or other significant disturbance of cultural properties. As acknowledged in advance, and specifically limited in the permit terms and conditions, such permits may authorize collection of isolated cultural materials, cultural materials that are at-risk of being damaged or removed by looters, and minor sub-surface probing to locate limits of cultural properties or unconfirmed archaeological deposits for mapping purposes. Minor, subsurface probing is limited to shovel or trowel tests. These permits may be issued on a multiple-Field Office or statewide basis, for three (3) years, to facilitate Section 106 compliance inventories. First-time permit holders, or those who have not demonstrated an organizational history of work on BLM Colorado lands, are issued permits for

one (1) year only, until they have established a history of successful project completion. Speculative permits are discouraged, and BLM may not issue a permit unless it is associated with a project. Also, BLM may not renew first-time permit holders if work is not conducted under the permit during the year.

2. <u>Limited Testing and/or Collection</u> activities may be authorized for applicants who propose to conduct small-scale testing and/or systematic collection and removal of cultural materials during field identification, evaluation, and recording, so that the significance or research potential of a cultural property may be better understood (but not substantially diminished). Small-scale testing should be limited to a maximum of three (3) square meters per site. It is important to understand that the purpose of limiting testing is to establish whether a site is eligible for nomination to the NRHP. Hence, testing should cease once it is determined that intact subsurface cultural deposits are present.

Exceptions to the three-square meter rule require written permission from the Field Office archaeologist and must provide details about the site, project, time frame, and reasons for the exemption. Excavation of any cultural property beyond limited evaluative or eligibility testing requires the issuance of a permit for excavation and/or removal (see item 3 below). Limited testing may be conducted to identify mitigation needs at a site. Limited testing and/or collection permits are generally site-specific and issued for the project duration. Because the work performed under limited testing permits is expected to disturb relatively little of the cultural property, they generally can be issued without Native American consultation.

3. Excavation and/or Removal may be authorized for applicants who propose to excavate and/or remove material remains at a greater scale than the limited testing described above, with the result that the significance and/or future research potential of a cultural property may be substantially altered. Excavation/removal permits are restricted to specific project areas or specific cultural properties and are issued for the duration of the project. Major testing programs designed to answer research questions and to guide future data recovery efforts of an eligible cultural property require excavation permits. Ordinarily, excavation/removal permits will be issued only after Native American notification and consultation required by ARPA and the Native American Graves Protection and Repatriation Act (NAGPRA) has been completed. The work is usually guided by a detailed treatment plan that has been reviewed and approved by BLM after consultation with the Colorado SHPO (details may be found in Section X.H. of the Protocol).

A combination of cultural resource activities described in items 1 and 2, above may be authorized in a single permit, as appropriate, depending on the extent and nature of work proposed in the application. A survey and recordation or limited testing/collection permit may be modified to authorize additional activities, project areas, and/or cultural properties that were not specified in the permit at the time of issuance. An excavation/removal permit normally will not be modified to include additional project areas and/or cultural properties; a new excavation/removal permit would be required.

A project-specific Fieldwork Authorization Request form (Form CO-8151-3) is required before

commencing fieldwork and is issued by the appropriate BLM Field Office. Fieldwork authorizations should not be routinely used to apply additional special conditions to the permit beyond what was attached at original issuance, nor should the authorization process be used as a second level of review of proposed personnel.

BLM archaeologists may participate in or monitor work conducted by cultural resource use permittees.

Curation agreements are required, even for non-collection permits. It is the responsibility of the cultural resource use permittee to establish curation agreements with repositories. The agreement(s) should be submitted to the BLM with the application or renewal request and **must** be in place before a permit is issued.

# B. Permit Application, Renewal, and Modification

Any person may apply for a PAI by submitting an application form and required supporting documentation to the State Director or his/her designee. Applicants should contact the BLM State Archaeologist for information about how to apply. Only one (1) copy should be provided and may be submitted electronically to the BLM State Archaeologist via email. The application should not be sent to the Field Office(s). Permittees must allow four weeks for processing of a survey permit request and six to eight weeks for processing of testing or excavation permit requests.

Application for modification or renewal of permits may be requested using the "Request for Modification of Permit for Archaeological Investigations" (Form CO-8151-6). Applicants may need to submit supporting documentation that is relevant to the requested modification or renewal. The modification or renewal request may not be made prior to 30 days before the expiration of the term of the permit. Provided the permit has not been misused since it expired, renewals may be requested within a reasonable period after expiration. If the existing permit is in good standing, during the time a permit renewal is being reviewed and processed, the permit will remain in effect.

The following list of minimum requirements will assist cultural resource use permittees in preparing applications:

#### 1. Organizational Qualifications

Applications must show the applicant's organizational ability to accomplish work of the type and scope proposed. A summary of organizational experience should be submitted providing the following minimum information:

- a. Statement of applicant's organizational ability to accomplish work, including:
  - i. Location(s) of facilities and equipment;
  - ii. Description of facilities and equipment;
  - iii. Organizational structure and staffing; and
  - iv. Specification of which and to what extent facilities, equipment, and staff listed would

be utilized.

- b. Statement of applicant's organizational history in completing the type of work proposed, including:
  - i. Similar past projects;
  - ii. Past government contracts;
  - iii. Selected bibliography of project or contract reports and/or publications resulting from the previous two items;
  - iv. Previous federal permits held in the last three (3) years, effective dates of permits currently in force, and applications pending or planned;
  - v. Suspended or non-renewed federal permits; and
  - vi. Other pertinent organizational experience, such as research and special studies.

If the applicant is a newly formed entity, any information that might take the place of information requested in items a.i. and a.ii. above should be provided. In such cases, individual capabilities of personnel will carry greater weight in evaluation of organizational qualifications. Lack of an organizational history will not be the principal factor in a recommendation for permit denial.

# 2. Individual Qualifications

- a. Permit Administrator. Applications must include the name of the individual proposed to be responsible for carrying out the terms and conditions of the permit and otherwise complying with legal requirements applicable to the permitted activity. This individual must be legally empowered to obligate the applicant organization and must sign the application. Unless this individual is also named under items 2.b. and 2.c. below, it is not necessary that this individual is a professionally qualified archaeologist, historian, or architect.
- b. *Project Director/Principal Investigator*: Applications must include the name of any individual(s) who would be responsible for planning, supervising, and overseeing the overall project, including responsibility for the professional quality of evaluations and recommendations. Principal investigators will have primary accountability for technical completeness and competence of work conducted under the permit. They are responsible for development of work plans and research designs, for performance of crew chiefs, for selection standards and limitations on work assignments of crew members, for analysis and interpretation of field data, for integration of fieldwork results into comparative regional perspectives, and for preparation of reports. Information must be included with the application to demonstrate that each individual has achieved the following:
  - i. Adequate professional instruction. This may be obtained in either of the following two ways:
    - 1. Formal education resulting in a graduate degree in the appropriate discipline for the permitted activity, *or*
    - 2. Formal education resulting in a bachelor's degree in the appropriate discipline for the permitted activity, *plus* at least two (2) years of pertinent, professionally

- supervised experience, with increasing responsibility leading to duties similar to those proposed in the application.
- ii. Competence in theory and method, and in recording, collecting, handling, analyzing, evaluating, and reporting of cultural resources data, relative to the type and scope of work proposed.
- iii. Ability to plan, equip, staff, organize, and supervise activity of the type and scope of the work proposed.
- iv. Ability to carry research to completion, as evidenced by timely completion of theses, research reports, final reports, etc.
- v. Completion of at least sixteen (16) months of professional cultural resource management experience, including similar duties as proposed in the application. This experience must include at least four (4) months (120 days) of experience with comparable cultural resources in similar cultural and geographical areas. If equivalency is claimed under item 2.b.i. above, the sixteen (16) months of experience required here is to be included in, not in addition to, the two (2) years of experience required in item 2.b.i. above.
- c. Field Director/Field Supervisor/Crew Chief. Applications must include the name of individual(s) that are responsible for carrying out field projects and are in the field when fieldwork is underway. Crew chiefs are responsible for the technical quality of fieldwork, for the direct on-the-ground supervision of all aspects of fieldwork and data gathering, for proposing resource evaluations and recommendations for further treatment, and for preparing field records and descriptive reports. For each individual, information must be included with the application to demonstrate that the individual has achieved the following:
  - i. Adequate professional instruction, obtained either of the following two ways:
    - 1. Formal education resulting in a bachelor's degree in the appropriate discipline (anthropology/archaeology, history, architecture) and at least twelve (12) months of pertinent professionally supervised experience, with increasing responsibility leading to duties similar to those proposed in the application; *or*
    - 2. Equivalent training and experience, including at least thirty (30) months of pertinent, professionally supervised experience, with increasing responsibilities equivalent to those proposed in the application.
  - ii. Competence in recording, collecting, handling, analyzing, evaluating, and reporting cultural property data, relative to the type and scope of work proposed.
  - iii. Demonstrated ability to supervise activity of type and scope proposed.
  - iv. Completion of at least four (4) months (120 days) of professional cultural resource management experience with comparable cultural resources in similar cultural and geographic areas. This may be part of the experience required in item 2.c.i. above.

The same individual may be named under items 2.a.-c. above (e.g., the same individual may be proposed to serve as permit administrator, project director, and field supervisor), provided that evidence is submitted to demonstrate that all pertinent criteria are met.

d. Monitors: Project excavation or trenching monitors must meet the same minimum

- qualifications as field director(s)/field supervisor(s)/crew chief(s), except for the supervision requirement. Monitors must also have experience in excavation methods, either through an approved field school, or at least thirty (30) days supervised experience in excavation.
- e. *Historical Archaeologist*: This designation is only for those with professional experience restricted to historical archaeology. Certification must meet the same minimum qualifications as a principal investigator and field director/field supervisor/crew chief.
- f. *Architectural Historian*: The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or a closely related field, with coursework in American architectural history, or a bachelor's degree in architectural history, art history, historic preservation, or a closely-related field plus one of the following:
  - i. At least two (2) years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; *or*
  - ii. Substantial contributions, through research and publication, to the body of scholarly knowledge in the field of American architectural history (Secretary of the Interior's Standards and Guidelines: Professional Qualifications Standards).
- g. Crew Members: All crew members must possess a minimum of eighteen (18) hours of anthropology or archaeology experience, with two (2) months field experience or field school. The cultural resource use permittee is responsible for assuring that these qualifications are met.

#### 3. Qualifications of Proposed Curatorial Facility

Materials collected from BLM-administered lands and associated records will be deposited in the following facilities unless otherwise noted in the permit:

- a. Canyons of the Ancients Visitor Center and Museum: Canyons of the Ancients National Monument, Gunnison, Tres Rios, and Uncompander Field Offices.
- b. Museums of Western Colorado: Colorado River Valley, Grand Junction, Kremmling, Little Snake, and White River Field Offices.
- c. Royal Gorge Regional Museum and History Center: Royal Gorge Field Office.
- d. No specified long-term facilities are available for the San Luis Valley Field Office. A no collection policy is currently in effect, unless specified in the fieldwork authorization.

To the maximum extent possible, proposed curatorial facilities should meet the 36 CFR Part 79 standards and must satisfy the following minimum considerations, as applicable:

- a. Physical Considerations:
  - i. Adequate security;
  - ii. Adequate protection for the types of materials expected to be housed, such as climate control for perishable material remains;

- iii. Adequate protection for records, data, photographs, and other documents;
- iv. Adequate records/accessioning/retrieval systems, including full capability to account for materials:
- v. Adequate provisions for scholarly access and study; and
- vi. Maintenance of physical plant insurance.
- b. Administrative Considerations:
  - i. Provision for permanent preservation, including transfer to a Federal or federally approved location in the event the facility should cease to exist;
  - ii. Adequate staffing;
  - iii. Provision for granting qualified scholars reasonable access to records and collections for research purposes.

# 4. Certification by Curatorial Facility

Each application must include a curation agreement signed by an authorized official of the proposed curatorial facility, detailing the facility's willingness to accept collections, records, data, photographs, and other documents generated during the proposed term of the permit, and to assume permanent curatorial responsibility and accountability for such materials on behalf of the United States (U.S.) Government. The U.S. Government owns all collections and associated records. The cultural resource use permittee is required to notify the curatorial facility of the term of the permit. The curation agreement must include the expiration date for the permit.

# 5. <u>Cultural and Geographic Area Experience</u>

The completion of at least four (4) months (120 days) of professional cultural resource management field experience in applicable cultural and geographical areas associated with the Field Office, or in areas of adjacent states involving similar cultural resources is required. The geographical area experience is based on the number of field days by project work (i.e. inventory, excavation, and monitoring) by county. For purposes of evaluating professional work experience, thirty (30) days constitutes one (1) month. One workday, even if it is slightly more or less than eight (8) hours, counts as a single day. Thus, if an individual worked for no less than six (6) hours or ten (10) hours or more in a single day, that workday would count as one (1) day. The resumes of personnel submitted with the application must clearly show the required information, or the application will be delayed until the information is provided.

# C. Application Review and Evaluation

The BLM State Archaeologist reviews each permit application, with input from the Field Office in which the proposed work will occur. All permit applications are reviewed in the State Office and require at least 30 calendar days to process (depending on the type of permit application- see V.B. above). The applicant is responsible for seeking input from the appropriate Field Offices to better complete an application, particularly when the application involves treatment plans.

Documentation of qualifications for all supervisory personnel must be provided in resumes. Failure on the part of applicants to provide complete and up-to-date information in the required

format will result in delays in the processing of the application until this information is provided.

The BLM will inform the applicant what is needed for review as quickly as possible. For this purpose, documented telephone or email contact is preferable to written notification.

Any application that fails to meet minimum qualification criteria may be rejected without further review following the permit denial procedures of BLM Manual 8150.

If an individual deliberately falsifies or grossly exaggerates his or her qualifications or experience on their resume, the BLM will suspend any further consideration of certifying that individual in a supervisory capacity for a period of time commensurate with the severity of falsification.

#### D. Permit Areas

Survey/Recordation permits are issued by Field Office jurisdiction. Limited Testing/Collection and Excavation/Removal permits are issued by project area or cultural property.

#### E. Permit Numbers

Survey/Recordation and Limited Testing/Collection permits are assigned numbers that will remain in effect through all modifications and renewals. Excavation/Removal permits are assigned numbers that will remain in effect only through the term of the project.

#### F. Fieldwork Authorization

Prior to commencement of any field investigations, cultural resource use permittees must notify the appropriate Field Offices of their intent to carry out fieldwork and submit a Fieldwork Authorization Request (Form 8151-3). A request must be made for each project-specific authorization and a map showing the proposed project area must be included. At no time should a permittee use the authorization as the mechanism to gain access to non-federal surface. The proponent is responsible for obtaining landowner consent and access. The BLM staff archaeologist will file a copy of the authorization in the Field Office permit files and send an electronic copy to the BLM State Archaeologist for the permanent, statewide PAI file.

#### G. Pre-Field Check-In

Prior to each project, having received a Fieldwork Authorization, and, before commencing fieldwork, the permittee must conduct a records search. The cultural resource use permittee will have to check the records at the BLM Field Office(s) and History Colorado, Office of Archaeology and Historic Preservation, to identify all recorded cultural resource sites and previous inventories. The BLM may not have the staff and time to conduct such pre-field records check for permittees. In this event, the cultural resource use permittee may schedule a check-in with the BLM archaeologist at the Field Office where fieldwork will be conducted. The purpose of the check-in is to conduct the files searches, discuss the scope of the project and the adequacy of the proposed survey, and to obtain a BLM project number. Scheduling the check-in may be done by phone or email, and should allow at least a week's notice for scheduling. Failure to conduct a pre-

field records check may result in the rejection of the associated survey report and/or suspension or revocation of the permit.

#### H. Post-Field Check-In

As soon as possible, upon completion of the fieldwork, the cultural resource use permittee will notify the appropriate BLM office of the results of the fieldwork. This may be done over the phone or by email (please see section VI.J. Reporting Process and Standards). For long-term projects, it is advisable to keep the BLM archaeologist informed as fieldwork proceeds using progress reports.

After the cultural resource use permittee reports the results, the BLM archaeologist will contact SHPO to obtain the OAHP documentation number for the survey or limited results report, for inclusion on the written documentation. **The BLM will provide the cultural resource use permittee with an OAHP documentation number.** The following information is required for the post-fieldwork phone call or email to the BLM archaeologist:

- 1) County or counties associated with the project,
- 2) Type of finding (positive or negative),
- 3) Working report title,
- 4) The BLM project number assigned to the project.

# I. Annual Permit Reports to the State Office

Cultural resource use permittees are **required** to submit an annual report of their work for the calendar year, even if no work was conducted. The report will include the following information: name, type, and size of project; OAHP and BLM documentation numbers; number of isolated finds and sites discovered (if any) and number of eligible sites; date of report acceptance or notation of report pending; and if artifacts were collected, and where and when they were curated. Curation receipts must be submitted at the same time as the report, if they have not been previously submitted. The report will be submitted to the Colorado State Office no later than December 31 of each year. BLM prefers that the report is submitted by email, rather than in hard copy. [Note: the annual report is not to be used as a substitute for any inventory or excavation reports or site evaluations. Failure to submit the annual report may be grounds for permit suspension or revocation.]

# J. Outreach

Cultural resource use permittees are especially encouraged to educate project proponents about the value of cultural resources and the legal consequences of unauthorized damage and unauthorized removal of artifacts. It is strongly recommended that project proponents offer an employee education program for field employees.

#### VI. INVENTORY

(See BLM Manual 8110 Identifying and Evaluating Cultural Resources)

# A. Objectives

The inventory objective is to identify all cultural resources, including traditional cultural properties (TCPs), within a specified APE. The identification of cultural resources must be conducted in accordance with professional standards detailed in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (published by the NPS at 48 FR 44716, September 29, 1983).

# B. Classes of Inventory

The BLM cultural resource inventory system is composed of three kinds of inventory: Class I – existing information inventory; Class II – probabilistic field inventory; and Class III – intensive field inventory. Each type of inventory is designed to provide specific cultural resource information for various planning and resource management needs. The most frequently employed method is Class III inventory, carried out with the intent of enabling BLM to comply with Section 106 of the NHPA before making decisions about proposed land and resource uses. In those cases, unless specifically prohibited in regulations, the cost of inventories will be the responsibility of the project proponent or the benefiting BLM activity, as authorized by Section 110(g) of the NHPA.

- 1. <u>Class I</u> inventory is not merely a records search or pre-field literature review, conducted prior to land disturbance actions. A Class I inventory is most useful for gaining a comprehensive view of all the known archaeological, historical, and cultural resources and TCPs within a large area. It is a professionally prepared study that includes a compilation and analysis of all reasonably available cultural resource data and literature. Additionally, this study is a management-focused, interpretive, narrative overview and synthesis of the data.
- 2. <u>Class II</u> inventory is a professionally conducted, statistically based sample survey, designed to aid in characterizing the probable density, diversity, and distribution of cultural properties within a large area. Intensive pedestrian inventory is conducted in limited and discontinuous portions of the APE. Within individual sample units, survey aims, methods, and intensity are the same as those applied in a Class III inventory. A Class II inventory may include an approach that is based on a professional, but judgmental, strategy that needs to be specifically defined for a project. A Class II inventory may be conducted in several phases, using different sample designs to improve statistical reliability.
- 3. <u>Class III</u> inventory is a professionally conducted, continuous, intensive pedestrian survey of an entire project area, aimed at locating and recording *all* cultural properties. Intensive inventory describes the distribution of properties in an area; determines the number, location, and condition of properties; determines the types of properties present within the area; permits classification of individual properties; and records the physical extent of specific properties.
- 4. <u>Reconnaissance survey</u> is a focused or special-purpose information tool that is less systematic, less intensive, less complete, or otherwise does not meet Class III inventory standards. An area only surveyed by reconnaissance methods cannot be considered complete

and may be subject to resurvey for other purposes.

The cultural resource inventory of the built environment will incorporate guidance from the OAHP Colorado Cultural Resource Survey Manual - Guidelines for Identification: History and Archaeology.

# C. Determination of Level of Inventory

Once an application or notice of proposed activity is received, and the BLM has determined that it is an *undertaking*, as defined by 36 CFR 800.16(y), the BLM:

- 1. Will determine the area of potential effects (APE), including direct and indirect effects of the proposed undertaking, as defined by 36 CFR 800.16(d), considering information provided by Tribes, consulting parties, and interested parties, as appropriate. The APE must be fully document in the inventory report, including a clear description and boundary. The BLM may request the assistance of SHPO when defining the APE. *Cultural resource use permittees do not define the APE*. Projects must be adequately designed and identified. Preliminary and final project design will be identified on USGS 7.5-minute maps, with sufficient detail for adequate determination of the potential effect a proposed project might have on cultural resources.
- 2. Will review the project characteristics and all existing cultural resource inventory data (including Class I information) pertaining to the APE. Once this review is completed, the BLM will inform the cultural resource use permittee of the required level of effort, following guidance provided in 36 CFR 800.4(b)(1), and the class of inventory that will be required.

#### D. Minimal Area to be Inventoried

The following standards are intended to be minimal inventory guidelines. Additional Field Office standards and procedures are available at the BLM Colorado internet site for permits for archaeological investigations or by contacting the Field Office or State Office cultural resource staff. The BLM will exercise professional judgment on a case-by-case basis, and some projects can be expected to deviate. The cultural resource use permittee will locate the boundaries of the defined inventory area prior to commencement of the survey. Geospatial data, corner markers, benchmarks, 7.5-minute topographic maps, aerial photographs (where available), roadways, and other landscape features can be used to ensure ground control and confidence in the inventory area and in the location of cultural resources. Field Offices will provide or review geospatial data defining boundaries for the APE and inventory area. If needed, the cultural resource use permittee can flag and stake the boundary on the ground. Flagging or stakes must be removed upon completion of project.

Survey areas may be expanded beyond standard requirements to prevent site damage from inadvertent project activities, to assist in site avoidance for areas of high site density, or to allow for minimal project redesign. Survey areas must include a fifty- (50-) foot buffer beyond the direct APE.

The following minimum standards will apply to the direct APE of specific land uses:

- 1. <u>Rights-of-Way</u> (ROW): A Class III inventory will include the proposed ROW plus fifty (50) feet on each side of the ROW. The inventory must include turnouts, staging, temporary use areas, parking, and camping, or any other area where reasonably foreseeable (direct) effects may occur.
- 2. <u>Coal</u>: A Class III inventory will include an area of one (1) square acre, centered on the exploratory drill hole. The operator may choose to do more than this amount to ensure adequate coverage.
- 3. Oil and Gas: A Class III inventory will include a minimal area of ten (10) square acres or forty (40) square acres, centered on the drill hole depending on the size of the well pad. The operator may choose to do more than this amount to ensure adequate coverage. If several well sites are anticipated, block survey coverage should be considered. Access roads and other associated ROWs requires a minimum 200-foot-wide corridor, unless otherwise determined. The inventory should be conducted with sufficient lead time to ensure that the cultural resources report will be included in the Application for Permit to Drill (APD) package.
- 4. <u>Geophysical</u>: Geophysical operations can affect cultural properties through direct impacts (blasting, vehicle movements, road building, etc.). Generally, geophysical proposals will be evaluated on a case-by-case basis to determine appropriate inventory requirements. The following is provided to give specific information on geophysical project requirements.
  - a. Geophysical operations *may* be conducted without an inventory, provided that 100 percent of the ground is snow-covered, there is a snow depth of at least six (6) inches, *and* the ground is frozen. Class III inventory is required in areas where surface disturbance, such as blading, road construction, shot points, or other activities will take place. When filing the "Notice of Intent," the operator must provide BLM with accurate geospatial data, showing the proposed line location and areas of proposed activity, including, but not limited to, seismic lines, staging areas, access routes, and drop zones. The geospatial data will form the basis for a literature search to determine inventory requirements. All project areas will be appropriately marked for BLM inspection and cultural fieldwork.
  - b. Where a Class III inventory has been determined necessary, it will include:
    - i. A 100 ft. radius around each shot point;
    - ii. A 300 ft. radius around each shot point near a rim or rock/cliff face, or in areas otherwise identified during the records and literature review as having high potential for standing structures and/or rock art;
    - iii. A 100 ft.- wide swath (50 ft. on either side of center line) on all source lines, receiver lines (if vehicles will be driven down the receiver lines), and access routes. Other types of receiver lines, wireless or wired, do not require Class III inventory, unless the BLM cultural resource specialist determines otherwise;
    - iv. A 300 ft.-wide corridor will be inventoried on all source lines/points that are located along canyon rims and/or below cliffs and rock faces, or in areas otherwise identified during the records and literature review as having high potential for standing

- structures and/or rock art;
- v. All helicopter landing zones, staging areas, parking areas for vibroseis buggies, or other locations of surface disturbance;
- vi. Personnel conducting the inventory will use existing vehicle access routes and keep to existing roads; and
- vii. The cultural resource use permittee will sufficiently flag all cultural resources for avoidance during inventory. All material (i.e. flagging, stakes, lath, pin flags, etc.) used to mark sites will be removed by the cultural resource use permittee after seismic work is completed in the area.

5. <u>Indirect APE</u>: The following minimum standards apply to the indirect APE of specific land uses. The APE for indirect effects on historic properties must consider effects that are later in time or further removed in distance but are still reasonably foreseeable.

The indirect APE can be influenced by the scale and nature of an undertaking. Large and complex undertakings will likely include an indirect APE. Wells, ponds, and existing access roads under rights-of-way are examples of typical small undertakings that primarily deal with direct effects only. A specific example of indirect effects includes increased access and potential vandalism, both incidental and intentional, to nearby historic properties. See, for example, Nickens, Paul R., Signa L. Larralde and Gordon C. Tucker, Jr. A Survey of Vandalism to Archaeological Resources in Southwestern Colorado, Colorado Bureau of Land Management, 1981.

The above minimum standards apply in most cases and should be employed whenever feasible and prudent for efficient project design and implementation. Exceptions may occur, and they should be considered when the design is not routine and/or when environmental conditions allow for areas to be inventoried at less than these standards. The BLM may determine, on a case-by-case basis, that the Class III standards are not applicable.

# E. Level and Intensity of Inventory and/or Monitoring

The BLM will ensure that the class, level, and intensity of inventory are commensurate with the proposed land use, the planning stage at which required consultation takes place, topographic setting, and the known distribution of cultural resources. Prior to any surface-disturbing activity, a Class III inventory is usually conducted. Class III inventories must account for all visible surface sites within the defined area. All decisions to conduct less than a Class III inventory must be documented in writing and approved by BLM.

BLM-administered lands, unless meeting a specific exclusion, will be surveyed at a Class III level. The following environmental conditions *might* limit or preclude Class III coverage of cultural resources:

- 1. Previous natural ground disturbance that has modified the surface so extensively that the likelihood of finding cultural resources is negligible; and/or
- 2. Human activity within the past fifty (50) years that has created a new land surface to such an

extent as to eradicate traces of cultural resources; and/or

- 3. Adequate survey at the same class and level previously conducted, and sites records adequately documenting the location, methods, and results of the survey; and/or
- 4. Natural environmental characteristics that are unfavorable to the presence of cultural resources (such as recent landslides or rock falls):
  - a. Slopes greater than 30 degrees (58 percent), where no potential exists for rock shelters, rock art, historical mining sites, or other cultural resources associated with rock faces or ledges. This particularly applies to steep talus or shale slopes. Field verification must be made of this condition.
  - b. Dense vegetation cover or other surface-obscuring conditions might require further survey as these conditions change. In most cases, there will be areas where spot ground checking is possible; some other methods of "seeing" through the vegetation and/or surface to near-surface deposits may be recommended, such as testing or monitoring.

In cases where a Class III survey has been determined necessary, the APE must be 100 percent snow-free before the survey can take place. Field Office archaeologists may grant exceptions to this standard, based on factors specific to the area proposed for inventory. Cultural resource monitoring where resources are present or reasonably expected is permitted only when the ground surface is free of snow, unfrozen, and dry.

The above environmental conditions do not always apply to the built environment. Class III inventory will be required in most situations.

# F. Inventory Field Methods

In consultation with BLM, cultural resource use permittees may use their own field methodologies within the following guidelines and limits:

- 1. The APE boundary must be identified by the BLM before any fieldwork is undertaken. **Field Offices will provide geospatial boundaries for the APE**. If needed, the cultural resource use permittee can flag and stake the boundary on the ground. For narrow linear projects, it is important that right-of-way widths are precisely known. The appropriate BLM archaeologist must approve any variances from these requirements.
- 2. For block surveys and regional studies, crews will be limited to no more personnel than can be effectively managed by the field supervisor (experience has shown four or five to be about maximum).
- 3. Crew spacing should not normally exceed 15-20 meters. Exemptions from total coverage, due to terrain or other factors, must be coordinated with and approved by the appropriate BLM archaeologist.

- 4. Collection strategies must be coordinated with the appropriate BLM archaeologist (see Section K. Collection and Curation).
- 5. If paleontological resources are suspected or encountered during inventory, archaeologists should note the location, write a brief description of condition, and contact the BLM authorized officer, who will contact the BLM regional paleontologist.

#### G. Recording Cultural Resources

Upon finding unrecorded cultural resources, descriptive data will be recorded on the appropriate Colorado OAHP site forms. Sites previously recorded on abbreviated or unofficial site forms, or where information is outdated or incomplete, <u>must be re-recorded</u>. A Cultural Resources Re-Visitation Form, or a BLM-approved monitoring form, must be completed, where adequately recorded cultural resources are inspected and are present within the APE.

Sites partially within the inventory area must be fully recorded. [Note: Portions of extensive sites may be excluded from this requirement on a case-by-case basis in consultation with the appropriate BLM archaeologist.] Linear sites will be recorded on BLM linear site forms within the APE.

Hard datums are no longer required, and are, in fact, discouraged. Virtual datums are preferred and can be based on a permanent or semi-permanent feature on the site, such as a tree or boulder.

# H. Digital Data Management Specifications

[See the most current version of the BLM-Colorado Digital Data Management Specifications at the BLM Colorado internet site for Permits for Archaeological Investigations.]

#### I. Evaluation

Often, cultural resources cannot be evaluated from surface observations. The BLM Class III inventory methods allow for limited testing using limited probing, troweling, or shovel testing to locate the spatial limits of cultural resources, to determine whether buried cultural deposits are present, or to make determinations of eligibility. Limited testing might be necessary to determine whether buried cultural deposits exist. This testing for evaluation should not be confused with formal testing and should be kept to the minimum amount necessary to determine the presence of subsurface deposits. In no case should such evaluative testing exceed three (3) square meters of site surface. Test plots should also be shown on the site sketch. Criteria used to determine properties potentially eligible for the NRHP must be substantive, objective, and stated in the report.

The potential for subsurface cultural materials must be given special consideration in assessment of future monitoring and mitigation needs. Cultural resource use permittees are

encouraged to use their best professional judgment to recommend whether sites are eligible for nomination to the NRHP. The "Need Data" determination should be applied sparingly, and only in those cases where *both* surface evidence and limited testing yield ambiguous results. Significance evaluations made by the cultural resource use permittee are recommendations only. The BLM will determine NRHP eligibility according to criteria listed in 36 CFR Part 60.4, without a requirement to wait for concurrence from SHPO. BLM may request assistance from SHPO if questions about NRHP eligibility arise. BLM's NRHP eligibility determinations regarding traditional cultural properties will require formal SHPO consultation, as well as consultation with Tribes or communities with historically rooted beliefs, customs, and practices tied to a particular place.

#### J. Reporting Process and Standards

Upon completion of the fieldwork, the cultural resource use permittee must report the field findings to the appropriate BLM Field Office. The report must include a detailed description of the undertaking and the definition of the APE used as the basis for identification and evaluation recommendations. Phone calls or electronic mail are acceptable methods of reporting results. Cultural resource use permittees do not have the authority to give permission for a client company, i.e., project proponent, to proceed with a project. The BLM authorized officer is the only person who can authorize a proponent to proceed.

- 1. <u>Negative findings</u>: Cultural resource use permittees can report negative findings by phone to the BLM Field Office archaeologist. The BLM Field Office archaeologist, however, does not have the authority to allow the project to proceed. The report of negative findings will be passed on to the appropriate BLM authorized officer. This reporting process will expedite the internal BLM review process. Often, other project considerations and stipulations may be applicable.
- 2. <u>Positive findings with no effect to cultural resources:</u> Field surveys with known cultural resources that can be avoided by the project will require BLM review. The BLM Field Office archaeologist will notify the appropriate BLM authorized officer of these findings.
- 3. <u>Positive findings with effects to cultural resources</u>: Field surveys with known cultural resources listed or potentially eligible for the NRHP that cannot be avoided will require discussions between the cultural resource use permittee, the project proponent, and the BLM. Treatment plans will be developed and implemented in consultation with the SHPO, as well as Tribes and other consulting parties, as appropriate. See the Protocol, Section X.H., regarding resolution of adverse effects. Authorization to proceed can occur only after consultation and resolution of adverse effects has been completed. The BLM Field Office archaeologist will notify the appropriate BLM authorized officer of these findings.

Prior to project authorization, a cultural resource report of survey, testing and excavation must be approved by the BLM. The project authorization document may include stipulations for additional cultural resource work (e.g., monitoring, data recovery). Deadline requirements for submission of additional cultural resource reports will be included in the authorization document.

All preliminary reports are to be submitted to the BLM within ten (10) working days of completion of fieldwork, if no sites were encountered or sixty (60) days if sites were located. Extensions may be allowed, in coordination with the BLM. However, all agreements between the BLM and the cultural resource use permittee will be in writing, with clearly defined dates for draft and final report reviews established, pursuant to instructions in BLM Manual 8150.

The cultural resource use permittee will submit all proprietary information directly to the appropriate BLM Field Office. Proprietary information includes any documentation that is exempt from public disclosure under ARPA and NHPA, including the location of cultural resources and traditional cultural properties. Reports with non-proprietary information may be made available to the project proponent. The disclosure of proprietary site information remains at the discretion of the BLM *only*.

The report will follow the Colorado OAHP Cultural Resource Report Forms and Guidelines. The report must identify the number of acres inventoried on BLM-administered lands and on non-BLM-administered lands. Reports and site forms that are not in this format are not acceptable to the BLM or SHPO. These reports and forms will be rejected, and the project will not be allowed to proceed until an acceptable documentation is completed.

Professional peer review can be used to ensure quality products. Peer review is especially desirable for syntheses, historic contexts or research design development, or other planning and inventory efforts that form the primary substantive and theoretical basis for evaluation and planning. It is also appropriate for planning, implementing, and reporting of major inventory or data recovery projects. BLM will only provide substantive and critical quality control comments on reports; the BLM will not serve as a copy editor.

The cultural resource use permittee will submit one (1) hard copy and one (1) electronic copy (PDF) of the final report and site forms, as well as shapefiles/a file geodatabase of the resource and project boundaries, to the appropriate BLM office. BLM will provide the SHPO with the report and site forms and will conduct the appropriate consultation. Site forms should be kept separate, i.e., not bound in the report.

#### K. Collection and Curation

Qualified individuals may be authorized by the State Director, or his/her designee, to remove cultural resource artifacts which are in danger of loss or which are needed for scientific study, public interpretation, or evaluation of the cultural property. Additionally, no paleontological resources may be collected under a cultural resource permit, unless the remains are in an archaeological context (e.g. paleontological bone in a hearth), however, a paleontologist should be consulted. Cultural resource artifacts removed from BLM land in Colorado, along with copies of the associated records, are curated as property of the United States in a university, museum, or other scientific or educational institution within or near the state of Colorado. BLM has designated repositories in Colorado to permanently curate collections and associated documentation (see above Section B.3.). Research collections and associated documentation may be temporarily held at another location until completion of research, with BLM approval.

- 1. <u>Collection</u>: Only limited collections will be made on BLM-administered lands in Colorado in the following circumstances.
  - a. Survey and Recordation: The BLM generally adheres to a no collection policy. Collection is only recommended if, in the opinion of the archaeologist, the artifact(s) are unique and vulnerable to unauthorized collection or destruction, diagnostic (time-sensitive), and cannot be readily identified in the field. A catalog sheet, drawings of the artifact(s), and location of the collection must be included in the body of the report and attached to the appropriate site form(s). The location of collected artifacts will be accurately plotted on site maps.
  - b. Limited Testing and Collection and Excavation/Removal: If artifacts are collected, rationale and the method and nature of any collection (e.g., systematic versus nonsystematic), will be included in the data recovery plan submitted with the permit application and in the final report. Artifact provenience control must be established and exercised. Collection will require a more detailed assemblage analysis in the final report. A catalog sheet, drawings and photos of the artifact(s), and location of the collection will be included in the body of the report and attached to the appropriate site form(s). The location of collected artifacts must also be accurately plotted on site maps.
- 2. <u>Curation</u>: Collected artifacts must be curated according to the standards of the facility designated as the curatorial repository on the PAI.
  - a. The permittee will deposit all artifacts, samples, and collections, as applicable, and copies of all records, data, photographs, and other documents resulting from work conducted under a PAI, with the curatorial facility named in the PAI, not later than 90 days after the date the final report is submitted to the appropriate BLM official. Receipt of collections must be documented on the museum collections deposit statement form, along with the repository accession and/or catalog numbers. Copies of the completed form must be provided by the permittee to the State Office within 30 calendar days of depositing the collections to the curatorial facility. Failure to provide a completed form with a list of materials deposited in approved curatorial facilities may result in the suspension or revocation of the permit.
  - b. No collections are exempt from deposit with the curatorial facility, including type collections. Permittees wishing to hold type collections must do so through the issuance of curatorial loan agreements between them and the curatorial facility.

# L. Treatment Options

Treatment recommendations should be commensurate with the nature and significance of the involved cultural resources and the extent of possible damage, be cost-effective and realistic, consider project requirements and limitations, consider substantive input from consulting parties, and be BLM-approved. Treatment plans should follow the steps outlined in the Protocol,

#### Section X.H.

BLM will seek ways to avoid, minimize, or mitigate any adverse effects on historic properties:

- 1. <u>Avoidance</u>: This is the preferred strategy for treating potential direct adverse effects on historic properties (36 CFR 800.16(l)(1)). Monitoring may be required to ensure that historic properties are avoided. If avoidance involves project relocation, the new APE may require cultural resources inventory. The proponent's input will be required prior to determining avoidance and/or mitigation measures.
- 2. <u>Minimization</u>: BLM may employ the following physical and administrative conservation measures as management tools to protect historic properties. Proposals should include a feasibility justification and specifications. Indirect methods may include signing, fencing/gating, other protective barriers, patrol/surveillance, erosion control (off-site), and/or off-site fire control. Direct methods may include erosion control (on-site), fire control (on-site), detailed recording, and/or relocation.
- 3. <u>Mitigation</u>: If avoidance is imprudent or infeasible, recommendations should include a range of mitigation options for adverse effects. Mitigation options may include data recovery, stabilization, building and landscape documentation, and production of syntheses and historic contexts.
  - a. Data Recovery: The recovery of cultural resource data employs scientific methods and techniques, which are guided by a consideration of current archaeological issues, questions, and objectives. Data recovery proposals should define study topics and discuss data collection priorities as related to the use(s) and/or significant qualities of specific cultural properties or types of cultural properties. The proposed work, including field methods and analysis techniques, should be justified based on the data recovery objectives. Proposals must include consideration of conservation and collections management.
  - b. Stabilization: Condition assessments for each affected historic property, detailing a plan for conservation and treatment, are required. Detailed specifications for stabilization work will include individual fieldwork tasks, specific locations requiring stabilization, methods and materials use, and types of necessary expertise.
  - c. Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscapes Survey (HABS/HAER/HALS) and Historic Resource Documentation Standards for Level I, II and III Documentation (as described in OAHP Publication 1595): For an historic property where an adverse effect can be mitigated by completing HABS/HAER/HALS documentation or Level II or III documentation, BLM will ensure the preparation of a documentation plan. To ensure that the appropriate level of documentation is completed, BLM will coordinate all HABS/HAER/HALS documentation projects with the National Park Service prior to initiating the project.

d. Syntheses and Historic Contexts: If on-the-ground mitigation is not feasible or appropriate, preparation of a synthetic document or historic context might be an acceptable resolution of adverse effects. BLM and SHPO, and the ACHP if required, will together determine whether such an approach is desirable, and the documents will need to meet certain standards, such as the Secretary of the Interior's Standards for Historical Documentation.

# M. Treatment/Mitigation Plans

If a cultural property is determined eligible for or listed on the NRHP, and thereupon defined as an "historic property," and will be adversely affected by a proposed development, the BLM prefers avoidance of the historic property over costly and lengthy mitigation activities. When historic properties cannot be avoided, BLM will determine, in consultation with the SHPO, Tribes, and other consulting parties, the appropriate treatment. Project proponents should be aware that cultural resource conflicts do not normally prevent eventual development, but will take time to formulate and implement mitigation measures to prevent the loss of cultural information. These mitigating measures will be developed with the input of the BLM Field Office archaeologist(s), the cultural resource use permittee, and the proponent, but consultation with SHPO, and possibly the ACHP, will be necessary.

The cultural resource use permittee will submit a research design and treatment/mitigation plan, when appropriate, to guide a program of mitigation, to the appropriate BLM Field Office archaeologist for review, unless stipulated differently in a project-specific agreement. The proposed plan will conform to the Secretary of the Interior's *Standards and Guidelines, Archaeology and Historic Preservation*, ACHP guidance on archaeology, and the SHPO's guidelines for "Data Recovery Plans" and "Reports." BLM and SHPO will comment in writing within ten (10) working days of receipt of correspondence and associated documentation, unless the parties agree to an extension. If SHPO disagrees with BLM, the parties will follow procedures for resolving disagreements in Section XII.C. of the Protocol Agreement. The BLM will notify the cultural resource use permittee upon SHPO concurrence with the treatment/mitigation plan.

#### N. Unanticipated Discoveries

All large-scale projects must include a strategy for dealing with discoveries. If cultural resources and/or human remains are discovered during operations, activity in the vicinity of the discovery will cease, and the BLM authorized officer will be notified *immediately*. BLM, in cooperation with the project proponent and/or cultural resource use permittee, will ensure that the cultural resources and/or human remains are protected from further disturbance until BLM determines the next steps, and until any necessary procedures are completed.

Unless otherwise noted in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the SHPO and any Tribe that might attach religious and cultural significance to the affected property, select the appropriate mitigation option within 48 hours of the discovery. BLM will implement the process in a timely manner, and will fully

document it in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.

If human remains are discovered on BLM-administered lands, the treatment of human remains will be in accordance with NAGPRA and BLM policy. If human remains are discovered on private or State land during a BLM undertaking, the BLM will follow the provisions of the applicable Colorado Revised Statutes (CRS) regarding unmarked human remains (CRS-24-80-1301-1305).

#### O. Emergencies

The BLM will follow the procedures at 36 CFR 880.12 for all emergency situations.

# P. Other General Standards that Apply to Land Uses

Cultural resource documentation will be submitted to the BLM for review and Section 106 compliance *prior* to project authorization. Subsequent mitigation by avoidance or special stipulations may be formulated after review of the documentation. Where historic properties cannot be avoided or are damaged by operations, acceptable mitigation will be performed at the expense of the project proponent.

All employees of the proponents, and any subcontractors, must be informed by the project proponent before commencement of operations that any disturbance to, defacement of, or removal of archaeological, historical, or cultural material (including pot sherds and arrowheads) will be treated as law enforcement/administrative issues. Project proponents will be held accountable for the conduct of their employees and subcontractors.

If subsurface cultural materials are discovered during operations, all work in the vicinity of the resource will cease, and the BLM authorized officer will be notified *immediately*. The operator will take any additional measures requested by the officer, including the possibility of hiring a qualified archaeologist to carry out specific instructions.

A cultural resource monitor (permitted archaeologist) may be required during operation and/or reclamation activities to ensure that the operations or activities cause no inadvertent damage to cultural properties.

Additional stipulations may be added in cases where additional or standard protection is needed. Examples may include but are not limited to: cultural resource monitoring for all operations in sensitive areas; weather restrictions; frequent compliance checks and contacts with all operational personnel on site; site fencing or restrictive use barriers; requirements for identification and monitoring of sites made more susceptible to vandalism or collection because of proposed land use; verification of site locations, even if a Class III inventory had previously been conducted; and special reclamation measures to reduce erosion.

The standard stipulations or conditions of approval to be applied to all land use authorizations are:

- 1. Unless permitted, anyone associated with the management and operation of this project must not disturb historic, archaeological, or paleontological resources, including collecting artifacts, or will be subject to prosecution.
- 2. Pursuant to 43 CFR 10.4(g), the BLM-authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days, or until a notification to proceed is issued by the authorized officer.
- 3. If in connection with operations, the permittee, their contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest, such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the permittee will immediately suspend all operations in the vicinity of the cultural or paleontological resource and will notify the BLM authorized officer of the findings (36 CFR 800.13). Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.